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Air Quality Impact Assessment Report

Dundas Bus Rapid Transit Mississauga East Project

Date: February 2022

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Executive Summary

ES 1. Project Background and Study Purpose

In 2020, Metrolinx completed the Dundas Bus Rapid Transit Initial Business Case, which recommends a preferred Bus Rapid Transit alignment, and supportive service concept along Dundas Street between Kipling Station, in the City of Toronto, through the City of Mississauga and Halton Region, to Highway 6 in the City of Hamilton. AECOM Canada Limited (AECOM) was retained by Metrolinx and the City of Mississauga to evaluate the proposed 48-kilometre transit corridor. The evaluation involves the completion of the Preliminary Design, Preliminary Design Business Case and Transit Project Assessment Process.

A Transit Project Assessment Process is a focused environmental impact assessment process created specifically for transit projects. The process involves a pre-planning phase followed by a regulated (up to 120 days) consultation and documentation period. These phases include consultation, assessment of impacts, development of measures to mitigate negative impacts, and documentation. Consultation occurs with the public, stakeholders and Indigenous Nations throughout the process. Following these phases, there is a 30-day public review period where the public has the opportunity to review the Environmental Project Report (EPR) and provide additional comments, followed by a 35-day Minister’s review period.

The preliminary design phase will build upon the pre-planning completed as part of the Transit Project Assessment Process. In this phase, the project team will utilize the environmental impact assessment from the Transit Project Assessment Process to refine the Bus Rapid Transit design to a 30% design level. The Preliminary Design Business Case analyzes the Dundas Bus Rapid Transit corridor against strategic objectives, financial and economic impacts and operations considerations. The Preliminary Design Business Case will compare the corridor against a business-as-usual scenario (i.e., without the project).

In 2018, the Dundas Connects Master Plan (Dundas Connects) was completed by the City of Mississauga. It guides future development and intensification along the Dundas Street Corridor in the City of Mississauga. Bus Rapid Transit, cycling infrastructure, and an enhanced public realm for pedestrians were among the recommendations in the Plan. Dundas Connects is being implemented through various studies and initiatives, including this Transit Project Assessment Process.

The Dundas Bus Rapid Transit Mississauga East Project (the Project) includes the planning and design of a 7-kilometre Bus Rapid Transit corridor from Confederation Parkway to the City of Toronto boundary at Etobicoke Creek, within the City of Mississauga. This Air Quality Impact Assessment Report (the Report) has been prepared to support the Dundas Bus Rapid Transit – Mississauga East Transit Project Assessment Process.

The purpose of this Report is to describe the detailed approach for documenting the air quality baseline existing conditions, impact assessment, mitigation measures and monitoring activities associated with the Project.

The proposed scope of work involves five (5) main tasks, which include:

1. Background information review;
2. Existing conditions assessment;
3. Assessment of impacts from the Project;
4. Development of mitigation measures and monitoring activities to minimize impacts; and
5. Preparation of an Air Quality Impact Assessment Report.

Refer to **Section 1** for more information related to Project background and Study purpose.

ES 2. Methodology

The methodology of the Air Quality Impact Assessment is divided into nine sections, each providing relevant detail on the approach, assumptions, modelling software, regulations and guidance documents referenced, sourced of data, and criteria of assessment. These nine sections are as follows:

1. Background Review,
2. Study Area and Representative Receptors,
3. Assessment of Contaminants,
4. Relevant Air Quality Guidelines,
5. Existing Ambient Air Quality Methodology,
6. Meteorological Conditions Assessment Methodology,

7. Emission Inventory Assessment Methodology (both for operational emissions and construction emissions),
8. Dispersion Modelling Assessment Methodology, and
9. Assumptions.

A detailed methodology description is provided in **Section 2**.

ES 3. Existing Conditions

The Study Area for this assessment includes the Project Area marked for development (**Figure A1**, **Appendix A**), including all lands scheduled for construction activities and new or expanded stations with a 500-metre extension surrounding all potential on-ground sources of air emissions (**Figure A2**, **Appendix A**). Representative receptors were selected within these individual 500-metre boundaries surrounding the Project Area. Representative receptors were identified as either sensitive or critical (**Figure A3, Appendix A**). Sensitive receptors include residential homes and critical receptors include locations where vulnerable populations spend eight or more hours per day (e.g. hospitals, schools, child-care centres, long-term care homes, etc.).

Criteria air contaminants (CACs) and greenhouse gases (GHGs) were selected for assessment based on recommendations from the internal Metrolinx Draft Environmental Guide: Recommended Approach for Assessing and Mitigating Air Quality Impacts and Greenhouse Gas Emissions of Metrolinx Public Transit Projects ("Metrolinx Air Quality Guideline" issued in draft, November, 2019), and the Ministry of Transportation (MTO) Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020). Relevant criteria for assessment were obtained from the Ontario Ambient Air Quality Criteria (AAQC, 2020) and the Canadian Ambient Air Quality Standards (CAAQS, 2020).

The meteorological data was obtained from the Toronto Pearson Airport over a 5-year period (2016-2020). The wind rose for this time period is presented in **Section 3** and shows the predominant wind direction is from the northwest, the west and southeast. It also shows a low-windspeed predominance from the southeast.

Background air quality levels are predominately below the respective Provincial and Federal ambient air quality criteria and standards; however, some measured concentrations show a significant exceedance for benzo(a)pyrene, as well as a lesser exceedance for benzene and nitrogen dioxide. In addition, nitrogen dioxide, benzene, and benzo(a)pyrene ambient concentrations are at 105% (NO_2 1-hour averaging period), 108% (benzene annual averaging period), 242% (benzo(a)pyrene 24-hour

averaging period) and 675% (benzo(a)pyrene annual averaging period) of their respective current federal and provincial standards.

Additional information on the existing conditions is provided in **Section 3**.

ES 4. Potential Impacts, Mitigation Measures and Monitoring Activities

Table E-1 summarizes potential impacts, mitigation measures and monitoring activities during the construction phase of the Project, and **Table E-2** summarizes potential impacts, mitigation measures and monitoring activities during the operations phase of the Project.

Table E-1: Potential Impacts, Mitigation Measures and Monitoring Activities During Construction

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Construction Conditions:	Construction related air pollution may pose risks to human health and wellbeing	▪ Prior to commencement of construction, develop and implement a detailed Construction Air Quality Management Plan. The Air Quality Management Plan will: o Demonstrate compliance with the specific air quality criteria and limits in the Metrolinx *Environmental Guide for Air Quality and Greenhouse Gas Emissions Assessment* (2019). o Define the Project's air quality impact zone and identify all sensitive receptors within this area. o Assess the baseline air quality by continuous measurement of local ambient concentrations of $PM_{2.5}$ and PM_{10} over a minimum period of one week, where large local sources of pollution, such as highways, directly affect the zone of influence of the Project.	• Develop and implement Weekly Air Quality Monitoring Plans that document how air quality monitoring has been conducted and compliance assessed to effectively prevent unacceptable rates of air emissions in accordance with the following guidelines: o The construction related air contaminants of primary concern are in the form of particulate matter, with the principal construction related fractions of $PM_{2.5}$ and PM_{10} -

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		o Estimate and document the predictable worst-case air quality impacts of the Project on sensitive receptors within the air quality impact zone, develop appropriate mitigation measures, demonstrate their effectiveness, and commit to their timely implementation. o Monitor continuously any contaminant, in addition to $PM_{2.5}$ and PM_{10}, which is predicted to exceed its relevant air quality exposure criterion during any phase of the Project and at any receptor. o Include explicit commitment to the implementation of all applicable best practices identified in the Environment Canada document, *Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities* (2005). ▪ Develop a Communications Protocol and a Complaints Protocol to respond to issues that develop during construction.	particulate matter of less than 2.5 and 10 micron in diameter, respectively. Other contaminants of concern include crystalline silica and oxides of nitrogen. The list of contaminants will be expanded with any and all air pollutants that may be produced as a result of the work. o The criteria for PM2.5, PM10 and crystalline silica are provided in Metrolinx's *Environmental Guide for Air Quality and*

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
			Greenhouse Gas Emissions Assessment (2019). The applicable criteria for all other air contaminants of concern are to be found in the various schedules of *Ontario Regulation 419/05*. ▪ Siting of the monitors should generally follow the guidelines provided in the Ministry of the Environment, Conservation and Parks (MECP) *Operations Manual for Air Quality Monitoring in Ontario* (2018).
Construction Conditions:	Increased NO_2, CO, SO_2, particulate, and VOC impact levels	▪ On-site construction vehicle activity shall be managed to control emissions of odorous contaminants and diesel exhaust, including benzene and benzo(a)pyrene emissions from exhaust, including benzene and	▪ The following monitoring activities should be considered in the development of the Air Quality Management Plan:

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Increased Traffic Congestion and Construction Vehicular Emissions **Fugitive Particulate Emissions**	at nearby receptors from vehicular emissions. Increased particulate emissions, including dust, from construction activities.	benzo(a)pyrene emissions from exhaust. An Air Quality Management Plan will be developed to ensure consistent attention to mitigation of dust and particulates, including silica, from the construction site. The following mitigation measures should be considered in the Air Quality Management Plan: – All equipment complies with Canadian engine emissions standards. – All equipment visually inspected prior to use and properly maintained. – Implement a no idling policy on site (unless necessary for equipment operation). – Use of electricity from the grid over diesel generators wherever possible. – Retrofitting of combustion engines with specific exhaust emission control measures such as particulate traps. – If applicable, follow guidelines on hot mix asphalt outlined in the Ontario Hot Mix Producers Association's Environmental Practices Guide: Ontario Hot Mix Asphalt Plants, Fifth Edition (Ontario Hot Mix	– Baseline conditions should be established prior to construction for longer than one week to capture representative concentrations under varying meteorological conditions. – On-site meteorological monitoring in conjunction with real-time particulate monitoring representative of receptor impacts. – Place monitors both upwind and downwind of construction activities, where possible. – Application of threshold "Action Level" triggers for implementation of specific and increasing intensity mitigation activities linked to specific construction activities.

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		Producers Association, 2015). ▪ Applicable mitigation measures from Environment Canada's Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (Cheminfo Services Inc., 2005) and the Ministry of Environment, Conservation and Parks' Technical Bulletin Management Approaches for Industrial Fugitive Dust Sources, shall be followed. Both documents are provided within Appendix K. The following mitigation measures should be considered in the Air Quality Management Plan: – Complete earthwork grading within 10 days of ceased active construction. – Temporary seeding or mulching of bare soil and storage piles. – Compression or clodding of soil surfaces and storage piles to reduce erosion. – Confine storage pile activity to downwind side of piles. – Reduction of activities during high wind conditions.	– Reporting detailed results of ongoing monitoring and mitigation activities. – Monitoring at locations where there are persistent complaints, as required. ▪ In addition, relevant construction monitoring activities from the following recommended guidelines will be implemented during construction: – Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (Cheminfo Services Inc., 2005); and, – Operations Manual for Air Quality Monitoring in Ontario (Ministry of the Environment, Conservation and Parks, 2018).

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		– Full or partial enclosure of demolition activities. – Wind screens or barriers where possible or necessary. – Scheduling certain construction activities (i.e., site preparation and earth works activities, demolition activities, unpaved surfaces with heavy equipment travel, and uncovered soil storage piles) to periods of time when exposure to dust is expected to be limited (e.g., avoid scheduling activities during dry, windy weather conditions). – Landscaping materials ordered close to time of use to reduce on-site storage. – Application of soil stabilizers or dust control polymers where feasible. – Daily removal of accumulated mud, dirt and debris deposits on-site, and regular truck washing. – Paved and unpaved roadway cleaning, watering or application of a non-chloride dust suppressant. – Minimize drop height of materials on-site.	

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		– Covering surface area of hauled bulk material. – Methods and equipment for cleanup of accidental spill of dusty materials. – Limit travel speeds on-site to a maximum of 16-24 kilometres per hour. ▪ If disruption of contaminated soils is anticipated at any time, ensure that contaminants are not released. ▪ Develop a communications protocol which includes timely resolution of complaints.	

Table E-2: Potential Impacts, Mitigation Measures and Monitoring Activities During Operations

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Operating Conditions: **Increased Traffic Vehicular Emissions**	Increased NO_2, CO, SO_2, particulate, and VOC impact levels at nearby receptors.	Continued promotion of increased electric vehicle purchase and infrastructure within Ontario. Implementation of vegetation within the Project Study Area to decrease ground level dispersion of particulates.	No other specific monitoring implementation recommended at this time.

ES 5. Future Commitments

The assessment of potential air quality impacts was completed based on the draft 10% design of the planned Bus Rapid Transit corridor. As changes to the inputs used in this assessment may occur during detailed design, it is recommended that during detailed design, the air quality analyses be assessed for any changes to the inputs that were used in the analyses. If there were any changes to the inputs, an additional analysis would be required in order to confirm the findings of this study. The purpose of the updated analysis would be to reflect the revised inputs so that the impacts, mitigation measures, and monitoring requirements are accurate to the most recent design details. Changes that may trigger an assessment update include changes to input variables, such as roadway alignment, overall traffic volumes, grading, etc.

Commitments to additional future work for air quality are summarized in **Table E-3** below. With the development of future commitments, the Project is ensured to be implemented in accordance with the mitigation measures and monitoring activities described in **Section 4**.

Table E-3: Future Commitments

Environmental Component	Project Phase	Commitments for Future Work
Air Quality	▪ Detailed Design/ Construction/ Operations	▪ Potential re-assessment of Air Quality Impacts during detailed design phase. Submission of an EA Addendum may be required for significant design changes from draft 10% design affecting Air Quality. ▪ Development and implementation of an Air Quality Management Plan during construction operations. Refer to **Table 6-13** for details on an Air Quality Management Plan

ES 6. Permits and Approvals

In addition to the Transit Project Assessment Process, the requirement of other permits and approvals required to implement the Project were investigated. There are no specific federal, provincial, or municipal permits and approvals required prior to Project construction related to Air Quality.

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1. Introduction

1.1 Background

Previous municipal planning studies and the Metrolinx Initial Business Case confirmed the need for improved bus transit infrastructure along Dundas Street. Metrolinx is now advancing plans for the Dundas Bus Rapid Transit corridor. More than 20 kilometres of the 48-kilometre Bus Rapid Transit corridor will operate in bus lanes or in a dedicated right-of-way, separate from other traffic, allowing faster and more reliable transit connections.

In 2020, Metrolinx completed the Dundas Bus Rapid Transit Initial Business Case, which recommends a preferred Bus Rapid Transit alignment, and supportive service concept along Dundas Street between Kipling Station, in the City of Toronto, through the City of Mississauga and Halton Region, to Highway 6 in the City of Hamilton. AECOM Canada Limited (AECOM) was retained by Metrolinx and the City of Mississauga to evaluate the proposed 48-kilometre transit corridor. The evaluation involves the completion of the Preliminary Design, Preliminary Design Business Case and Transit Project Assessment Process.

A Transit Project Assessment Process is a focused environmental impact assessment process created specifically for transit projects. The process involves a pre-planning phase followed by a regulated (up to 120 days) consultation and documentation period. These phases include consultation, assessment of impacts, development of measures to mitigate negative impacts, and documentation. Consultation occurs with the public, stakeholders and Indigenous Nations throughout the process. Following these phases, there is a 30-day public review period where the public has the opportunity to review the Environmental Project Report (EPR) and provide additional comments, followed by a 35-day Minister’s review period.

The preliminary design phase will build upon the pre-planning completed as part of the Transit Project Assessment Process. In this phase, the project team will utilize the environmental impact assessment from the Transit Project Assessment Process to refine the Bus Rapid Transit design to a 30% design level. The Preliminary Design Business Case analyzes the Dundas Bus Rapid Transit corridor against strategic objectives, financial and economic impacts and operations considerations. The Preliminary Design Business Case will compare the corridor against a business-as-usual scenario (i.e., without the project).

In 2018, the Dundas Connects Master Plan (Dundas Connects) was completed by the City of Mississauga. It guides future development and intensification along the Dundas Street Corridor in the City of Mississauga. Dundas Connects was developed over a 2-year period with extensive consultation from the public. It was endorsed by City Council on June 18, 2018. Bus Rapid Transit, cycling infrastructure, and an enhanced public realm for pedestrians were among the recommendations in the Plan. Dundas Connects is being implemented through various studies and initiatives, including this Transit Project Assessment Process.

The Dundas Bus Rapid Transit Mississauga East (the Project) includes the planning and design of a 7-kilometre Bus Rapid Transit corridor from Confederation Parkway to the City of Toronto boundary at Etobicoke Creek, within the City of Mississauga. The Project has been submitted under the Government of Canada's Investing in Canada Infrastructure Program and is currently awaiting approval. This Air Quality Impact Assessment Report (the Report) has been prepared to support the Dundas Bus Rapid Transit – Mississauga East Transit Project Assessment Process.

1.2 Purpose of the Air Quality Impact Assessment Report

This Report describes the detailed approach for documenting the air quality baseline existing conditions, the results of the impact assessment (impact of the Project on air quality), proposed mitigation measures and proposed monitoring activities associated with the Project.

The proposed scope of work involves five main tasks, which include:

1. Background information review;
2. Existing conditions assessment;
3. Assessment of impacts from the Project;
4. Development of mitigation measures and monitoring activities to minimize negative impacts of the Project on air quality; and
5. Preparation of an Air Quality Impact Assessment Report.

A detailed description of the methodology for each item is provided in **Section 2**.

1.3 Study Area

The Project Area is the area of direct disturbance required for the construction and operation of the Project. It includes the proposed alignment for the Project, additional area(s) for potential refinements as the design progresses and possible laydown area(s) for construction operations. The Project Area is shown in **Figure A1**, **Appendix A**.

The Study Area for the Air Quality Impact Assessment (the Study Area) is shown in **Figure A2, Appendix A**. The Study Area is based the Ministry of Transportation Ontario's Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020) recommendations which includes the Project Area plus a surrounding 500-metre buffer. Ground level fugitive emissions from highway or roadway vehicle movement and associated activities are expected to dissipate to negligible levels beyond 500 metres.

2. Methodology

2.1 Background Review

Relevant project-specific background documents and information were reviewed prior to conducting the impact assessment. Project-specific information was primarily related to engineering details for the project design, specifications and other relevant data where appropriate. Existing documentation on traffic studies conducted within the boundary of the Study Area was requested and received from relevant municipal bodies, including City of Mississauga.

Desktop background information review was conducted with a focus on:

- Existing relevant air quality assessment guidelines, methodologies, and levels of acceptable contaminant concentrations within the Study Area by provincial and federal regulatory bodies;
- Existing and confirmed future residential development for sensitive[1] and critical[2] receptor identification within the Study Area;
- Review of existing background air quality concentration measurements from the National Air Pollution Surveillance network of monitoring stations within Ontario which are managed in collaboration with the Ministry of the Environment, Conservation and Parks; and
- Review of existing supporting documentation such as:
    - Dundas Street (Regional Road 5) Improvements Class EA Study – Neyagawa Boulevard (Regional Road 4) to Oak Park Boulevard) Environmental Study Report (MRC 2013); and
    - Halton Region Dundas Street (Regional Road 5) Transportation Improvements (from Bran Street to Bronte Road) Class Environmental Assessment Study (MMM 2012).

[1] Sensitive receptors are defined as any building used for temporary or permanent residence, for example detached housing, condos, or apartments.

[2] Critical receptors are defined as any building used for temporary or permanent locations designated for sensitive populations such as children, sick persons, or elderly persons. These include schools, hospitals, day care centres, and long-term care homes.

The background review provided the basis of understanding for the Project requirements and informed the methodology for carrying out the Air Quality Impact Assessment.

2.2 Representative Receptors

Representative receptors were selected within the Study Area, determined by distance from the proposed project alignment. A total of nine (9) critical receptors (childcare centres, retirement homes, and similar institution buildings) and 27 sensitive receptors (residences) were identified as per **Table 2-1** below. **Figure A3** in **Appendix A** shows the locations of each of the representative receptors.

Table 2-1: Dundas BRT Mississauga East Representative Receptors

Receptor ID	Type	Address	Description
CR1	Critical	3153 Cawthra Road Mississauga, ON L5A 2X4	Mini Skool 'A Childs Place' Inc. Daycare
CR2	Critical	3173 Cawthra Road Mississauga, ON L5A 2X4	Mississauga Daycare Centre
CR3	Critical	590 Lolita Gardens Mississauga, ON L5A 4N8	Cawthra Gardens Long Term Care Residence
CR4	Critical	460 Silver Creek Blvd Mississauga, ON L5A 2B3	Silver Creek Public School
CR5	Critical	275 Rudar Road Mississauga, ON L5A 1S2	TEAM Primary School
CR6	Critical	3024 Hurontario Street Unit 211Mississauga, ON L5B 4M4	Aspen Preparatory Academy
CR7	Critical	3025 Hurontario Street Mississauga, ON L5A 2H1	Algonquin Careers Academy
CR8	Critical	3100 Hurontario Street Mississauga, ON L5B 1N7	TL Kennedy Secondary School
CR9	Critical	2500 Mimosa Row Mississauga, ON L5B 1P7	Royal Montessori School
SR1	Sensitive	4 Rayside Drive Etobicoke, ON M9C 1S6	Single Unit Dwelling
SR2	Sensitive	14 Neilson Drive Etobicoke, ON M9C 1V6	Apartment Building
SR3	Sensitive	7 Mountain Ash Court Etobicoke, ON M9C 1L3	Single Unit Dwelling
SR4	Sensitive	1767 Dundas Street E Mississauga, ON L4X 1L5	Peel Family Shelter
SR5	Sensitive	1777 Coram Crescent Mississauga, ON L4X 1L2	Single Unit Dwelling
SR6	Sensitive	1703 Coram Crescent	Single Unit Dwelling

Receptor ID	Type	Address	Description
		Mississauga, ON L4X 1L1	
SR7	Sensitive	3145 Queen Frederica Drive Mississauga, ON L4Y 3A7	Apartment Building
SR8	Sensitive	3025 Queen Frederica Drive Mississauga, ON L4Y 3A1	Apartment Building
SR9	Sensitive	130 Arena Road Mississauga, ON L4Y 2C5	Townhome
SR10	Sensitive	1009 Dundas Street E Mississauga, ON L4Y 4A5	Single Unit Dwelling
SR11	Sensitive	935 Dundas Street E Mississauga, ON L4Y 4B7	Apartment Building
SR12	Sensitive	3038 Haines Road Mississauga, ON L4Y 4B2	Single Unit Dwelling
SR13	Sensitive	652 Green Meadow Crescent Mississauga, ON L5A 2V2	Single Unit Dwelling
SR14	Sensitive	600 Lolita Gardens Mississauga, ON L5A 3K8	Apartment Building
SR15	Sensitive	530 Lolita Gardens Mississauga, ON L5A 3T2	Apartment Building
SR16	Sensitive	2545 Hensall Street Mississauga, ON L5A 2T1	Single Unit Dwelling
SR17	Sensitive	435 Hensall Street Mississauga, ON L5A 1Y1	Single Unit Dwelling
SR18	Sensitive	2596 Burslem Road Mississauga, ON L5A 2R6	Single Unit Dwelling
SR19	Sensitive	3035 Given Road Mississauga, ON L5A 2N2	Single Unit Dwelling
SR20	Sensitive	230 Randi Road Mississauga, ON L5A 1V7	Single Unit Dwelling
SR21	Sensitive	162 Randi Road Mississauga, ON L5A 1V5	Single Unit Dwelling
SR22	Sensitive	3100 Kirwin Avenue Mississauga, ON L5A 3S6	Apartment Building
SR23	Sensitive	75 King Street E Mississauga, ON L5A 4G5	Apartment Building
SR24	Sensitive	2503 Hurontario Street Mississauga, ON L5A 2G7	Apartment Building
SR25	Sensitive	2594 Confederation Pkwy Mississauga, ON L5B 1S2	Single Unit Dwelling
SR26	Sensitive	180 Anastasia Terrace Mississauga, ON L5B 3A6	Single Unit Dwelling
SR27	Sensitive	2616 Privet Court Mississauga, ON L5B 2Z4	Single Unit Dwelling

2.3 Assessment of Contaminants

The criteria air contaminants and greenhouse gases selected for assessment within this Report are based on recommendations from the internal Metrolinx Draft Environmental Guide: Recommended Approach for Assessing and Mitigating Air Quality Impacts and Greenhouse Gas Emissions of Metrolinx Public Transit Projects ("Metrolinx Air Quality Guideline" issued in draft, November, 2019), and the Ministry of Transportation Ontario Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020).

The Air Quality Impact Assessment includes the following Criteria Air Contaminants and Greenhouse Gases from vehicle emissions:

Criteria Air Contaminants:

1. Nitrogen dioxide, NO_2
   (assessed over 1-hour, 24-hour, and annual averaging periods);
2. Carbon monoxide, CO
   (assessed over 1-hour and 8-hour averaging periods);
3. Sulphur Dioxide, SO_2
   (assessed over 10-min, 1-hour, and annual averaging periods);
4. Particulate matter (<10 microns), PM_{10}
   (assessed over 24-hour and annual averaging periods);
5. Particulate matter (<2.5 microns), $PM_{2.5}$
   (assessed over 24-hour and annual averaging periods);
6. Acetaldehyde
   (assessed over 30-min and 24-hour averaging period);
7. Acrolein
   (assessed over 1-hour and 24-hour averaging periods);
8. Benzene
   (assessed over 24-hour and annual averaging periods);
9. Benzo(a) pyrene, B(a)P
   (assessed over 24-hour and annual averaging periods);
10. Formaldehyde
    (assessed over 24-hour averaging period); and

11. 1,3-butadiene
    (assessed over 24-hour and annual averaging periods).

Greenhouse Gases:

1. Carbon dioxide, CO_2;
2. Methane, CH_4; and
3. Nitrous Oxide, N_2O.

Vehicular emissions of the coarse fraction of particulates (PM_{10}) are emitted mostly from tire wear, brake wear, and road dust fugitives, whereas the fine fraction ($PM_{2.5}$) is mostly attributed to vehicle emission exhausts.

Impacts from contaminants contributing to the regional GHG levels were assessed as a singular carbon dioxide equivalent (CO_2e) using appropriate 100-year global warming potential values (GWP100) as most recently published in the Canadian Gazette Par I, Volume 155 (February 13, 2021)[3]. The Project impacts of CO_2e will be compared to the Ministry of the Environment, Conservation and Parks projected transportation emissions for the province, as described in the Ministry of the Environment, Conservation and Parks Made-in-Ontario Environment Plan (November 2018).

2.4 Relevant Air Quality Guidelines

The applicable standards for Criteria Air Contaminants are established by the Ministry of the Environment, Conservation and Parks as the Ambient Air Quality Criteria (AAQC, 2020) and the Canadian Council of Ministers of the Environment as the Canadian Ambient Air Quality Standards (CAAQS, 2020 and 2025), as noted in **Table 2-2**.

Table 2-2: Summary of Applicable Guidelines and Standards

Criteria Air Contaminant	Source	Averaging Period	Air Quality Threshold Value (µg/m^3)
Nitrogen dioxide	Ambient Air Quality Criteria	One hour	400
		24 hours	200
Nitrogen dioxide (1)	Canadian Ambient Air Quality Standards	One hour (2020)	119
		Annual (2020)	34
		One hour (2025)	83

[3] Canadian Department of the Environment, *Canadian Environmental Protection Act, 1999: Notice with respect to reporting of greenhouse gases (GHGs) for 2020*, Canada Gazette, Volume 155, Part I, February 13, 2021. Accessed April 19, 2021: https://gazette.gc.ca/rp-pr/p1/2021/2021-02-13/html/sup1-eng.html

Criteria Air Contaminant	Source	Averaging Period	Air Quality Threshold Value (µg/m^3)
		Annual (2025)	24
Carbon monoxide	Ambient Air Quality Criteria	One hour	36,200
		Eight hours	15,700
Sulphur dioxide	Ambient Air Quality Criteria	10-minute	178
		One hour	106
		Annual	11
Sulphur dioxide (2)	Canadian Ambient Air Quality Standards	One hour (2020)	193
		Annual (2020)	14
		One hour (2025)	179
		Annual (2025)	11
Particulate matter (<10 microns) (3)	Ambient Air Quality Criteria	24 hours	50
Particulate matter (<2.5 microns) (4)	Canadian Ambient Air Quality Standards	24 hours (2020)	27
Particulate matter (<2.5 microns) (4)	Canadian Ambient Air Quality Standards	Annual (2020)	8.8
Acetaldehyde	Ambient Air Quality Criteria	30-minute	500
		24 hours	500
Acrolein	Ambient Air Quality Criteria	One hour	4.5
		24 hours	0.4
Benzene	Ambient Air Quality Criteria	24 hours	2.3
		Annual	0.45
Benzo(a)pyrene	Ambient Air Quality Criteria	24 hours	0.00005
		Annual	0.00001
1,3-Butadiene	Ambient Air Quality Criteria	24 hours	10
		Annual	2
Formaldehyde	Ambient Air Quality Criteria	24 hours	65

Notes: (1) The Canadian Ambient Air Quality Standards threshold for nitrogen dioxide is based on the three-year average of the annual 98th percentile of the daily maximum one-hour average concentrations.

(2) The Canadian Ambient Air Quality Standards threshold for sulphur dioxide is based on the three-year average of the annual 99th percentile of the daily maximum one-hour average concentrations.

(3) The value of 50 µg/m^3 (24 hr) is an interim Ambient Air Quality Criteria and is provided as a guide for decision making.

(4) The Air Quality threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years.

The Ambient Air Quality Criteria are acceptable effects-based levels in ambient air, used for assessing general air quality and the potential for causing adverse effects. Criteria are set based on the “limiting effect”. Effects considered may be health, odour,

vegetation, soiling, visibility, corrosion or others and thresholds have variable averaging times appropriate for the effect that they are intended to protect against. The Ambient Air Quality Criteria are set at levels below which an adverse health and/or environmental effects may be expected. If a contaminant has more than one Ambient Air Quality Criteria value, all must be used for assessment purposes as each represents a different type of effect linked to a particular averaging period.

The Canadian Council of Ministers of the Environment has developed Canada-wide standards for $PM_{2.5}$, NO_2 and SO_2 under the Canadian Ambient Air Quality Standards. The Canadian Ambient Air Quality Standards are established as voluntary objectives under the Canadian Environmental Protection Act, 1999. These standards are developed jointly by various provincial jurisdictions based on a scientific and risk-based approach. Standards are presented to the Ministers along with a timetable for implementation and monitoring and public reporting programs. Ministers are responsible for implementing the standards within their own jurisdictions and promote consistency across the country.

2.5 Existing Ambient Air Quality Methodology

The existing ambient air quality conditions were based on publicly available historical data from ambient air quality monitoring stations within Ontario. The most recent data available at the time of preparation of this Report (April 2021) was utilized. The following National Air Pollution Surveillance air quality monitoring stations were selected as representative of the ambient air quality of the Study Area:

1. Toronto West (National Air Pollution Surveillance ID 60430);
2. Mississauga (National Air Pollution Surveillance ID 60434);
3. Etobicoke South (National Air Pollution Surveillance ID 60435);
4. Gage Institute (National Air Pollution Surveillance ID 60427); and
5. Roadside Wallberg University of Toronto (National Air Pollution Surveillance ID 60439).

These stations are located nearest to the Study Area and monitored (in combination) all relevant Criteria Air Contaminants for the assessment, since one station is unable to monitor all Criteria Air Contaminants. Where multiple stations were found to monitor a common Criteria Air Contaminant, the closest representative station was selected for the assessment. In this assessment, Mississauga Station and Etobicoke South Station both monitored particulate matter and nitrogen oxides; however, Mississauga Station

was closer to the Study Area and therefore was selected as the most representative location to monitor both contaminants. **Figure A4** in **Appendix A** presents the locations of all five air quality monitoring stations relative to the Study Area. Details related to these air quality monitoring stations are provided in **Table 2-3**.

Table 2-3: Air Quality National Air Pollution Surveillance Monitoring Station Information

Station Information	Toronto West	Mississauga	Etobicoke South	Gage Institute	Roadside Wallberg University of Toronto
National Air Pollution Surveillance No.	60430	60434	60435	60427	60439
Address	125 Resources Road, Toronto	3359 Mississauga Road, Mississauga	461 Kipling Avenue, Etobicoke	223 College Street, Toronto	200 College Street, Toronto
Years of Data Available	2015 – 2019	2015 – 2019	2015 – 2019 (NO_2, $PM_{2.5}$, 1,3-Butadiene) 2013 – 2017 (Benzene)	2011 – 2014	2014 – 2017
Latitude	43.7094	43.5470	43.6108	43.6582	43.6590
Longitude	-79.5435	-79.6587	-79.52198	-79.3972	-79.3954
Station Type	Urban	Urban	Urban	Urban	Urban
CACs Measured	CO, SO_2	NO_2, $PM_{2.5}$	NO_2, $PM_{2.5}$ Benzene, 1,3-Butadiene	Benzo(a)pyrene	Formaldehyde, Acetaldehyde, Acrolein

One-hour, eight-hour, and 24-hour ambient concentrations for the Criteria Air Contaminants were obtained from the 90th percentile of hourly measurements from the representative air quality monitoring stations (the average value was calculated from the available years). The 90th percentile of available background data was used following the methodology outlined in the Ministry of Transportation's Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020). In addition, the 98th and 99th percentile averages for the three highest years within the data set were included to compare

against Canadian Ambient Air Quality Standards, utilizing the same statistical methodology used to determine these standards.

Annual ambient concentrations for the Criteria Air Contaminants were obtained from the mean hourly or daily measurements (as available) taken at the representative air quality monitoring station. The overall annual ambient concentration was averaged from the available five years of data for provincial standard comparison, and it was also adjusted using the appropriate statistical methodology used to compare to the federal standards, as indicated by the Canadian Council of Ministers of the Environment.

2.6 Meteorological Conditions Assessment Methodology

Site-specific meteorological data from the Toronto Pearson Airport was requested and processed by the Ministry of the Environment, Conservation and Parks for use in dispersion modelling with advanced air dispersion modelling software, AERMOD version 19191.

This five-year data set (2016-2020) was also analysed using a wind rose to determine the predominant wind directions and wind speeds within the Study Area.

2.7 Emission Inventory Assessment Methodology

Mesoscale air quality impacts are defined as the incremental change in regional emissions of Criteria Air Contaminants due to the proposed Project modifications relative to the existing infrastructure configuration, for a given future year. Emission inventories estimate the quantities (in mass units) of Criteria Air Contaminants emitted over a given time period and provide information about contributions from the air emission sources. Emissions are estimated by multiplying emission factors by source activity levels. An emission factor represents the emissions from a single source for a unit of time or distance (e.g., grams of CO per vehicle kilometre traveled). The source activity is the number of vehicle-kilometre-traveled on a roadway segment in a given time period, such as one day.

The emission inventory for the Air Quality Impact Assessment was developed from the number of passenger vehicles, transit buses, and heavy trucks annually averaged daily activity along the arterial roads identified for assessment within the Study Area. The emission inventory includes emissions from the full speed capacity and low-speed travel of transit buses and passenger vehicles along identified sources of significant traffic emission within the Study Area. The motor vehicle emission inventory was developed using:

- Available Project design details (e.g. lane reductions or widening, designed capacity for rapid bus transit infrastructure, etc.),
- Representative assumptions of transit scheduling along the Dundas BRT infrastructure,
- Available traffic data within the Study Area, and
- Emission factors produced from the U.S. EPA emissions modeling software MOVES 3.0 for the existing conditions year of 2019 and future horizon year of 2041.

Identification of significant sources of traffic emissions within the Study Area was conducted based on the classification of Dundas Street West and the new Bus Rapid Transit infrastructure as the primary route of study, with inclusion of traffic corridors within the Study Area having at least 10% or more of the annual average daily traffic volumes as Dundas Street West. There were fifteen (15) identified through-volume sources within the Study Area, and thirty-eight (38) identified signalized intersection idling sources within the Study Area associated with the BRT infrastructure project footprint. These sources are listed with location and description in **Table 2-4**. Source identification for through-volume sources (moving traffic) and idling sources (at signalized intersections) are continued from the Dundas BRT Toronto Study Area.

Table 2-4: Dundas BRT Mississauga East Emission Sources

Source ID	Type	Description
S11	Through-Volume	Dundas St. W, between Southcreek Rd. (SI9) & Universal Dr. (SI10)
S12	Through-Volume	Dundas St. W, between Universal Dr. (SI10) & Wharton Way (SI11)
S13	Through-Volume	Dundas St. W, between Wharton Way (SI11) & Treadwells Dr./Coram Ave. (SI12)
S14	Through-Volume	Dundas St. W, between Treadwells Dr./Coram Ave. (SI12) & Mattawa Ave. (SI13)
S15	Through-Volume	Dundas St. W, between Mattawa Ave. (SI13) & Jarrow Ave. (SI14)
S16	Through-Volume	Dundas St. W, between Jarrow Ave. (SI14) & Neilco Ct. (SI15)
S17	Through-Volume	Dundas St. W, between Neilco Ct. (SI15) & Dixie Rd. (SI16)
S18	Through-Volume	Dundas St. W, between Dixie Rd. (SI16) & Blundel Rd. (SI17)
S19	Through-Volume	Dundas St. W, between Blundel Rd. (SI17) & Stanfield Rd. (SI20)
S20	Through-Volume	Dundas St. W, between Stanfield Rd. (SI20) & Tomken Rd. (SI21)
S21	Through-Volume	Dundas St. W, between Tomken Rd. (SI21) & Cawthra Rd. (SI24)
S22	Through-Volume	Dundas St. W, between Cawthra Rd. (SI24) & Grenville Dr. (SI25)

Source ID	Type	Description
S23	Through-Volume	Dundas St. W, between Grenville Dr. (SI25) & Kirwin Ave. (SI26)
S24	Through-Volume	Dundas St. W, between Kirwin Ave. (SI26) & Hurontario St. (SI27)
S25	Through-Volume	Dundas St. W, between Hurontario St. (SI27) & Confederation Pkwy (SI28)
SI9_E	Idling	Dundas St. W, Hwy 403 off-ramp (SI50) & Hwy 403 off-ramp (SI51)
SI9_W	Idling	Dundas St. W, Hwy 403 off-ramp (SI51) & Ninth Line (SI52)
SI10_E	Idling	Intersection at Universal Dr. and Dundas St. W., eastbound approach
SI10_W	Idling	Intersection at Universal Dr. and Dundas St. W., westbound approach
SI11_E	Idling	Intersection at Wharton Way and Dundas St. W., eastbound approach
SI11_W	Idling	Intersection at Wharton Way and Dundas St. W., westbound approach
SI12_E	Idling	Intersection at Treadwells Dr. and Dundas St. W., eastbound approach
SI12_W	Idling	Intersection at Treadwells Dr. and Dundas St. W., westbound approach
SI13_E	Idling	Intersection at Mattaw Ave. and Dundas St. W., eastbound approach
SI13_W	Idling	Intersection at Mattaw Ave. and Dundas St. W., westbound approach
SI14_E	Idling	Intersection at Jarrow Ave. and Dundas St. W., eastbound approach
SI14_W	Idling	Intersection at Jarrow Ave. and Dundas St. W., westbound approach
SI15_E	Idling	Intersection at Neilco Ct. and Dundas St. W., eastbound approach
SI15_W	Idling	Intersection at Neilco Ct. and Dundas St. W., westbound approach
SI16_E	Idling	Intersection at Dixie Rd. and Dundas St. W., eastbound approach
SI16_W	Idling	Intersection at Dixie Rd. and Dundas St. W., westbound approach
SI17_E	Idling	Intersection at Blundell Rd. and Dundas St. W., eastbound approach
SI17_W	Idling	Intersection at Blundell Rd. and Dundas St. W., westbound approach
SI18_E	Idling	Intersection at Arena Rd. and Dundas St. W., eastbound approach
SI18_W	Idling	Intersection at Arena Rd. and Dundas St. W., westbound approach
SI19_E	Idling	Intersection at Palstan Rd. and Dundas St. W., eastbound approach
SI19_W	Idling	Intersection at Palstan Rd. and Dundas St. W., westbound approach
SI20_E	Idling	Intersection at Constitution Blvd. and Dundas St. W., eastbound approach
SI20_W	Idling	Intersection at Constitution Blvd. and Dundas St. W., westbound approach
SI21_E	Idling	Intersection at Tomken Rd. and Dundas St. W., eastbound approach
SI21_W	Idling	Intersection at Tomken Rd. and Dundas St. W., westbound approach
SI22_E	Idling	Intersection between Haines Rd. and Dundas St. W., eastbound approach
SI22_W	Idling	Intersection between Haines Rd. and Dundas St. W., westbound approach
SI23_E	Idling	Intersection at Haines Rd. and Dundas St. W., eastbound approach
SI23_W	Idling	Intersection at Haines Rd. and Dundas St. W., westbound approach

Source ID	Type	Description
SI24_E	Idling	Intersection at Cawthra Arena Rd. and Dundas St. W., eastbound approach
SI24_W	Idling	Intersection at Cawthra Arena Rd. and Dundas St. W., westbound approach
SI25_E	Idling	Intersection at Cliff Rd. and Dundas St. W., eastbound approach
SI25_W	Idling	Intersection at Cliff Rd. and Dundas St. W., westbound approach
SI26_E	Idling	Intersection at Camilla Rd. and Dundas St. W., eastbound approach
SI26_W	Idling	Intersection at Camilla Rd. and Dundas St. W., westbound approach
SI27_E	Idling	Intersection at Hurontario Rd. and Dundas St. W., eastbound approach
SI27_W	Idling	Intersection at Hurontario Rd. and Dundas St. W., westbound approach

The emissions inventory was prepared in accordance with the Ministry of Transportation's Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020) for Cumulative Impact Assessments. Annual emissions inventories were prepared for each pollutant for the Existing Conditions year (2019) and Future Conditions horizon year (2041). A copy of the full inventory is included in **Appendix E**.

2.7.1 Operational Emission Inventory

The vehicular emissions were estimated using the U.S. EPA emissions modelling software MOVES 3.0 (MOVES). This software provides emission rates for a wide variety of source types (i.e., passenger cars, motorcycles, long-haul trucks, etc.), speed bins, road types, and emission types (i.e., running emissions, idling emissions, tire wear, brake wear, etc.). Emission rates were developed for all criteria air contaminants and greenhouse gas compounds from passenger vehicle, heavy truck and transit bus source types (MOVES Source IDs 11, 21, 31, 32, 42, 43, 51, 52, and 53). The study did not include intercity buses, motor homes, or combination long-haul trucks travelling along the arterial roads within the Study Area. The excluded sources are typically seen along highway routes and are assumed to not be applicable for assessment of arterial roadways. All other trucks were included within the assessment of heavy vehicles, and it was assumed that any presence of long-haul combination trucks would be relatively minimal and therefore negligible.

The U.S. EPA emissions modelling software MOVES calculates emissions from mobile sources using a variety of factors: time span, geographic bounds, vehicle type, road type, and emission or process type. The time span calculates emission using default fleet composition and fuel criteria specific to a pre-selected year, month, hour, and

weekday/weekend profile. Fleet composition and fuel criteria are also specific to geographic location, with default database data provided for each county in the United States. For Canada, the closest U.S. County to the Study Area is expected to provide fleet and fuel characteristics as close of a match as possible; therefore, Niagara County in New York State was selected. Since MOVES is developed in the U.S., Canadian-specific county data are not available. It is typical for Canadian air quality transportation environmental assessment projects to assume a similar vehicle fleet and fuel characteristics to that of the closest U.S. based county. This approach has been accepted by the Ministry of the Environment, Conservation and Parks for previously submitted assessments for other transportation projects.

There are thirteen vehicle types and five fuel types in MOVES. The various vehicle types encompass passenger vehicles (motorcycles, cars and trucks); light, medium and heavy commercial trucks; buses (intercity, transit, and school); and other vehicle types such as refuse trucks and motor homes. The fuels include diesel, gasoline, electricity, compressed natural gas (for transit buses only), and ethanol (E-85) fuel. The percentage of E-85 fuel used by the Project fleet was eliminated in emissions estimation for this Project as flex-fuel cars and fuelling stations are not readily available in Ontario as they are in the United States.

Emissions in MOVES are divided into four major categories:

1. Running emissions;
2. Start emissions;
3. Evaporative emissions; and
4. Particulate emissions from brake wear and tire wear.

Vehicular emissions from the project were estimated using the MOVES3.0 County Scale methodology. An averaged 24-hour emission profile was generated for each pollutant, for each vehicle type (passenger car and transit bus). The maximum emissions from January and July were compared and the higher of the two was selected for inclusion in air dispersion modelling, to capture the worst-case emissions from both the coldest (January) and warmest (July) ambient temperatures.

Evaporative emissions include the following sub-categories: evaporative permeation, fuel vapour venting, fuel leaks, refuelling displacement vapour loss, and refuelling spillage loss. All types of evaporative emissions were included within the calculated MOVES running emission factor used in the assessment.

Idling emissions from transit busses and passenger vehicles were derived from the MOVES County Scale modelling output using the emission rate at the designated idling speed bin (speed bin ID = 0).

2.7.2 Construction Emission Inventory

Construction emissions of dust and particulates (PM_{10} and $PM_{2.5}$) will be estimated on a high-level qualitative basis, according to proposed construction activities and the identification of a worst-case 24-hour construction emissions scenario. These emissions will not be included within subsequent dispersion modelling, but rather used to help inform potential mitigation and monitoring measures in conjunction with the Existing Conditions ambient air quality levels.

The specific conditions of worst-case construction emissions were assumed based on the following operations: road works asphalt removal and site preparation; road works paving of new asphalt; soil excavation and stockpiling; station construction and installation; culvert construction; and bridge construction. The associated equipment list, number of vehicles per construction operation, associated equipment horsepower, and hours of daily operation for each construction operation are included within the Dundas BRT Air Quality Assumptions Report, included within **Appendix B**.

2.8 Dispersion Modelling Assessment Methodology

The calculated emission inventory for each station for all criteria air contaminants were modelled using the U.S. EPA gaussian dispersion model, AERMOD (version 19191). The model is capable of predicting impacts from a variety of source types, including stationary sources (e.g., stacks), line sources (e.g., traffic emissions along roads), stationary volume sources (e.g., pile unloading), and area sources (e.g., parking lots).

AERMOD predicts contaminant impacts using the Gaussian dispersion model in conjunction with hourly meteorological data. A 5-year site-specific meteorological data set was pre-processed by the Ministry of the Environment, Conservation and Parks for direct use in AERMOD for the years 2015-2019 using raw meteorological data from the surface and upper air meteorological stations located closest to the Study Area.

Emission sources identified within the AERMOD model were based on road traffic and idling emissions from vehicle sources within the Study Area, including:

- Transit bus travel along the identified Bus Rapid Transit infrastructure; and

- Passenger vehicle, and heavy truck travel along Dundas Street arterial roads within the Study Area.

For each link and source, an hourly profile of emissions and traffic data was input into the model, along with other pertinent information such as road width per link. Release heights and plume widths were calculated in accordance with U.S. EPA's recommended methodologies.

2.9 Assumptions

The Air Quality Impact Assessment was conducted following a number of assumptions, which are specified in detail within the Air Quality Assumptions Report, provided in **Appendix B**.

3. Existing Conditions

3.1 Existing Ambient Air Quality

Relevant ambient air quality data collected at the five National Air Pollution Surveillance air quality monitoring stations (Environment and Climate Change Canada, 2021) is summarized in **Appendix D**. Representative data for all Criteria Air Contaminants were identified as follows for the applicable averaging periods. The background concentrations for each contaminant were compared to the applicable Provincial and Federal standards for all applicable time averaging periods and percentile concentrations, as shown in **Table 3-1**.

Table 3-1: Comparison of Background Ambient Air Quality Data to Standards

CAC	Station ID	Averaging Period	Years	Average of Background Data (µg/m³)	Statistical Form	Criteria/ Standard (µg/m³)	Standard Source	% of Criteria/ Standard
NO_2	**60434**	1	2015-2019	36	5-year 90th Percentile	400	AAQC	9%
		1	2015-2019	88	3-year 98th Percentile	119	CAAQS (2020)	74%
		1	**2015-2019**	**88**	**3-year 98th Percentile**	**83**	**CAAQS (2025)**	**105%**
		24	2015-2019	28	5-year 90th Percentile	200	AAQC	14%
		Annual	2015-2019	18.1	Max Annual Mean	34	CAAQS (2020)	54%
		Annual	2015-2019	18.1	Max Annual Mean	24	CAAQS (2025)	76%
CO	60430	1	2015-2019	422	5-year 90th Percentile	36,200	AAQC	1%
		8	2015-2019	413	5-year 90th Percentile	15,700	AAQC	3%
SO_2	60430	1	2015-2019	25	3- year 99th Percentile	193	CAAQS (2020)	13%
		1	2015-2019	25	3-year 99th Percentile	179	CAAQS (2025)	14%
		1	2015-2019	3	5-year 90th Percentile	106	AAQC	3%
		10-min	2015-2019	5	5-year 90th Percentile	178	AAQC	3%

CAC	Station ID	Averaging Period	Years	Average of Background Data (µg/m³)	Statistical Form	Criteria/ Standard (µg/m³)	Standard Source	% of Criteria/ Standard
		Annual	2015-2019	3.3	5-year Mean	11	AAQC	31%
		Annual	2015-2019	2.8	Maximum Annual Mean	14	CAAQS (2020)	20%
		Annual	2015-2019	2.8	Maximum Annual Mean	11	CAAQS (2025)	26%
PM_{10} (2)	60434	24	2015-2019	25	5-year 90th Percentile	50	AAQC	50%
$PM_{2.5}$	60434	24	2015-2019	20	3-year 98th Percentile	27	CAAQS (2020)	76%
		Annual	2015-2019	7.7	5-year Mean	8.8	CAAQS (2020)	87%
Acetaldehyde (3)	60439	30-min	2014-2017	5	5-year 90th Percentile	500	AAQC	1%
		24	2014-2017	2	5-year 90th Percentile	500	AAQC	0%
Acrolein (4)	60439	1	2014-2017	0.2	5-year 90th Percentile	4.5	AAQC	4%
		24	2014-2017	0.1	5-year 90th Percentile	0.4	AAQC	17%
Benzene	60435	24	2013-2017	0.8	5-year 90th Percentile	2.3	AAQC	34%
Benzene	**60435**	**Annual**	**2013-2017**	**0.49**	**5-year Mean**	**0.45**	**AAQC**	**108%**
Benzo(a)-pyrene	**60435**	**24**	**2011-2014**	**0.00012**	**5-year 90th Percentile**	**0.00005**	**AAQC**	**242%**
		Annual	**2011-2014**	**0.00007**	**5-year Mean**	**0.00001**	**AAQC**	**675%**
1,3-Butadiene	60435	24	2013-2017	0.06	5-year 90th Percentile	10	AAQC	1%
		Annual	2013-2017	0.04	5-year Mean	2	AAQC	2%
Formaldehyde	60439	24	2014-2017	3	5-year 90th Percentile	65	AAQC	5%

Notes:

1. Exceedances of the Ambient Air Quality Criteria and Canadian Ambient Air Quality Standards are shown in red.

2. PM_{10} was not included in National Air Pollution Surveillance air quality monitoring station measurements, and therefore was estimated using $PM_{2.5}$ measurements, assuming a ratio of 1 µg/m³ PM_{10} per 0.54 µg/m³ of $PM_{2.5}$ as per Lall et al. publication in Atmospheric Environment, Estimation of historical annual PM2.5 exposures for health effects assessment (Lall et al., 2004).

3. Concentrations of acetaldehyde are measured on a 24-hour basis, background concentrations for the 30-minute averaging period have been converted using the Ministry of the Environment, Conservation and Parks' conversion factor where $C_{0.5hr} = C_{24hr} \times (24hr/0.5hr)^{0.28}$.

4. Concentrations of acrolein are measured on a 24-hour basis, background concentrations for the hourly averaging period have been converted using the Ministry of the Environment, Conservation and Parks' conversion factor where $C_{1hr} = C_{24hr} \times (24hr/1hr)^{0.28}$.

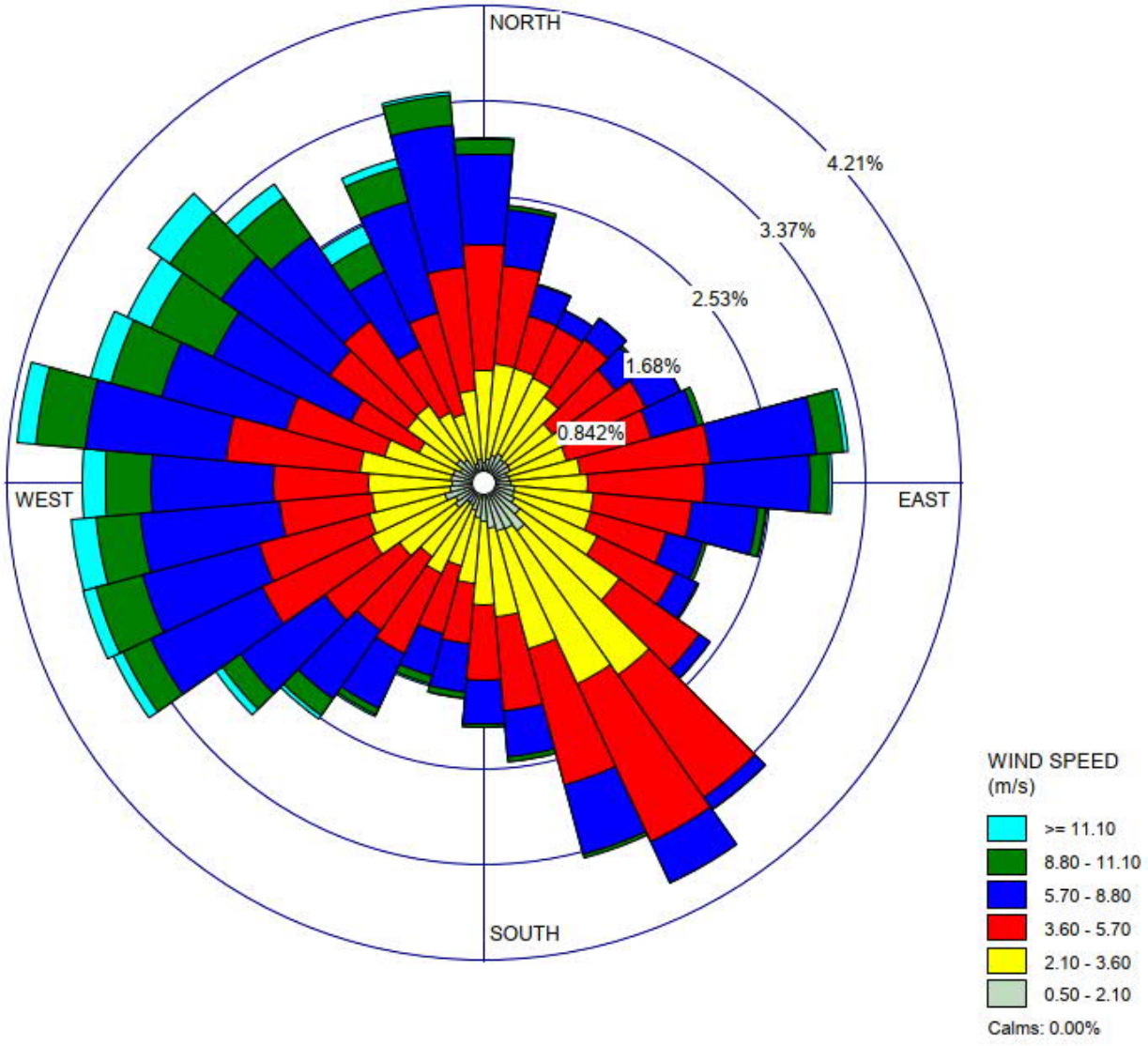
3.2 Meteorological Conditions

The local air quality from both ambient conditions and contributions from traffic and transit activities are affected by the local and regional meteorological conditions. Predominant wind speeds and wind directions within the Study Area will determine the likely areas of most common impacts, and the potential areas of greatest impact. Higher impact conditions from traffic emissions are created from low speed surface air movement towards a nearby receptor. Local surface station meteorological data can be used to anticipate areas of high probability impact.

The closest representative meteorological station for this project was identified as the Toronto Pearson Airport station located in Toronto (Station ID 61587). This station captures the meteorological effects from the surrounding major inland roads within the Toronto area which are expected to affect the Study Area. The wind rose for the 5-year meteorological period (2016-2020) showing the wind direction (blowing from) and wind speed is presented in **Figure 3-1**. The wind rose shows that the predominant wind direction is from the northwest, the west and southeast. It also shows a low-windspeed predominance from the southeast.

The wind rose model is based on site-specific meteorological data for the Study Area. Due to the specific land use settings for this assessment (i.e. urban and suburban alternating on the sides of the roadway), two datasets were used, one based on urban and the other based on suburban land use.

Figure 3-1: Wind Rose Representative of Dundas BRT Mississauga East Meteorological Conditions



4. Emission Inventory

4.1 Traffic Assessment

Three conditions were assessed for the Dundas Bus Rapid Transit Mississauga East Study Area: Existing Conditions, Future No-Build Conditions, and Future Build Conditions. The through-volume sources (**Table 2-4**: sources S11 through S25) located within the Study Area for Existing Conditions and Future No-Build Conditions remained identical. The idling sources (**Table 2-4**: sources SI9_E through SI27_W) within the Study Area were adjusted for varying queue lengths while waiting at intersections, where increased future traffic projections produced longer idling queues with the existing road infrastructure. Future Build design changes resulted in revised source configuration, traffic volumes, and idling queue lengths for all sources within the Study Area.

In addition to the identified sources within the Dundas Bus Rapid Transit Mississauga East Study Area as described in **Table 2-4**, all project sources were included to capture dispersion modelling cross-effects from neighbouring aspects of the project design both to the east, with the Toronto segment of the Dundas Bus Rapid Transit project, and to the west, with the Mississauga West segment of the Dundas Bus Rapid Transit project. The traffic data for all project sources included within the dispersion modelling were analysed in the same manner for consistency, following assumptions outlined in the **Appendix B**.

Peak AM traffic counts for both passenger vehicles and trucks were determined by the AECOM Traffic analysis team for all three conditions: Existing Conditions, Future No-Build Conditions, and Future Build Conditions. Using the modelled peak AM counts, the through traffic bi-directional daily traffic volumes were determined for each source identified with the Study Area (**Table 2-4**: sources S11 through S25). It was assumed that 50% of the traffic volumes would be stopped at intersections to estimate the appropriate approach directional volumes for determining idling queue lengths and peak approach volumes for idling sources (**Table 2-4**: sources SI9_E through SI27_W). The Existing Conditions traffic assessment was assessed for the year 2011, and an annual growth rate of 1% was applied to the averaged turning movement counts and 15-minute count traffic data to determine a traffic volume prediction for both the 2019 Existing Conditions. Projected traffic data was provided for the 2041 Future No-Build and Future-Build Conditions individually by the AECOM traffic analysis team. The 1% existing conditions growth rate is based on the following factors:

- The immediate lands around the future project infrastructure are generally well built-out;
- Historical traffic data shows negligible growth;

The year of 2019 was selected to represent Existing Conditions traffic volumes, assuming pre-pandemic traffic conditions. The Ontario Traffic Manual (Book 12, July 2001) was referenced to be able to estimate appropriate annual averaged daily traffic volumes from AM Peak and PM Peak service volumes as provided by the AECOM Traffic.

The traffic volumes provided by AECOM Traffic, summarized as annual averaged daily traffic volumes were assumed to include local existing bus routes within the Study Area. Future projected Bus Rapid Transit volumes from express bus service from Metrolinx Bus Rapid Transit rolling stock and Mississauga MiWay express bus service were estimated according to the Dundas Bus Rapid Transit Initial Business case (September 2020)[4], with a combined service provider bus traffic headway of two minutes (30 buses per hour) for each direction during peak service hours, and halved volumes during off-peak hours (early mornings before 7 AM and evenings after 7 PM). Metrolinx Bus Rapid Transit rolling stock was conservatively assumed to be fully diesel operated, while MiWay rolling stock was assumed to be electrified following an annual increase of electric bus rolling stock projected to meet MiWay transit's plan to have an 80% electrified fleet by 2050, as indicated by the City of Mississauga during rolling stock assumption review with AECOM. Further details on Bus Rapid Transit service levels, rolling stock division, and electrification are in the Assumptions Report, provided in **Appendix B**.

Signalized intersection data was provided by the AECOM Traffic for select intersections within the Study Area, including average signal cycle length and average red signal time, in seconds. This data was used to estimate average queue lengths for directional approach volumes along Dundas Street West at each signalized intersection identified within the Study Area (**Table 2-4**: sources SI9_E through SI277_W). For intersections where signalized intersection data was not available from AECOM Traffic, an assumed signal cycle length of 120 seconds and red signal time of 90 seconds was assumed.

All analyzed traffic data are summarized separately in **Table C1**, **Table C2**, **Table C3**, and **Table C3** of **Appendix C** for all sources within the Dundas Bus Rapid Transit project, including the Toronto and Mississauga West segments.

[4] Metrolinx Dundas BRT Initial Business Case, September 2021: http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/2020-08-17-Dundas-BRT-IBC-Final-Draft.pdf

4.2 Emissions Modeling (MOVES3.0.1)

The input data required to run MOVES in County Scale and Project Scale are presented in **Table 4-1**. Vehicle emission modelling was limited to internal combustion engine exhaust emissions (tailpipe exhaust only). Where default data included in MOVES3.0.1 were deemed appropriate for the Study Area, the MOVES default data has been used. The default data used was from Niagara County (New York), USA, given the relative proximity to the Study Area.

Table 4-1: MOVES3.0.1 Input Data

Parameter	Input	Reference
Scale	County Scale & Project Scale	-
Representative County	Niagara County, New York	-
Calculation Type	Emission Rates & Inventory	-
Years of Evaluation	2019, 2041	-
Month of Evaluation	January and July	-
Temperature ˚C	Full set of average hourly temperatures, by month (January or July)	Environment Canada climate data (January/July 2019). Toronto Pearson Airport location.
Humidity	Full set of average hourly humidity readings, by month (January or July)	Environment Canada climate data (January/July 2019). Toronto Pearson Airport location.
Fuel Types	Default fuel mix (E85 reassigned to Gasoline)	MOVES3.0.1 Default
Vehicle Types	Source IDs 11, 21, 31, 32, 42, 43, 51, 52, 53	-
Vehicle Age Distribution	MOVES3.0.1 Default	U.S. EPA

The applicable emissions factors for all vehicle classes generated by MOVES, running as County Scale, for the existing condition and projected build-out years (2019 and 2041) with appropriate speed bins for the Study Area are summarized in **Appendix E**.

The individual vehicle type emissions from MOVES were combined to create a representative vehicle emission for three classes of vehicle: cars (Source ID 11, 21, 31, and 32), trucks (Source ID 43, 51, 52, and 53), and transit busses (Source ID 42). The vehicle fraction for each source type is shown in **Table 4-2**.

Table 4-2: Source Type Fractions (MOVES3.0.1)

Description	Fraction ID	Category ID	Source Type ID	2019 Fraction	2041 Fraction
Bus Rapid Transit	B 42	B	42	100%	100%
Dundas West Passenger Car Mix	C 11	C	11	3%	4%
Dundas West Passenger Car Mix	C 21	C	21	43%	48%
Dundas West Passenger Car Mix	C 31	C	31	48%	43%
Dundas West Passenger Car Mix	C 32	C	32	6%	5%
Dundas West Medium Truck Mix	T 42	T	42	1%	1%
Dundas West Medium Truck Mix	T 43	T	43	5%	4%
Dundas West Medium Truck Mix	T 51	T	51	1%	1%
Dundas West Medium Truck Mix	T 52	T	52	89%	90%
Dundas West Medium Truck Mix	T 53	T	53	4%	4%

The emission factors output by MOVES were used to calculate an appropriate emission rate to be input into the AERMOD model for assessment, in grams per second (g/s). The representative daily traffic volumes (AADT) and Bus Rapid Transit headway bus volumes for each identified source within the Study Area were used to determine a maximum daily emission rate. A 24-hour traffic dispersion profile, using an 'urban' distribution profile from the United States Federal Highway Association "REALCOST" program, was applied to daily emission rates to determine an hourly emission profile for the Study Area. For the Future Build Conditions, the U.S. FHA 24-hour profile was combined with Bus Rapid Transit headway assumptions for the Study Area to provide a weighted 24-hour distribution for both traffic and Bus Rapid Transit in combination. Further details are included within the Assumptions Report in **Appendix B**. The associated AERMOD emission rates (g/s) derived from the MOVES output and combined representative traffic data is shown in **Appendix F** for each modelled source.

4.3 Annual GHG and Criteria Air Contaminants Inventory

Annual emissions from all sources within the Study Area were estimated using the emission rates (g/s), multiplied by the predicted annual traffic volumes. Annual emissions were also calculated based on the predicted number of vehicles idling periods correlating to the hourly number of representative transit arrivals.

Table 4-3 and **Table 4-4** show the predicted annual emissions for select priority criteria air contaminants and greenhouse gas emissions assessed for the Future Build

Conditions (2041), respectively. Total carbon dioxide equivalent was calculated using the 100-year global warming potential used by Environment and Climate Change Canada (ECCC) for 2021 greenhouse gas reporting[5].

Table 4-3: Priority Criteria Air Contaminant Annual Emissions from All Sources within the Mississauga East Study Area, Future Build Conditions (2041)

Criteria Air Contaminant (CAC)	Total Annual Emissions - Future Build Conditions (tonnes)
NO_X	309
CO	300
SO_2	1.39
$PM_{2.5}$	1.66

Table 4-4: Greenhouse Gas Annual Emissions from All Sources within the Mississauga East Study Area, Future Build Conditions (2041)

Greenhouse Gas (GHG)	Total Annual Emissions - Future Build Conditions (tonne)
CO_2	243,952
Methane	103
Nitrous Oxide	4.5
CO_2 Equivalent	247,881

Table 4-5 and **Table 4-6** show the predicted annual emissions for select priority criteria air contaminants and greenhouse gas emissions assessed for the Future No-Build Conditions (2041), respectively.

Table 4-5: Priority Criteria Air Contaminant Annual Emissions from All Sources within the Mississauga East Study Area, Future No-Build Conditions (2041)

Criteria Air Contaminant (CAC)	Total Annual Emissions - Future Build Conditions (tonnes)
NO_X	270
CO	296
SO_2	1.67

[5] Environment and Climate Change Canada, 2021, "Technical Guidance on reporting Greenhouse Gas Emissions": Accessed online: https://publications.gc.ca/collections/collection_2021/eccc/En81-29-2020-eng.pdf

Criteria Air Contaminant (CAC)	Total Annual Emissions - Future Build Conditions (tonnes)
$PM_{2.5}$	4.36

Table 4-6: Greenhouse Gas Annual Emissions from All Sources within the Mississauga East Study Area, Future No-Build Conditions (2041)

Greenhouse Gas (GHG)	Total Annual Emissions - Future Build Conditions (tonne)
CO_2	284,342
Methane	69
Nitrous Oxide	5.09
CO_2 Equivalent	287,585

The project operations show a slight increase in nitrogen oxides, carbon monoxide, and methane emissions, with a decrease in particulate, sulphur dioxide, carbon dioxide, and nitrous oxide emissions. These changes are expected from both increased bus traffic resulting from the bus rapid transit (BRT) operations, and a simultaneous decrease in projected regular traffic along Dundas Street West due to the project implementation and increased public transit ridership.

5. Air Dispersion Modelling

Dispersion modelling was conducted with the modelling software AERMOD, version 19191, and AERMET 19191. The air dispersion modelling was set-up using guidance provided in the "Air Dispersion Modelling Guideline for Ontario, Guideline A-11, version 3.0" published by the Ministry of Environment Conservation and Parks (MECP). For each link and source in each station, an hourly profile of emissions and traffic data was input into the model, along with other pertinent information such as road width per link, and queue lengths of the road vehicles. Release heights and plume widths were calculated in accordance with U.S. Environmental Protection Agency's recommended methodologies.

5.1 Modelling Inputs

5.1.1 Meteorology

Five years of site-specific pre-processed meteorological data from 2016 – 2020 with land use derived from the Study Area was obtained from the Ontario Ministry of Environment, Conservation and Parks. The meteorological data (surface) was collected at Toronto Pearson Airport station located in Toronto (Station ID 61587), and was processed for suburban land-use.

5.1.2 Terrain

Terrain data is publicly available from the Ontario Ministry of Environment, Conservation and Parks via their website[6] for the Study Area in the form of GeoTiff files. The GeoTiff file used for the modelling input was cdem_dem_030M.tiff.

5.1.3 Identified Receptors

The Ministry of Transportation Ontario Guideline (2019) as well as Metrolinx's internal document "Recommended Approach for Assessing and Mitigating Air Quality Impacts

[6] Regional Meteorological and Terrain Data for Air Dispersion Modelling (MECP): https://www.ontario.ca/page/map-regional-meteorological-and-terrain-data-air-dispersion-modelling

and Greenhouse Gases of Metrolinx Public Transit Projects" identifies two types of receptors:

- Sensitive (residences); and
- Critical (hospitals, retirement homes, childcare centres, and similar institution buildings).

The receptors identified within the Study Area have been described within **Section 2.2** of this report in **Table 2-1**.

In addition to these sensitive and critical receptors identified, the AERMOD models were created with a grid of 50 m x 50 m receptor points within the Study Area, excluding areas overlapping with the influence area surrounding line volume sources to prevent the overestimation of road impacts.

5.2 NO_2 Assessment using Ozone Limiting Method (OLM)

The concentration of nitrogen dioxide (NO_2) in the atmosphere is affected by the reaction of nitrous oxide (NO) with ozone (O_3), which is a by-product of mobile vehicle fuel combustion. The atmospheric reaction of NO with ozone is demonstrated as follows:

$$\mathbf{NO + O_3 \rightarrow NO_2 + O_2}$$

It is assumed that the rate of conversion of NO to NO_2 is controlled by the availability of ozone in the ambient atmosphere. This principle is called the "ozone limiting method" (OLM). Using the same principles, given a high enough concentration of ozone in the ambient atmosphere, all of the emitted NO emissions will convert to NO_2 and disperse in the same way as other inert combustion products from mobile vehicles.

According to NOx studies done by the U.S. Environmental Protection Agency, emissions of NOx from combustion are primarily in the form of NO (U.S. EPA, 1999). Modelled concentrations of NOx were therefore used along with ambient measured concentrations of background ozone levels from nearby Ontario Ministry of Environment, Conservation and Parks and Environment Canada monitoring stations to calculate the concentrations of NO_2 at a given sensitive receptor. The Québec Ministry of the Sustainable Development, Environment, and Parks published a technical guide for calculating atmospheric concentration of NO_2 using the ozone limiting method (Couture, 2008), described as follows:

- If the concentration (part per million, ppm) of NO is lower than that of ozone ([NO] < [O_3] or, more precisely, [O_3 > 0.9 [NOX]), then we assume that all of NO was converted to NO2 : [NO_2] = [NO_X]
- If the concentration (ppm) of NO is greater than that of ozone ([NO] > [O_3]), then the concentration of NO equal to the concentration (ppm) of ozone is converted to NO2 : [NO2] = [O_3] + 0.1* [NO_X]

The concentration of ambient ozone was taken as the average of the maximum 90th percentile values (2015 to 2019) for measured ozone concentrations at the NAPS Mississauga Station (NAPS ID 60434) as shown in **Table 5-1**. The NAPS Mississauga Station is located within the Study Area, at the University of Toronto Mississauga campus, northeast of the Dundas Street West and Mississauga Road intersection. Based on proximity, it was chosen as the most representative station for the ozone background level assessment.

Table 5-1: Local Ambient Ozone Levels (90th Percentile Concentrations, ppb)

Contaminant	Averaging Period (hr)	Data Source	2015	2016	2017	2018	2019	5-Year Average
O_3	1	NAPS	43	42	42	43	40	42
O_3	24	NAPS	37	36	36	38	35	37
O_3	Annual	NAPS	25	26	26	26	24	26

The modelled maximum receptor grid and discrete receptor concentrations of NO_X for the Existing Conditions (2019), Future No-Build, and Future Build Conditions (2041) and the resulting calculated NO_2 concentration using the ozone limiting method is shown below for the maximum impacted critical receptor in **Table 5-2**. The resulting calculated NO_2 concentration using the ozone limiting method for all sensitive and critical receptors are shown in **Appendix G**.

Table 5-2: NO_2 Calculation Using Ozone Limiting Method: Maximum Critical Receptor Concentration

Condition: Year [1]	Averaging Period (hr)	Modelled NOx Concentration (µg/m³)	Modelled NOx Concentration (ppb) [2]	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m³)	Maximum Concentration Location (UTM X, UTM Y)
EC: 2019	1	140	74.44	42	49.44	92.98	611674.95, 4826277.30 (CR7)
EC: 2019	24	43	23.01	37	23.01	43.26	611634.99, 4826200.97 (CR6)
EC: 2019	Annual	14	7.38	26	7.38	13.88	611634.99, 4826200.97 (CR6)
FNB: 2041	1	134	71.12	42	49.11	92.35	611674.95, 4826277.30 (CR7)
FNB: 2041	24	35	18.82	37	18.82	35.39	611634.99, 4826200.97 (CR6)
FNB: 2041	Annual	12	6.30	26	6.30	11.86	611634.99, 4826200.97 (CR6)
FB: 2041	1	178	95	42	51	97	611634.99, 4826200.97 (CR6)
FB: 2041	24	50	27	37	27	50	611634.99, 4826200.97 (CR6)
FB: 2041	Annual	17	9	26	9	17	611634.99, 4826200.97 (CR6)

Notes: (1) EC – Existing Conditions; FNB – Future No-Build Conditions; FB - Future Build Conditions

(2) Conversion from µg/m^3 to ppb uses the molecular weight of nitrogen dioxide (46 g/mol), gas constant (8.314 m^3 Pa mol^{-1} K^{-1}), and standard temperature and pressure of 101.325 Pa and 25 degrees Celsius.

6. Potential Impacts, Mitigation Measures and Monitoring Activities

6.1 Potential Impacts

6.1.1 Operations

6.1.1.1 Predicted Cumulative Concentrations: Existing Conditions

The highest predicted contaminant emissions for the Existing Conditions were modelled in AERMOD using a 50-metre spaced receptor grid, including sensitive and critical receptors. The results of the dispersion modelling identified the location of the maximum concentration at the most impacted receptor within each Study Area. The maximum concentrations for all receptors (including gridded receptors), and at the most impacted critical and sensitive receptor for the Mississauga East Study Area are summarized in **Table 6-1**, **Table 6-2**, and **Table 6-3**, respectively. Results are presented with the background concentrations for each contaminant per averaging period to determine the cumulative concentrations. The cumulative concentrations were compared to the applicable Air Quality Threshold and the predicted exceedances are noted in red.

The maximum concentration cumulative impacts at each identified critical and sensitive receptor is included in **Appendix H**. There are nine critical receptors and 27 sensitive receptors identified within the Mississauga East Study Area, as listed in **Table 2-1**.

Table 6-1: Summary of Existing Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	127	613464.49 4828603.91	163	400	AAQC	32%	41%
	1 hour	88	3-year 98th Percentile	127	613464.49 4828603.91	215	83	CAAQS (2025)	153%	259%
	24 hour	28	5-year 90th Percentile	84	614602.33 4829754.08	112	200	AAQC	42%	56%
	Annual	17	Max Annual Mean	50	614602.33 4829754.08	67	24	CAAQS (2025)	208%	279%
CO	1 hour	422	5-year 90th Percentile	1,222	614602.33 4829754.08	1644	36,200	AAQC	3%	5%
	8 hour	413	5-year 90th Percentile	618	614602.33 4829754.08	1031	15,700	AAQC	4%	7%
SO_2	10 min.	5	5-year 90th Percentile	8.00	614602.33 4829754.08	13.00	178	AAQC	4%	7%
	1 hour	25	3-year 99th Percentile	4.84	614602.33 4829754.08	29.84	179	CAAQS (2025)	3%	17%
	1 hour	3	5-year 90th Percentile	4.84	614602.33 4829754.08	7.84	106	AAQC	5%	7%

Table 6-1: Summary of Existing Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.55	614602.33 4829754.08	3.35	11	CAAQS (2025)	5%	30%
	Annual	3.3	5-year Mean	0.55	614602.33 4829754.08	3.85	11	AAQC	5%	35%
PM_{10}	24 hour	25	5-year 90th Percentile	6.83	614602.33 4829754.08	31.83	50	AAQC	14%	64%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	5.86	614602.33 4829754.08	25.86	27	CAAQS	22%	96%
	Annual	7.7	5-year Mean	1.96	614602.33 4829754.08	9.66	8.8	CAAQS	22%	110%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	2.90	613464.49 4828603.91	7.90	500	AAQC	1%	2%
	24 hour	2	5-year 90th Percentile	0.75	614602.33 4829754.08	2.75	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.31	613464.49 4828603.91	0.51	4.5	AAQC	7%	11%
	24 hour	0.1	5-year 90th Percentile	0.10	614602.33 4829754.08	0.20	0.4	AAQC	24%	49%

Table 6-1: Summary of Existing Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	1.02	614602.33 4829754.08	1.82	2.3	AAQC	44%	79%
	Annual	0.49	5-year Mean	0.34	614602.33 4829754.08	0.83	0.45	AAQC	76%	185%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	1.14E-03	614602.33 4829754.08	1.27E-03	0.00005	AAQC	2,288%	2,530%
	Annual	6.75E-05	5-year Mean	3.84E-04	614602.33 4829754.08	4.52E-04	0.00001	AAQC	3,841%	4,516%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.13	614602.33 4829754.08	0.19	10	AAQC	1%	2%
	Annual	0.04	5-year Mean	0.04	614602.33 4829754.08	0.08	2	AAQC	2%	4%
Formaldehyde	24 hour	3	5-year 90th Percentile	1.34	614602.33 4829754.08	4.34	65	AAQC	2%	7%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-2: Summary of Existing Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	93	CR7	129	400	AAQC	23%	32%
	1 hour	88	3-year 98th Percentile	93	CR7	181	83	CAAQS (2025)	112%	218%
	24 hour	28	5-year 90th Percentile	39	CR7	67	200	AAQC	19%	33%
	Annual	17	Max Annual Mean	12	CR7	29	24	CAAQS (2025)	51%	122%
CO	1 hour	422	5-year 90th Percentile	418	CR7	840	36,200	AAQC	1%	2%
	8 hour	413	5-year 90th Percentile	201	CR6	614	15,700	AAQC	1%	4%
SO_2	10 min.	5	5-year 90th Percentile	2.88	CR7	7.88	178	AAQC	2%	4%
	1 hour	25	3-year 99th Percentile	1.74	CR7	26.74	179	CAAQS (2025)	1%	15%
	1 hour	3	5-year 90th Percentile	1.74	CR7	4.74	106	AAQC	2%	4%

Table 6-2: Summary of Existing Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS Standard (µg/m^3)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.17	CR6	2.97	11	CAAQS (2025)	2%	27%
	Annual	3.3	5-year Mean	0.17	CR6	3.47	11	AAQC	2%	32%
PM_{10}	24 hour	25	5-year 90th Percentile	2.52	CR6	27.52	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	1.79	CR6	21.79	27	CAAQS	7%	81%
	Annual	7.7	5-year Mean	0.57	CR6	8.27	8.8	CAAQS	6%	94%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0.87	CR7	5.87	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.22	CR6	2.22	500	AAQC	0%	0%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.09	CR7	0.29	4.5	AAQC	2%	6%
	24 hour	0.1	5-year 90th Percentile	0.03	CR6	0.13	0.4	AAQC	7%	32%

Table 6-2: Summary of Existing Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.33	CR6	1.13	2.3	AAQC	14%	49%
	Annual	0.49	5-year Mean	0.11	CR6	0.60	0.45	AAQC	24%	133%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	3.29E-04	CR6	4.50E-04	0.00005	AAQC	658%	900%
	Annual	6.75E-05	5-year Mean	1.06E-04	CR6	1.73E-04	0.00001	AAQC	1,055%	1,731%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.04	CR6	0.10	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.01	CR6	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.39	CR6	3.39	65	AAQC	1%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-3: Summary of Existing Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	119	SR11	155	400	AAQC	30%	39%
	1 hour	88	3-year 98th Percentile	119	SR11	207	83	CAAQS (2025)	143%	249%
	24 hour	28	5-year 90th Percentile	79	SR11	107	200	AAQC	39%	53%
	Annual	17	Max Annual Mean	31	SR11	48	24	CAAQS (2025)	131%	201%
CO	1 hour	422	5-year 90th Percentile	978	SR8	1400	36,200	AAQC	3%	4%
	8 hour	413	5-year 90th Percentile	487	SR8	900	15,700	AAQC	3%	6%
SO_2	10 min.	5	5-year 90th Percentile	6.37	SR8	11.37	178	AAQC	4%	6%
	1 hour	25	3-year 99th Percentile	3.86	SR8	28.86	179	CAAQS (2025)	2%	16%
	1 hour	3	5-year 90th Percentile	3.86	SR8	6.86	106	AAQC	4%	6%

Table 6-3: Summary of Existing Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.40	SR8	3.20	11	CAAQS (2025)	4%	29%
	Annual	3.3	5-year Mean	0.40	SR8	3.70	11	AAQC	4%	34%
PM_{10}	24 hour	25	5-year 90th Percentile	6.03	SR8	31.03	50	AAQC	12%	62%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	5.11	SR8	25.11	27	CAAQS	19%	93%
	Annual	7.7	5-year Mean	1.63	SR8	9.33	8.8	CAAQS	18%	106%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	2.42	SR8	7.42	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.63	SR8	2.63	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.26	SR11	0.46	4.5	AAQC	6%	10%
	24 hour	0.1	5-year 90th Percentile	0.08	SR8	0.18	0.4	AAQC	20%	45%

Table 6-3: Summary of Existing Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.79	SR8	1.59	2.3	AAQC	34%	69%
	Annual	0.49	5-year Mean	0.25	SR8	0.74	0.45	AAQC	56%	165%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	9.77E-04	SR8	1.10E-03	0.00005	AAQC	1,955%	2,197%
	Annual	6.75E-05	5-year Mean	3.11E-04	SR8	3.78E-04	0.00001	AAQC	3,106%	3,782%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.10	SR8	0.16	10	AAQC	1%	2%
	Annual	0.04	5-year Mean	0.03	SR8	0.07	2	AAQC	2%	4%
Formaldehyde	24 hour	3	5-year 90th Percentile	1.14	SR8	4.14	65	AAQC	2%	6%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

6.1.1.2 Predicted Cumulative Concentrations: Future No-Build Conditions

The highest predicted contaminant emissions for the Future No-Build Conditions were modelled in AERMOD using a 50-metre spaced receptor grid, including sensitive and critical receptors. The results of the dispersion modelling identified the location of the maximum concentration at the most impacted receptor within each Study Area. The maximum concentrations for all receptors (including gridded receptors), and at the most impacted critical and sensitive receptor for the Mississauga East Study Area are summarized in **Table 6-4**, **Table 6-5**, and **Table 6-6**, respectively. Results are presented with the background concentrations for each contaminant per averaging period to determine the cumulative concentrations. The cumulative concentrations were compared to the applicable Air Quality Threshold and the predicted exceedances are noted in red.

The maximum concentration cumulative impacts at each identified critical and sensitive receptor is included in **Appendix H**. There are nine critical receptors and 27 sensitive receptors identified within the Mississauga East Study Area, as listed in **Table 2-1**.

Table 6-4: Summary of Future No-Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	115	614602.33 4829754.08	151	400	AAQC	29%	38%
	1 hour	88	3-year 98th Percentile	115	614602.33 4829754.08	203	83	CAAQS (2025)	138%	244%
	24 hour	28	5-year 90th Percentile	81	614602.33 4829754.08	109	200	AAQC	40%	54%
	Annual	17	Max Annual Mean	40	614602.33 4829754.08	57	24	CAAQS (2025)	168%	239%
CO	1 hour	422	5-year 90th Percentile	313	614602.33 4829754.08	735	36,200	AAQC	1%	2%
	8 hour	413	5-year 90th Percentile	152	614602.33 4829754.08	565	15,700	AAQC	1%	4%
SO_2	10 min.	5	5-year 90th Percentile	3.49	614602.33 4829754.08	8.49	178	AAQC	2%	5%
	1 hour	25	3-year 99th Percentile	2.11	614602.33 4829754.08	27.11	179	CAAQS (2025)	1%	15%
	1 hour	3	5-year 90th Percentile	2.11	614602.33 4829754.08	5.11	106	AAQC	2%	5%

Table 6-4: Summary of Future No-Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS Standard (µg/m^3)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.24	614602.33 4829754.08	3.04	11	CAAQS (2025)	2%	28%
	Annual	3.3	5-year Mean	0.24	614602.33 4829754.08	3.54	11	AAQC	2%	32%
PM_{10}	24 hour	25	5-year 90th Percentile	1.30	614602.33 4829754.08	26.30	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.68	614602.33 4829754.08	20.68	27	CAAQS	3%	77%
	Annual	7.7	5-year Mean	0.23	614602.33 4829754.08	7.93	8.8	CAAQS	3%	90%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0	611674.95 4826277.3	5	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	1	614602.33 4829754.08	3	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.03	614602.33 4829754.08	0.23	4.5	AAQC	1%	5%
	24 hour	0.1	5-year 90th Percentile	0.01	614602.33 4829754.08	0.11	0.4	AAQC	3%	28%

Table 6-4: Summary of Future No-Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.12	614602.33 4829754.08	0.92	2.3	AAQC	5%	40%
	Annual	0.49	5-year Mean	0.04	614602.33 4829754.08	0.53	0.45	AAQC	9%	118%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	1.13E-04	614602.33 4829754.08	2.34E-04	0.00005	AAQC	226%	469%
	Annual	6.75E-05	5-year Mean	3.85E-05	614602.33 4829754.08	1.06E-04	0.00001	AAQC	385%	1,061%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.29	614602.33 4829754.08	3.29	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-5: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	92	CR7	128	400	AAQC	23%	32%
	1 hour	88	3-year 98th Percentile	92	CR7	180	83	CAAQS (2025)	111%	217%
	24 hour	28	5-year 90th Percentile	26	CR7	54	200	AAQC	13%	27%
	Annual	17	Max Annual Mean	8	CR7	25	24	CAAQS (2025)	35%	106%
CO	1 hour	422	5-year 90th Percentile	98	CR6	520	36,200	AAQC	0%	1%
	8 hour	413	5-year 90th Percentile	48	CR6	461	15,700	AAQC	0%	3%
SO_2	10 min.	5	5-year 90th Percentile	1.35	CR7	6.35	178	AAQC	1%	4%
	1 hour	25	3-year 99th Percentile	0.82	CR7	25.82	179	CAAQS (2025)	0%	14%
	1 hour	3	5-year 90th Percentile	0.82	CR7	3.82	106	AAQC	1%	4%

Table 6-5: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.08	CR6	2.88	11	CAAQS (2025)	1%	26%
	Annual	3.3	5-year Mean	0.08	CR6	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25	5-year 90th Percentile	0.95	CR6	25.95	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.34	CR6	20.34	27	CAAQS	1%	75%
	Annual	7.7	5-year Mean	0.11	CR6	7.81	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0.38	CR7	5.38	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.08	CR6	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.01	CR7	0.21	4.5	AAQC	0%	5%
	24 hour	0.1	5-year 90th Percentile	0.003	CR6	0.10	0.4	AAQC	1%	26%

Table 6-5: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.04	CR6	0.84	2.3	AAQC	2%	37%
	Annual	0.49	5-year Mean	0.01	CR6	0.50	0.45	AAQC	3%	112%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	3.66E-05	CR6	1.58E-04	0.00005	AAQC	73%	316%
	Annual	6.75E-05	5-year Mean	1.20E-05	CR6	7.96E-05	0.00001	AAQC	120%	796%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.09	CR6	3.09	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-6: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	111	SR8	147	400	AAQC	28%	37%
	1 hour	88	3-year 98th Percentile	111	SR8	199	83	CAAQS (2025)	134%	240%
	24 hour	28	5-year 90th Percentile	80	SR8	108	200	AAQC	40%	54%
	Annual	17	Max Annual Mean	35	SR8	52	24	CAAQS (2025)	148%	218%
CO	1 hour	422	5-year 90th Percentile	284	SR8	706	36,200	AAQC	1%	2%
	8 hour	413	5-year 90th Percentile	138	SR8	551	15,700	AAQC	1%	4%
SO_2	10 min.	5	5-year 90th Percentile	3.08	SR8	8.08	178	AAQC	2%	5%
	1 hour	25	3-year 99th Percentile	1.87	SR8	26.87	179	CAAQS (2025)	1%	15%
	1 hour	3	5-year 90th Percentile	1.87	SR8	4.87	106	AAQC	2%	5%

Table 6-6: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.21	SR8	3.01	11	CAAQS (2025)	2%	27%
	Annual	3.3	5-year Mean	0.21	SR8	3.51	11	AAQC	2%	32%
PM_{10}	24 hour	25	5-year 90th Percentile	1.23	SR8	26.23	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.62	SR8	20.62	27	CAAQS	2%	76%
	Annual	7.7	5-year Mean	0.20	SR8	7.90	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0	SR8	5	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	1	SR8	3	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.03	SR8	0.23	4.5	AAQC	1%	5%
	24 hour	0.1	5-year 90th Percentile	0.01	SR8	0.11	0.4	AAQC	3%	28%

Table 6-6: Summary of Future No-Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.11	SR8	0.91	2.3	AAQC	5%	40%
	Annual	0.49	5-year Mean	0.04	SR8	0.53	0.45	AAQC	8%	117%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	1.02E-04	SR8	2.23E-04	0.00005	AAQC	204%	446%
	Annual	6.75E-05	5-year Mean	3.33E-05	SR8	1.01E-04	0.00001	AAQC	333%	1,008%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.26	SR8	3.26	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

6.1.1.3 Predicted Cumulative Concentrations: Future Build Conditions

The highest predicted contaminant emissions for the Future Build Conditions were modelled in AERMOD using a 50-metre spaced receptor grid, including sensitive and critical receptors. The results of the dispersion modelling identified the location of the maximum concentration at the most impacted receptor within the Study Area. The maximum concentrations for all receptors (including gridded receptors), and at the most impacted critical and sensitive receptor for the Mississauga East Study Area are summarized in **Table 6-7**, **Table 6-8**, and **Table 6-9**, respectively. Results are presented with the background concentrations for each contaminant per averaging period to determine the cumulative concentrations. The cumulative concentrations were compared to the applicable Air Quality Threshold and the predicted exceedances are noted in red.

The maximum concentration cumulative impacts at each identified critical and sensitive receptor is included in **Appendix H**. There are nine critical receptors and 27 sensitive receptors identified within the Mississauga East Study Area, as listed in **Table 2-1**. The specific impacts at all receptors are also included as graphics showing isopleth curves for varying pollutant concentrations in **Appendix I**.

Table 6-7: Summary of Future Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	111	614602.33 4829754.08	147	400	AAQC	28%	37%
	1 hour	88	3-year 98th Percentile	111	614602.33 4829754.08	199	83	CAAQS (2025)	134%	240%
	24 hour	28	5-year 90th Percentile	80	614057.11 4829274.81	108	200	AAQC	40%	54%
	Annual	17	Max Annual Mean	36	614602.33 4829754.08	53	24	CAAQS (2025)	152%	223%
CO	1 hour	422	5-year 90th Percentile	305	614602.33 4829754.08	727	36,200	AAQC	1%	2%
	8 hour	413	5-year 90th Percentile	158	614602.33 4829754.08	571	15,700	AAQC	1%	4%
SO_2	10 min.	5	5-year 90th Percentile	2.66	614602.33 4829754.08	7.66	178	AAQC	1%	4%
	1 hour	25	3-year 99th Percentile	1.61	614602.33 4829754.08	26.61	179	CAAQS (2025)	1%	15%
	1 hour	3	5-year 90th Percentile	1.61	614602.33 4829754.08	4.61	106	AAQC	2%	4%

Table 6-7: Summary of Future Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS Standard (µg/m^3)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.19	614602.33 4829754.08	2.99	11	CAAQS (2025)	2%	27%
	Annual	3.3	5-year Mean	0.19	614602.33 4829754.08	3.49	11	AAQC	2%	32%
PM_{10}	24 hour	25	5-year 90th Percentile	1.33	611188.81 4825646.33	26.33	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.50	611188.81 4825646.33	20.50	27	CAAQS	2%	76%
	Annual	7.7	5-year Mean	0.17	611188.81 4825646.33	7.87	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0.61	611634.99 4826200.97	5.61	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.88	614602.33 4829754.08	2.88	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.03	614602.33 4829754.08	0.23	4.5	AAQC	1%	5%
	24 hour	0.1	5-year 90th Percentile	0.01	614602.33 4829754.08	0.11	0.4	AAQC	2%	27%

Table 6-7: Summary of Future Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Location of Max Conc. (UTM Coordinates)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.10	614602.33 4829754.08	0.90	2.3	AAQC	4%	39%
	Annual	0.49	5-year Mean	0.03	614602.33 4829754.08	0.52	0.45	AAQC	7%	116%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	8.61E-05	614602.33 4829754.08	2.07E-04	0.00005	AAQC	172%	415%
	Annual	6.75E-05	5-year Mean	2.90E-05	614602.33 4829754.08	9.65E-05	0.00001	AAQC	290%	965%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.31	614602.33 4829754.08	3.31	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-8: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % Standard
NO_2	1 hour	36	5-year 90th Percentile	97	CR6	133	400	AAQC	24%	33%
	1 hour	88	3-year 98th Percentile	97	CR6	185	83	CAAQS (2025)	117%	223%
	24 hour	28	5-year 90th Percentile	50	CR6	78	200	AAQC	25%	39%
	Annual	17	Max Annual Mean	17	CR6	34	24	CAAQS (2025)	71%	141%
CO	1 hour	422	5-year 90th Percentile	163	CR6	585	36,200	AAQC	0%	2%
	8 hour	413	5-year 90th Percentile	74	CR6	487	15,700	AAQC	0%	3%
SO_2	10 min.	5	5-year 90th Percentile	1.33	CR7	6.33	178	AAQC	1%	4%
	1 hour	25	3-year 99th Percentile	0.81	CR7	25.81	179	CAAQS (2025)	0%	14%
	1 hour	3	5-year 90th Percentile	0.81	CR7	3.81	106	AAQC	1%	4%

Table 6-8: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % Standard
	Annual	2.8	Maximum Annual Mean	0.08	CR6	2.88	11	CAAQS (2025)	1%	26%
	Annual	3.3	5-year Mean	0.08	CR6	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25	5-year 90th Percentile	1.13	CR6	26.13	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.38	CR6	20.38	27	CAAQS	1%	75%
	Annual	7.7	5-year Mean	0.13	CR6	7.83	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0.61	CR6	5.61	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.14	CR6	2.14	500	AAQC	0%	0%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.01	CR6	0.21	4.5	AAQC	0%	5%
	24 hour	0.1	5-year 90th Percentile	0.00	CR6	0.10	0.4	AAQC	1%	26%

Table 6-8: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Critical Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Critical Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.04	CR6	0.84	2.3	AAQC	2%	37%
	Annual	0.49	5-year Mean	0.01	CR6	0.50	0.45	AAQC	3%	112%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	3.65E-05	CR6	1.58E-04	0.00005	AAQC	73%	315%
	Annual	6.75E-05	5-year Mean	1.21E-05	CR6	7.97E-05	0.00001	AAQC	121%	797%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.15	CR6	3.15	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

Table 6-9: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
NO_2	1 hour	36	5-year 90th Percentile	111	SR8	147	400	AAQC	28%	37%
	1 hour	88	3-year 98th Percentile	111	SR8	199	83	CAAQS (2025)	134%	240%
	24 hour	28	5-year 90th Percentile	80	SR8	108	200	AAQC	40%	54%
	Annual	17	Max Annual Mean	36	SR8	53	24	CAAQS (2025)	148%	219%
CO	1 hour	422	5-year 90th Percentile	302	SR8	724	36,200	AAQC	1%	2%
	8 hour	413	5-year 90th Percentile	156	SR8	569	15,700	AAQC	1%	4%
SO_2	10 min.	5	5-year 90th Percentile	2.25	SR8	7.25	178	AAQC	1%	4%
	1 hour	25	3-year 99th Percentile	1.36	SR8	26.36	179	CAAQS (2025)	1%	15%
	1 hour	3	5-year 90th Percentile	1.36	SR8	4.36	106	AAQC	1%	4%

Table 6-9: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
	Annual	2.8	Maximum Annual Mean	0.15	SR8	2.95	11	CAAQS (2025)	1%	27%
	Annual	3.3	5-year Mean	0.15	SR8	3.45	11	AAQC	1%	31%
PM_{10}	24 hour	25	5-year 90th Percentile	1.11	SR27	26.11	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20	3-year 98th Percentile	0.48	SR8	20.48	27	CAAQS	2%	76%
	Annual	7.7	5-year Mean	0.16	SR8	7.86	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour	5	5-year 90th Percentile	0.11	SR8	5.11	500	AAQC	0%	1%
	24 hour	2	5-year 90th Percentile	0.69	SR11	2.69	500	AAQC	0%	1%
Acrolein	1 hour	0.2	5-year 90th Percentile	0.03	SR8	0.23	4.5	AAQC	1%	5%
	24 hour	0.1	5-year 90th Percentile	0.01	SR8	0.11	0.4	AAQC	2%	27%

Table 6-9: Summary of Future Build Conditions Cumulative Concentration: Most Impacted Sensitive Receptor

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Most Impacted Sensitive Receptor	Cumulative Conc. (µg/m³)	AAQC/ CAAQS Standard (µg/m³)	Standard Source	Max % of Standard	Cumulative % of Standard
Benzene	24 hour	0.8	5-year 90th Percentile	0.09	SR8	0.89	2.3	AAQC	4%	39%
	Annual	0.49	5-year Mean	0.03	SR8	0.52	0.45	AAQC	6%	115%
Benzo(a)-pyrene	24 hour	1.21E-04	5-year 90th Percentile	7.66E-05	SR8	1.98E-04	0.00005	AAQC	153%	396%
	Annual	6.75E-05	5-year Mean	2.48E-05	SR8	9.24E-05	0.00001	AAQC	248%	924%
1,3-Butadiene	24 hour	0.06	5-year 90th Percentile	0.00	-	0.06	10	AAQC	0%	1%
	Annual	0.04	5-year Mean	0.00	-	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3	5-year 90th Percentile	0.30	SR8	3.30	65	AAQC	0%	5%

Notes:

(1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards (CAAQs). The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24-hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative air quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air quality monitoring stations.

(5) Exceedances to Air Quality thresholds are shown in **red**

6.1.1.4 Predicted Cumulative Concentrations: Results Discussion

The following contaminants are predicted to exceed the federal and/or provincial standards within the Future Build Conditions:

1. NO_2: For both the 1-hour (223% - 240%) and annual (141% - 223%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from both averaging periods also predict an exceedance at other identified sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-7, 6-8, and 6-9**
   Figure Reference: **Figures I13 and I14**, **Appendix I**

2. Benzene: For the annual (112% - 116%) averaging period threshold, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from this averaging period also predict an exceedance at other identified sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-7, 6-8, and 6-9**
   Figure Reference: **Figure I6**, **Appendix I**

3. Benzo(a)pyrene: For both the 24-hour (315% - 415%) and annual (797% - 924%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results for both averaging periods also predict an exceedance at all other sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-7, 6-8, and 6-9**
   Figure Reference: **Figures I7 and I8**, **Appendix I**

The following contaminants are predicted to exceed the federal and/or provincial standards within the Future No-Build Conditions:

1. NO_2: For both the 1-hour (217% - 244%) and annual (106% - 239%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from both averaging periods also predict an exceedance at other identified sensitive and critical receptors within the Study Area.

Table Reference: **Tables 6-4, 6-5, and 6-6**
Figure Reference: **n/a**

2. Benzene: For the annual (112% - 118%) averaging period threshold, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from this averaging period also predict an exceedance at other identified sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-4, 6-5, and 6-6**
   Figure Reference: **n/a**

3. Benzo(a)pyrene: For both the 24-hour (316% - 446%) and annual (796% - 1,061%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results for both averaging periods also predict an exceedance at all other sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-4, 6-5, and 6-6**
   Figure Reference: **n/a**

The following contaminants are predicted to exceed the federal and/or provincial standards within the Existing Conditions:

1. NO_2: For both the 1-hour (249%) and annual (201%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from both averaging periods also predict an exceedance at other identified sensitive and critical receptors within the Study Area.
   Table Reference: **Tables 6-1, 6-2, and 6-3**
   Figure Reference: **n/a**

2. $PM_{2.5}$: For the annual (106% - 110%) averaging period threshold, with significant contribution from background ambient air quality data. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North and at the sensitive receptor "SR8." Model results also predict exceedance at select other identified sensitive and critical receptors within the Study Area.

   Table Reference: **Tables 6-1 and 6-3**
   Figure Reference: **n/a**

3. Benzene: For the annual (133% - 185%) averaging period threshold, with approximately equal contribution from both the background ambient air quality

data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results from this averaging period also predict an exceedance at other identified sensitive and critical receptors within the Study Area.
Table Reference: **Tables 6-1, 6-2, and 6-3**
Figure Reference: **n/a**

4. Benzo(a)pyrene: For both the 24-hour (900% - 2,530%) and annual (1,731% - 4,516%) averaging period thresholds, with approximately equal contribution from both the background ambient air quality data and the Future Build modelled results. The locations of highest impact are at the UTM coordinates 614602.33 m East, and 4829754.08 m North, at the critical receptor "CR6," and at the sensitive receptor "SR8." Model results for both averaging periods also predict an exceedance at all other sensitive and critical receptors within the Study Area.
Table Reference: **Tables 6-1, 6-2, and 6-3**
Figure Reference: **n/a**

For all exceeding contaminants, the ambient background concentration was a major contributor to the exceedance to the Canadian Ambient Air Quality Standards and Ambient Air Quality Criteria standards in combination with the modelled concentration.

The iso-concentration contour maps for all contaminants showing the modelled results of all contaminants and averaging periods for the Future Build Conditions are provided in **Appendix I**.

For a specific reference example, **Figure 6-1** and **Figure 6-2** show the isoconcentration contours within the Study Area for the Future No-Build and Future Build Conditions of NO_X for the 1-hour averaging period, before OLM adjustments to produce NO_2 concentrations. As shown in the figures, the Future Build Conditions does have an increased impact as compared to Future No-Build Conditions at this particular intersection. This is primarily due to the projected increase in heavy vehicle traffic volumes from additional bus traffic from the Bus Rapid Transit route, along Dundas Street West comparing the Future No-Build traffic data to the Future Build traffic data, specifically:

- Approximately 9,700 Annual Averaged Daily Traffic for Future Build conditions along Dundas Street West, at the Hurontario Street. intersection closest to CR6 and CR7 (two highest impacted critical receptors) including 930 buses per day using the Bus Rapid Transit infrastructure.
- Approximately 9,100 Annual Averaged Daily Traffic for Future No-Build conditions along Dundas Street West at the same intersection, with local bus traffic only.

- This shows an approximate 6% increase in traffic between the two scenarios, driven by the addition of 930 buses per day travelling in both directions along Dundas Street West Bus Rapid Transit infrastructure on either side of the intersection.
- Emission rates for Future Build conditions at the same intersection for nitrogen oxides (NO_X) increased by approximately 74% due to the presence of additional buses from the Bus Rapid Transit infrastructure and a predicted higher percentage of trucks travelling along Dundas Street West within this portion of the Study Area (see **Table C-1**, in **Appendix C**). This increase in both buses and trucks results in a higher relative emission rate for nitrogen oxides within this specific intersection.

Figure 6-1: Isoconcentration Contours of Hurontario Street and Dundas Street West Interchange for NO_X,1-hour averaging period, Future No-Build Conditions

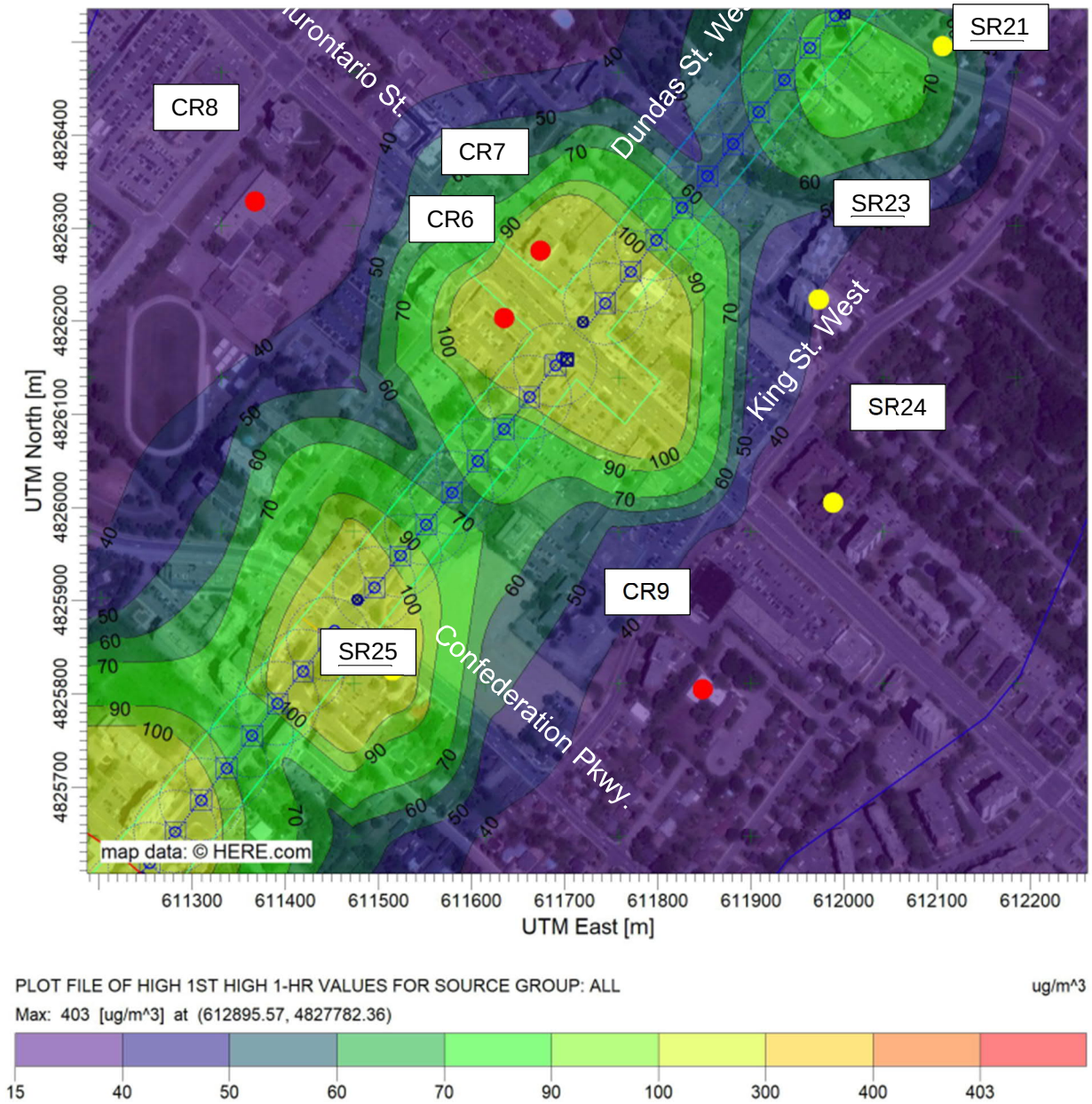
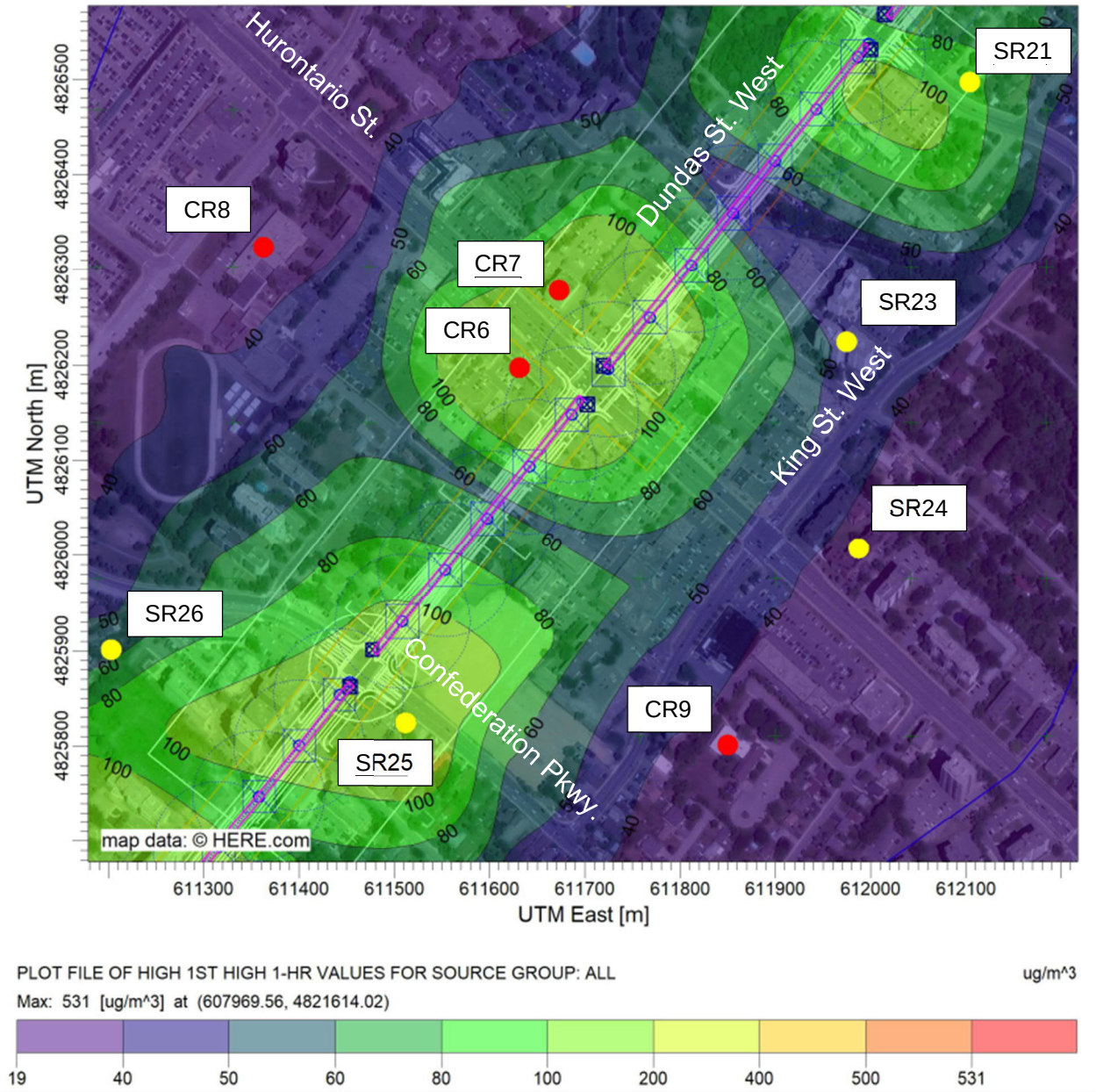


Figure 6-2: Isoconcentration Contours of Hurontario Street and Dundas Street West Interchange for NO_X, 1-hour averaging period, Future Build Conditions



To provide the percent change for the Future Build Conditions in comparison to the modelled Existing Conditions and Future No-Build Conditions, **Table 6-10** compares the cumulative concentration impact at the most impacted critical receptors (CR6 and CR7) within the Study Area. The maximum concentrations at all modelled critical and sensitive receptors are included in **Appendix H**.

Table 6-10: Comparison of Cumulative Maximum Concentrations at Critical Receptors CR6 and CR7 for Existing, Future No Build, and Future Build Conditions

Contaminant	Averaging Period	Existing Conditions (µg/m^3)	Future No-Build Conditions (µg/m^3)	Future Build Conditions (µg/m^3)	% Change from Existing Conditions	% Change from Future No-Build Conditions
NO_2	1 hour	93	92	97	4%	5%
	24 hour	39	26	50	30%	93%
	Annual	12	8	17	37%	100%
CO	1 hour	418	98	163	-61%	66%
	8 hour	201	48	74	-63%	55%
SO_2	10 min.	2.88	1.35	1.33	-54%	-1%
	1 hour	1.74	0.82	0.81	-54%	-1%
	Annual	0.17	0.08	0.08	-56%	1%
PM_{10}	24 hour	2.52	0.95	1.13	-55%	18%
$PM_{2.5}$	24 hour	1.79	0.34	0.38	-79%	12%
	Annual	0.57	0.11	0.13	-78%	13%
Acetaldehyde	0.5 hour	0.87	0.38	0.61	-31%	59%
	24 hour	0.22	0.08	0.14	-36%	70%
Acrolein	1 hour	0.09	0.01	0.01	-84%	14%
	24 hour	0.03	0.003	0.004	-85%	21%
Benzene	24 hour	0.33	0.04	0.04	-87%	6%
	Annual	0.11	0.01	0.01	-87%	7%
Benzo(a) pyrene	24 hour	3.29E-04	3.66E-05	3.65E-05	-89%	0%
	Annual	1.06E-04	1.20E-05	1.21E-05	-89%	1%
1,3-Butadiene	24 hour	0.04	0	0	-100%	-
	Annual	0.01	0	0	-100%	-
Formaldehyde	24 hour	0.39	0.09	0.15	-61%	74%

This table shows a broad range of increase from 1% through 100% for most contaminants due to the proposed Project compared to the Future No-Build scenario. This is due both to a slight increase in traffic in the Future Build scenario, but primarily to an anticipated increase in bus vehicular emissions along Dundas Street West from the Bus Rapid Transit infrastructure and variations in heavy truck traffic throughout the Study Area. The respective increase from each pollutant varies depending on the contribution from diesel combustion emissions from the Bus Rapid Transit operation and heavy truck traffic within the Study Area.

The variation in Project impact results when compared to the Existing Conditions is due to a decrease in individual contaminant exhaust emissions from projected MOVES 3.0 modelling and due to the increase in traffic conditions within the Study Area. Emissions from some contaminants are anticipated to decrease at a greater rate than others due to projected fuel combustion efficiencies in newer models of vehicles and projected fuel compositions in the future. An example is the anticipated elimination of 1,3-butadiene as a contaminant from vehicle exhausts post 2040 due to increased efficiency of combustion within a projected future vehicle fleet.

6.1.2 Cumulative Frequency Analysis

A cumulative frequency analysis was conducted to estimate the potential period of exposure for the predicted 1-hour averaged NO_2 and 24-hour benzo(a)pyrene concentrations at the worst-case impacted sensitive receptor. These contaminants are predicted to exceed their respective provincial limit at the most impacted sensitive and critical receptors (SR8 and CR6) in the modelling of the Project Future Build Conditions.

Each of the following figures show the percentage of time that the highest impacted receptor is experiencing concentrations of NO_2 and benzo(a)pyrene from both the Project's contribution and the contribution from the background ambient air quality, in relation to the respective federal or provincial limit. These figures should be viewed as a visual aid representing the relative impacts from each of the contributing sources.

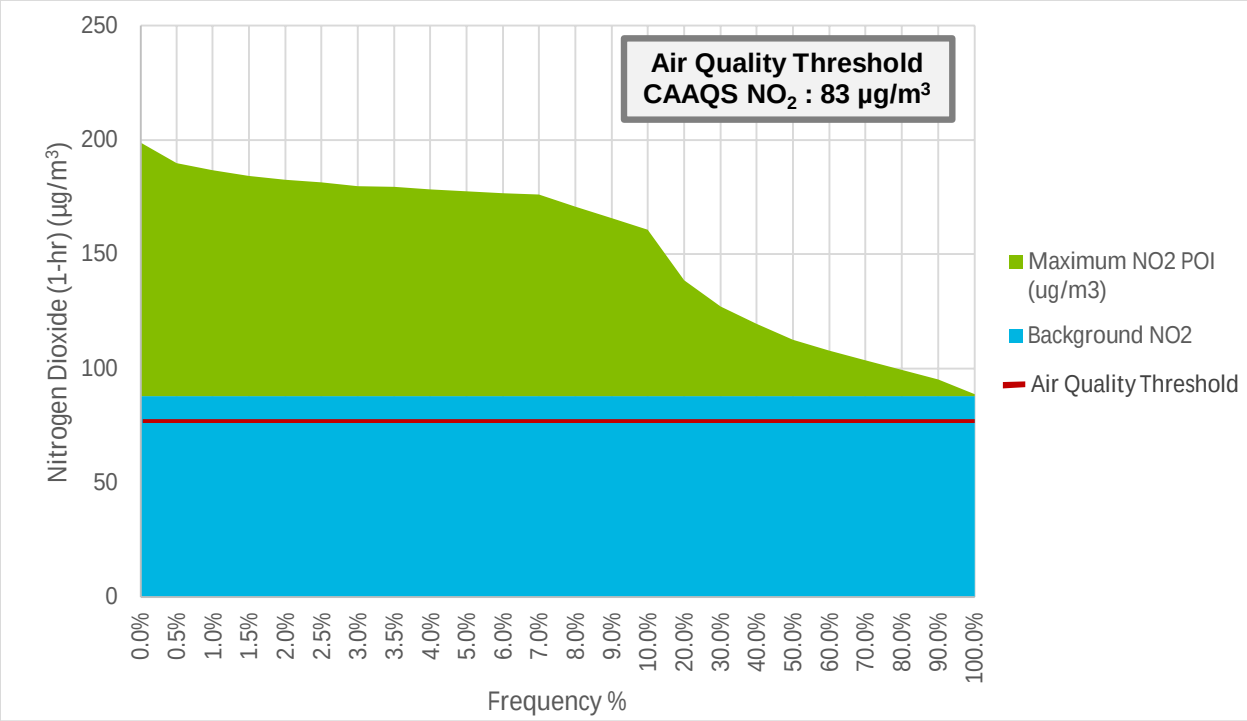
6.1.2.1 1-Hour Average NO_2 Impacts for Future Build Conditions

Figure 6-3 shows the cumulative frequency analysis curve representing the percentage of time at which the most impacted sensitive receptor (SR8) is experiencing a concentration of NO_2 averaged over 1-hour, in relation to the federal limit. The percentage of exceedance of Canadian Ambient Air Quality Standards limits for the highest sensitive receptor (SR8) is slightly higher than the most impacted critical receptor (CR6) and therefore was selected for the cumulative frequency analysis.

The figure also illustrates the separate contribution from the Project sources and from the background air quality. The figure shows the following:

- All hours have a concentration above the Canadian Ambient Air Quality Standards limit.
- The background level of NO_2 (1-hour) contributes 100% of CAAQS limit.

Figure 6-3: Future Build Cumulative Frequency Analysis (SR8) 1-hr NO_2



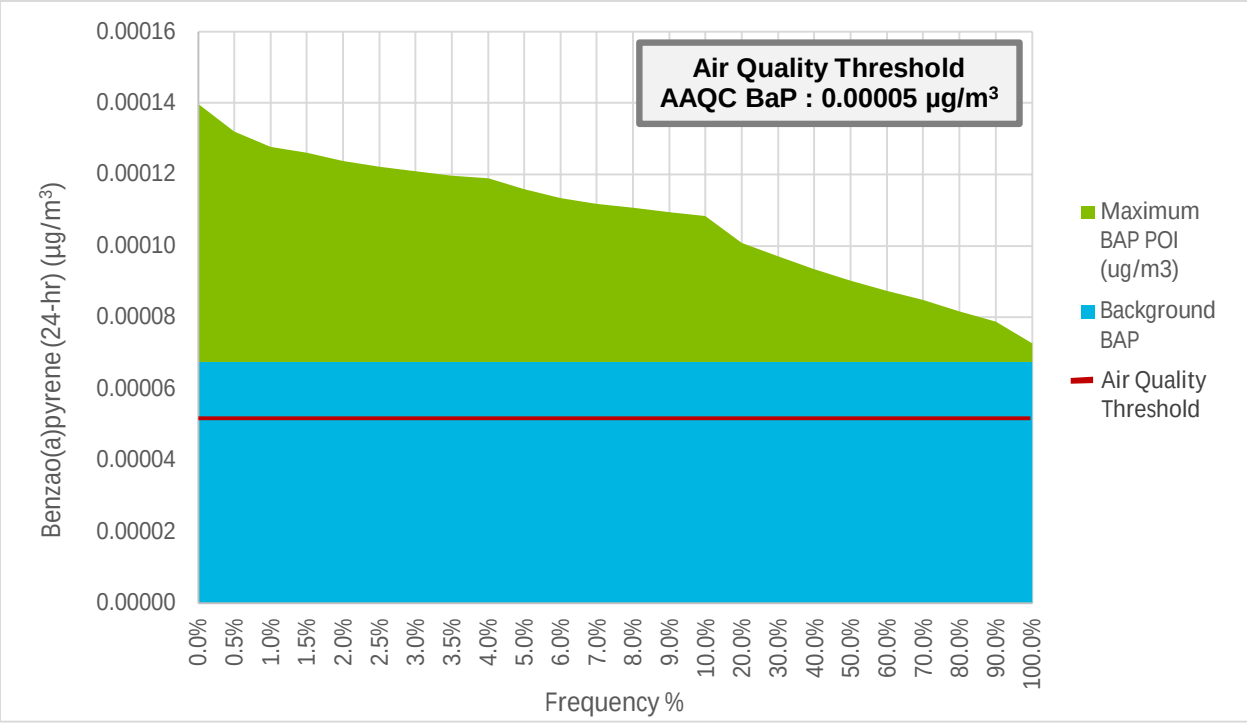
6.1.2.2 24-Hour Average Benzo(a)Pyrene Impacts for Future Build Conditions

Figure 6-4 shows the cumulative frequency analysis curve representing the percentage of time at which the most impacted sensitive receptor (SR8) is experiencing a concentration of benzo(a)pyrene averaged over 24-hour, in relation to the Ambient Air Quality Criteria limit. The percentage of exceedance of Ambient Air Quality Criteria limits for the highest sensitive receptor (SR8) is slightly higher than the most impacted critical receptor (CR6) and therefore was selected for the cumulative frequency analysis.

The figure also illustrates the separate contribution from the Project sources and from the background air quality. The figure shows the following:

- All of the modelled days have a concentration above the Ambient Air Quality Criteria limit.
- The background level of benzo(a)pyrene (24-hour) contributes 100% of Ambient Air Quality Criteria limit.

Figure 6-4: Future Build Cumulative Frequency Analysis (SR8) 24-hr Benzo(a)Pyrene



6.1.3 Construction

Construction activity creates and releases fine particulates (fugitive dust) and other vapours into the surrounding community, including diesel combustion exhaust, asphalt volatile contaminant emissions, etc. Emissions from construction activity are temporary and unlikely to have long-lasting effects on the surrounding area.

Fugitive dust emissions can result from movement of construction equipment and transport of materials to and from a construction site. Fugitive dust would generally be a problem during periods of intense construction activity and would be accentuated by windy and/or dry conditions.

Construction activities which potentially prove most impactful to the local air quality include, but are not limited to:

- Clearing and grubbing;
- Grading and rock blasting;
- Storage of granular material;

- Road and surface paving;
- Structure construction/ deconstruction; and
- Mobile on-site equipment.

Construction activities will result in temporary traffic disruption and detour, which can lead to increased traffic congestion, thereby increasing motor vehicle exhaust emissions on nearby roadways, and could result in elevated localized pollutant concentrations.

Construction equipment operating by diesel fuel combustion or other fuel type combustion emit exhaust contaminants during their operation. Compared with emissions from other motor vehicle sources in the Study Area, emissions from construction equipment and trucks are generally insignificant with respect to compliance with the provincial and federal ambient air quality standards.

6.1.3.1 Construction Equipment and Vehicle Exhaust

Environment Canada adopted amendments to the Off-Road Compression-Ignition Engine Emission Regulations which align Canadian emission standards with the U.S. EPA Tier 4 standards for non-road engines, including the emission limits, testing methods and effective dates. The Regulations Amending the Off-Road Compression-Ignition Engine Emission Regulations (the Amendments) impose stricter standards and new requirements starting with engines of the 2012 and later model years.

All equipment and vehicles should be kept properly maintained and repaired to minimize exhaust emissions, including odours.

Excessive idling of vehicles and equipment (greater than five minutes) should be minimized. Other potential mitigation measures may include the use of alternative-fuelled or electric equipment where feasible.

A brief estimation of worst-case vehicular emissions of suspended particulate from road works (existing asphalt removal and site preparation, and paving of new asphalt), station construction, soil excavation and stockpiling, culvert construction, and bridge construction was conducted. The vehicular distribution and operation for each construction scenario is included in **Appendix B** and was assessed using MOVES 3.0 non-roads for the year of 2025, conservatively, assuming diesel operation of all vehicles. The total daily emission of respirable particulate from each scenario is as follows:

- Existing asphalt removal and site preparation: 3,997 g/day
- Paving of new asphalt: 1,662 g/day

- Station construction installation: 1,007 g/day
- Soil excavation and stockpiling: 2,622 g/day
- Culvert construction: 3,096 g/day
- Bridge construction: 2,729 g/day

A full summary of construction scenario emission assessment, including emission rates from MOVES3.0 non-roads modelling output is included in **Appendix J**.

6.1.3.2 Fugitive Dust

Implementing good practices including wetting exposed earth areas; covering dust-producing materials during transport; and limiting construction activities during high wind conditions will minimize the impacts of fugitive dust. Potential mitigation measures that may be employed by the construction contractor to reduce fugitive dust issues include:

- Seeding, paving, covering, wetting, or otherwise treating disturbed soil surfaces;
- Minimizing storage and unnecessary transfers of spoils and debris on-site;
- Using wind screens or fences;
- Covering all truckloads of dust-producing material;
- Removing all loose or unsecured debris or materials from empty trucks prior to leaving the site;
- Reducing traffic speeds on any unpaved surfaces;
- Vacuum sweeping or watering of all paved surfaces and roadways on which equipment and truck traffic enter and leave the construction areas;
- Using wheel washes and truck washes at site egresses; and
- Modifying work schedules when weather conditions could lead to adverse impacts (e.g., very dry soil and high winds).

Fugitive dust from construction activities can be managed through implementation of an Air Quality Management Plan, where mitigation measures are specified for the planned construction activities and implemented on an as-needed basis.

6.1.4 Assessment of Modelling Results through “Regional Analysis”

6.1.4.1 Greenhouse Gas Assessment

Mobile vehicles emit the following greenhouse gases (GHGs) in significant amounts:

- Carbon dioxide (CO_2);
- Methane (CH_4); and
- Nitrous oxide (N_2O).

Total greenhouse gas emissions were calculated using a combination of MOVES emission rates and total annual vehicle usage projections for the Project sources of air quality contaminant emissions. MOVES is capable of calculating atmospheric carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) emissions varying with vehicle class, speed, and emission process type (i.e., running emissions, starting emissions, etc.). Annual total greenhouse gas emissions were calculated by combining the grams per vehicle-mile-travelled (g/VMT) emission rates derived from MOVES County Scale output for each of the greenhouse gas pollutants with the projected annual source vehicle usage and source length (in miles) to extrapolate an annual emissions.

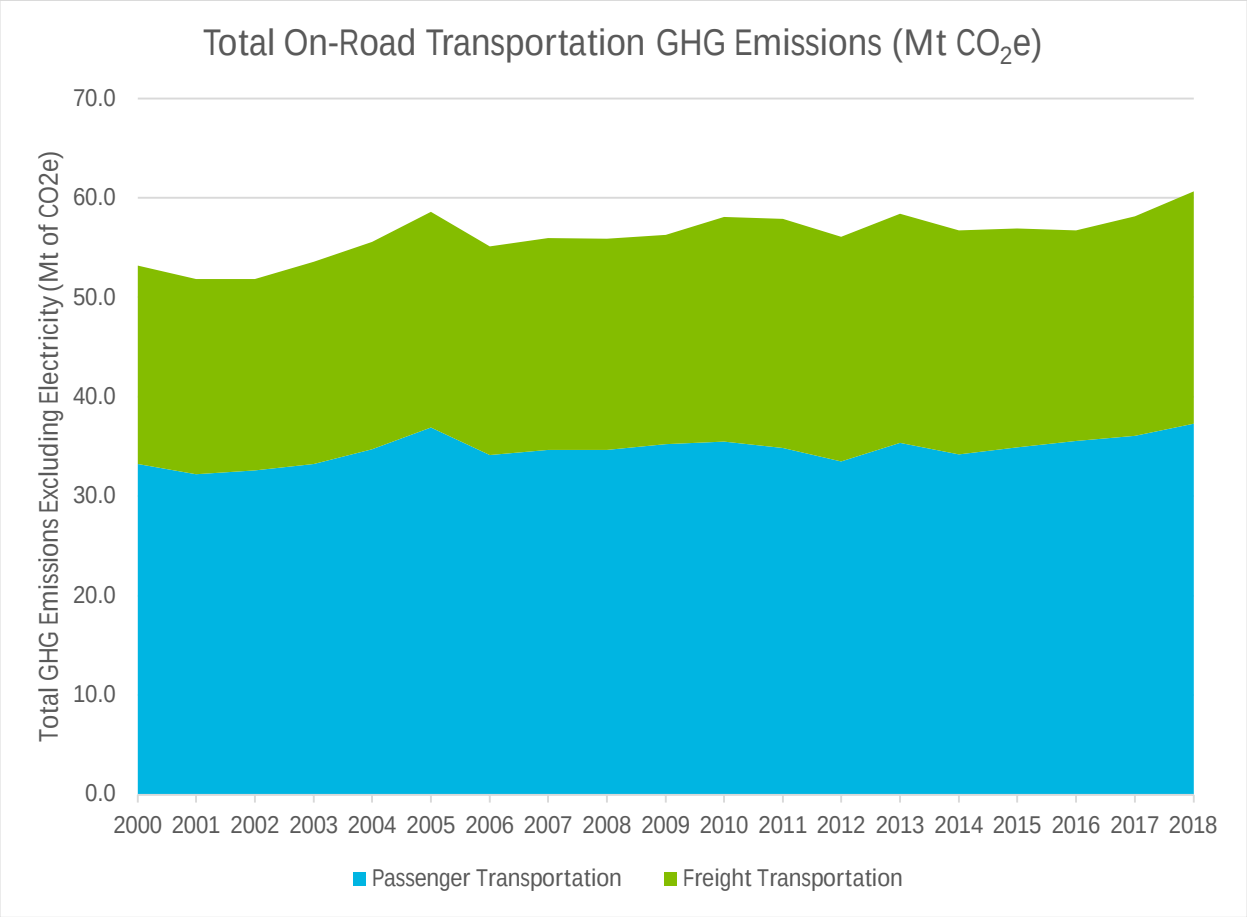
Individual greenhouse gases have differing abilities to absorb heat in the atmosphere. These varying heat absorption properties are quantified by an individual global warming potential (GWP) factor for each contaminant which converts the mass of a greenhouse gas to the representative equivalent mass of CO_2 ($CO_{2\,eq}$). The Global Warming Potentials are calculated based on the amount of heat trapping potential that would result from the emission of 1 kg of a given greenhouse gas to the emission of 1 kg of CO_2. Global Warming Potentials for various greenhouse gas compounds are defined by Environment Canada in their *Technical Guidance on Reporting Greenhouse Gas Emissions* (2016) document, summarized for compounds of interest below in **Table 6-11**.

Table 6-11: Greenhouse Gas 100-year Global Warming Potentials

Greenhouse Gas	100-year GWP
Carbon dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous oxide (N_2O)	298

Currently there are no greenhouse gas emission standards in Canada or the United States on a per-source basis. However, National Resources Canada reports annual greenhouse gas emissions for various industrial sectors, including the Transportation sector. **Figure 6-5** below shows historical annual trend of greenhouse gas emissions from the transportation sector from 2000 to 2018, in megatons (Mt) of $CO_{2\,eq}$.

Figure 6-5: Trends in GHG Transportation Sector Emissions (2000-2018), National Resources Canada



Source: National Resources Canada - Comprehensive Energy Use Database: Table 8: GHG Emissions by Transportation Mode[7]

The Project contributions of greenhouse gas in the Future Build year (2041) were compared to the 2018 $CO_{2\,eq}$ contributions from the Ontario Transportation sector, shown below in **Table 6-6**.

[7] Table 8 "GHG Emissions by Transportation Mode" from Natural Resource Canada's Transportation Sector (Ontario) annual reporting database (2000 – 2018). Available electronically at: https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=CP&sector=tran&juris=on&rn=8&page=0

Table 6-12: Greenhouse Gas Project Contribution Regional Assessment

Contaminant	Future Build (2041) (Mt) [1]	2018 Reported GHG Emissions for the Transportation Sector [3] (Mt CO2 eq.)	% Future Build Project Contribution
Carbon dioxide (CO_2)	0.6036	-	-
Methane (CH_4)	2.35E-04	-	-
Nitrous Oxide (N_2O)	1.09E-05	-	-
CO_2 equivalent [2]	0.6127	60.7	1.01%

Notes:
(1) Mt = Megatons
(2) CO_2 equivalent was calculated for the Future Build Condition using Global Warming Potential conversion for N_2O and CH_4 (298 and 25, respectively)
(3) National Resource Canada: Table 8 “GHG Emissions by Transportation Mode”, Comprehensive Energy Use Database (accessed May 2021), excluding off-road emissions.

As shown above in **Table 6-6** the Project greenhouse gas contributions are approximately 1% compared to the total Transportation 2018 CO_2eq emissions.

6.2 Mitigation Measures and Monitoring Activities

6.2.1 Construction

Exposure to construction-related emissions can be mitigated by the following:

- Ensuring all mobile equipment is in good condition, properly and regularly maintained, and compliant with applicable federal and provincial regulations for off-road diesel engines;
- Ensuring all machinery is maintained and operated in accordance with manufacturer’s specification;
- Locating stationary equipment (generators, compressors, etc.) as far away from sensitive receptors as practical;
- Minimizing idling time and posting signage to this effect around the construction site;

- Ensuring stationary and mobile equipment are not operated during early morning (before 6 AM, or sunrise) or evening periods (after 8 PM, or sunset) as often as practical;
- Implementing the use of non-chloride dust suppressants;
- Temporary seeding or mulching and compression or clodding of bare soil and storage piles to reduce erosion;
- Implementing an Air Quality Management Plan for the duration of the construction phase, which includes practices to minimize fine particulate release from mobile equipment, materials handling, and wind erosion (further details on the Air Quality Management Plan can be found within **Table 6-13**); and
- Ensuring that the areas most impacted by particulate levels are vegetated (e.g., tree planting) where possible between the source of emission (e.g. Dundas Street West) and the impacted receptor(s) to reduce the cumulative particulate impacts.

Site supervisors during the construction phase should monitor the site for wind direction and weather conditions to ensure that high-impact activities be reduced when the wind is blowing consistently towards nearby sensitive receptors. The site supervisor should also monitor for visible fugitive dust and take action to determine the root-cause in order to counteract this. Specific details to this effect should be included in the Air Quality Management Plan.

It is further recommended that mitigation measures detailed in "*Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (March 2005)"* prepared by Cheminfo for Environment Canada be implemented, where practical.

6.2.2 Operations

The individual impacts from the proposed Project emissions on the local air quality are a result of contributions from both idling vehicles and travelling vehicles within the Study Area. These emissions from roadways and idling vehicles are released with little upward dispersion capacity and are therefore expected to dissipate with increasing distance from the emission source.

Potential mitigation actions to counteract the Project emission impacts are limited due to the Project's projected increase in vehicular travel along Dundas Street. Increased percentage of electric vehicles and fuel-efficient vehicles within the vehicular fleet can provide significant criteria air contaminant and greenhouse gas reduction in the short to medium term. The introduction and increasing popularity and affordability of hybrid and full electric vehicles, as well as transit authority led initiatives to increase the percentage

of fuel efficient and hybrid vehicles within the provincial vehicle fleet will continue to reduce emission impacts from vehicles in the future.

As suggested within the construction mitigation section, areas affected by airborne particulates may be benefited by introducing vegetation (*e.g.* trees, shrubbery, etc.) to help reduce cumulative particulate impacts during the operational phase. Vegetation would be best placed, where feasible, between sources of emission (i.e. roadways) and impacted receptor(s).

6.3 Summary of Potential Impacts, Mitigation Measures and Monitoring Activities

This section provides a summary of potential impacts, mitigation measures and monitoring activities associated with the Project. **Table 6-13** summarizes potential impacts, mitigation measures and monitoring activities during the construction phase of the Project, and **Table 6-14** summarizes potential impacts, mitigation measures and monitoring activities during the operations phase of the Project.

Table 6-13: Potential Impacts, Mitigation Measures and Monitoring Activities During Construction

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Construction Conditions:	Construction related air pollution may pose risks to human health and wellbeing	▪ Prior to commencement of construction, develop and implement a detailed Construction Air Quality Management Plan. The Air Quality Management Plan will: o Demonstrate compliance with the specific air quality criteria and limits in the Metrolinx *Environmental Guide for Air Quality and Greenhouse Gas Emissions Assessment* (2019). o Define the Project's air quality impact zone and identify all sensitive receptors within this area. o Assess the baseline air quality by continuous measurement of local ambient concentrations of $PM_{2.5}$ and PM_{10} over a minimum period of one week, where large local sources of pollution, such as highways, directly affect the zone of influence of the Project. o Estimate and document the predictable worst-case air quality	• Develop and implement Weekly Air Quality Monitoring Plans that document how air quality monitoring has been conducted and compliance assessed to effectively prevent unacceptable rates of air emissions in accordance with the following guidelines: o The construction related air contaminants of primary concern are in the form of particulate matter, with the principal construction related fractions of $PM_{2.5}$ and PM_{10} - particulate matter

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		impacts of the Project on sensitive receptors within the air quality impact zone, develop appropriate mitigation measures, demonstrate their effectiveness, and commit to their timely implementation. o Monitor continuously any contaminant, in addition to $PM_{2.5}$ and PM_{10}, which is predicted to exceed its relevant air quality exposure criterion during any phase of the Project and at any receptor. o Include explicit commitment to the implementation of all applicable best practices identified in the Environment Canada document, *Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities* (2005). ▪ Develop a Communications Protocol and a Complaints Protocol to respond to issues that develop during construction.	of less than 2.5 and 10 micron in diameter, respectively. Other contaminants of concern include crystalline silica and oxides of nitrogen. The list of contaminants will be expanded with any and all air pollutants that may be produced as a result of the work. o The criteria for PM2.5, PM10 and crystalline silica are provided in Metrolinx's *Environmental Guide for Air Quality and Greenhouse Gas Emissions Assessment*

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
			(2019). The applicable criteria for all other air contaminants of concern are to be found in the various schedules of *Ontario Regulation 419/05*. ▪ Siting of the monitors should generally follow the guidelines provided in the Ministry of the Environment, Conservation and Parks (MECP) *Operations Manual for Air Quality Monitoring in Ontario* (2018).
Construction Conditions: **Increased Traffic Congestion and Construction**	Increased NO_2, CO, SO_2, particulate, and VOC impact levels at nearby receptors from vehicular emissions.	▪ On-site construction vehicle activity shall be managed to control emissions of odorous contaminants and diesel exhaust, including benzene and benzo(a)pyrene emissions from exhaust, including benzene and benzo(a)pyrene emissions from exhaust. An Air Quality Management Plan will be developed to ensure consistent attention to mitigation of dust and particulates, including silica, from the construction	▪ The following monitoring activities should be considered in the development of the Air Quality Management Plan: – Baseline conditions should be established prior to construction for longer than one week to capture representative concentrations under varying meteorological conditions.

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Vehicular Emissions **Fugitive Particulate Emissions**	Increased particulate emissions, including dust, from construction activities.	site. The following mitigation measures should be considered in the Air Quality Management Plan: – All equipment complies with Canadian engine emissions standards. – All equipment visually inspected prior to use and properly maintained. – Implement a no idling policy on site (unless necessary for equipment operation). – Use of electricity from the grid over diesel generators wherever possible. – Retrofitting of combustion engines with specific exhaust emission control measures such as particulate traps. – If applicable, follow guidelines on hot mix asphalt outlined in the Ontario Hot Mix Producers Association's Environmental Practices Guide: Ontario Hot Mix Asphalt Plants, Fifth Edition (Ontario Hot Mix Producers Association, 2015). ▪ Applicable mitigation measures from Environment Canada's Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (Cheminfo Services Inc., 2005) and the Ministry of Environment, Conservation and Parks' Technical Bulletin Management Approaches for Industrial Fugitive Dust Sources, shall be followed. Both documents are provided within Appendix K.	– On-site meteorological monitoring in conjunction with real-time particulate monitoring representative of receptor impacts. – Place monitors both upwind and downwind of construction activities, where possible. – Application of threshold "Action Level" triggers for implementation of specific and increasing intensity mitigation activities linked to specific construction activities. – Reporting detailed results of ongoing monitoring and mitigation activities. – Monitoring at locations where there are persistent complaints, as required. ▪ In addition, relevant construction monitoring activities from the following recommended guidelines will be implemented during construction: – Best Practices for the Reduction of Air Emissions from Construction and

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		The following mitigation measures should be considered in the Air Quality Management Plan: – Complete earthwork grading within 10 days of ceased active construction. – Temporary seeding or mulching of bare soil and storage piles. – Compression or clodding of soil surfaces and storage piles to reduce erosion. – Confine storage pile activity to downwind side of piles. – Reduction of activities during high wind conditions. – Full or partial enclosure of demolition activities. – Wind screens or barriers where possible or necessary. – Scheduling certain construction activities (i.e., site preparation and earth works activities, demolition activities, unpaved surfaces with heavy equipment travel, and uncovered soil storage piles) to periods of time when exposure to dust is expected to be limited (e.g., avoid scheduling activities during dry, windy weather conditions). – Landscaping materials ordered close to time of use to reduce on-site storage. – Application of soil stabilizers or dust control polymers where feasible.	Demolition Activities (Cheminfo Services Inc., 2005); and, – Operations Manual for Air Quality Monitoring in Ontario (Ministry of the Environment, Conservation and Parks, 2018).

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
		– Daily removal of accumulated mud, dirt and debris deposits on-site, and regular truck washing. – Paved and unpaved roadway cleaning, watering or application of a non-chloride dust suppressant. – Minimize drop height of materials on-site. – Covering surface area of hauled bulk material. – Methods and equipment for cleanup of accidental spill of dusty materials. – Limit travel speeds on-site to a maximum of 16-24 kilometres per hour. ▪ If disruption of contaminated soils is anticipated at any time, ensure that contaminants are not released. ▪ Develop a communications protocol which includes timely resolution of complaints.	

Table 6-14: Potential Impacts, Mitigation Measures and Monitoring Activities During Operations

Environmental Component	Potential Impacts Compared to Future No-Build and Existing Conditions	Mitigation Measures(s)	Monitoring Activities
Operating Conditions: **Increased Traffic Vehicular Emissions**	Increased NO_2, CO, SO_2, particulate, and VOC impact levels at nearby receptors.	Continued promotion of increased electric vehicle purchase and infrastructure within Ontario. Implementation of vegetation within the Project Study Area to decrease ground level dispersion of particulates.	No other specific monitoring implementation recommended at this time.

6.4 Final 10% Design

The final 10% design has been developed since the completion of this Air Quality assessment which was based on the draft 10% design. The final 10% design incorporated changes that may impact the air quality impacts of the project on identified sensitive and critical receptors. These changes include slight roadway readjustments and changes to structural requirements at some infrastructure locations (e.g. widening of passenger platforms for select Dundas Bus Rapid Transit scheduled route stops).

Roadway realignments may increase or decrease the predicted air quality impacts for both construction and operation. However, based on the magnitude of the changes reflected in the final 10% design, the overall findings of this study would not be significantly impacted.

Changes to structural requirements may result in different construction equipment usage, staging and phasing areas than what was assumed for the purposes of this assessment. However, the general mitigation actions suggested within this assessment for construction operations will still apply regardless of changes resulting from the final 10% design structural requirements and are equally applicable. Correspondingly, while the direct impact from altered construction operations may alter, the overall mitigation actions and recommendations of this assessment will still apply.

7. Future Commitments

The assessment of potential air quality impacts was completed based on the draft 10% design of the planned Bus Rapid Transit corridor. As changes to the inputs used in this assessment may occur during detailed design, it is recommended that during detailed design, the air quality analyses be assessed for any changes to the inputs that were used in the analyses. If there were any changes to the inputs, an additional analysis would be required in order to confirm the findings of this study. The purpose of the updated analysis would be to reflect the revised inputs so that the impacts, mitigation measures, and monitoring requirements are accurate to the most recent design details. Changes that may trigger an assessment update include changes to input variables, such as roadway alignment, overall traffic volumes, grading, etc.

Commitments to additional future work for air quality are summarized in

Table 7-1 below. With the development of future commitments, the Project is ensured to be implemented in accordance with the mitigation measures and monitoring activities described in **Section 4**.

Table 7-1: Future Commitments

Environmental Component	Project Phase	Commitments for Future Work
Air Quality	▪ Detailed Design/ Construction/ Operations	▪ Potential re-assessment of Air Quality Impacts during detailed design phase. Submission of an EA Addendum may be required for significant design changes from draft 10% design affecting Air Quality. ▪ Development and implementation of an Air Quality Management Plan during construction operations. Refer to **Table 6-13** for details on an Air Quality Management Plan.

8. Permits and Approvals

There are no specific federal, provincial, or municipal permits and approvals required prior to Project construction related to Air Quality.

9. References

Ontario Ministry of The Environment, Conservation and Parks, 2020:
Ambient Air Quality Criteria. Human Toxicology and Air Standards Section Technical Assessment and Standards Development Branch. https://files.ontario.ca/mecp-ambient-air-quality-criteria-list-en-2020-05-01.pdf

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National Air Pollution Surveillance Program. Available: https://www.canada.ca/en/environment-climate-change/services/air-pollution/monitoring-networks-data/national-air-pollution-program.html

Environment and Climate Change Canada, 2020:
Past Weather and Climate. Historical Data. Available: https://climate.weather.gc.ca/historical_data/search_historic_data_e.html

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Appendix A

Study Area Figures

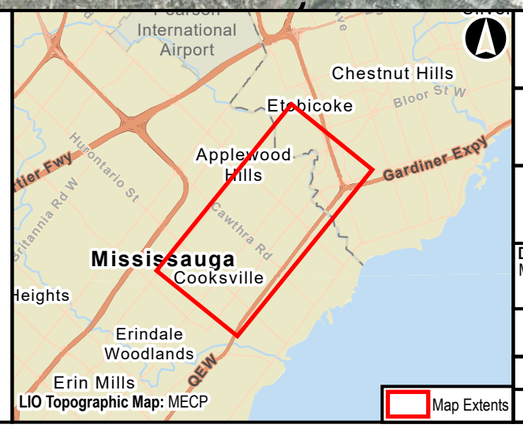
Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Air Quality Area of Investigation (Study Area)
- Mississauga East Project Area

Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Watercourse



LIO Topographic Map: MECP

Dundas Bus Rapid Transit
Mississauga East - Priority Area

Study Area

0 200 400 800 1,200 1,600 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

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Figure A1

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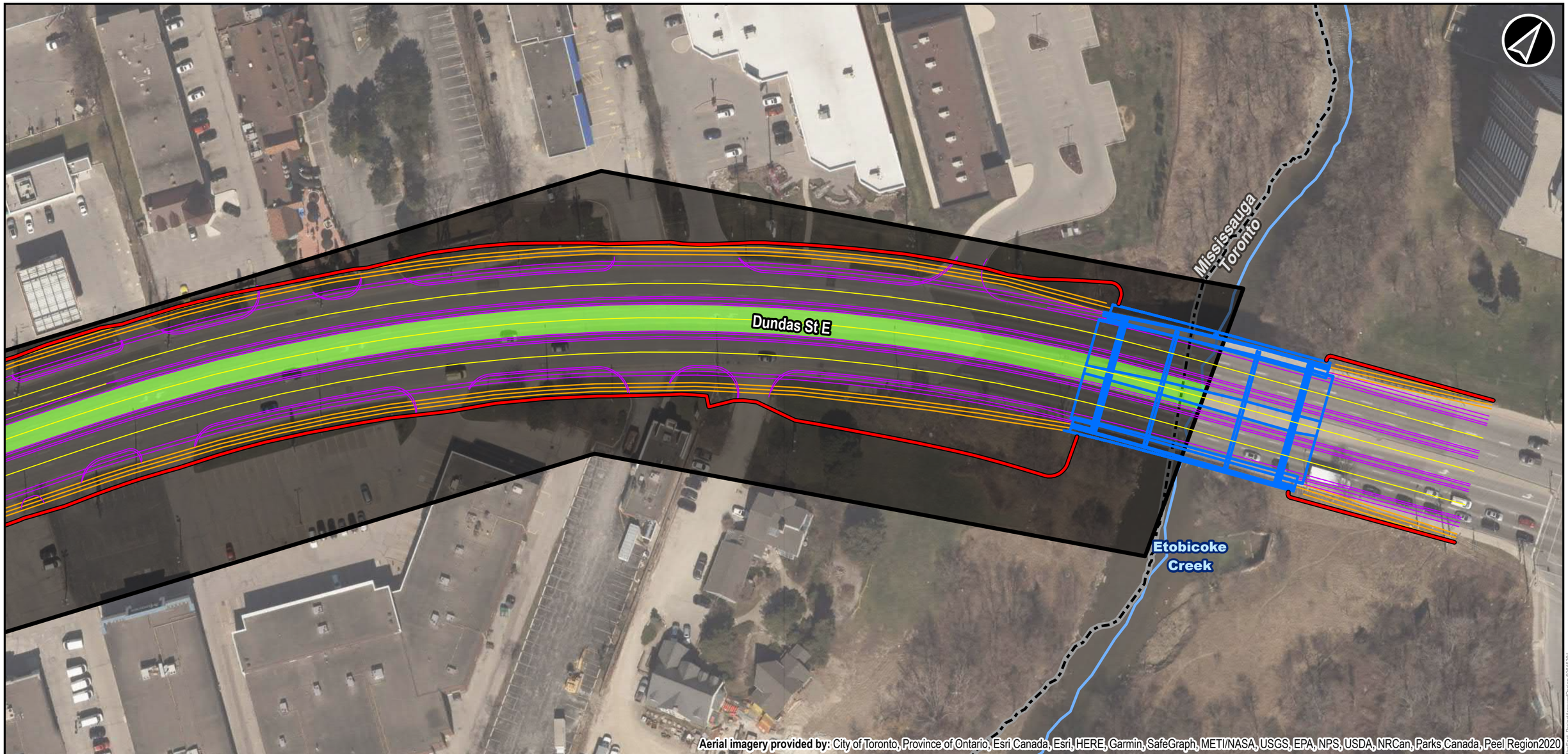


Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

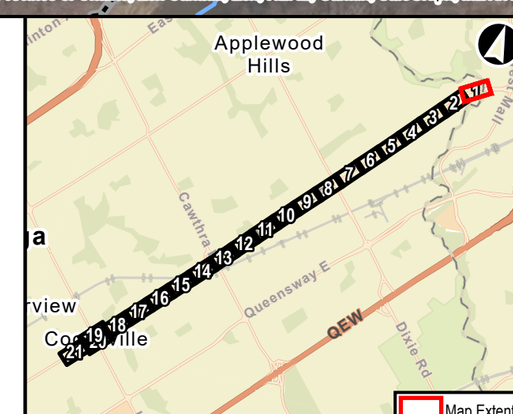
Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bridge
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane

Base Layers

- Municipal Boundary
- Watercourse



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

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Appendix A2-1

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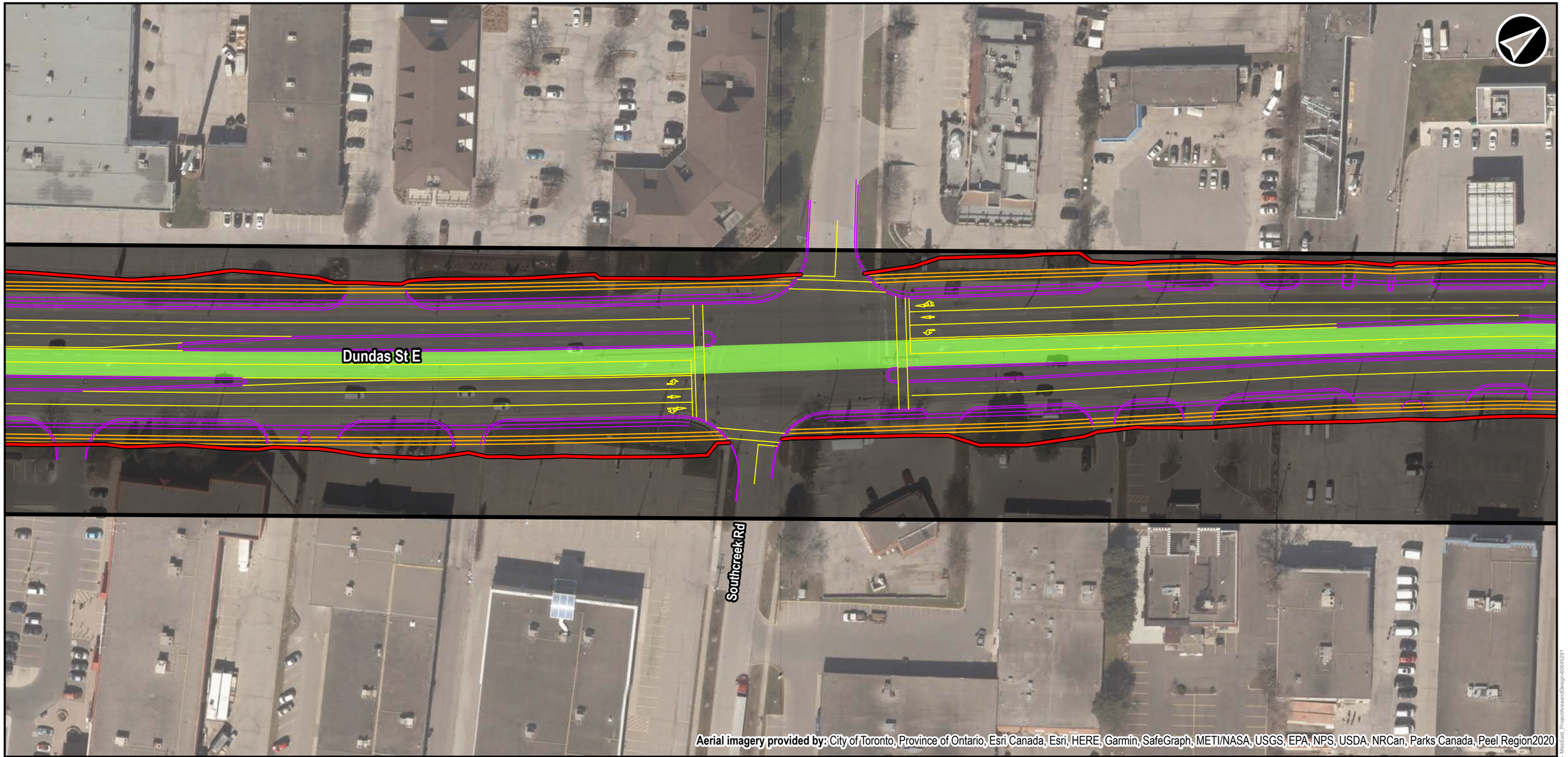
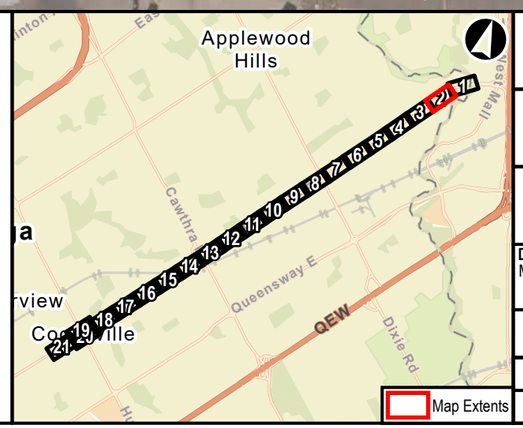


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

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NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

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Appendix A2-2

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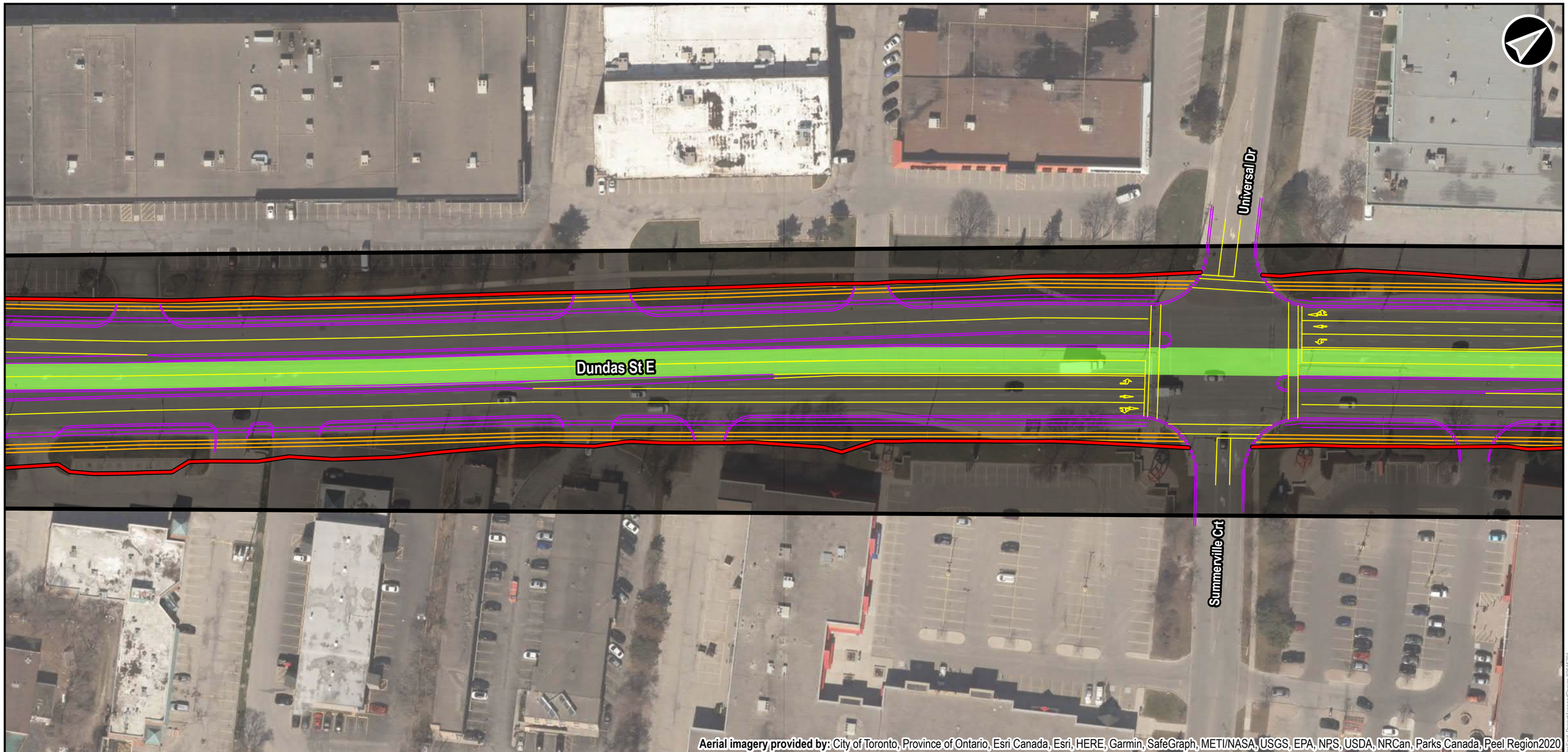
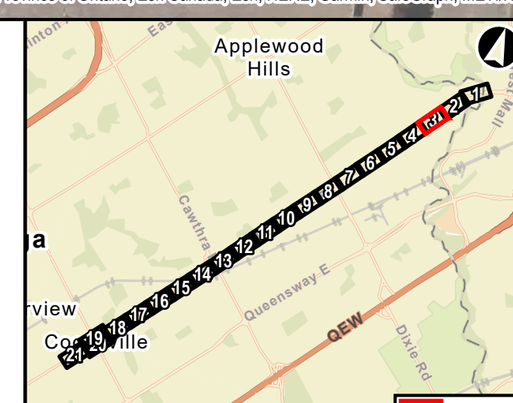


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

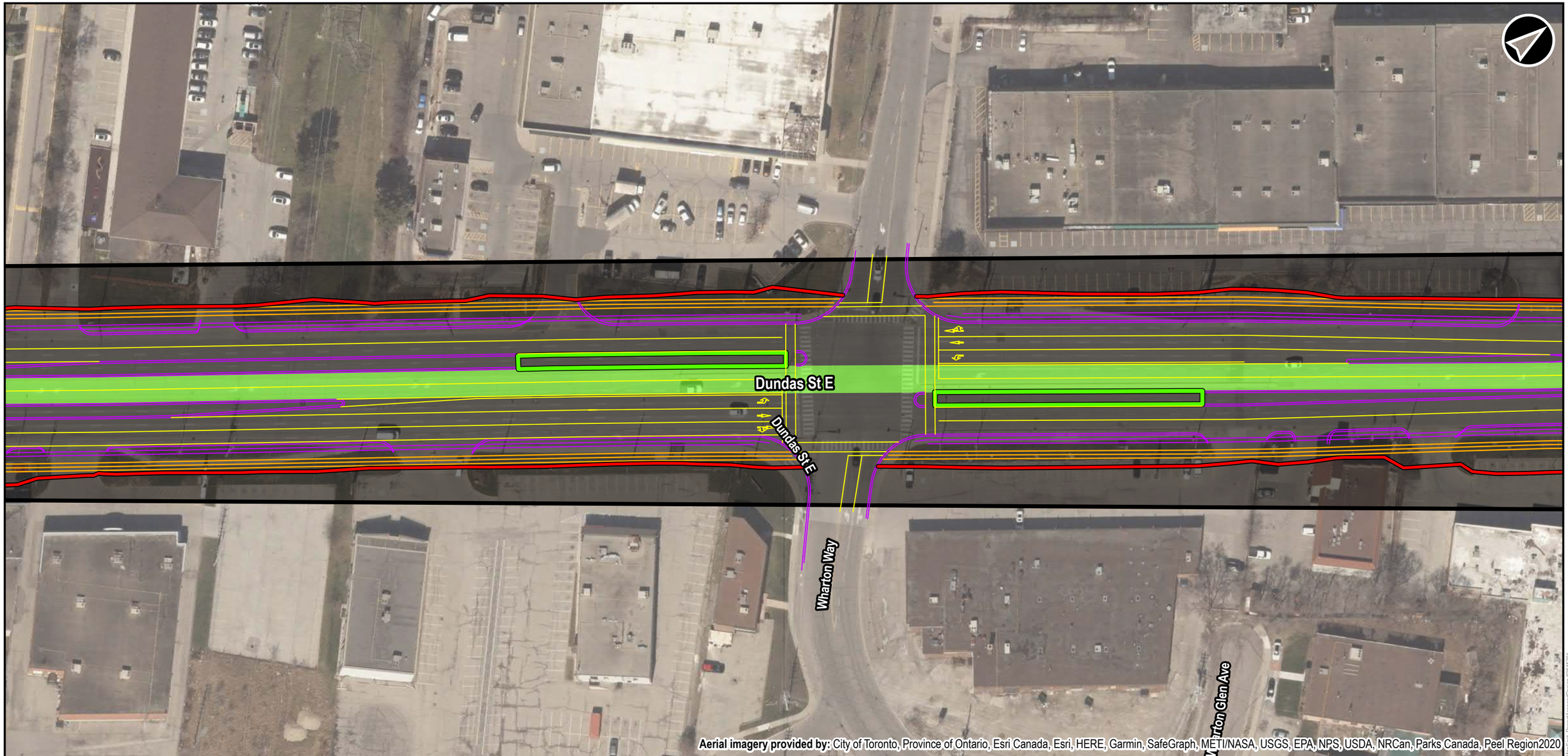
Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-3

Project Location: E:\PR\Dundas\BRT_EglinAve\1Data\PR-60645291\DundasBRT.aprx Layout: Air Quality - Mississauga East_Project Area and Design Date Saved: 10/12/2021 3:20 PM User: oraws

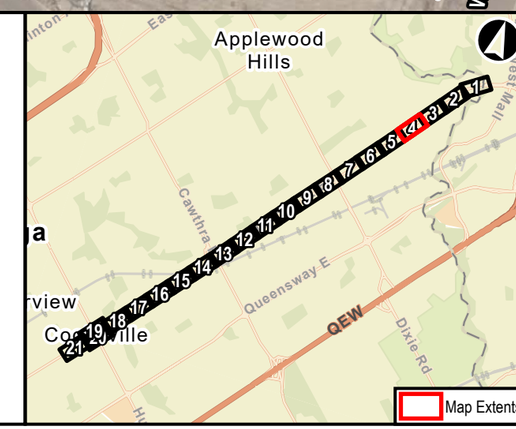


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-4

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Date Saved: 10/12/2021 3:20 PM User: cravs

Nawbrook Rd

Treadwells Dr

Dundas St E

Coram Ave

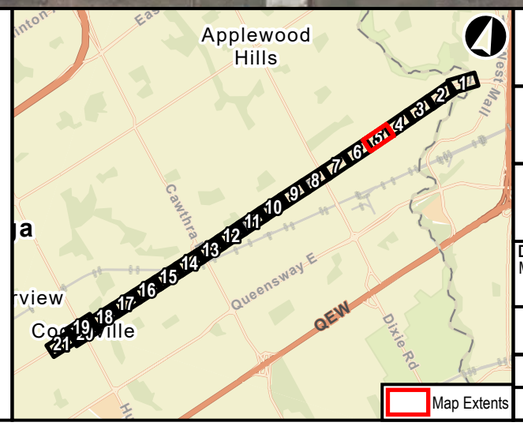
Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-5

Project Location: E:\PROJ\Dundas\BRT_60645291\Data\PRJ-60645291\Dundas\BRT.aprx Layout: A1-Quality - MissEast_ProposedraandDesign-60645291
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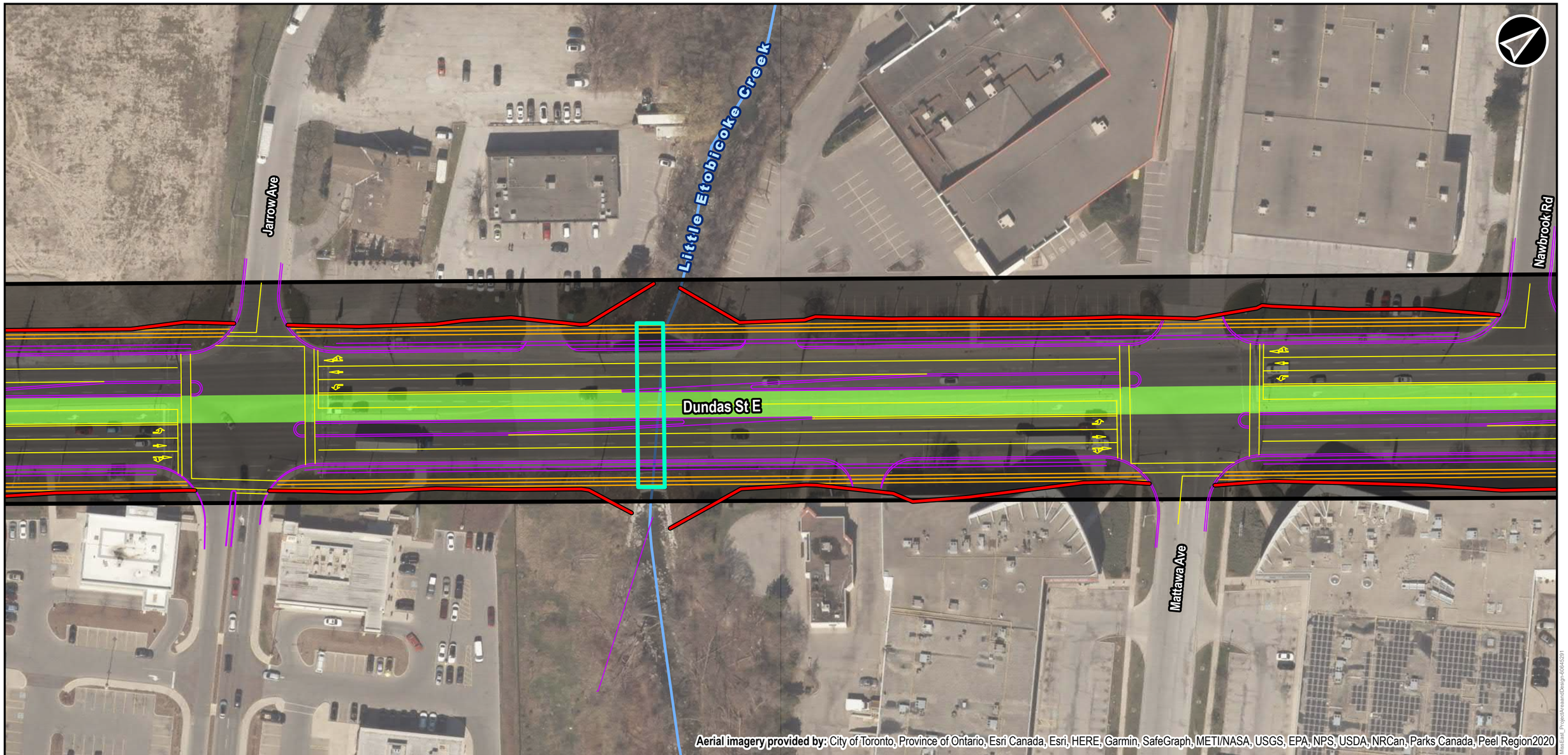


Legend

Mississauga East Project Area

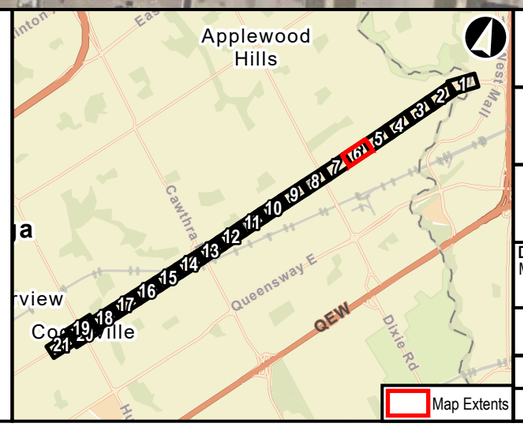
Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Culvert
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk

Bus Rapid Transit Lane

Base Layers

- Watercourse



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-6

Project Location: U:\P\P-J\Dundas\BRT_60645291\Data\PhD-60645291-Dundas\BRT.aprx Layout: Air Quality - MissEast_Project\Hawk\Design-60645291
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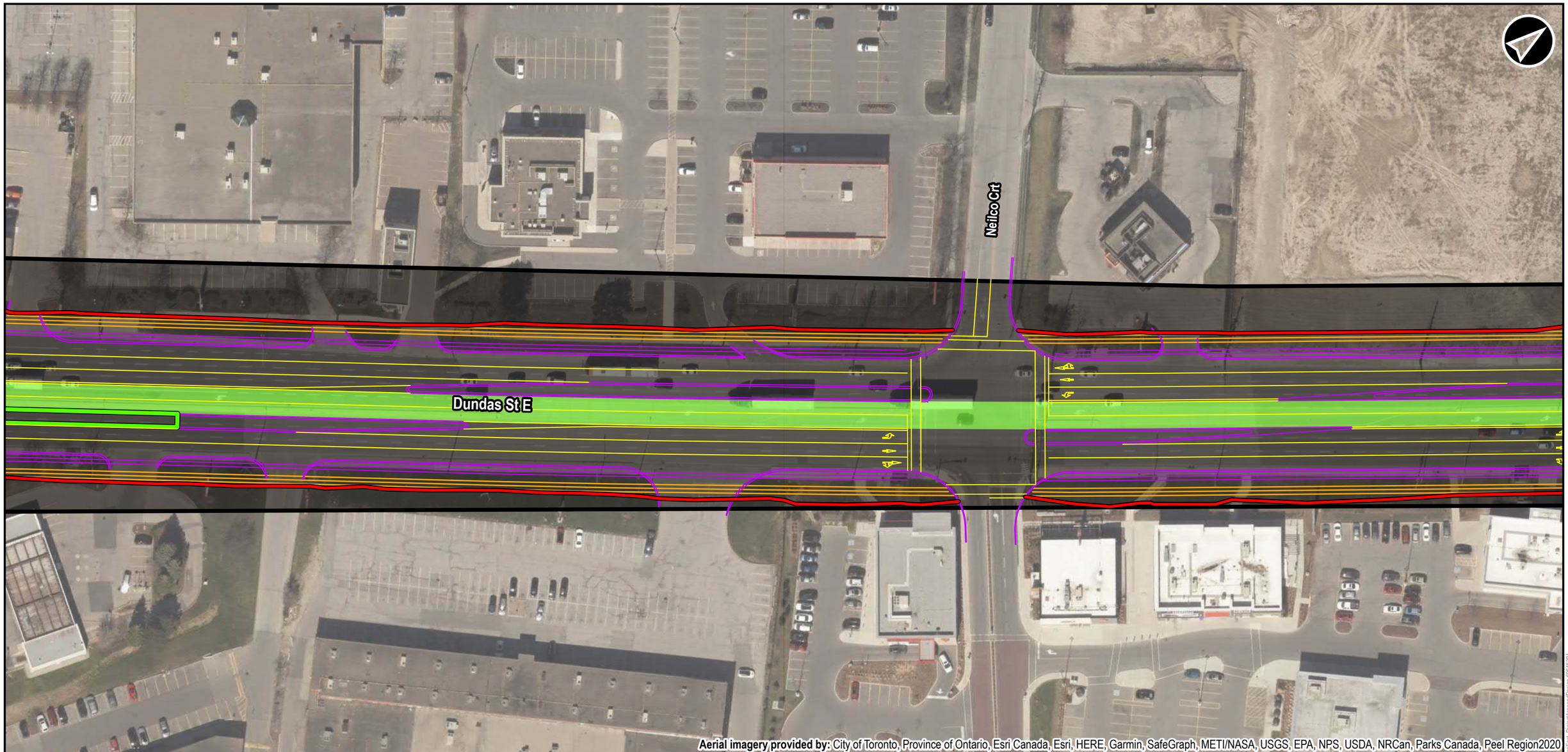
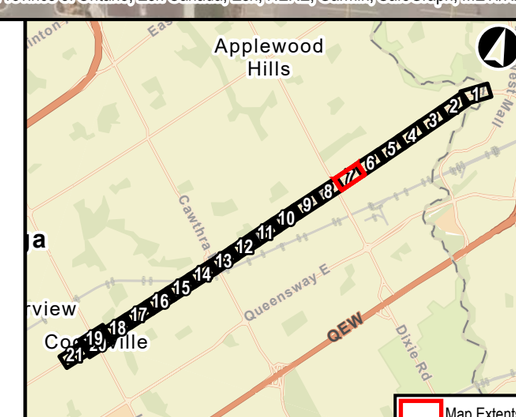


Legend

Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-7

Project Location: E:\PR\Dundas\BRT_EA\60645291\Data\PR-A60645291-DundasBRTApprLayoutAirQuality_MissEast_Project\AreaandDesign-A60645291
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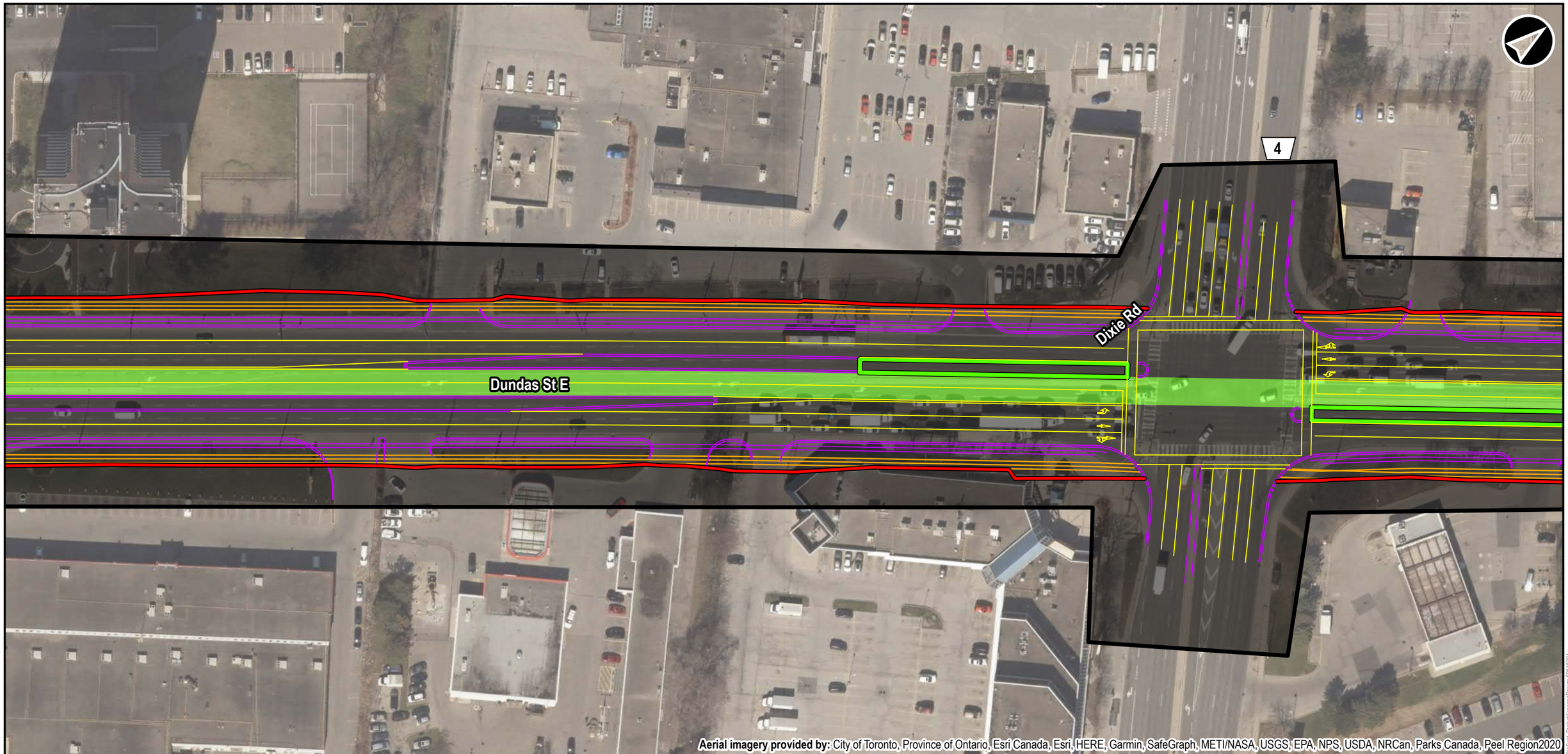
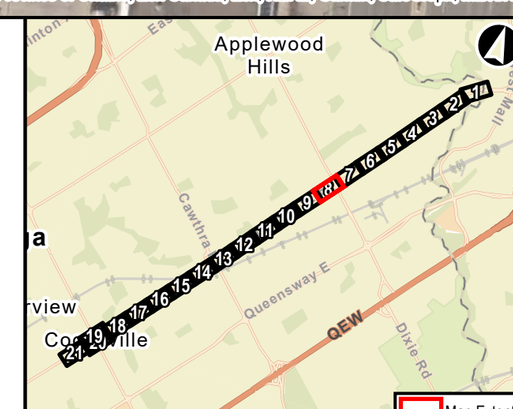


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-8

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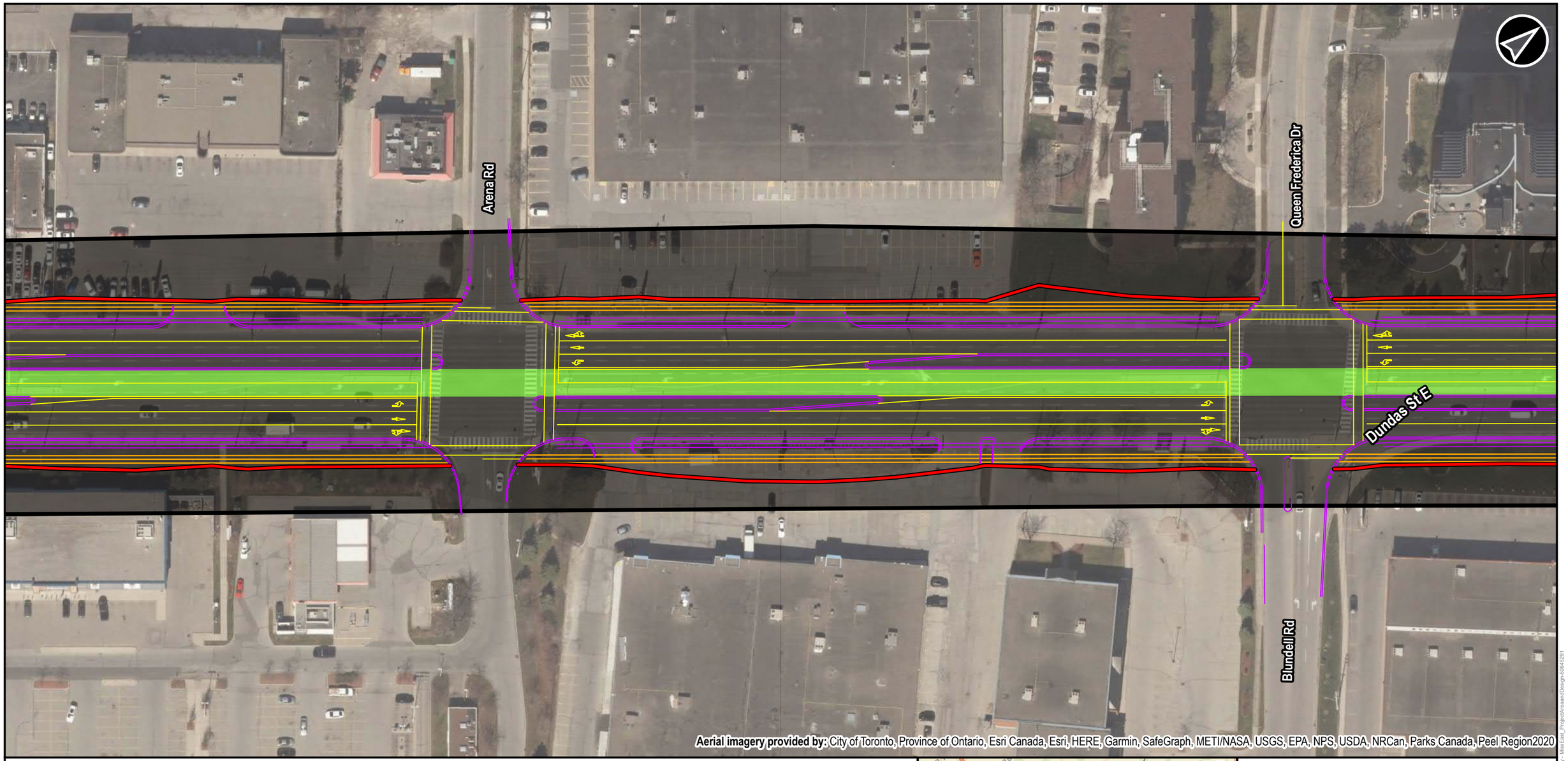
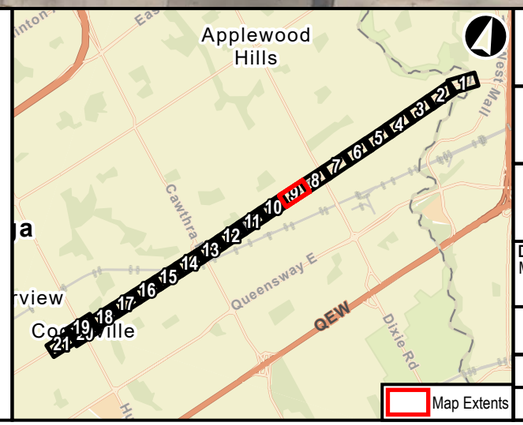


Legend

Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-9

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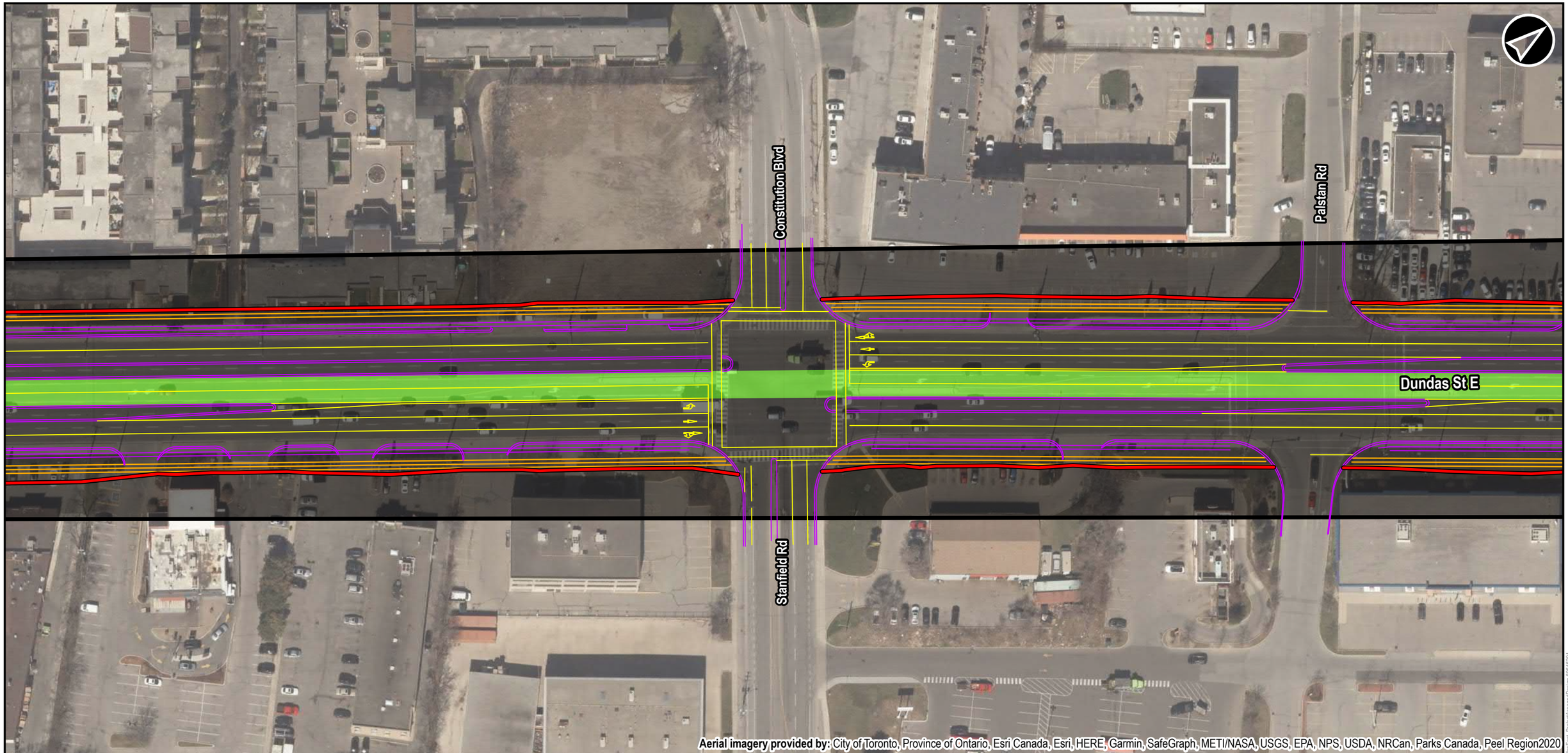
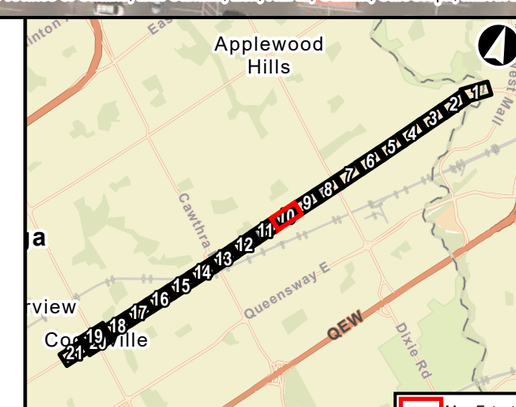


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-10

Project Location: I:\P-R-S\Dundas\BRT_60645291\Data\PRL\60645291-DundasBRT-Appx-Layout-Air Quality - MissEast_Project\Assess\Design-60645291
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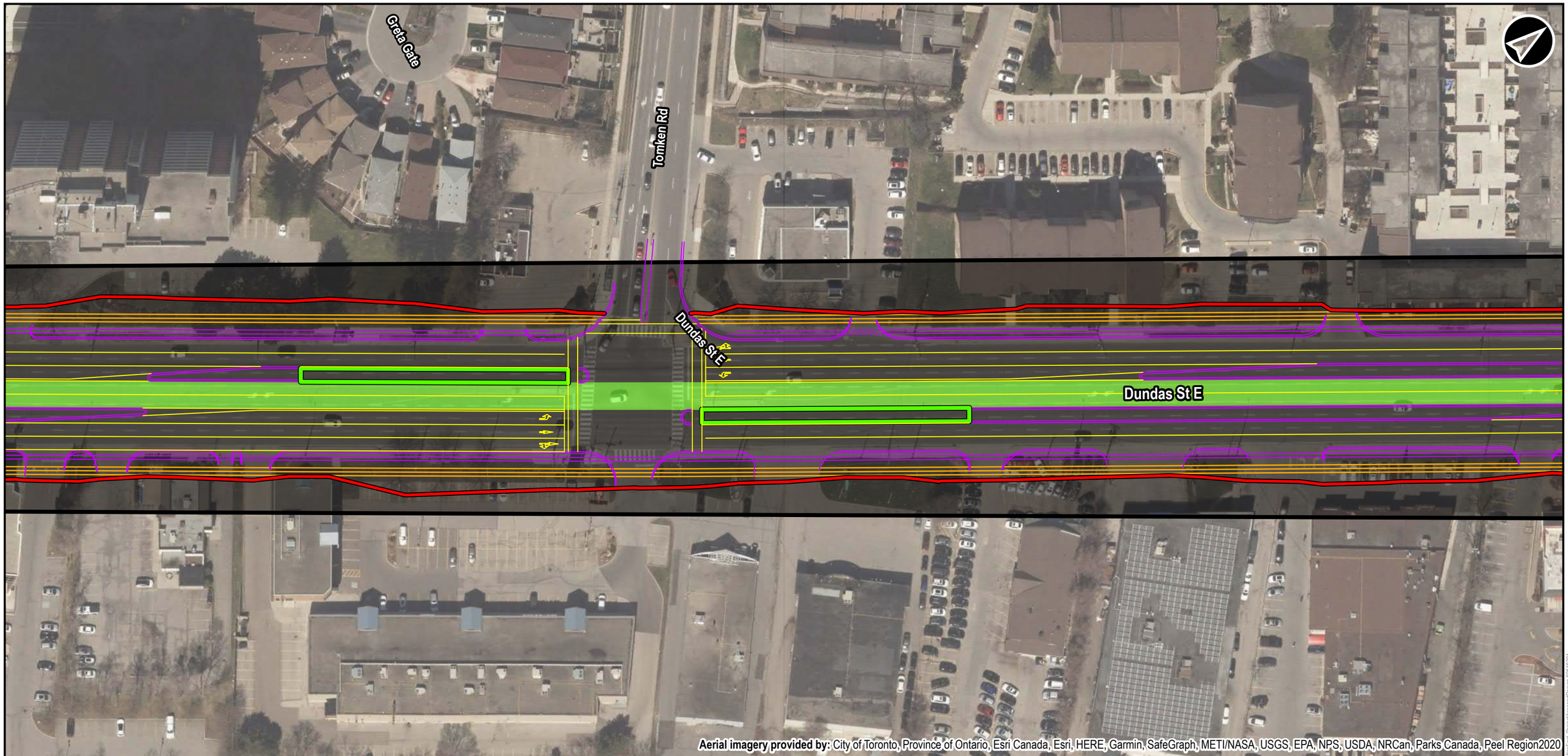
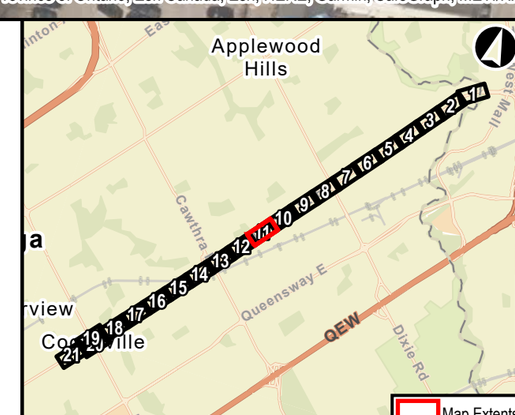


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-11

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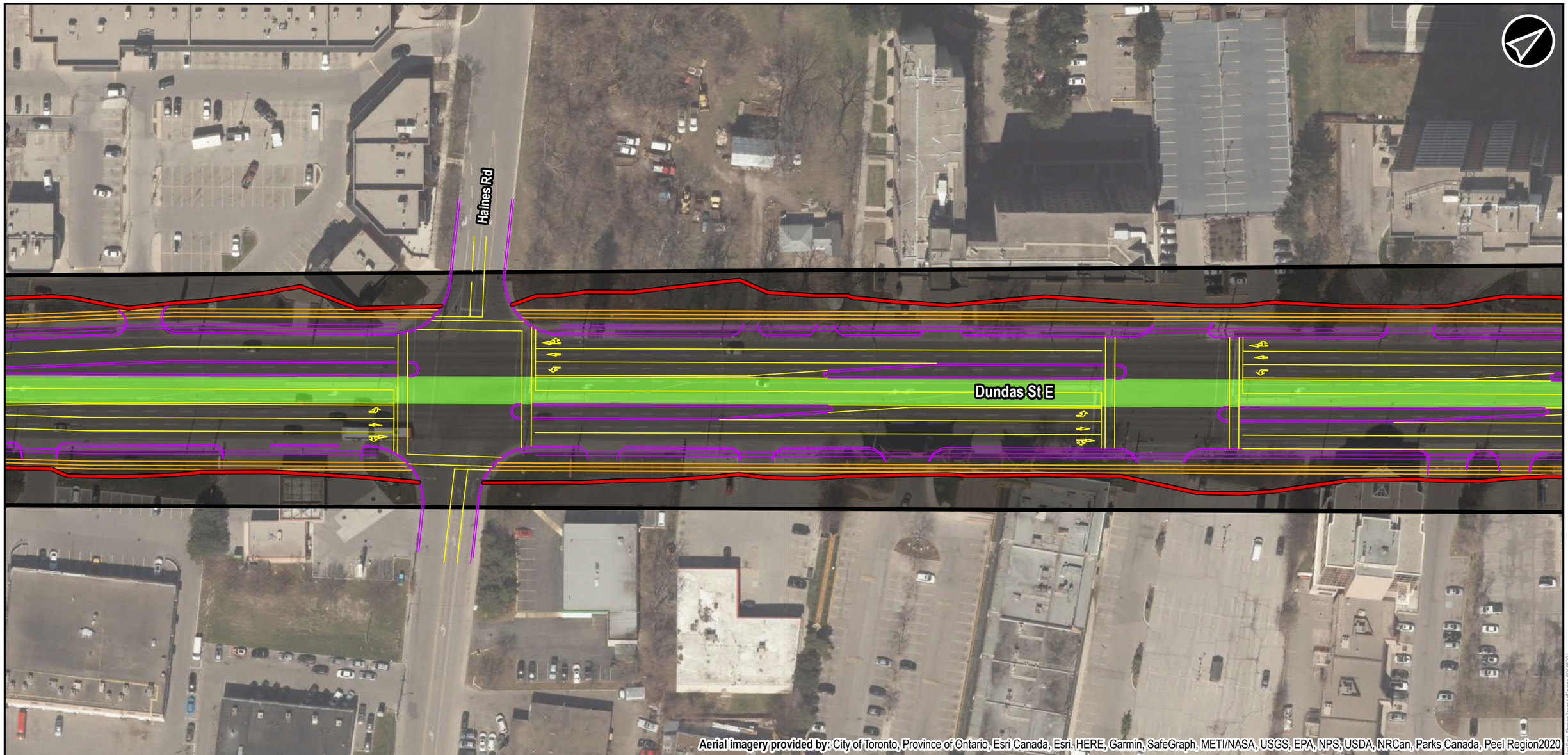
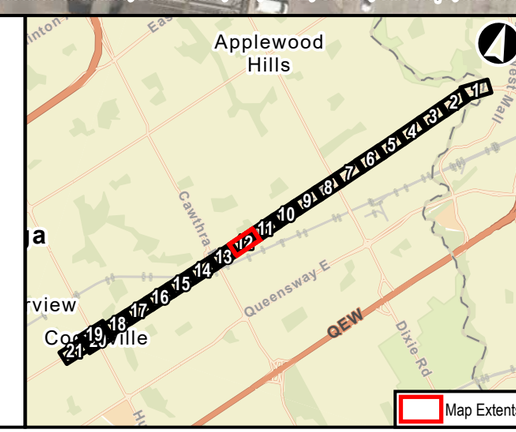


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-12

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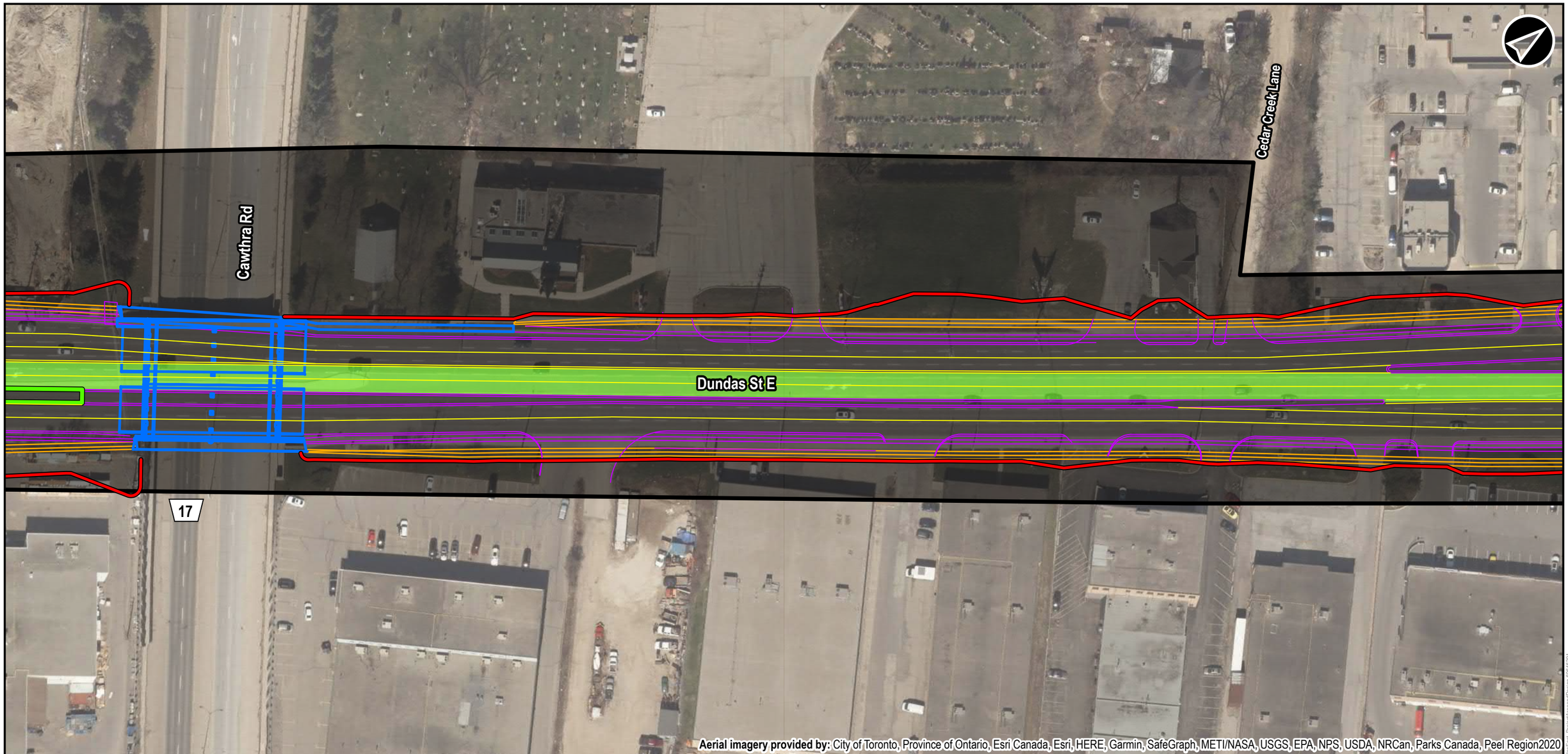
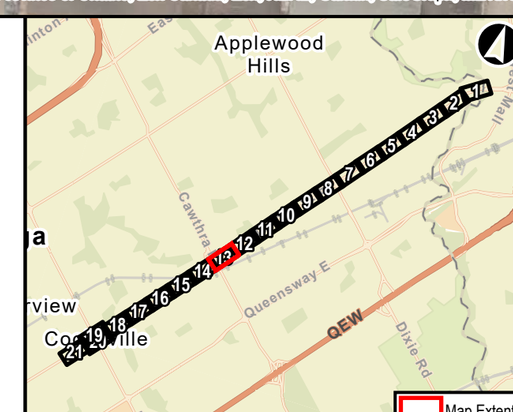


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bridge
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-13

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Date Saved: 10/12/2021 3:20 PM User: oraws

Dundas St E

Cawthra Rd

Hensall Cir

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

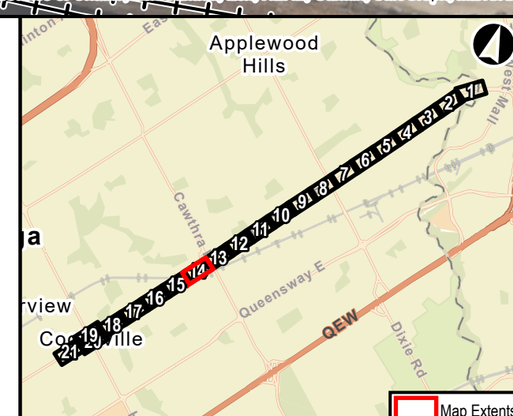
Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bridge
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Retaining Wall
- Proposed Sidewalk

Bus Rapid Transit Lane

Base Layers

Railway



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-14

Project Location: E:\PR\Dundas\BRT_EglinAve\1Data\PH-60645291\DundasBRT.aprx\Layout\Air Quality - Alleyway_Project\AreaandDesign-60645291
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Dundas St E

Hensall Cir

Hensall St

Tedlo St

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

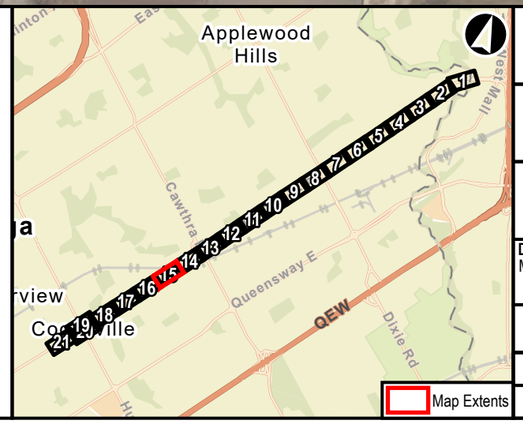
Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bridge
- Proposed Curb or Edge of Pavement
- Proposed Retaining Wall
- Proposed Sidewalk

Bus Rapid Transit Lane

Base Layers

- Railway



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-15

Project Location: E:\PR_Dundas\BRT_60645291\Data\PRJ_60645291_DundasBRT\Layout_Air Quality_Mississauga_Project\AreasandDesign_60645291
Date Saved: 10/12/2021 3:20 PM User: cravs

Grenville Dr

Franze Dr

Dundas St E

Hensall Cir

Cliff Rd

Burslem Rd

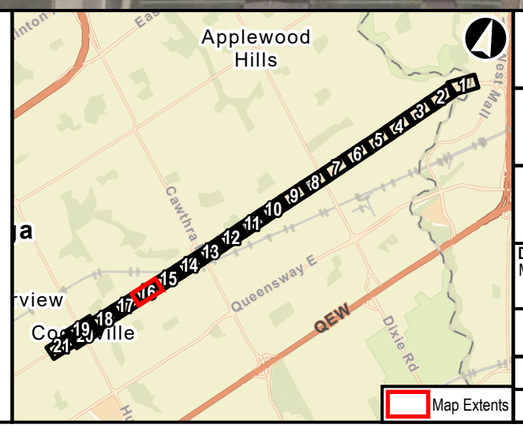
Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Retaining Wall
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX

AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-16

Project Location: G:\P\P-P\Dundas\BRT_60645291\Data\PRL-60645291-DundasBRT-app-Layout-Air Quality - MikeLong_Project\Arcmap\Design-60645291
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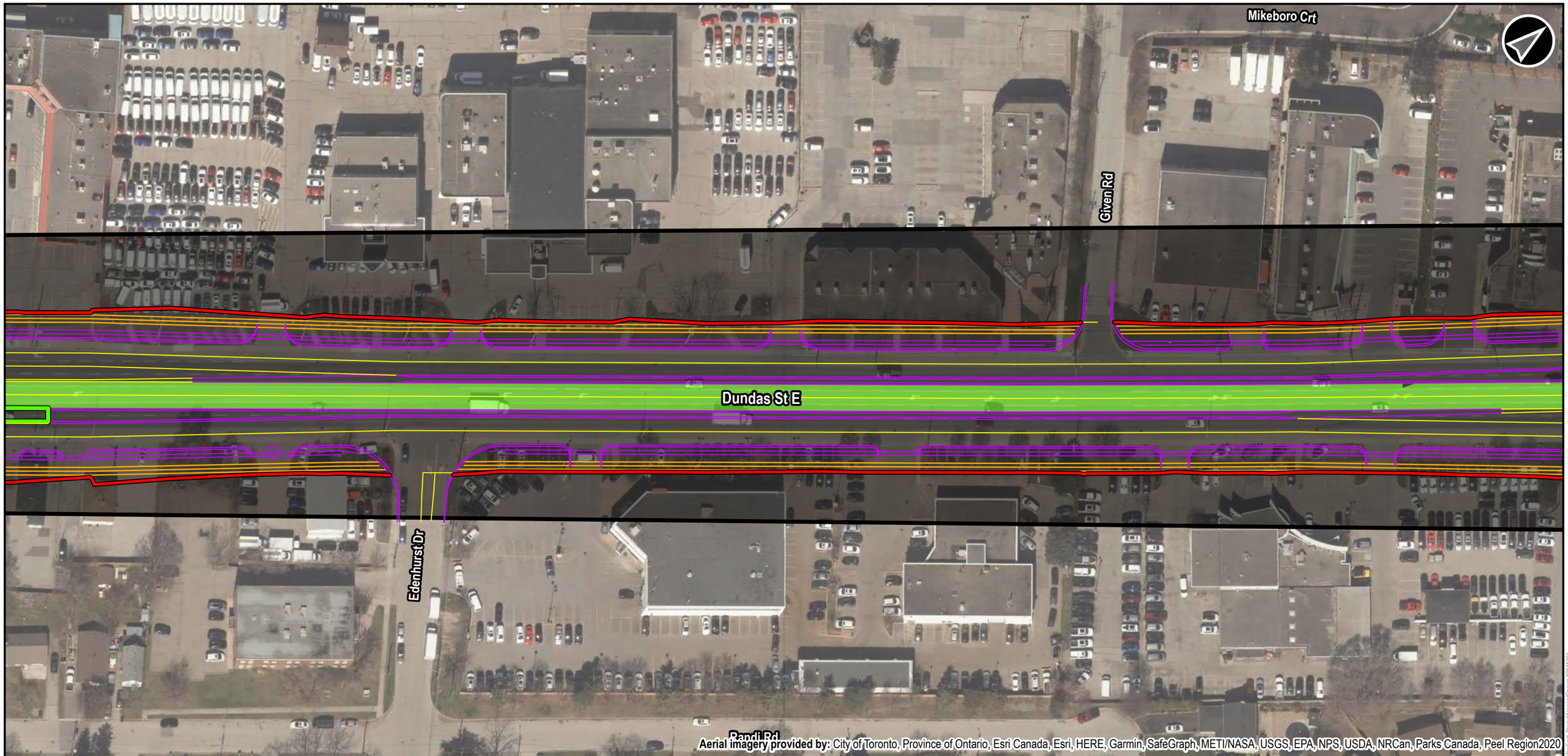
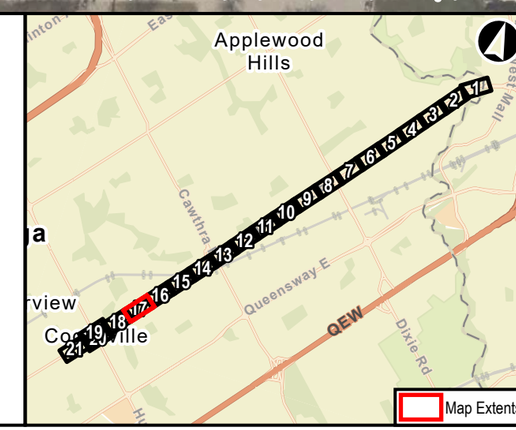


Legend

- Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
P:60645291	Rev:00

Appendix A2-17

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Jaguar Valley Dr

Littlejohn Lane

Kirwin Ave

Dundas St E

Cooksville Creek

Camilla Rd

Bandi Rd

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

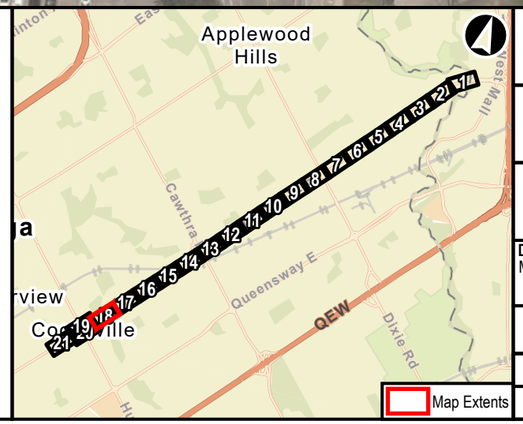
Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Grading Limits
- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk
- Bus Rapid Transit Lane

Base Layers

- Watercourse



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000	Appendix A2-18
P:60645291	Rev:00	

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Date Saved: 10/12/2021 3:20 PM User: oraws

Cyrus St
Agnes St
Cook St
Hurontario St
Jaguar Valley Dr
Dundas St W
Dundas St E
Confederation Sq
Shepard Ave

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

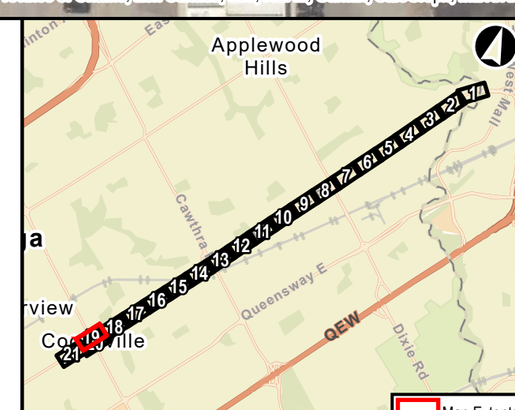
Mississauga East Proposed Design (50%)

Proposed Pavement Markings

Proposed Bus Station

Proposed Curb or Edge of Pavement

Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

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P:60645291	Rev:00

Appendix A2-19

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Date Saved: 10/12/2021 3:20 PM User: orawa

Cook St

Dundas St W

Dundas St E

Confederation Sq

Hurontario St

Shepard Ave

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

Legend

Mississauga East Project Area

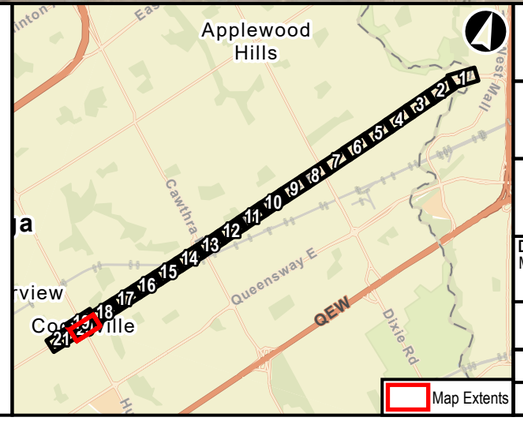
Mississauga East Proposed Design (50%)

Proposed Pavement Markings

Proposed Bus Station

Proposed Curb or Edge of Pavement

Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Oct, 2021	1:1,000
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Appendix A2-20

Project Location: E:\PR\Dundas\BRT_2020\2021\Data\PR\-60645291\-DundasBRT\Apps\Layout\-Air Quality\-MissEast_ProjectAreaandDesign-60645291
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Dundas St W

Rugby Rd

Confederation Pky

Novar Rd

Cook St

Confederation Sq

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Peel Region2020

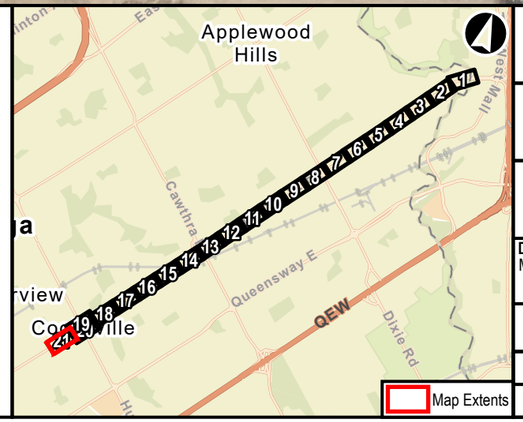
Legend

Mississauga East Project Area

Mississauga East Proposed Design (50%)

- Proposed Pavement Markings
- Proposed Bus Station
- Proposed Curb or Edge of Pavement
- Proposed Sidewalk

Bus Rapid Transit Lane



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Project Area and Proposed Design

0 5 10 20 30 40 50 60 Meters

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

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Appendix A2-21

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Map A

Mississauga Valley Blvd
CR4
CR2
CR1
SR13
Silver Creek Blvd
SR15
CR3
SR14
Hillcrest Ave
SR26
CR8
Kirwin Ave
SR22
Cooksville Creek
SR19
SR17
Cawthra Rd
Rymal Rd
Tomken Rd
Constitution Blvd
SR7
Queen Frederica Dr
SR9
Little Etobicoke Creek
Golden Orchard Dr
SR12
SR11
SR10
SR8
4
CR6
Dundas St W
Dundas St E
SR27
SR25
CR7
SR21
SR20
SR18
SR16
Mason Hts
Mary Fix Creek
Confederation Pky
King St W
CR9
SR24
SR23
Hurontario St
King St E
Camilla Rd
CR5
Cliff Rd
Hensall St
Tedlo St
Haines Rd
Stanfield Rd
Blundell Rd
Dixie Rd
17
Paisley Blvd W

Map B

Flagship Dr
Golden Orchard Dr
Fieldgate Dr
Queen Frederica Dr
Little Etobicoke Creek
Etobicoke Creek
Toronto
Mississauga
Markland Dr
SR3
Renforth Creek
Neilson Dr
CR2
SR13
CR1
Silver Creek Blvd
Rymal Rd
Tomken Rd
Constitution Blvd
SR7
SR9
4
427
SR14
Cawthra Rd
SR12
SR11
SR10
SR8
SR4
Dundas St E
SR5
SR6
SR2
SR1
Dundas St W
W Mall Cres
Haines Rd
Stanfield Rd
Blundell Rd
Dixie Rd
Mattawa Ave
Wharton Glen Ave
The West Mall
17

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Air Quality Area of Investigation (Study Area)
- Mississauga East Project Area

Air Quality Receptor by Type

- Critical
- Sensitive

Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Watercourse

Chestnut Hi
Etobicoke
Bloor St
Hurontario St
Eglinton Ave E
Applewood Hills
A
Gardiner Ex
Cawthra Rd
Mississauga
B
Cooksville
Erindale Woodlands
Map Extents

LIO Topographic Map: MECP

Dundas Bus Rapid Transit: Mississauga East

Representative Receptors

0 100 200 400 600 800 1,000 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, Region of Peel, TRCA, and City of Toronto

METROLINX | AECOM

Sep, 2021	1:14,000
P:60645291	Rev:00

Figure A3

Project Location: E:\PR\JDundasBRT_60645291\Data\PR-ENVS\GIS\DundasBRT.aprx\Layout: Air Quality
Date Saved: 9/10/2021 5:36 PM User: graves

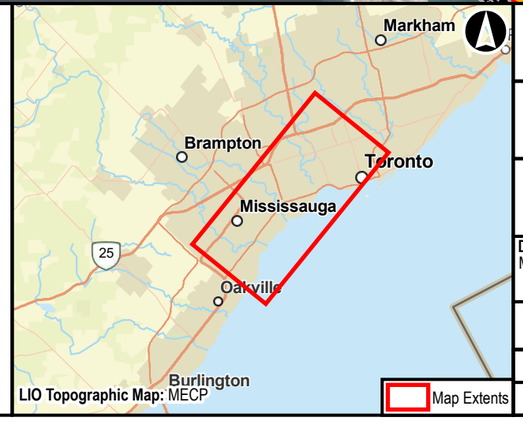
Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Earthstar Geographics

Legend

- Air Quality Area of Investigation (Study Area)
- Mississauga East Project Area
- Air Quality National Air Pollution Surveillance Monitoring Station

Base Layers

- Municipal Boundary
- Primary Highway



LIO Topographic Map: MECP

Dundas Bus Rapid Transit
Mississauga East - Priority Area

Air Quality National Air Pollution Surveillance Monitoring Station

0 0.5 1 2 3 4 5 km

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH

METROLINX | AECOM

Sep, 2021	1:80,000
P:60645291	Rev:00

Figure A4

Project Location: E:\P6-Dundas\BRT_project\01Data\PRJ-60645291-DundasBRT\aprx Layout: Air Quality_Mississauga_AirQualityMonitoringStation-60645291
Date Saved: 9/10/2021 5:36 PM User: oraws

AECOM Imagine it. Delivered.

Appendix B

Air Quality Assumptions Report

AECOM Imagine it. Delivered.

Metrolinx

Air Quality Assumption Report

Dundas Bus Rapid Transit Project

Date: June 2021

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3. Assumptions for Emission Rate Calculations..... 5

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List of Attachments

Attachment 1. Source Type Distribution Summary

Attachment 2. 24-hour Traffic & BRT Distribution Summary

Attachment 3. Construction Equipment Operation Summary

Attachment 4. Signalized Intersection Data Summary

1. Existing Conditions Assumptions

The following assumptions have been made for the traffic modelling within the air quality impact assessment:

1. The following contaminants were selected to represent potential impacts from the project on both Segment A (Toronto) and Segment B (Mississauga) study areas:
    a. Criteria Air Contaminants: nitrogen dioxide (NO_2), carbon monoxide (CO), sulphur dioxide (SO_2), respirable particulate matter (PM_{10}), fine particulate ($PM_{2.5}$), acetaldehyde, acrolein, benzene, benzo(a)pyrene, 1,3-butadiene, and formaldehyde.
    b. Greenhouse Gases: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).
2. Background air quality concentrations for the Criteria Air Contaminants were estimated using five years of data (2015 – 2019) collected from five National Air Pollution Surveillance (NAPS) air quality monitoring stations:
    a. Toronto West (NAPS ID 60430), Mississauga (NAPS ID 60434), Etobicoke South (NAPS ID 60435), Gage Institute (NAPS ID 60427), and Roadside Wallberg University of Toronto (NAPS ID 60439)
3. Meteorological data was requested for site specific land use for both Segment A (Toronto) and Segment B (Mississauga) study areas from the Ontario Ministry of Environment, Conservation and Parks (MECP). Data was provided using surface station data from the Toronto Pearson Airport station (Station ID 61587) and the nearest available upper air station data in Buffalo, New York for a five-year period (2016 – 2020).

2. Assumptions for Traffic Modelling

The following assumptions have been made for the traffic modelling within the air quality impact assessment:

1. Peak AM traffic volumes were provided by AECOM Traffic analysis for 2011 and 2041 and are assumed to include existing bus routes within the AM Peak counts.
2. The 2011 modelling results were multiplied by 1% traffic growth per year to project the 2019 annual average daily traffic (AADT) values. The 1% traffic growth rate was assumed based on:
    a. The immediate lands around the future project infrastructure are generally well built-out; and
    b. Historical traffic data shows negligible growth.
3. Existing Conditions were assessed for the year 2019, assuming pre-pandemic traffic conditions.
4. Future Conditions were assessed for the year 2041.
5. Dundas Street West with existing and future proposed infrastructure was considered for traffic modelling, excluding traffic counts from north/south intersecting roads and adjacent arterial roads. It is assumed that for the purposes of this assessment, there will be priority focus given to changes between traffic conditions with and without the Dundas BRT infrastructure, and that these changes will mainly impact traffic along Dundas Street West and not significantly impact traffic on intersecting or adjacent arterial roads within the Study Area.
6. The annual average daily traffic (AADT) predicted along Dundas Street West is assumed to have a year-specific vehicular distribution according to the MOVES 3.0.1 input database, and according to any specific truck distribution percentages provided by the AECOM Traffic team. Specific information on vehicle distribution is provided in Table 1 of Attachment 1.
7. Signalized Intersection data was provided in the following format, as indicated in Attachment 4:
    a. Average Cycle Length (seconds)
    b. Average Red Time (seconds)
    c. Clearance Lost Time (seconds)
    d. Saturation Flow Rate (vehicle per hour per lane)

8. Where specific signalized intersection data is missing, the average cycle length and average red time will be assumed to be equal to the average of the closest two signalized intersections.

9. Signalized Intersection data will be used in the following manner to calculate total idling emission rate on a per-hour basis:

    a. emission rate (gram per vehicle-hour) x # vehicles in a given hour x ratio of red-light time to cycle length

    Unit analysis: [gram/veh-hr] x # vehicles x [idling ratio] x [1 hr / 3,600 seconds) = [gram/second]

10. Signalized Intersection data will be used in the following manner to calculate maximum queue length:

    a. AM peak hour traffic volume / number of queuing lanes / number of signal cycles per hour x weighted average length of a vehicle

    b. Weighted average vehicle length range = 5.90 m for the Existing Conditions & Future No-Build conditions, and 7.03 m for Future Build Conditions (including additional bus volumes along Dundas Street West within both Segment A and Segment B Study Areas).
    **See Table 3 of Attachment 1: "Source Type Distribution Summary"*

11. Metrolinx Bus Rapid Transit rolling stock is assumed to be 100% "Transit Bus" emissions, using diesel fuel for all Metrolinx BRT rolling stock service.
    Note: there has been preliminary discussion on implementation of electric buses for the Dundas BRT project. In order to presume a worst-case scenario, diesel buses will be modeled. Should a quantitative assessment of electric buses for the Dundas BRT be required, additional scope for modelling a secondary Future Build scenario will be required.

12. Other express service providers such as MiWay Mississauga, or TTC Express routes is conservatively assumed to have existing rolling stock powered by diesel fuel, with a percentage reduction of associated emissions matching respective commitments from both providers, namely:

    a. MiWay Mississauga commitment to 80% emission reductions by 2050, and

    b. TTC commitment to 100% emission reductions by 2040[1].

13. Bus Rapid Transit traffic is assumed to include 50% rolling stock of Metrolinx designated Dundas BRT bus routes, and 50% rolling stock from other express service providers such as MiWay Mississauga, or TTC Express routes.

[1] TTC Green Initiatives: http://www.ttc.ca/Riding_the_TTC/green_initiatives.jsp

14. As per the Dundas BRT Initial Business Case (September 2020)[2], Segment A combined service provider bus traffic assumed to have a maximum AM & PM peak service level of one bus every minute (60 buses per hour, each direction), for each direction, with evening and early morning assumed reduced service levels by half, equating to one bus every 2 minutes (30 buses per hour, each direction), translating to 1,860 buses per day.
    **See Table 1 of Attachment 2: "24-hour Traffic & BRT Distribution Summary"*

15. As per the Dundas BRT Initial Business Case (September 2020)[3], Segment B combined service provider bus traffic assumed to have a maximum AM & PM peak service level of one bus every 2 minutes (30 buses per hour, each direction), for each direction, with evening and early morning assumed reduced service levels by half, equating to one bus every 4 minutes (15 buses per hour, each direction), translating to 930 buses per day.
    **See Table 1 of Attachment 2: "24-hour Traffic & BRT Distribution Summary"*

[2] Metrolinx Dundas BRT Initial Business Case, September 2021: http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/2020-08-17-Dundas-BRT-IBC-Final-Draft.pdf

[3] Metrolinx Dundas BRT Initial Business Case, September 2021: http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/2020-08-17-Dundas-BRT-IBC-Final-Draft.pdf

3. Assumptions for Emission Rate Calculations

The following inputs and assumptions were used for the modelling of emission factors and calculating emission rates for the Dundas BRT Project:

1. The emission factor modelling software used for this assessment is the U.S. EPA Motor Vehicle Emissions Simulator (MOVES) version 3.0.1.
2. The months of January & July are modelled to simulate worst-case conditions for both cold and hot temperature extremes and humidity conditions.
3. Existing Conditions were assessed for the year 2019, assuming pre-pandemic traffic conditions.
4. Future Conditions were assessed for the year 2041.
5. Weekday emission profiles were selected as a representation of worst-case peak traffic conditions.
6. Niagara County in New York state was selected as the nearest geographic location within MOVES 3.0.1 to the Dundas BRT Project for selection of fuel compositions.
7. Vehicle types assumed to travel along Dundas Street West include:
    a. Motorcycle (MOVES Source ID 11)
    b. Passenger Car (MOVES Source ID 21)
    c. Passenger Truck (MOVES Source ID 31)
    d. Light Commercial Truck (MOVES Source ID 32)
    e. School Bus (MOVES Source ID 43)
    f. Transit Bus (MOVES Source ID 42)
    g. Refuse Truck (MOVES Source ID 51)
    h. Single Unit Short-Haul Truck (MOVES Source ID 52)
    i. Single Unit Long-Haul Truck (MOVES Source ID 53)
8. Gasoline and diesel fuels were selected for vehicles travelling along Dundas Street West. It was assumed that the MOVES 3.0.1 fuel category of ethanol-based fuel (fuel type “E85”) would not be applicable for this project as vehicles operating using this type of fuel are not as prevalent or supported in Canada.

9. The road type selected for estimating emissions using MOVES 3.0.1 include urban unrestricted access, which is defined as urban based roadways which are not accessed through on/off ramps only (i.e. non-highway urban roads).

10. Pollutants included within the emissions modelling are categorized as follows:

    a. Greenhouse Gases (GHG): methane (CH_4), nitrous oxide (N_2O), carbon dioxide (CO_2), and carbon dioxide equivalent (CO_2e)

    b. Criteria Air Contaminants (CAC): carbon monoxide (CO), nitrogen oxides (NOx), fine particulate matter ($PM_{2.5}$), respirable particulate matter (PM_{10}), and sulphur dioxide (SO_2)

    c. Volatile Organic Compounds (VOC): benzene, 1,3-butadiene, formaldehyde, acetaldehyde, and acrolein

    d. Polycyclic Aromatic Hydrocarbons (PAH): represented as benzo(a)pyrene (BaP, particle & volatile)

11. Processes included within the emissions modelling were as follows:

    a. Running

    b. Crankcase running

    c. Brake-wear

    d. Tire-wear

    e. Extended Idle

    f. Crankcase Extended Idle

    g. Aux Power Exhaust

    h. Evaporation Permeation

    i. Evaporation Fuel Vapour Venting

    j. Evaporation Fuel Leaks

12. Output Units of the emissions modelling were metric, as follows:

    a. Grams

    b. Kilojoules

    c. Kilometres

4. Assumptions for Dispersion Modelling

The following assumptions will be utilized for the air dispersion modelling assessment using U.S. EPA AERMOD (version 19191):

1. The project study area includes the Segment A (Toronto) and Segment B (Mississauga) project footprints, with an additional 500 metre buffer.

2. Traffic flow emissions are represented by separated Line Volume source types in AERMOD, where:

    a. Plume Height, Release Height, and Plume Width were determined using the U.S. EPA “Haul Roads” calculation tool.

    a. Vehicle Height weighted average assumed to be 1.93 m for Existing Conditions & Future No-Build conditions, and 2.31 m for Future Build conditions (including additional bus volumes along Dundas Street West within both Segment A and Segment B Study Areas).
    **See Table 3 of Attachment 1: “Source Type Distribution Summary”*

    b. Road Width is assumed to be measured from curbside to curbside, where individual links are separated based on significant road width parameters (e.g. additional lanes)

3. Traffic idling emissions at each approach direction for signalized intersections are represented by a single Volume source type in AERMOD, where:

    a. Release Height for single volume sources representing approach volume idling = weighted average release height of vehicular exhaust ranges from 0.66 m for Existing Conditions & Future No-Build conditions, to 1.25 m for Future Build conditions.
    **See Table 3 of Attachment 1: “Source Type Distribution Summary”*

    b. Initial Lateral Dimension = width of approach combined idling lanes, divided by 4.3

    c. Initial Vertical Dimension = vertical dimension of source (release height x 2) divided by 4.3

4. If the calculated length of queue for the AM/PM Peak hour approach volume is greater than the combined lateral dimension of a single Volume source, a Line Volume source will be included instead, using the same release height, initial, and lateral dimensions as the proposed single Volume source, where the length of queue is equal to the length of the Line Volume source, where:

a. Release Height for single volume sources representing approach volume idling = weighted average release height of vehicular exhaust = 0.66 m – 1.25 m
**See Table 3 of Attachment 1: "Source Type Distribution Summary"*

b. The associated Plume Height is equal to Release Height x 2 = 1.32 m – 2.50 m

c. Plume Width is equal to the width of approach combined idling lanes.

d. Source type is indicated as Elevated (Release Height > 0)

5. The five-year data meteorological (MET) data set is site specific and will be provided by the Ontario Ministry of Environmental, Conservation and Parks (MECP). MECP has provided both MET data sets processed using urban and suburban land use types with a recommendation to "assess a range of modelled impacts based on the results using these two datasets." The meteorological data set presenting the highest potential impact on receptors will be used, based on preliminary model screening. Meteorological surface station selected for representation of the project was the Toronto Pearson Airport with upper air data from the closest representative station in Buffalo, New York.

6. GeoTIFF files were selected for the Study Area. These were prepared by the MECP and are publicly available on the MECP website: https://www.ontario.ca/environment-and-energy/map-regional-meteorological-and-terrain-data-air-dispersion-modelling

5. Assumptions for Construction Emissions

The following assumptions will be utilized when estimating the air emissions from construction activities:

1. Worst-case operation conditions were assumed for the following four construction operations:
    a. Road Works: existing asphalt removal and site preparation
    b. Road Works: paving new asphalt
    c. Soil Excavation and stockpiling
    d. Station Construction: installation
    e. Culvert construction
    f. Bridge construction
2. The associated equipment list, number of vehicles per construction operation, horsepower, and hours of daily operation for each construction operation are included in Attachment 3 “Construction Equipment Operation Summary”.
3. Emissions of particulate matter (PM_{10} and $PM_{2.5}$) from construction emissions will be assessed using the emission modelling software from U.S. EPA Motor Vehicle Emission Simulator (MOVES) version 3.0.1 “off-roads” modelling simulation, with emission rates provided for the assumed year of construction 2030 in units of grams per horsepower-hour (g/hp-hr).

Attachment 1

Source Type Distribution Summary

Dundas Bus Rapid Transit (BRT)
Air Quality Assumptions: Attachment 1
Metrolinx, June 2021

Table 1 - Source Type Fraction Calculation

yearID	Fraction ID	sourceTypeID	sourceTypePopulation[1]	CAR Fraction[2]	TRK Fraction[3]	BRT Fraction[4]
2019	C 11	11	8920314	3%	-	-
2019	C 21	21	113793548	43%	-	-
2019	C 31	31	126450419	48%	-	-
2019	C 32	32	14806237	6%	-	-
2019	HT 41	41	340953	-	-	-
2019	B 42	42	110990	-	-	100%
2019	T 42	42	110990	-	1.2%	-
2019	T 43	43	483997	-	5.1%	-
2019	T 51	51	59888	-	0.63%	-
2019	T 52	52	8433573	-	89%	-
2019	T 53	53	371957	-	3.9%	-
2019	HT 54	54	836663	-	-	-
2019	HT 61	61	1098872	-	-	-
2019	HT 62	62	1823634	-	-	-
2041	C 11	11	10940829	4%	-	-
2041	C 21	21	139568601	48%	-	-
2041	C 31	31	126439404	43%	-	-
2041	C 32	32	14804947	5%	-	-
2041	HT 41	41	433123	-	-	-
2041	B 42	42	140994	-	-	100%
2041	T 42	42	140994	-	1%	-
2041	T 43	43	614836	-	4%	-
2041	T 51	51	88287	-	1%	-
2041	T 52	52	12432743	-	90%	-
2041	T 53	53	548337	-	4%	-
2041	HT 54	54	1233406	-	-	-
2041	HT 61	61	1099159	-	-	-
2041	HT 62	62	1824110	-	-	-
		Total 2019	277642035			
		Total 2041	310309770			
		Total CAR 2019	263970518			
		Total CAR 2041	291753781			
		Total TRK 2019	9460405			
		Total TRK 2041	13825197			
		Total BRT 2019	110990			
		Total BRT 2041	140994			

[1] Vehicle Population for 2019 and 2041 pulled from the MOVES3.0 input database
[2] "CAR" refers to the category of vehicle which includes passenger transportation
[3] "TRK" refers to the category of vehicle which includes both commercial and public transportation, of a heavier weight class
[4] "BRT" refers to transit buses utilizing the Dundas BRT project infrastructure

Dundas Bus Rapid Transit (BRT)
Air Quality Assumptions: Attachment 1
Metrolinx, July 2021

Table 2 - Source Type Fraction Summary

Description	Fraction ID	Category ID	Source Type ID	2019 Fraction	2041 Fraction
Transit Bus	B 42	B	42	100%	100%
Dundas West Passenger Car Mix	C 11	C	11	3%	4%
Dundas West Passenger Car Mix	C 21	C	21	43%	48%
Dundas West Passenger Car Mix	C 31	C	31	48%	43%
Dundas West Passenger Car Mix	C 32	C	32	6%	5%
Dundas West Medium Truck Mix	T 42	T	42	1%	1%
Dundas West Medium Truck Mix	T 43	T	43	5%	4%
Dundas West Medium Truck Mix	T 51	T	51	1%	1%
Dundas West Medium Truck Mix	T 52	T	52	89%	90%
Dundas West Medium Truck Mix	T 53	T	53	4%	4%
Dundas West Vehicle Mix	HT 41	HT	41	--	--
Dundas West Vehicle Mix	HT 54	HT	54	--	--
Dundas West Vehicle Mix	HT 61	HT	61	--	--
Dundas West Vehicle Mix	HT 62	HT	62	--	--
VEH SUM				100%	100%
BRT SUM				100%	100%
TRK SUM				100%	100%

Table 3 - Weighted Vehicle Dimension Summary

Source Type ID	Vehicle Height (m)	Vehicle Length (m)	Vehicle Height (m)	Weighted Average Vehicle Height (m)	Weighted Average Vehicle Length (m)	Weighted Average Vehicle Exhaust Height (m)	
11	1.2	2	0.3	1.70	5.20	0.30	"CAR"
21	1.5	5	0.3				
31	1.9	5.5	0.3				
32	2	6.5	0.3				
42	4.15	12.5	4.15	4.15	12.5	4.15	"BRT"
43	3.4	12	0.3	4.07	12.31	3.92	"TRK"
51	4.2	8	4.2				
52	4.15	12.5	4.15				
53	4.15	12.5	4.15				

Existing Conditions Traffic Summary: Avg. AADT CAR = 10244
Avg. AADT BRT = 0
Avg. AADT TRK = 1119

Future Build Traffic Summary: Avg. AADT CAR = 10172
Avg. AADT BRT = 1860
Avg. AADT TRK = 1600

Existing Conditons Vehicle Height: 1.93 m
Future Build Vehicle Height: 2.31 m

Existing Conditons Vehicle Length: 5.90 m
Future Build Vehicle Length: 7.03 m

Exist. Cond. Vehicle Exhaust Height: 0.66 m
Future Build Vehicle Exhaust Height: 1.25 m

**Note: the weighted average values are subject to change based on ongoing revision to segment specific truck volume percentages.*

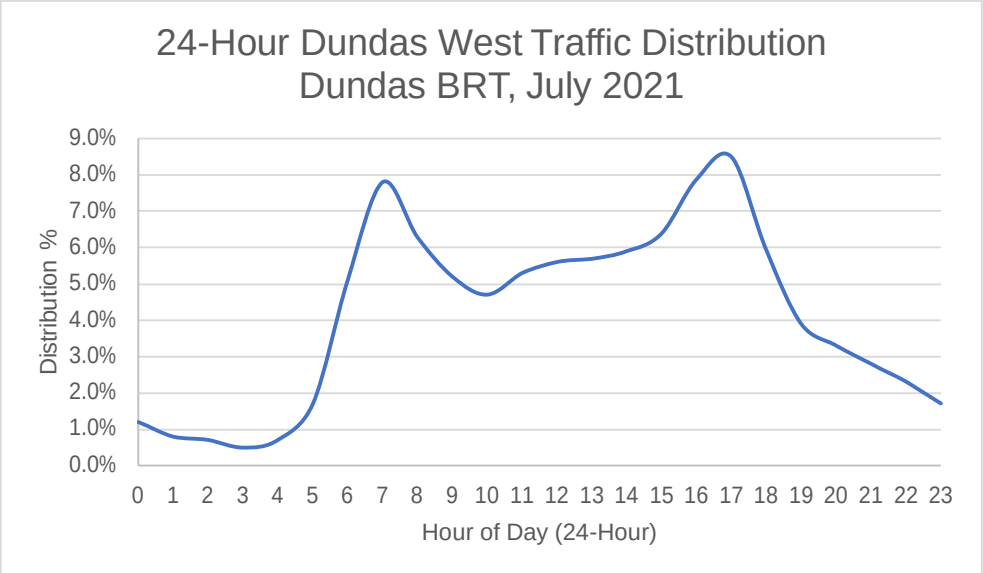
Attachment 2

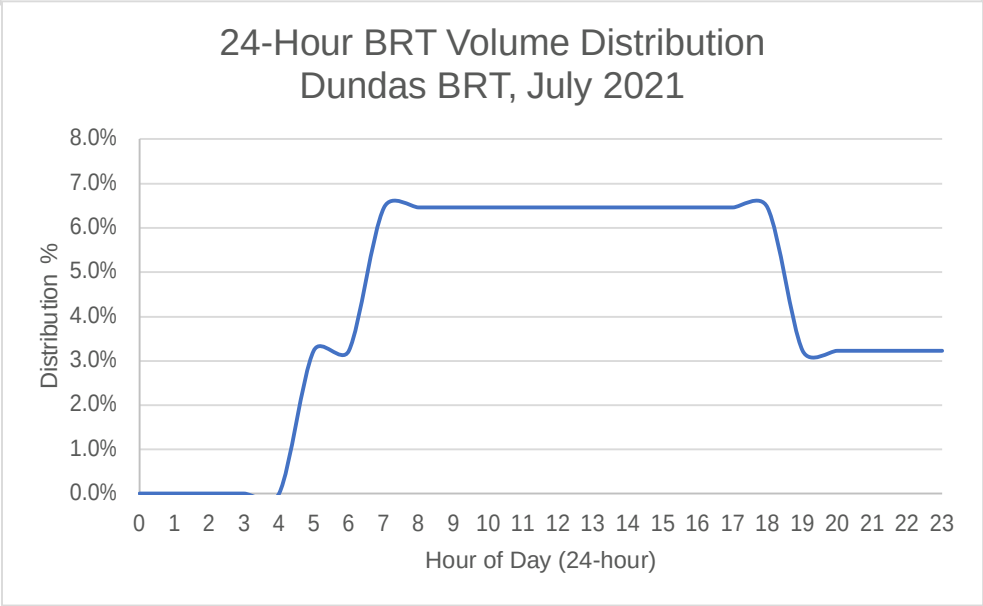
24-hour Traffic & BRT Distribution Summary

Dundas Bus Rapid Transit (BRT)
Air Quality Assumptions: Attachment 2
Metrolinx, June 2021

Table 1: 24-Hour Distribution Volume

Dundas BRT Segment A & Segment B Study Areas				
Link ID	**All**	**Seg. A**	**Seg. B**	**All**
Hour Starting	**Dundas West Traffic %**	**# BRT Buses per hour**	**# BRT Buses per hour**	**Dundas BRT %**
0:00	1.2%	0	0	0.0%
1:00	0.8%	0	0	0.0%
2:00	0.7%	0	0	0.0%
3:00	0.5%	0	0	0.0%
4:00	0.7%	0	0	0.0%
5:00	1.7%	60	30	3.2%
6:00	5.1%	60	30	3.2%
7:00	7.8%	120	60	6.5%
8:00	6.3%	120	60	6.5%
9:00	5.2%	120	60	6.5%
10:00	4.7%	120	60	6.5%
11:00	5.3%	120	60	6.5%
12:00	5.6%	120	60	6.5%
13:00	5.7%	120	60	6.5%
14:00	5.9%	120	60	6.5%
15:00	6.4%	120	60	6.5%
16:00	7.9%	120	60	6.5%
17:00	8.5%	120	60	6.5%
18:00	5.9%	120	60	6.5%
19:00	3.9%	60	30	3.2%
20:00	3.3%	60	30	3.2%
21:00	2.8%	60	30	3.2%
22:00	2.3%	60	30	3.2%
23:00	1.7%	60	30	3.2%
Total:	100%	1860	930	100%





Note:
1) Data taken from the "REALCOST" program published by the United States Federal Highway Association
2) 24% Urban AADT data was used to represent the hourly AADT proportions for the Dundas BRT project
3) 24-hour Dundas BRT Volumes assumed to be 1 bus every 30 minutes for night-hours (starting at 5 AM) and evening hours, and 1 bus every 15 minutes during day-time hours

Night
Day
Evening/Early Morning

Attachment 3

Construction Equipment Operation Summary

Dundas Bus Rapid Transit (BRT)

Air Quality Assumptions: Attachment 3

Metrolinx, June 2021

Table 1 - Construction Equipment Operation Assumptions

Equipment Description	Units per Operation	Equipment Rating (hp)	Load Factor (%)	hr/day
Road Works Operation - Existing Asphalt Removal and Site Preparation				
Excavator	2	232	80	12
Pickup Truck	5	225	50	12
Dump Truck	2	250	80	12
Impact Hammer	2	250	80	12
Loaders	2	83	80	12
Bulldozer	1	190	80	12
Road Milling Machine (Cold Recycling Machine)	1	480	85	12
Portable Light Generator	5	27	15	12
Backup Alarms (Tonal)	14	NA	15	12
Road Works Operation - Paving New Asphalt				
Dump Truck	2	250	50	12
Pickup Truck	5	225	80	12
Bottom/Belly Dump Truck	1	250	80	12
Grader	1	275	85	12
Asphalt Roller	2	194	85	12
Water Truck	1	150	50	12
Asphalt Paver	1	150	85	12
Road Sweeper	2	70	50	12
Portable Light Generator	5	27	50	12
Backup Alarms (Tonal)	13	NA	15	12
Station Construction Operation - Installation				
Flatbed Truck	1	362	80	12
Crane	1	230	80	12
Power Generator	1	268	85	12
Concrete Mixer Truck	1	225	80	12
Portable Light Generator	5	27	15	12
Welding Generator	5	4	80	12
Pickup Truck	5	225	50	12
Backup Alarms (Tonal)	6	NA	15	12
Soil Exacavation and Stockpiling				
Excavator	2	232	80	12
Bulldozer	1	190	80	12
Loaders	2	83	80	12
Portable Light Generator	5	27	15	12
Dump Truck	2	250	50	12
Pickup Truck	2	225	50	12
Backup Alarms (Tonal)	9	NA	15	12

AECOM

Table 1 - Construction Equipment Operation Assumptions

Equipment Description	Units per Operation	Equipment Rating (hp)	Load Factor (%)	hr/day
Culvert Construction				
Flatbed Trucks	1	360	80	12
Excavator	1	500	80	12
Loaders	1	83	80	12
Dump Truck	2	250	80	12
Compactors	1	300	80	12
Water Pumps	2	27	100	12
Portable Light Generator	5	27	15	12
Backup Alarms (Tonal)	5	NA	15	12
Bridge Construction				
Compressor	2	60	80	12
Crane	2	230	80	12
Dump Truck	2	250	80	12
Flatbed Truck	2	360	80	12
Concrete Mixer Truck	2	225	80	12
Man Lift	2	67	50	12
Impact Pile Driver	1	249	80	12
Excavator	1	232	80	12
Concrete Mixer	1	225	80	12
Concrete Pump Truck	1	229	80	12
Power Generator	1	268	90	12
Portable Light Generator	3	27	15	12
Backup Alarms (Tonal)	11	NA	15	12

Day = 07:00h to 23:00h

Night = 23:00h to 07:00h

Attachment 4

Signalized Intersection Data Summary

Dundas Bus Rapid Transit (BRT)
Air Quality Assumptions: Attachment 4
Metrolinx, June 2021

Table 1: Signalized Intersection Data

Scenario	Intersection	Movement	Ave Cycle Length (s)	Phase Split (s)	Ave Red Time (s) Inlcuding All Red and Amber	All-Red Time (s)	Amber Time (s)
Segment A 2041 PM No-Build	Neilson Drive / West Mall Crescent and Dundas Street West	NB	120	46	74	3.4	3.3
		SB	120	46	74	3.4	3.3
		WBT	120	62	58	2.5	3.8
		WBL	120	20	100	1	3
		EBT	120	54	66	2.5	3.8
		EBL	120	12	108	1	3
	Highway 427 W Terminal and Dundas Street West	SB	120	56	64	2.7	3
		WB	120	64	56	3.3	3.8
		EB	120	64	56	3.3	3.8
	Highway 427 E Terminal and Dundas Street West	NB	120	41	79	3.4	3.3
		WB	120	68	52	2.5	3.8
		EBT	120	68	52	2.5	3.8
		EBL	120	11	109	1	3
	The East Mall Crescent and Dundas Street West	NB	120	51	69	3.8	3.3
		SB	120	51	69	3.8	3.3
		WBT	120	49	71	3.3	3.8
		WBL	120	14	106	4.2	3.3
		EBT	120	50	70	3.3	3.8
		EBL	120	15	105	4.6	3.8
	Paulart Drive and Dundas Street West	NB	120	38	82	3.1	3.3
		SB	120	38	82	3.1	3.3
		WB	120	82	38	2	3.8
		EB	120	82	38	2	3.8
	Shaver Avenue South / Shorncliffe Road and Dundas Street West	NB	120	40	80	5.6	3.3
		SB	120	40	80	5.6	3.3
		WB	120	75	45	2.8	3.3
		EBT	120	60	60	2.8	3.3
		EBL	120	15	105	4.1	3.3
	New Site Access and Dundas Street West	NB	120	35	85	2.6	3
		WBT	120	80	40	2.1	3.8
		WBL	120	12	108	1	3
		EB	120	68	52	2.1	3.8
	Poplar Avenue / Subway Crescent and Dundas Street West	NB	120	45	75	2.6	3
		SB	120	45	75	2.6	3
		WBT	120	70	50	2.1	3.8
		WBL	120	11	109	1	3
		EB	120	59	61	2.1	3.8
	Acorn Avenue and Dundas Street West	NB	120	36	84	3.1	3
		SB	120	36	84	3.1	3
		WBT	120	84	36	2.4	3.8
		WBL	120	11	109	1	3
		EB	120	73	47	2.4	3.8
	Aukland Road and Dundas Street West	NBT	120	40	80	3	4
		NBL	120	20	100	1	3
		SBT	120	40	80	3	4
		SBL	120	20	100	1	3
		WBT	120	49	71	2	4
		WBL	120	11	109	1	3
		EBT	120	49	71	2	4
		EBL	120	11	109	1	3
Segment A 2041 PM Full-Median BRT	Neilson Drive / West Mall Crescent and Dundas Street West	NB	120	42	78	3.4	3.3
		SB	120	42	78	3.4	3.3
		WBT	120	52	68	2.5	3.8
		WBL	120	18	102	3	3
		EBT	120	60	60	2.5	3.8
		EBL	120	26	94	3	3
	Highway 427 W Terminal and Dundas Street West	SB	120	60	60	2.7	3
		WB	120	60	60	3.3	3.8
		EB	120	60	60	3.3	3.8
	Highway 427 E Terminal and Dundas Street West	NB	120	45	75	3.4	3.3
		WB	120	58	62	2.5	3.8
		EBT	120	75	45	2.5	3.8
		EBL	120	17	103	3	3

Scenario	Intersection	Movement	Ave Cycle Length (s)	Phase Split (s)	Ave Red Time (s) Inlcuding All Red and Amber	All-Red Time (s)	Amber Time (s)
(continued) Segment A 2041 PM Full-Median BRT	The East Mall Crescent and Dundas Street West	NB	120	39	81	3.8	3.3
		SB	120	39	81	3.8	3.3
		WBT	120	64	56	3.3	3.8
		WBL	120	64	56	4.2	3.3
		EBT	120	12	108	3.3	3.8
		EBL	120	12	108	4.6	3.8
	Paulart Drive and Dundas Street West	NB	120	42	78	3.1	3.3
		SB	120	42	78	3.1	3.3
		WBT	120	66	54	2	3.8
		WBL	120	12	108	3	3
		EBT	120	66	54	2	3.8
		EBL	120	12	108	3	3
	Shaver Avenue South / Shorncliffe Road and Dundas Street West	NB	120	41	79	5.6	3.3
		SB	120	41	79	5.6	3.3
		WBT	120	62	58	2.8	3.3
		WBL	120	12	108	4.1	3.3
		EBT	120	62	58	2.8	3.3
		EBL	120	12	108	4.1	3.3
	New Site Access and Dundas Street West	NB	120	36	84	2.6	3
		WBT	120	84	36	2.1	3.8
		WBL	120	12	108	3	3
		EB	120	72	48	2.1	3.8
	Poplar Avenue / Subway Crescent and Dundas Street West	NB	120	30	90	2.6	3
		SB	120	30	90	2.6	3
		WBT	120	73	47	2.1	3.8
		WBL	120	14	106	3	3
		EBT	120	71	49	2.1	3.8
		EBL	120	12	108	3	3
	Acorn Avenue and Dundas Street West	NB	120	32	88	3.1	3
		SB	120	32	88	3.1	3
		WBT	120	76	44	2.4	3.8
		WBL	120	22	98	3	3
		EB	120	66	54	2.4	3.8
		EBL	120	12	108	3	3
	Aukland Road and Dundas Street West	NBT	120	30	90	3	4
		NBL	120	28	92	3	3
		SBT	120	30	90	3	4
		SBL	120	28	92	3	3
		WBT	120	50	70	2	4
		WBL	120	12	108	3	3
		EBT	120	50	70	2	4
		EBL	120	12	108	3	3
Segment B Cooksville 2041 PM Alt 1 & Alt 4	Confederation Parkway and Dundas Street East	NBT	140	50	90	3	4
		NBL	140	19	121	0	3
		SBT	140	47	93	3	4
		SBL	140	16	124	0	3
		WBT	140	52	88	4	4
		WBL	140	11	129	2	4
		EBT	140	63	77	4	4
		EBL	140	22	118	2	4
	Hurontario Street and Dundas Street East	NB	140	72	68	3	4
		SB	140	72	68	3	4
		WBT	140	48	92	4	4
		WBL	140	14	126	0	3
		EBT	140	54	86	4	4
		EBL	140	20	120	0	3
	Camilla Road/Kirwin Avenue and Dundas Street East	NB	140	36	104	3	4
		SBT	140	57	83	3	4
		SBL	140	21	119	0	3
		WBT	140	72	68	3	4
		WBL	140	16	124	0	3
		EBT	140	67	73	3	4
		EBL	140	11	129	2	4
Segment B Erindale 2041 PM Alt 1 & Alt 2	Mississauga Road and Dundas Street East	NBT	140	46	94	2	4
		NBL	140	8	132	0	3
		SBT	140	52	88	2	4
		SBL	140	12	128	0	3
		WBT	140	70	70	2	5
		WBL	140	8	132	0	3
		EBT	140	72	68	2	5
		EBL	140	10	130	0	3

Scenario	Intersection	Movement	Ave Cycle Length (s)	Phase Split (s)	Ave Red Time (s) Inlcuding All Red and Amber	All-Red Time (s)	Amber Time (s)
(continued) Segment B Erindale 2041 PM Alt 1 & Alt 2	Robinson Street and Dundas Street East	NB	140	24	116	2	4
		WBT	140	116	24	2	4
		WBL	140	11	129	2	4
		EB	140	105	35	2	4
	Credit Woodlands Crescent and Dundas Street East	NB	140	39	101	3	4
		SB	140	39	101	3	4
		WBT	140	86	54	3	4
		WBL	140	11	129	2	4
		EBT	140	90	50	3	4
		EBL	140	15	125	3	4

Notes:
[1] NB = northbound, SB = southbound, EB = eastbound, WB = westbound

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Appendix C

Traffic Data and Bus Service Inputs

Table C-1: Dundas BRT Traffic Data Summary - Annual Average Daily Traffic (AADT)

Modeling ID	Table C-1: Dundas BRT Traffic Data Summary - AADT (by year)		Existing Conditions		Future No Build Conditions		Future Build Out Conditions	
	Source Location	Description	2019 CAR AADT	2019 TRK AADT	2041 CAR AADT	2041 TRK AADT	2041 CAR AADT	2041 TRK AADT
S1	Along Dundas Street, Segment A	Dundas St.W, WB, between Kipling & Aukland Rd. (SI1)	5,068	361	8,002	754	7,805	847
S2	Along Dundas Street, Segment A	Dundas St.W, EB, between Kipling & Aukland Rd. (SI1)	5,548	376	7,864	893	7,717	935
S3	Along Dundas Street, Segment A	Dundas St.W, between Aukland Rd. (SI1) & Poplar Ave (SI2)	8,825	960	9,805	1,364	9,589	1,463
S4	Along Dundas Street, Segment A	Dundas St.W, between Poplar Ave (SI2) & Shaver Ave S (SI3)	10,256	853	11,663	1,569	11,137	1,592
S5	Along Dundas Street, Segment A	Dundas St.W, between Shaver Ave S (SI3) & Paulart Dr. (SI4)	9,631	942	10,636	1,422	10,133	1,694
S6	Along Dundas Street, Segment A	Dundas St.W, between Paulart Dr. (SI4) & The East Mall Crsc. (SI5)	10,035	1,510	10,106	1,678	9,568	2,010
S7	Along Dundas Street, Segment A	Dundas St.W, between The East Mall Crsc. (SI5) & 427 offrmp (SI6)	10,225	2,292	8,809	2,702	8,762	2,568
S8	Along Dundas Street, Segment A	Dundas St.W, between 427 offrmp E (SI6) & 427 offrmp W (SI7)	9,655	1,836	10,267	3,145	8,539	2,568
S9	Along Dundas Street, Segment A	Dundas St.W, between 427 offrmp W (SI7) & Neilson Dr. (SI8)	11,045	1,721	14,365	2,523	11,455	2,280
S10	Along Dundas Street, Segment A	Dundas St.W, between Neilson Dr. (SI8) & Southcreek Rd. (SI9)	11,879	1,275	13,528	3,637	10,146	3,327
S11	Along Dundas Street, Segment B	Dundas St.W, between Southcreek Rd. (SI9) & Universal Dr. (SI10)	10,814	1,110	13,665	2,487	9,970	2,061
S12	Along Dundas Street, Segment B	Dundas St.W, between Universal Dr. (SI10) & Wharton Way (SI11)	10,928	996	13,212	2,939	9,438	2,593
S13	Along Dundas Street, Segment B	Dundas St.W, between Wharton Way (SI11) & Treadwells Dr./Coram Ave. (SI12)	10,278	1,646	14,195	1,957	9,971	2,060
S14	Along Dundas Street, Segment B	Dundas St.W, between Treadwells Dr./Coram Ave. (SI12) & Mattawa Ave. (SI13)	9,453	1,240	13,243	1,895	8,826	1,763
S15	Along Dundas Street, Segment B	Dundas St.W, between Mattawa Ave. (SI13) & Jarrow Ave. (SI14)	12,237	1,265	14,279	2,620	10,813	1,391
S16	Along Dundas Street, Segment B	Dundas St.W, between Jarrow Ave. (SI14) & Neilco Ct. (SI15)	12,204	1,299	14,523	2,376	10,123	2,081
S17	Along Dundas Street, Segment B	Dundas St.W, between Neilco Ct. (SI15) & Dixie Rd. (SI16)	14,591	1,721	15,959	3,314	12,232	2,730
S18	Along Dundas Street, Segment B	Dundas St.W, between Dixie Rd. (SI16) & Blundel Rd. (SI17)	13,631	2,289	14,711	3,949	11,009	2,809
S19	Along Dundas Street, Segment B	Dundas St.W, between Blundel Rd. (SI17) & Stanfield Rd. (SI20)	12,822	1,576	14,675	2,596	10,721	2,226
S20	Along Dundas Street, Segment B	Dundas St.W, between Stanfield Rd. (SI20) & Tomken Rd. (SI21)	11,205	1,671	12,911	2,970	9,722	2,356
S21	Along Dundas Street, Segment B	Dundas St.W, between Tomken Rd. (SI21) & Cawthra Rd. (SI24)	9,674	1,732	12,063	1,738	10,859	1,663
S22	Along Dundas Street, Segment B	Dundas St.W, between Cawthra Rd. (SI24) & Grenville Dr. (SI25)	8,363	1,080	9,242	1,911	8,536	2,530
S23	Along Dundas Street, Segment B	Dundas St.W, between Grenville Dr. (SI25) & Kirwin Ave. (SI26)	7,669	872	9,124	908	8,545	1,377
S24	Along Dundas Street, Segment B	Dundas St.W, between Kirwin Ave. (SI26) & Hurontario St. (SI27)	7,193	445	7,502	1,410	7,149	1,630
S25	Along Dundas Street, Segment B	Dundas St.W, between Hurontario St. (SI27) & Confederation Pkwy (SI28)	7,671	787	7,865	1,424	7,822	887
S26	Along Dundas Street, Segment B	Dundas St.W, between Confederation Pkwy (SI28) & Clayhill Rd. (SI31)	8,250	863	9,485	921	8,244	976
S27	Along Dundas Street, Segment B	Dundas St.W, between Clayhill Rd. (SI31) & Mavis Dr. (SI33)	9,024	744	9,984	1,538	9,187	543
S28	Along Dundas Street, Segment B	Dundas St.W, between Mavis Dr. (SI33) & Wolfdale Rd. (SI34)	10,222	751	11,831	1,091	9,615	781
S29	Along Dundas Street, Segment B	Dundas St.W, between Wolfdale Rd. (SI34) & Erindale Station Rd. (SI36)	11,586	591	13,124	1,198	10,487	575
S30	Along Dundas Street, Segment B	Dundas St.W, between Erindale Station Rd. (SI36) & Credit Woodlands (SI38)	12,364	526	13,686	965	12,199	747
S31	Along Dundas Street, Segment B	Dundas St.W, between Credit Woodlands (SI38) & Mississauga Rd. (SI40)	12,758	645	14,806	872	14,443	806
S32	Along Dundas Street, Segment B	Dundas St.W, between Mississauga Rd. (SI40) & Erin Mills Pkwy. (SI42)	11,341	462	13,222	770	12,158	1,786
S33	Along Dundas Street, Segment B	Dundas St.W, between Erin Mills Pkwy. (SI42) & Glen Erin Dr. (SI44)	8,912	420	11,344	629	10,134	1,537
S34	Along Dundas Street, Segment B	Dundas St.W, between Glen Erin Dr. (SI44) & Woodchester Dr. (SI45)	8,700	446	11,115	736	10,813	667
S35	Along Dundas Street, Segment B	Dundas St.W, between Woodchester Dr. (SI45) & Winston Churchill Blvd (SI46)	8,598	361	11,114	615	10,722	567
S36	Along Dundas Street, Segment B	Dundas St.W, between Winston Churchill Blvd (SI46) & Ridgeway Dr. (SI48)	9,478	471	11,625	833	9,972	764
S37	Along Dundas Street, Segment B	Dundas St.W, between Ridgeway Dr. (SI48) & Vega Blvd. (SI49)	10,358	580	12,371	817	9,646	538
S38	Along Dundas Street, Segment B	Dundas St.W, between Vega Blvd. (SI49) & Hwy 403 offrmp (SI50)	12,216	937	14,927	1,116	12,196	1,161
S39	Along Dundas Street, Segment B	Dundas St.W, Hwy 403 offrmp (SI50) & Hwy 403 offrmp (SI51)	11,495	3,249	12,467	3,510	12,977	1,333
S40	Along Dundas Street, Segment B	Dundas St.W, Hwy 403 offrmp (SI51) & Ninth Line (SI52)	13,568	1,843	14,229	2,079	13,498	1,770

Table C-2: Dundas BRT Signalized Intersection Traffic Data Summary

Modeling ID	Table C-2: Dundas BRT: Signalized Intersection Traffic Data Summary - AADT (by year)		Existing Conditions - Approach Volume		Future No Build Conditions - Approach Volume		Future Build Out Conditions - Approach Volume	
	Source Location	Description	2019 CAR AADT	2019 TRK AADT	2041 CAR AADT	2041 TRK AADT	2041 CAR AADT	2041 TRK AADT
SI1_E	Aukland at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	12,016	814	15,727	1,786	15,610	1,694
SI1_W		WESTBOUND ALONG DUNDAS STREET W	10,975	781	16,004	1,509	15,610	1,694
SI1n_E	Acorn (new) at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,786	927	12,766	1,575	12,599	1,578
SI1n_W		WESTBOUND ALONG DUNDAS STREET W	11,040	852	13,834	1,539	13,374	1,643
SI2_E	Poplar Ave at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	9,556	1,040	9,805	1,364	9,589	1,463
SI2_W		WESTBOUND ALONG DUNDAS STREET W	11,105	924	11,663	1,569	11,137	1,592
SI2n_E	New intersection at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,331	982	10,734	1,467	10,363	1,527
SI2n_W		WESTBOUND ALONG DUNDAS STREET W	10,767	972	11,149	1,495	10,635	1,643
SI3n_E	New south entrance to development at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,331	982	10,734	1,467	10,363	1,527
SI3n_W		WESTBOUND ALONG DUNDAS STREET W	10,767	972	11,149	1,495	10,635	1,643
SI3_E	Shaver at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	11,105	924	11,663	1,569	11,137	1,592
SI3_W		WESTBOUND ALONG DUNDAS STREET W	10,429	1,020	10,636	1,422	10,133	1,694
SI4_E	Paulart Dr at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,429	1,020	10,636	1,422	10,133	1,694
SI4_W		WESTBOUND ALONG DUNDAS STREET W	10,866	1,636	10,106	1,678	9,568	2,010
SI5_E	E Mall Cres at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,866	1,636	10,106	1,678	9,568	2,010
SI5_W		WESTBOUND ALONG DUNDAS STREET W	11,072	2,482	8,809	2,702	8,762	2,568
SI6_E	HWY 427 at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	11,072	2,482	8,809	2,702	8,762	2,568
SI6_W		WESTBOUND ALONG DUNDAS STREET W	10,454	1,988	10,267	3,145	8,539	2,568
SI7_E	The West Mall at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	10,454	1,988	10,267	3,145	8,539	2,568
SI7_W		WESTBOUND ALONG DUNDAS STREET W	11,960	1,863	14,365	2,523	11,455	2,280
SI8_E	Neilson Drive at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	11,960	1,863	14,365	2,523	11,455	2,280
SI8_W		WESTBOUND ALONG DUNDAS STREET E	12,863	1,380	13,528	3,637	10,146	3,327
SI9_E	Southcreek Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	12,863	1,380	13,528	3,637	10,146	3,327
SI9_W		WESTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI10_E	Universal Drive at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI10_W		WESTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI11_E	Wharton Way at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI11_W		WESTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI12_E	Treadwells Dr at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	11,710	1,202	13,665	2,487	9,970	2,061
SI12_W		WESTBOUND ALONG DUNDAS STREET E	10,237	1,343	13,243	1,895	8,826	1,763
SI13_E	Mattawa Ave. at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	12,480	1,286	13,972	2,554	10,391	1,726
SI13_W		WESTBOUND ALONG DUNDAS STREET E	11,744	1,357	13,761	2,258	9,819	1,577

Table C-2: Dundas BRT Signalized Intersection Traffic Data Summary

Modeling ID	Table C-2: Dundas BRT: Signalized Intersection Traffic Data Summary - AADT (by year)		Existing Conditions - Approach Volume		Future No Build Conditions - Approach Volume		Future Build Out Conditions - Approach Volume	
	Source Location	Description	2019 CAR AADT	2019 TRK AADT	2041 CAR AADT	2041 TRK AADT	2041 CAR AADT	2041 TRK AADT
SI14_E	Jarrow Ave at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	13,251	1,370	14,279	2,620	10,813	1,391
SI14_W		WESTBOUND ALONG DUNDAS STREET E	13,251	1,370	14,279	2,620	10,813	1,391
SI15_E	Neilco Ct at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	13,251	1,370	14,279	2,620	10,813	1,391
SI15_W		WESTBOUND ALONG DUNDAS STREET E	15,799	1,864	15,959	3,314	12,232	2,730
SI16_E	Dixie Road at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	15,799	1,864	15,959	3,314	12,232	2,730
SI16_W		WESTBOUND ALONG DUNDAS STREET E	14,760	2,479	14,711	3,949	11,009	2,809
SI17_E	Blundell Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	14,760	2,479	14,711	3,949	11,009	2,809
SI17_W		WESTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI18_E	Arena Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI18_W		WESTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI19_E	Palstan Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI19_W		WESTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI20_E	Constitution Blvd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	13,885	1,706	14,675	2,596	10,721	2,226
SI20_W		WESTBOUND ALONG DUNDAS STREET E	12,133	1,809	12,911	2,970	9,722	2,356
SI21_E	Tomken at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	12,133	1,809	12,911	2,970	9,722	2,356
SI21_W		WESTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI22_E	Dundas St E between Haines and Tomken	EASTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI22_W		WESTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI23_E	Haines Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI23_W		WESTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI24_E	Along Cawthra Arena Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	10,475	1,875	12,063	1,738	10,859	1,663
SI24_W		WESTBOUND ALONG DUNDAS STREET E	9,056	1,170	9,242	1,911	8,536	2,530
SI25_E	Cliff Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	9,056	1,170	9,242	1,911	8,536	2,530
SI25_W		WESTBOUND ALONG DUNDAS STREET E	8,305	944	9,124	908	8,545	1,377
SI26_E	Camilla Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	8,305	944	9,124	908	8,545	1,377
SI26_W		WESTBOUND ALONG DUNDAS STREET E	7,789	482	7,502	1,410	7,149	1,630
SI27_E	Hurontario at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	7,789	482	7,502	1,410	7,149	1,630
SI27_W		WESTBOUND ALONG DUNDAS STREET W	8,306	852	7,865	1,424	7,822	887
SI28_E	Confederation Pkwy at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	8,306	852	7,865	1,424	7,822	887
SI28_W		WESTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976
SI29_E	Parkerhill Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976
SI29_W		WESTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976

Table C-2: Dundas BRT Signalized Intersection Traffic Data Summary

Modeling ID	Table C-2: Dundas BRT: Signalized Intersection Traffic Data Summary - AADT (by year)		Existing Conditions - Approach Volume		Future No Build Conditions - Approach Volume		Future Build Out Conditions - Approach Volume	
	Source Location	Description	2019 CAR AADT	2019 TRK AADT	2041 CAR AADT	2041 TRK AADT	2041 CAR AADT	2041 TRK AADT
SI30_E	Mason Hits at Dundas W	EASTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976
SI30_W		WESTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976
SI31_E	Clayhill Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	8,934	934	9,485	921	8,244	976
SI31_W		WESTBOUND ALONG DUNDAS STREET W	9,772	806	9,984	1,538	9,187	543
SI32_E	Elmcreek Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	9,772	806	9,984	1,538	9,187	543
SI32_W		WESTBOUND ALONG DUNDAS STREET W	9,772	806	9,984	1,538	9,187	543
SI33_E	Mavis Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	9,772	806	9,984	1,538	9,187	543
SI33_W		WESTBOUND ALONG DUNDAS STREET W	11,069	813	11,831	1,091	9,615	781
SI34_E	Wolfedale at Dundas W	EASTBOUND ALONG DUNDAS STREET W	11,069	813	11,831	1,091	9,615	781
SI34_W		WESTBOUND ALONG DUNDAS STREET W	12,546	640	13,124	1,198	10,487	575
SI35_E	Cedarglen Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	12,546	640	13,124	1,198	10,487	575
SI35_W		WESTBOUND ALONG DUNDAS STREET W	12,546	640	13,124	1,198	10,487	575
SI36_E	Glengarry Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	13,389	570	13,686	965	12,199	747
SI36_W		WESTBOUND ALONG DUNDAS STREET W	13,389	570	13,686	965	12,199	747
SI37_E	Old Carraige at Dundas W	EASTBOUND ALONG DUNDAS STREET W	13,389	570	13,686	965	12,199	747
SI37_W		WESTBOUND ALONG DUNDAS STREET W	13,815	699	14,806	872	14,443	806
SI38_E	The Credit Woodlands at Dundas W	EASTBOUND ALONG DUNDAS STREET W	13,815	699	14,806	872	14,443	806
SI38_W		WESTBOUND ALONG DUNDAS STREET W	13,815	699	14,806	872	14,443	806
SI39_E	Robinson St. at Dundas W	EASTBOUND ALONG DUNDAS STREET W	13,433	647	14,410	846	13,859	1,063
SI39_W		WESTBOUND ALONG DUNDAS STREET W	13,047	600	14,014	821	13,300	1,296
SI40_E	Mississauga Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	13,051	596	14,014	821	13,276	1,320
SI40_W		WESTOUND ALONG DUNDAS STREET W	12,280	500	13,222	770	12,158	1,786
SI41_E	King Forest Drive at Dundas W	EASTBOUND ALONG DUNDAS STREET W	12,280	500	13,222	770	12,158	1,786
SI41_W		WESTBOUND ALONG DUNDAS STREET W	12,280	500	13,222	770	12,158	1,786
SI42_E	Erin Mills Pkwy at Dundas W	EASTBOUND ALONG DUNDAS STREET W	12,280	500	13,222	770	12,158	1,786
SI42_W		WESTBOUND ALONG DUNDAS STREET W	9,650	455	11,344	629	10,134	1,537
SI43_E	Along Dundas W	EASTBOUND ALONG DUNDAS STREET W	10,965	478	12,283	699	11,146	1,661
SI43_W		WESTBOUND ALONG DUNDAS STREET W	9,535	469	11,229	682	10,473	1,102
SI44_E	Glen Erin Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	9,650	455	11,344	629	10,134	1,537
SI44_W		WESTBOUND ALONG DUNDAS STREET W	9,421	483	11,115	736	10,813	667
SI45_E	Woodchester Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	9,421	483	11,115	736	10,813	667
SI45_W		WESTBOUND ALONG DUNDAS STREET W	9,310	391	11,114	615	10,722	567

Table C-2: Dundas BRT Signalized Intersection Traffic Data Summary

Modeling ID	Table C-2: Dundas BRT: Signalized Intersection Traffic Data Summary - AADT (by year)		Existing Conditions - Approach Volume		Future No Build Conditions - Approach Volume		Future Build Out Conditions - Approach Volume	
	Source Location	Description	2019 CAR AADT	2019 TRK AADT	2041 CAR AADT	2041 TRK AADT	2041 CAR AADT	2041 TRK AADT
SI46_E	Winstin Churchhill Blvd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	9,310	391	11,114	615	10,722	567
SI46_W		WESTBOUND ALONG DUNDAS STREET W	10,263	510	11,625	833	9,972	764
SI47_E	Hampshire Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	10,263	510	11,625	833	9,972	764
SI47_W		WESTBOUND ALONG DUNDAS STREET W	10,263	510	11,625	833	9,972	764
SI48_E	Winston Park Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	10,263	510	11,625	833	9,972	764
SI48_W		WESTBOUND ALONG DUNDAS STREET W	11,217	628	12,371	817	9,646	538
SI49_E	Hyde Park Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	11,217	628	12,371	817	9,646	538
SI49_W		WESTBOUND ALONG DUNDAS STREET W	13,228	1,015	14,927	1,116	12,196	1,161
SI50_E	Dundas St W at HW403 East	EASTBOUND ALONG DUNDAS STREET W	13,228	1,015	14,927	1,116	12,196	1,161
SI50_W		WESTBOUND ALONG DUNDAS STREET W	12,447	3,518	12,467	3,510	12,977	1,333
SI51_E	Dundas St W at HW403 West	EASTBOUND ALONG DUNDAS STREET W	12,447	3,518	12,467	3,510	12,977	1,333
SI51_W		WESTBOUND ALONG DUNDAS STREET W	14,692	1,995	14,229	2,079	13,498	1,770
SI52_E	9th Line at Dundas W	EASTBOUND ALONG DUNDAS STREET W	14,692	1,995	14,229	2,079	13,498	1,770
SI52_W		WESTBOUND ALONG DUNDAS STREET W	14,692	1,995	14,229	2,079	13,498	1,770

Table C-3: Dundas BRT; BRT Data Summary

Table C-3: Dundas BRT; Traffic Data Summary - AADT (by year)			Dundas BRT Future Build Bus Volumes
Source Location	**Description**	**Modeling ID**	**2041 AADT ***
Along Dundas Street, Segment A	Dundas St.W, WB, between Kipling & Aukland Rd. (SI1)	S1	1,860
Along Dundas Street, Segment A	Dundas St.W, EB, between Kipling & Aukland Rd. (SI1)	S2	1,860
Along Dundas Street, Segment A	Dundas St.W, between Aukland Rd. (SI1) & Poplar Ave (SI2)	S3	1,860
Along Dundas Street, Segment A	Dundas St.W, between Poplar Ave (SI2) & Shaver Ave S (SI3)	S4	1,860
Along Dundas Street, Segment A	Dundas St.W, between Shaver Ave S (SI3) & Paulart Dr. (SI4)	S5	1,860
Along Dundas Street, Segment A	Dundas St.W, between Paulart Dr. (SI4) & The East Mall Crsc. (SI5)	S6	1,860
Along Dundas Street, Segment A	Dundas St.W, between The East Mall Crsc. (SI5) & 427 offrmp (SI6)	S7	1,860
Along Dundas Street, Segment A	Dundas St.W, between 427 offrmp E (SI6) & 427 offrmp W (SI7)	S8	1,860
Along Dundas Street, Segment A	Dundas St.W, between 427 offrmp W (SI7) & Neilson Dr. (SI8)	S9	1,860
Along Dundas Street, Segment A	Dundas St.W, between Neilson Dr. (SI8) & Southcreek Rd. (SI9)	S10	1,860
Along Dundas Street, Segment B	Dundas St.W, between Southcreek Rd. (SI9) & Universal Dr. (SI10)	S11	930
Along Dundas Street, Segment B	Dundas St.W, between Universal Dr. (SI10) & Wharton Way (SI11)	S12	930
Along Dundas Street, Segment B	Dundas St.W, between Wharton Way (SI11) & Treadwells Dr./Coram Ave. (SI12)	S13	930
Along Dundas Street, Segment B	Dundas St.W, between Treadwells Dr./Coram Ave. (SI12) & Mattawa Ave. (SI13)	S14	930
Along Dundas Street, Segment B	Dundas St.W, between Mattawa Ave. (SI13) & Jarrow Ave. (SI14)	S15	930
Along Dundas Street, Segment B	Dundas St.W, between Jarrow Ave. (SI14) & Neilco Ct. (SI15)	S16	930

Table C-3: Dundas BRT; Traffic Data Summary - AADT (by year)			Dundas BRT Future Build Bus Volumes
Source Location	**Description**	**Modeling ID**	**2041 AADT ***
Along Dundas Street, Segment B	Dundas St.W, between Neilco Ct. (SI15) & Dixie Rd. (SI16)	S17	930
Along Dundas Street, Segment B	Dundas St.W, between Dixie Rd. (SI16) & Blundel Rd. (SI17)	S18	930
Along Dundas Street, Segment B	Dundas St.W, between Blundel Rd. (SI17) & Stanfield Rd. (SI20)	S19	930
Along Dundas Street, Segment B	Dundas St.W, between Stanfield Rd. (SI20) & Tomken Rd. (SI21)	S20	930
Along Dundas Street, Segment B	Dundas St.W, between Tomken Rd. (SI21) & Cawthra Rd. (SI24)	S21	930
Along Dundas Street, Segment B	Dundas St.W, between Cawthra Rd. (SI24) & Grenville Dr. (SI25)	S22	930
Along Dundas Street, Segment B	Dundas St.W, between Grenville Dr. (SI25) & Kirwin Ave. (SI26)	S23	930
Along Dundas Street, Segment B	Dundas St.W, between Kirwin Ave. (SI26) & Hurontario St. (SI27)	S24	930
Along Dundas Street, Segment B	Dundas St.W, between Hurontario St. (SI27) & Confederation Pkwy (SI28)	S25	930
Along Dundas Street, Segment B	Dundas St.W, between Confederation Pkwy (SI28) & Clayhill Rd. (SI31)	S26	930
Along Dundas Street, Segment B	Dundas St.W, between Clayhill Rd. (SI31) & Mavis Dr. (SI33)	S27	930
Along Dundas Street, Segment B	Dundas St.W, between Mavis Dr. (SI33) & Wolfdale Rd. (SI34)	S28	930
Along Dundas Street, Segment B	Dundas St.W, between Wolfdale Rd. (SI34) & Erindale Station Rd. (SI36)	S29	930
Along Dundas Street, Segment B	Dundas St.W, between Erindale Station Rd. (SI36) & Credit Woodlands (SI38)	S30	930
Along Dundas Street, Segment B	Dundas St.W, between Credit Woodlands (SI38) & Mississauga Rd. (SI39)	S31	930
Along Dundas Street, Segment B	Dundas St.W, between Mississauga Rd. (SI39) & Erin Mills Pkwy. (SI41)	S32	930

Table C-3: Dundas BRT; Traffic Data Summary - AADT (by year)			Dundas BRT Future Build Bus Volumes
Source Location	**Description**	**Modeling ID**	**2041 AADT ***
Along Dundas Street, Segment B	Dundas St.W, between Erin Mills Pkwy. (SI41) & Glen Erin Dr. (SI42)	S33	930
Along Dundas Street, Segment B	Dundas St.W, between Glen Erin Dr. (SI42) & Woodchester Dr. (SI43)	S34	930
Along Dundas Street, Segment B	Dundas St.W, between Woodchester Dr. (SI43) & Winston Churchill Blvd (SI44)	S35	930
Along Dundas Street, Segment B	Dundas St.W, between Winston Churchill Blvd (SI44) & Ridgeway Dr. (SI46)	S36	930
Along Dundas Street, Segment B	Dundas St.W, between Ridgeway Dr. (SI46) & Vega Blvd. (SI47)	S37	930
Along Dundas Street, Segment B	Dundas St.W, between Vega Blvd. (SI47) & Hwy 403 offrmp (SI48)	S38	930
Along Dundas Street, Segment B	Dundas St.W, Hwy 403 offrmp (SI48) & Hwy 403 offrmp (SI49)	S39	930
Along Dundas Street, Segment B	Dundas St.W, Hwy 403 offrmp (SI49) & Ninth Line (SI50)	S40	930

** See 24-hour Distribution tab to see how AADT is produced based on Dundas BRT Bus volume assumptions*

Table C-4: Dundas BRT: BRT Signalized Intersection Data Summary

Table C-4: Dundas BRT; Signalized Intersection Traffic Data Summary - AADT (by year)			Dundas BRT - FB Approach Volume
Source Location	**Description**	**Modeling ID**	**2041 AADT***
Aukland at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI1_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI1_W	930
Acorn (new) at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI1n_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI1n_W	930
Poplar Ave at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI2_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI2_W	930
New intersection at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI2n_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI2n_W	930
New intersection (New south entrance to development) at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI3n_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI3n_W	930
Shaver at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI3_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI3_W	930
Paulart Dr at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI4_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI4_W	930
E Mall Cres at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI5_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI5_W	930
HWY 427 at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI6_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI6_W	930
The West Mall at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI7_E	930
	WESTBOUND ALONG DUNDAS STREET W	SI7_W	930
Neilson Drive at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI8_E	930
	WESTBOUND ALONG DUNDAS STREET E	SI8_W	930
Southcreek Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI9_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI9_W	465
Universal Drive at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI10_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI10_W	465
Wharton Way at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI11_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI11_W	465
Treadwells Dr at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI12_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI12_W	465

Table C-4: Dundas BRT; Signalized Intersection Traffic Data Summary - AADT (by year)			Dundas BRT - FB Approach Volume
Source Location	**Description**	**Modeling ID**	**2041 AADT***
Mattawa Ave. at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI13_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI13_W	465
Jarrow Ave at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI14_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI14_W	465
Neilco Ct at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI15_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI15_W	465
Dixie Road at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI16_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI16_W	465
Blundell Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI17_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI17_W	465
Arena Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI18_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI18_W	465
Palstan Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI19_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI19_W	465
Constitution Blvd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI20_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI20_W	465
Tomken at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI21_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI21_W	465
Dundas St E between Haines and Tomken	EASTBOUND ALONG DUNDAS STREET E	SI22_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI22_W	465
Haines Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI23_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI23_W	465
Along Cawthra Arena Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI24_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI24_W	465
Cliff Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI25_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI25_W	465
Camilla Rd at Dundas St E	EASTBOUND ALONG DUNDAS STREET E	SI26_E	465
	WESTBOUND ALONG DUNDAS STREET E	SI26_W	465
Hurontario at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI27_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI27_W	465

Table C-4: Dundas BRT; Signalized Intersection Traffic Data Summary - AADT (by year)			Dundas BRT - FB Approach Volume
Source Location	**Description**	**Modeling ID**	**2041 AADT***
Confederation Pkwy at Dundas St W	EASTBOUND ALONG DUNDAS STREET W	SI28_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI28_W	465
Parkerhill Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI29_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI29_W	465
Mason Hits at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI30_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI30_W	465
Clayhill Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI31_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI31_W	465
Elmcreek Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI32_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI32_W	465
Mavis Rd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI33_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI33_W	465
Wolfedale at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI34_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI34_W	465
Cedarglen Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI35_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI35_W	465
Glengarry Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI36_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI36_W	465
Old Carraige at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI37_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI37_W	465
The Credit Woodlands at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI38_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI38_W	465
Robinson St. at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI39_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI39_W	465
Mississauga Road at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI40_E	465
	WESTOUND ALONG DUNDAS STREET W	SI40_W	465
King Forest Drive at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI41_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI41_W	465
Erin Mills Pkwy at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI42_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI42_W	465

Table C-4: Dundas BRT; Signalized Intersection Traffic Data Summary - AADT (by year)			Dundas BRT - FB Approach Volume
Source Location	**Description**	**Modeling ID**	**2041 AADT***
	EASTBOUND ALONG DUNDAS STREET W	SI43_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI43_W	465
Glen Erin Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI44_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI44_W	465
Woodchester Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI45_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI45_W	465
Winstin Churchhill Blvd at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI46_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI46_W	465
Hampshire Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI47_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI47_W	465
Winston Park Dr at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI48_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI48_W	465
Hyde Park Gate at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI49_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI49_W	465
Dundas St W at HW403 East	EASTBOUND ALONG DUNDAS STREET W	SI50_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI50_W	465
Dundas St W at HW403 West	EASTBOUND ALONG DUNDAS STREET W	SI51_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI51_W	465
9th Line at Dundas W	EASTBOUND ALONG DUNDAS STREET W	SI52_E	465
	WESTBOUND ALONG DUNDAS STREET W	SI52_W	465

** See 24-hour Distribution tab to see how AADT is produced based on Dundas BRT Bus volume assumptions*

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Appendix D

Relevant Ambient Air Quality Data

Air Quality Impact Assessment
Appendix D

Dundas Bus Rapid Transit (BRT)
Metrolinx, August 2021

Relevant Ambient Air Quality Data

Criteria Air Contaminant (CAC)	Station ID	Averaging Period	Units	MW	90th Percentile Concentrations					
		(hr)		(g/mol)	2015	2016	2017	2018	2019	5-Year
NO_2	60434	1	ppb	46.01	19.00	19.00	17.00	15.00	18.00	18.00
	60434	24	ppb	46.01	16.17	14.65	13.88	12.63	14.54	14.29
	60434	Annual	ppb	46.01	9.15	8.62	7.98	7.24	8.40	8.28
CO	60430	1	ppm	28.01	0.36	0.35	0.36	0.34	0.35	0.35
	60430	8	ppm	28.01	0.35	0.34	0.35	0.32	0.34	0.34
SO_2	60430	1	ppb	64.07	2.00	1.00	0.90	1.00	0.50	1.00
	60430	10 min	ppb	64.07	3.30	1.65	1.49	1.65	0.83	1.65
	60430	Annual	ppb	64.07	1.02	0.64	0.53	0.26	0.27	1.21
PM_{10}	60434	24	$\mu g/m^3$	-	29.66	23.69	23.30	24.37	24.58	25.05
$PM_{2.5}$	60434	24	$\mu g/m^3$	-	16.02	12.79	12.58	13.16	13.28	13.53
	60434	Annual	$\mu g/m^3$	-	8.51	7.21	6.83	7.29	6.97	7.36
Acetaldehyde	60439	24	$\mu g/m^3$	-	1.53	1.99	1.15	1.68	ND	1.69
Acrolein	60439	1	$\mu g/m^3$	-	0.18	0.17	0.11	0.15	ND	0.17
	60439	24	$\mu g/m^3$	-	0.07	0.07	0.04	0.06	ND	0.07
Benzene	60435	24	$\mu g/m^3$	-	0.86	0.77	0.66	0.76	0.72	0.77
	60435	Annual	$\mu g/m^3$	-	0.51	0.48	0.52	0.45	0.47	0.49
Benzo(a)pyrene	60435	24	ng/m^3	-	0.15	0.13	0.10	0.07	ND	0.12
	60435	Annual	ng/m^3	-	0.09	0.08	0.06	0.04	ND	0.07
1,3-Butadiene	60435	24	$\mu g/m^3$	-	0.07	0.06	0.07	0.05	0.05	0.06
	60435	Annual	$\mu g/m^3$	-	0.04	0.04	0.04	0.03	0.03	0.04
Formaldehyde	60439	24	$\mu g/m^3$	-	2.80	3.80	1.49	2.66	ND	3.16
Ozone	60434	1	ppb	48.00	43	42	42	43	40	42
	60434	24	ppb	48.00	37	36	36	38	35	37
	60434	Annual	ppb	48.00	25	26	26	26	24	26

Criteria Air Contaminant (CAC)	Station ID	Averaging Period	98th Percentile Concentrations (ug/m3)					3-Year Avg. (1-hr) or Max Annual
		(hr)	2015	2016	2017	2018	2019	
NO_2	60434	1	47.74	42.00	36.00	36.72	43.00	44.25
NO_2	60434	Annual	9.15	8.62	7.98	7.24	8.40	9.15
								3-year Avg. (24-hr & Annual)
$PM_{2.5}$	60434	24	24.20	17.30	18.10	18.21	18.93	0.00
$PM_{2.5}$	60434	Annual	8.51	7.21	6.83	7.29	6.97	7.67

Criteria Air Contaminant (CAC)	Station ID	Averaging Period	99th Percentile Concentrations (ppb)					Annual
		(hr)	2015	2016	2017	2018	2019	Max (SO2)
SO_2	60430	1	12.00	8.00	7.12	6.72	7.46	9.15

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Appendix E

MOVES 3.0 Output Summary

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	1438.423
1	0	2	1423.07
1	0	3	1405.933
1	0	4	1396.665
1	0	5	1393.29
1	0	6	1393.29
1	0	7	1401.648
1	0	8	1436.07
1	0	9	1484.602
1	0	10	1516.26
1	0	11	1542.179
1	0	12	1589.428
1	0	13	1601.907
1	0	14	1609.121
1	0	15	1616.825
1	0	16	1613.634
1	0	17	1612.249
1	0	18	1602.561
1	0	19	1591.481
1	0	20	1551.898
1	0	21	1524.68
1	0	22	1499.869
1	0	23	1477.949
1	0	24	1458.436
5	1	1	863.3344
5	1	2	855.9067
5	1	3	847.6148
5	1	4	843.1365
5	1	5	841.5002
5	1	6	841.5002
5	1	7	845.5443
5	1	8	862.1933
5	1	9	885.6719
5	1	10	900.9826
5	1	11	913.5192
5	1	12	936.3795
5	1	13	942.4121
5	1	14	945.9006
5	1	15	949.6262
5	1	16	948.0809
5	1	17	947.4147
5	1	18	942.7276
5	1	19	937.3666
5	1	20	918.2222
5	1	21	905.055
5	1	22	893.055
5	1	23	882.4515
5	1	24	873.0158
5	7	1	164.2573
5	7	2	163.3951
5	7	3	162.4323
5	7	4	161.9125
5	7	5	161.7222
5	7	6	161.7222
5	7	7	162.192

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.0255105
1	0	2	0.0255105
1	0	3	0.0255105
1	0	4	0.0255105
1	0	5	0.0255105
1	0	6	0.0255105
1	0	7	0.0255105
1	0	8	0.0255105
1	0	9	0.0255105
1	0	10	0.0255105
1	0	11	0.0255105
1	0	12	0.0255105
1	0	13	0.0255105
1	0	14	0.0255105
1	0	15	0.0255105
1	0	16	0.0255105
1	0	17	0.0255105
1	0	18	0.0255105
1	0	19	0.0255105
1	0	20	0.0255105
1	0	21	0.0255105
1	0	22	0.0255105
1	0	23	0.0255105
1	0	24	0.0255105
5	1	1	0.0109998
5	1	2	0.0109998
5	1	3	0.0109998
5	1	4	0.0109998
5	1	5	0.0109998
5	1	6	0.0109998
5	1	7	0.0109998
5	1	8	0.0109998
5	1	9	0.0109998
5	1	10	0.0109998
5	1	11	0.0109998
5	1	12	0.0109998
5	1	13	0.0109998
5	1	14	0.0109998
5	1	15	0.0109998
5	1	16	0.0109998
5	1	17	0.0109998
5	1	18	0.0109998
5	1	19	0.0109998
5	1	20	0.0109998
5	1	21	0.0109998
5	1	22	0.0109998
5	1	23	0.0109998
5	1	24	0.0109998
5	7	1	0.0009167
5	7	2	0.0009167
5	7	3	0.0009167
5	7	4	0.0009167
5	7	5	0.0009167
5	7	6	0.0009167
5	7	7	0.0009167

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	164.1255
5	7	9	166.8509
5	7	10	168.6294
5	7	11	170.0853
5	7	12	172.7395
5	7	13	173.4404
5	7	14	173.8453
5	7	15	174.2783
5	7	16	174.0986
5	7	17	174.0211
5	7	18	173.4772
5	7	19	172.8543
5	7	20	170.6312
5	7	21	169.1021
5	7	22	167.7087
5	7	23	166.4775
5	7	24	165.3819
5	8	1	156.1879
5	8	2	155.4022
5	8	3	154.5245
5	8	4	154.0502
5	8	5	153.8777
5	8	6	153.8777
5	8	7	154.3054
5	8	8	156.0673
5	8	9	158.5518
5	8	10	160.1722
5	8	11	161.4986
5	8	12	163.9172
5	8	13	164.5562
5	8	14	164.9253
5	8	15	165.3191
5	8	16	165.1559
5	8	17	165.0852
5	8	18	164.5896
5	8	19	164.0223
5	8	20	161.996
5	8	21	160.6028
5	8	22	159.3332
5	8	23	158.2108
5	8	24	157.2124
5	9	1	151.4764
5	9	2	150.7443
5	9	3	149.9274
5	9	4	149.4851
5	9	5	149.3242
5	9	6	149.3242
5	9	7	149.723
5	9	8	151.364
5	9	9	164.5562
5	9	10	164.9253
5	9	11	165.3191
5	9	12	165.1559
5	9	13	165.0852
5	9	14	164.5896

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.0009167
5	7	9	0.0009167
5	7	10	0.0009167
5	7	11	0.0009167
5	7	12	0.0009167
5	7	13	0.0009167
5	7	14	0.0009167
5	7	15	0.0009167
5	7	16	0.0009167
5	7	17	0.0009167
5	7	18	0.0009167
5	7	19	0.0009167
5	7	20	0.0009167
5	7	21	0.0009167
5	7	22	0.0009167
5	7	23	0.0009167
5	7	24	0.0009167
5	8	1	0.0007857
5	8	2	0.0007857
5	8	3	0.0007857
5	8	4	0.0007857
5	8	5	0.0007857
5	8	6	0.0007857
5	8	7	0.0007857
5	8	8	0.0007857
5	8	9	0.0007857
5	8	10	0.0007857
5	8	11	0.0007857
5	8	12	0.0007857
5	8	13	0.0007857
5	8	14	0.0007857
5	8	15	0.0007857
5	8	16	0.0007857
5	8	17	0.0007857
5	8	18	0.0007857
5	8	19	0.0007857
5	8	20	0.0007857
5	8	21	0.0007857
5	8	22	0.0007857
5	8	23	0.0007857
5	8	24	0.0007857
5	9	1	0.0006875
5	9	2	0.0006875
5	9	3	0.0006875
5	9	4	0.0006875
5	9	5	0.0006875
5	9	6	0.0006875
5	9	7	0.0006875
5	9	8	0.0006875
5	9	9	0.0007857
5	9	10	0.0007857
5	9	11	0.0007857
5	9	12	0.0007857
5	9	13	0.0007857
5	9	14	0.0007857

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	164.0223
5	9	16	161.996
5	9	17	160.6028
5	9	18	159.3332
5	9	19	158.7735
5	9	20	156.8864
5	9	21	155.5888
5	9	22	154.4062
5	9	23	153.3606
5	9	24	152.4304
5	10	1	147.9586
5	10	2	147.2696
5	10	3	146.5011
5	10	4	146.0858
5	10	5	145.9337

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.0007857
5	9	16	0.0007857
5	9	17	0.0007857
5	9	18	0.0007857
5	9	19	0.0006875
5	9	20	0.0006875
5	9	21	0.0006875
5	9	22	0.0006875
5	9	23	0.0006875
5	9	24	0.0006875
5	10	1	0.0006111
5	10	2	0.0006111
5	10	3	0.0006111
5	10	4	0.0006111
5	10	5	0.0006111

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	145.9337
5	10	7	146.3088
5	10	8	147.8526
5	10	9	150.0296
5	10	10	151.4494
5	10	11	152.6123
5	10	12	154.7318
5	10	13	155.2915
5	10	14	155.6152
5	10	15	155.9606
5	10	16	155.8172
5	10	17	155.7556
5	10	18	155.3206
5	10	19	154.8239
5	10	20	153.048
5	10	21	151.8269
5	10	22	150.7148
5	10	23	149.7311
5	10	24	148.8561
5	11	1	145.3923
5	11	2	144.741
5	11	3	144.0133
5	11	4	143.6203
5	11	5	143.4768
5	11	6	143.4768
5	11	7	143.8319
5	11	8	145.2924
5	11	9	147.3523
5	11	10	148.6955
5	11	11	149.7955
5	11	12	151.8011
5	11	13	152.3302
5	11	14	152.6365
5	11	15	152.9636
5	11	16	152.8283
5	11	17	152.7697
5	11	18	152.3583
5	11	19	151.8878
5	11	20	150.2079
5	11	21	149.0527
5	11	22	147.9997
5	11	23	147.0698
5	11	24	146.2417

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.0006111
5	10	7	0.0006111
5	10	8	0.0006111
5	10	9	0.0006111
5	10	10	0.0006111
5	10	11	0.0006111
5	10	12	0.0006111
5	10	13	0.0006111
5	10	14	0.0006111
5	10	15	0.0006111
5	10	16	0.0006111
5	10	17	0.0006111
5	10	18	0.0006111
5	10	19	0.0006111
5	10	20	0.0006111
5	10	21	0.0006111
5	10	22	0.0006111
5	10	23	0.0006111
5	10	24	0.0006111
5	11	1	0.00055
5	11	2	0.00055
5	11	3	0.00055
5	11	4	0.00055
5	11	5	0.00055
5	11	6	0.00055
5	11	7	0.00055
5	11	8	0.00055
5	11	9	0.00055
5	11	10	0.00055
5	11	11	0.00055
5	11	12	0.00055
5	11	13	0.00055
5	11	14	0.00055
5	11	15	0.00055
5	11	16	0.00055
5	11	17	0.00055
5	11	18	0.00055
5	11	19	0.00055
5	11	20	0.00055
5	11	21	0.00055
5	11	22	0.00055
5	11	23	0.00055
5	11	24	0.00055

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.014985
1	0	2	0.01495
1	0	3	0.01491
1	0	4	0.014889
1	0	5	0.014881
1	0	6	0.014881
1	0	7	0.0149
1	0	8	0.01498
1	0	9	0.015092
1	0	10	0.015165
1	0	11	0.015225
1	0	12	0.015335
1	0	13	0.015363
1	0	14	0.01538
1	0	15	0.015398
1	0	16	0.015391
1	0	17	0.015387
1	0	18	0.015365
1	0	19	0.015339
1	0	20	0.015248
1	0	21	0.015185
1	0	22	0.015127
1	0	23	0.015077
1	0	24	0.015031
5	1	1	0.027303
5	1	2	0.027252
5	1	3	0.027194
5	1	4	0.027163
5	1	5	0.027152
5	1	6	0.027152
5	1	7	0.02718
5	1	8	0.027295
5	1	9	0.027458
5	1	10	0.027565
5	1	11	0.027651
5	1	12	0.02781
5	1	13	0.027852
5	1	14	0.027876
5	1	15	0.027902
5	1	16	0.027891
5	1	17	0.027887
5	1	18	0.027854
5	1	19	0.027817
5	1	20	0.027684
5	1	21	0.027593
5	1	22	0.02751
5	1	23	0.027436
5	1	24	0.027371
5	7	1	0.005124
5	7	2	0.005108
5	7	3	0.00509
5	7	4	0.00508
5	7	5	0.005076
5	7	6	0.005076
5	7	7	0.005085

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.548571272
1	0	2	0.546403674
1	0	3	0.543986209
1	0	4	0.542676956
1	0	5	0.542200223
1	0	6	0.542200223
1	0	7	0.543380644
1	0	8	0.548238168
1	0	9	0.555088086
1	0	10	0.559556405
1	0	11	0.56321299
1	0	12	0.569883026
1	0	13	0.571644936
1	0	14	0.572662646
1	0	15	0.57374835
1	0	16	0.573297636
1	0	17	0.573103363
1	0	18	0.571736111
1	0	19	0.570171507
1	0	20	0.564585742
1	0	21	0.560744926
1	0	22	0.557242056
1	0	23	0.554148459
1	0	24	0.551396471
5	1	1	3.65477054
5	1	2	3.580685312
5	1	3	3.4979673
5	1	4	3.453269064
5	1	5	3.436953502
5	1	6	3.436953502
5	1	7	3.477313168
5	1	8	3.643417651
5	1	9	3.877609467
5	1	10	4.030397561
5	1	11	4.155468121
5	1	12	4.383496951
5	1	13	4.443721499
5	1	14	4.478526019
5	1	15	4.515703129
5	1	16	4.500296651
5	1	17	4.493637949
5	1	18	4.446875179
5	1	19	4.393391117
5	1	20	4.202380614
5	1	21	4.071021943
5	1	22	3.951304854
5	1	23	3.845511036
5	1	24	3.751358858
5	7	1	0.971770274
5	7	2	0.949149321
5	7	3	0.923895769
5	7	4	0.910245376
5	7	5	0.905263621
5	7	6	0.905263621
5	7	7	0.917587533

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.005122
5	7	9	0.005174
5	7	10	0.005207
5	7	11	0.005235
5	7	12	0.005285
5	7	13	0.005298
5	7	14	0.005306
5	7	15	0.005314
5	7	16	0.005311
5	7	17	0.00531
5	7	18	0.005299
5	7	19	0.005287
5	7	20	0.005245
5	7	21	0.005216
5	7	22	0.00519
5	7	23	0.005166
5	7	24	0.005146
5	8	1	0.004629
5	8	2	0.004614
5	8	3	0.004597
5	8	4	0.004589
5	8	5	0.004585
5	8	6	0.004585
5	8	7	0.004593
5	8	8	0.004626
5	8	9	0.004673
5	8	10	0.004703
5	8	11	0.004728
5	8	12	0.004774
5	8	13	0.004786
5	8	14	0.004793
5	8	15	0.0048
5	8	16	0.004797
5	8	17	0.004796
5	8	18	0.004786
5	8	19	0.004776
5	8	20	0.004738
5	8	21	0.004712
5	8	22	0.004688
5	8	23	0.004667
5	8	24	0.004648
5	9	1	0.004251
5	9	2	0.004238
5	9	3	0.004223
5	9	4	0.004215
5	9	5	0.004212
5	9	6	0.004212
5	9	7	0.004219
5	9	8	0.004249
5	9	9	0.004786
5	9	10	0.004793
5	9	11	0.0048
5	9	12	0.004797
5	9	13	0.004796
5	9	14	0.004786

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.968303678
5	7	9	1.03980927
5	7	10	1.086462317
5	7	11	1.124648811
5	7	12	1.194271805
5	7	13	1.212663925
5	7	14	1.223290985
5	7	15	1.234639919
5	7	16	1.22993904
5	7	17	1.227900905
5	7	18	1.213625467
5	7	19	1.197291688
5	7	20	1.138971913
5	7	21	1.098863443
5	7	22	1.062311621
5	7	23	1.030010808
5	7	24	1.001261163
5	8	1	0.911631432
5	8	2	0.891154234
5	8	3	0.868293858
5	8	4	0.855937685
5	8	5	0.851428445
5	8	6	0.851428445
5	8	7	0.862583721
5	8	8	0.908491396
5	8	9	0.97321917
5	8	10	1.015448221
5	8	11	1.05001565
5	8	12	1.113042765
5	8	13	1.129687124
5	8	14	1.139306025
5	8	15	1.149579482
5	8	16	1.145324359
5	8	17	1.143483152
5	8	18	1.130559515
5	8	19	1.115776733
5	8	20	1.062984114
5	8	21	1.02667793
5	8	22	0.993589401
5	8	23	0.964349748
5	8	24	0.938328351
5	9	1	0.860518685
5	9	2	0.841985318
5	9	3	0.821295515
5	9	4	0.810112221
5	9	5	0.80603131
5	9	6	0.80603131
5	9	7	0.816127979
5	9	8	0.857677853
5	9	9	1.129687124
5	9	10	1.139306025
5	9	11	1.149579482
5	9	12	1.145324359
5	9	13	1.143483152
5	9	14	1.130559515

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.004776
5	9	16	0.004738
5	9	17	0.004712
5	9	18	0.004688
5	9	19	0.004385
5	9	20	0.004351
5	9	21	0.004327
5	9	22	0.004305
5	9	23	0.004286
5	9	24	0.004269
5	10	1	0.003977
5	10	2	0.003965
5	10	3	0.003951
5	10	4	0.003943
5	10	5	0.00394

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	1.115776733
5	9	16	1.062984114
5	9	17	1.02667793
5	9	18	0.993589401
5	9	19	1.045282567
5	9	20	0.99750519
5	9	21	0.964643637
5	9	22	0.934698632
5	9	23	0.908232098
5	9	24	0.884680923
5	10	1	0.828400518
5	10	2	0.81113774
5	10	3	0.791866879
5	10	4	0.781451155
5	10	5	0.77765033

CAR Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.00394
5	10	7	0.003947
5	10	8	0.003975
5	10	9	0.004015
5	10	10	0.004041
5	10	11	0.004062
5	10	12	0.0041
5	10	13	0.004111
5	10	14	0.004116
5	10	15	0.004123
5	10	16	0.00412
5	10	17	0.004119
5	10	18	0.004111
5	10	19	0.004102
5	10	20	0.00407
5	10	21	0.004048
5	10	22	0.004027
5	10	23	0.004009
5	10	24	0.003994
5	11	1	0.003791
5	11	2	0.003779
5	11	3	0.003766
5	11	4	0.003759
5	11	5	0.003756
5	11	6	0.003756
5	11	7	0.003763
5	11	8	0.003789
5	11	9	0.003827
5	11	10	0.003851
5	11	11	0.003871
5	11	12	0.003908
5	11	13	0.003917
5	11	14	0.003923
5	11	15	0.003929
5	11	16	0.003926
5	11	17	0.003925
5	11	18	0.003918
5	11	19	0.003909
5	11	20	0.003879
5	11	21	0.003858
5	11	22	0.003839
5	11	23	0.003822
5	11	24	0.003807

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.77765033
5	10	7	0.787053761
5	10	8	0.825752208
5	10	9	0.880316691
5	10	10	0.915912825
5	10	11	0.945053531
5	10	12	0.998181088
5	10	13	1.012215679
5	10	14	1.020322772
5	10	15	1.028982932
5	10	16	1.025395056
5	10	17	1.023842068
5	10	18	1.012947119
5	10	19	1.000487457
5	10	20	0.955983614
5	10	21	0.925379646
5	10	22	0.89748753
5	10	23	0.872838072
5	10	24	0.850900945
5	11	1	0.815647476
5	11	2	0.798996019
5	11	3	0.780406225
5	11	4	0.770359451
5	11	5	0.76669258
5	11	6	0.76669258
5	11	7	0.775763952
5	11	8	0.81309391
5	11	9	0.865729591
5	11	10	0.900065473
5	11	11	0.928177162
5	11	12	0.979422435
5	11	13	0.992959931
5	11	14	1.000782831
5	11	15	1.009137179
5	11	16	1.00567366
5	11	17	1.004177657
5	11	18	0.99366756
5	11	19	0.981649268
5	11	20	0.938719698
5	11	21	0.909196334
5	11	22	0.882290416
5	11	23	0.858513573
5	11	24	0.837354666

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.067482389
1	0	2	0.060386689
1	0	3	0.053772823
1	0	4	0.053772823
1	0	5	0.053772823
1	0	6	0.053772823
1	0	7	0.053772823
1	0	8	0.06571605
1	0	9	0.087660697
1	0	10	0.101770956
1	0	11	0.113369876
1	0	12	0.135038362
1	0	13	0.140435792
1	0	14	0.144207022
1	0	15	0.148168979
1	0	16	0.14682872
1	0	17	0.146514847
1	0	18	0.142527423
1	0	19	0.137975397
1	0	20	0.12010533
1	0	21	0.107355358
1	0	22	0.096092925
1	0	23	0.085952091
1	0	24	0.076625321
5	1	1	0.059453357
5	1	2	0.058761277
5	1	3	0.058761277
5	1	4	0.058761277
5	1	5	0.058761277
5	1	6	0.058761277
5	1	7	0.058761277
5	1	8	0.058929804
5	1	9	0.063593108
5	1	10	0.066673748
5	1	11	0.06925469
5	1	12	0.074160087
5	1	13	0.075345109
5	1	14	0.07625105
5	1	15	0.077194238
5	1	16	0.076904971
5	1	17	0.076869267
5	1	18	0.076021668
5	1	19	0.07505972
5	1	20	0.071088056
5	1	21	0.068197122
5	1	22	0.065702949
5	1	23	0.063445056
5	1	24	0.061389611
5	7	1	0.019193256
5	7	2	0.019193256
5	7	3	0.019193256
5	7	4	0.019193256
5	7	5	0.019193256
5	7	6	0.019193256
5	7	7	0.019193256

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.001271
1	0	2	0.001268
1	0	3	0.001265
1	0	4	0.001263
1	0	5	0.001262
1	0	6	0.001262
1	0	7	0.001264
1	0	8	0.001271
1	0	9	0.00128
1	0	10	0.001286
1	0	11	0.001292
1	0	12	0.001301
1	0	13	0.001303
1	0	14	0.001305
1	0	15	0.001306
1	0	16	0.001306
1	0	17	0.001305
1	0	18	0.001303
1	0	19	0.001301
1	0	20	0.001293
1	0	21	0.001288
1	0	22	0.001283
1	0	23	0.001279
1	0	24	0.001275
5	1	1	0.007901
5	1	2	0.007892
5	1	3	0.007883
5	1	4	0.007878
5	1	5	0.007876
5	1	6	0.007876
5	1	7	0.007881
5	1	8	0.007899
5	1	9	0.007932
5	1	10	0.007958
5	1	11	0.007982
5	1	12	0.008018
5	1	13	0.008034
5	1	14	0.008046
5	1	15	0.008059
5	1	16	0.008056
5	1	17	0.008055
5	1	18	0.008042
5	1	19	0.008026
5	1	20	0.007996
5	1	21	0.007967
5	1	22	0.007945
5	1	23	0.007928
5	1	24	0.007914
5	7	1	0.001143
5	7	2	0.001141
5	7	3	0.001139
5	7	4	0.001138
5	7	5	0.001137
5	7	6	0.001137
5	7	7	0.001138

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.019193256
5	7	9	0.019193256
5	7	10	0.019193256
5	7	11	0.019193256
5	7	12	0.019193256
5	7	13	0.019193256
5	7	14	0.019193256
5	7	15	0.019193256
5	7	16	0.019193256
5	7	17	0.019193256
5	7	18	0.019193256
5	7	19	0.019193256
5	7	20	0.019193256
5	7	21	0.019193256
5	7	22	0.019193256
5	7	23	0.019193256
5	7	24	0.019193256
5	8	1	0.02075606
5	8	2	0.02075606
5	8	3	0.02075606
5	8	4	0.02075606
5	8	5	0.02075606
5	8	6	0.02075606
5	8	7	0.02075606
5	8	8	0.02075606
5	8	9	0.02075606
5	8	10	0.02075606
5	8	11	0.02075606
5	8	12	0.02075606
5	8	13	0.02075606
5	8	14	0.02075606
5	8	15	0.02075606
5	8	16	0.02075606
5	8	17	0.02075606
5	8	18	0.02075606
5	8	19	0.02075606
5	8	20	0.02075606
5	8	21	0.02075606
5	8	22	0.02075606
5	8	23	0.02075606
5	8	24	0.02075606
5	9	1	0.022423793
5	9	2	0.022423793
5	9	3	0.022423793
5	9	4	0.022423793
5	9	5	0.022423793
5	9	6	0.022423793
5	9	7	0.022423793
5	9	8	0.022423793
5	9	9	0.02075606
5	9	10	0.02075606
5	9	11	0.02075606
5	9	12	0.02075606
5	9	13	0.02075606
5	9	14	0.02075606

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.001143
5	7	9	0.001149
5	7	10	0.001154
5	7	11	0.001158
5	7	12	0.001164
5	7	13	0.001167
5	7	14	0.001168
5	7	15	0.00117
5	7	16	0.00117
5	7	17	0.001169
5	7	18	0.001167
5	7	19	0.001165
5	7	20	0.00116
5	7	21	0.001155
5	7	22	0.001151
5	7	23	0.001148
5	7	24	0.001145
5	8	1	0.001044
5	8	2	0.001042
5	8	3	0.00104
5	8	4	0.001039
5	8	5	0.001038
5	8	6	0.001038
5	8	7	0.001039
5	8	8	0.001043
5	8	9	0.001049
5	8	10	0.001053
5	8	11	0.001057
5	8	12	0.001063
5	8	13	0.001065
5	8	14	0.001066
5	8	15	0.001068
5	8	16	0.001067
5	8	17	0.001067
5	8	18	0.001066
5	8	19	0.001064
5	8	20	0.001059
5	8	21	0.001055
5	8	22	0.001051
5	8	23	0.001048
5	8	24	0.001046
5	9	1	0.000971
5	9	2	0.000969
5	9	3	0.000967
5	9	4	0.000966
5	9	5	0.000966
5	9	6	0.000966
5	9	7	0.000967
5	9	8	0.00097
5	9	9	0.001065
5	9	10	0.001066
5	9	11	0.001068
5	9	12	0.001067
5	9	13	0.001067
5	9	14	0.001066

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.02075606
5	9	16	0.02075606
5	9	17	0.02075606
5	9	18	0.02075606
5	9	19	0.022423793
5	9	20	0.022423793
5	9	21	0.022423793
5	9	22	0.022423793
5	9	23	0.022423793
5	9	24	0.022423793
5	10	1	0.023670487
5	10	2	0.023670487
5	10	3	0.023670487
5	10	4	0.023670487
5	10	5	0.023670487

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.001064
5	9	16	0.001059
5	9	17	0.001055
5	9	18	0.001051
5	9	19	0.000989
5	9	20	0.000984
5	9	21	0.000981
5	9	22	0.000978
5	9	23	0.000975
5	9	24	0.000973
5	10	1	0.000915
5	10	2	0.000914
5	10	3	0.000912
5	10	4	0.000911
5	10	5	0.000911

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.023670487
5	10	7	0.023670487
5	10	8	0.023670487
5	10	9	0.023670487
5	10	10	0.023670487
5	10	11	0.023670487
5	10	12	0.023670487
5	10	13	0.023670487
5	10	14	0.023670487
5	10	15	0.023670487
5	10	16	0.023670487
5	10	17	0.023670487
5	10	18	0.023670487
5	10	19	0.023670487
5	10	20	0.023670487
5	10	21	0.023670487
5	10	22	0.023670487
5	10	23	0.023670487
5	10	24	0.023670487
5	11	1	0.024582364
5	11	2	0.024582364
5	11	3	0.024582364
5	11	4	0.024582364
5	11	5	0.024582364
5	11	6	0.024582364
5	11	7	0.024582364
5	11	8	0.024582364
5	11	9	0.024582364
5	11	10	0.024582364
5	11	11	0.024582364
5	11	12	0.024582364
5	11	13	0.024582364
5	11	14	0.024582364
5	11	15	0.024582364
5	11	16	0.024582364
5	11	17	0.024582364
5	11	18	0.024582364
5	11	19	0.024582364
5	11	20	0.024582364
5	11	21	0.024582364
5	11	22	0.024582364
5	11	23	0.024582364
5	11	24	0.024582364

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.000911
5	10	7	0.000912
5	10	8	0.000915
5	10	9	0.00092
5	10	10	0.000923
5	10	11	0.000926
5	10	12	0.000931
5	10	13	0.000933
5	10	14	0.000934
5	10	15	0.000935
5	10	16	0.000935
5	10	17	0.000935
5	10	18	0.000934
5	10	19	0.000932
5	10	20	0.000928
5	10	21	0.000925
5	10	22	0.000922
5	10	23	0.000919
5	10	24	0.000917
5	11	1	0.000873
5	11	2	0.000872
5	11	3	0.00087
5	11	4	0.00087
5	11	5	0.000869
5	11	6	0.000869
5	11	7	0.00087
5	11	8	0.000873
5	11	9	0.000878
5	11	10	0.000881
5	11	11	0.000884
5	11	12	0.000888
5	11	13	0.00089
5	11	14	0.000891
5	11	15	0.000892
5	11	16	0.000892
5	11	17	0.000892
5	11	18	0.00089
5	11	19	0.000889
5	11	20	0.000885
5	11	21	0.000882
5	11	22	0.000879
5	11	23	0.000877
5	11	24	0.000875

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0
1	0	2	0
1	0	3	0
1	0	4	0
1	0	5	0
1	0	6	0
1	0	7	0
1	0	8	0
1	0	9	0
1	0	10	0
1	0	11	0
1	0	12	0
1	0	13	0
1	0	14	0
1	0	15	0
1	0	16	0
1	0	17	0
1	0	18	0
1	0	19	0
1	0	20	0
1	0	21	0
1	0	22	0
1	0	23	0
1	0	24	0
5	1	1	0
5	1	2	0
5	1	3	0
5	1	4	0
5	1	5	0
5	1	6	0
5	1	7	0
5	1	8	0
5	1	9	0
5	1	10	0
5	1	11	0
5	1	12	0
5	1	13	0
5	1	14	0
5	1	15	0
5	1	16	0
5	1	17	0
5	1	18	0
5	1	19	0
5	1	20	0
5	1	21	0
5	1	22	0
5	1	23	0
5	1	24	0
5	7	1	0
5	7	2	0
5	7	3	0
5	7	4	0
5	7	5	0
5	7	6	0
5	7	7	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.000514
1	0	2	0.000512
1	0	3	0.000511
1	0	4	0.00051
1	0	5	0.00051
1	0	6	0.00051
1	0	7	0.000511
1	0	8	0.000513
1	0	9	0.000517
1	0	10	0.00052
1	0	11	0.000522
1	0	12	0.000526
1	0	13	0.000527
1	0	14	0.000527
1	0	15	0.000528
1	0	16	0.000528
1	0	17	0.000527
1	0	18	0.000527
1	0	19	0.000526
1	0	20	0.000523
1	0	21	0.000521
1	0	22	0.000519
1	0	23	0.000517
1	0	24	0.000515
5	1	1	0.001932
5	1	2	0.00193
5	1	3	0.001928
5	1	4	0.001927
5	1	5	0.001927
5	1	6	0.001927
5	1	7	0.001928
5	1	8	0.001932
5	1	9	0.001937
5	1	10	0.001941
5	1	11	0.001944
5	1	12	0.001949
5	1	13	0.001951
5	1	14	0.001952
5	1	15	0.001952
5	1	16	0.001952
5	1	17	0.001952
5	1	18	0.001951
5	1	19	0.00195
5	1	20	0.001945
5	1	21	0.001942
5	1	22	0.001939
5	1	23	0.001936
5	1	24	0.001934
5	7	1	0.000309
5	7	2	0.000308
5	7	3	0.000308
5	7	4	0.000307
5	7	5	0.000307
5	7	6	0.000307
5	7	7	0.000307

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0
5	7	9	0
5	7	10	0
5	7	11	0
5	7	12	0
5	7	13	0
5	7	14	0
5	7	15	0
5	7	16	0
5	7	17	0
5	7	18	0
5	7	19	0
5	7	20	0
5	7	21	0
5	7	22	0
5	7	23	0
5	7	24	0
5	8	1	0
5	8	2	0
5	8	3	0
5	8	4	0
5	8	5	0
5	8	6	0
5	8	7	0
5	8	8	0
5	8	9	0
5	8	10	0
5	8	11	0
5	8	12	0
5	8	13	0
5	8	14	0
5	8	15	0
5	8	16	0
5	8	17	0
5	8	18	0
5	8	19	0
5	8	20	0
5	8	21	0
5	8	22	0
5	8	23	0
5	8	24	0
5	9	1	0
5	9	2	0
5	9	3	0
5	9	4	0
5	9	5	0
5	9	6	0
5	9	7	0
5	9	8	0
5	9	9	0
5	9	10	0
5	9	11	0
5	9	12	0
5	9	13	0
5	9	14	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.000309
5	7	9	0.00031
5	7	10	0.000311
5	7	11	0.000312
5	7	12	0.000314
5	7	13	0.000314
5	7	14	0.000315
5	7	15	0.000315
5	7	16	0.000315
5	7	17	0.000315
5	7	18	0.000314
5	7	19	0.000314
5	7	20	0.000313
5	7	21	0.000312
5	7	22	0.000311
5	7	23	0.00031
5	7	24	0.000309
5	8	1	0.000283
5	8	2	0.000283
5	8	3	0.000282
5	8	4	0.000282
5	8	5	0.000282
5	8	6	0.000282
5	8	7	0.000282
5	8	8	0.000283
5	8	9	0.000285
5	8	10	0.000286
5	8	11	0.000287
5	8	12	0.000288
5	8	13	0.000288
5	8	14	0.000289
5	8	15	0.000289
5	8	16	0.000289
5	8	17	0.000289
5	8	18	0.000288
5	8	19	0.000288
5	8	20	0.000287
5	8	21	0.000286
5	8	22	0.000285
5	8	23	0.000285
5	8	24	0.000284
5	9	1	0.000265
5	9	2	0.000264
5	9	3	0.000264
5	9	4	0.000263
5	9	5	0.000263
5	9	6	0.000263
5	9	7	0.000263
5	9	8	0.000264
5	9	9	0.000288
5	9	10	0.000289
5	9	11	0.000289
5	9	12	0.000289
5	9	13	0.000289
5	9	14	0.000288

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0
5	9	16	0
5	9	17	0
5	9	18	0
5	9	19	0
5	9	20	0
5	9	21	0
5	9	22	0
5	9	23	0
5	9	24	0
5	10	1	0
5	10	2	0
5	10	3	0
5	10	4	0
5	10	5	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.000288
5	9	16	0.000287
5	9	17	0.000286
5	9	18	0.000285
5	9	19	0.000269
5	9	20	0.000268
5	9	21	0.000267
5	9	22	0.000266
5	9	23	0.000266
5	9	24	0.000265
5	10	1	0.00025
5	10	2	0.00025
5	10	3	0.00025
5	10	4	0.000249
5	10	5	0.000249

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0
5	10	7	0
5	10	8	0
5	10	9	0
5	10	10	0
5	10	11	0
5	10	12	0
5	10	13	0
5	10	14	0
5	10	15	0
5	10	16	0
5	10	17	0
5	10	18	0
5	10	19	0
5	10	20	0
5	10	21	0
5	10	22	0
5	10	23	0
5	10	24	0
5	11	1	0
5	11	2	0
5	11	3	0
5	11	4	0
5	11	5	0
5	11	6	0
5	11	7	0
5	11	8	0
5	11	9	0
5	11	10	0
5	11	11	0
5	11	12	0
5	11	13	0
5	11	14	0
5	11	15	0
5	11	16	0
5	11	17	0
5	11	18	0
5	11	19	0
5	11	20	0
5	11	21	0
5	11	22	0
5	11	23	0
5	11	24	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.000249
5	10	7	0.000249
5	10	8	0.00025
5	10	9	0.000252
5	10	10	0.000252
5	10	11	0.000253
5	10	12	0.000254
5	10	13	0.000255
5	10	14	0.000255
5	10	15	0.000255
5	10	16	0.000255
5	10	17	0.000255
5	10	18	0.000255
5	10	19	0.000254
5	10	20	0.000253
5	10	21	0.000253
5	10	22	0.000252
5	10	23	0.000251
5	10	24	0.000251
5	11	1	0.00024
5	11	2	0.000239
5	11	3	0.000239
5	11	4	0.000239
5	11	5	0.000239
5	11	6	0.000239
5	11	7	0.000239
5	11	8	0.00024
5	11	9	0.000241
5	11	10	0.000242
5	11	11	0.000242
5	11	12	0.000244
5	11	13	0.000244
5	11	14	0.000244
5	11	15	0.000244
5	11	16	0.000244
5	11	17	0.000244
5	11	18	0.000244
5	11	19	0.000244
5	11	20	0.000243
5	11	21	0.000242
5	11	22	0.000241
5	11	23	0.000241
5	11	24	0.00024

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.000364
1	0	2	0.000363
1	0	3	0.000362
1	0	4	0.000362
1	0	5	0.000361
1	0	6	0.000361
1	0	7	0.000362
1	0	8	0.000364
1	0	9	0.000367
1	0	10	0.000368
1	0	11	0.00037
1	0	12	0.000372
1	0	13	0.000373
1	0	14	0.000374
1	0	15	0.000374
1	0	16	0.000374
1	0	17	0.000374
1	0	18	0.000373
1	0	19	0.000373
1	0	20	0.00037
1	0	21	0.000369
1	0	22	0.000367
1	0	23	0.000366
1	0	24	0.000365
5	1	1	0.000921
5	1	2	0.00092
5	1	3	0.000919
5	1	4	0.000918
5	1	5	0.000918
5	1	6	0.000918
5	1	7	0.000919
5	1	8	0.000921
5	1	9	0.000925
5	1	10	0.000927
5	1	11	0.000929
5	1	12	0.000932
5	1	13	0.000933
5	1	14	0.000934
5	1	15	0.000934
5	1	16	0.000934
5	1	17	0.000934
5	1	18	0.000933
5	1	19	0.000932
5	1	20	0.000929
5	1	21	0.000927
5	1	22	0.000926
5	1	23	0.000924
5	1	24	0.000923
5	7	1	0.000146
5	7	2	0.000146
5	7	3	0.000145
5	7	4	0.000145
5	7	5	0.000145
5	7	6	0.000145
5	7	7	0.000145

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	3.58E-05
1	0	2	3.58E-05
1	0	3	3.57E-05
1	0	4	3.56E-05
1	0	5	3.56E-05
1	0	6	3.56E-05
1	0	7	3.56E-05
1	0	8	3.58E-05
1	0	9	3.61E-05
1	0	10	3.63E-05
1	0	11	3.64E-05
1	0	12	3.67E-05
1	0	13	3.67E-05
1	0	14	3.68E-05
1	0	15	3.68E-05
1	0	16	3.68E-05
1	0	17	3.68E-05
1	0	18	3.68E-05
1	0	19	3.67E-05
1	0	20	3.65E-05
1	0	21	3.63E-05
1	0	22	3.62E-05
1	0	23	3.61E-05
1	0	24	3.6E-05
5	1	1	0.000101
5	1	2	0.000101
5	1	3	0.0001
5	1	4	0.0001
5	1	5	0.0001
5	1	6	0.0001
5	1	7	0.0001
5	1	8	0.000101
5	1	9	0.000101
5	1	10	0.000101
5	1	11	0.000101
5	1	12	0.000102
5	1	13	0.000102
5	1	14	0.000102
5	1	15	0.000102
5	1	16	0.000102
5	1	17	0.000102
5	1	18	0.000102
5	1	19	0.000102
5	1	20	0.000101
5	1	21	0.000101
5	1	22	0.000101
5	1	23	0.000101
5	1	24	0.000101
5	7	1	1.6E-05
5	7	2	1.6E-05
5	7	3	1.59E-05
5	7	4	1.59E-05
5	7	5	1.59E-05
5	7	6	1.59E-05
5	7	7	1.59E-05

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.000146
5	7	9	0.000147
5	7	10	0.000148
5	7	11	0.000148
5	7	12	0.000149
5	7	13	0.000149
5	7	14	0.000149
5	7	15	0.000149
5	7	16	0.000149
5	7	17	0.000149
5	7	18	0.000149
5	7	19	0.000149
5	7	20	0.000148
5	7	21	0.000148
5	7	22	0.000147
5	7	23	0.000147
5	7	24	0.000146
5	8	1	0.000133
5	8	2	0.000133
5	8	3	0.000133
5	8	4	0.000133
5	8	5	0.000133
5	8	6	0.000133
5	8	7	0.000133
5	8	8	0.000133
5	8	9	0.000134
5	8	10	0.000135
5	8	11	0.000135
5	8	12	0.000136
5	8	13	0.000136
5	8	14	0.000136
5	8	15	0.000136
5	8	16	0.000136
5	8	17	0.000136
5	8	18	0.000136
5	8	19	0.000136
5	8	20	0.000135
5	8	21	0.000135
5	8	22	0.000134
5	8	23	0.000134
5	8	24	0.000134
5	9	1	0.000124
5	9	2	0.000124
5	9	3	0.000123
5	9	4	0.000123
5	9	5	0.000123
5	9	6	0.000123
5	9	7	0.000123
5	9	8	0.000124
5	9	9	0.000136
5	9	10	0.000136
5	9	11	0.000136
5	9	12	0.000136
5	9	13	0.000136
5	9	14	0.000136

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	1.6E-05
5	7	9	1.61E-05
5	7	10	1.62E-05
5	7	11	1.62E-05
5	7	12	1.63E-05
5	7	13	1.63E-05
5	7	14	1.63E-05
5	7	15	1.64E-05
5	7	16	1.64E-05
5	7	17	1.63E-05
5	7	18	1.63E-05
5	7	19	1.63E-05
5	7	20	1.62E-05
5	7	21	1.62E-05
5	7	22	1.61E-05
5	7	23	1.61E-05
5	7	24	1.6E-05
5	8	1	1.46E-05
5	8	2	1.46E-05
5	8	3	1.46E-05
5	8	4	1.45E-05
5	8	5	1.45E-05
5	8	6	1.45E-05
5	8	7	1.46E-05
5	8	8	1.46E-05
5	8	9	1.47E-05
5	8	10	1.48E-05
5	8	11	1.48E-05
5	8	12	1.49E-05
5	8	13	1.49E-05
5	8	14	1.49E-05
5	8	15	1.49E-05
5	8	16	1.49E-05
5	8	17	1.49E-05
5	8	18	1.49E-05
5	8	19	1.49E-05
5	8	20	1.48E-05
5	8	21	1.48E-05
5	8	22	1.47E-05
5	8	23	1.47E-05
5	8	24	1.47E-05
5	9	1	1.36E-05
5	9	2	1.36E-05
5	9	3	1.35E-05
5	9	4	1.35E-05
5	9	5	1.35E-05
5	9	6	1.35E-05
5	9	7	1.35E-05
5	9	8	1.36E-05
5	9	9	1.49E-05
5	9	10	1.49E-05
5	9	11	1.49E-05
5	9	12	1.49E-05
5	9	13	1.49E-05
5	9	14	1.49E-05

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.000136
5	9	16	0.000135
5	9	17	0.000135
5	9	18	0.000134
5	9	19	0.000126
5	9	20	0.000126
5	9	21	0.000125
5	9	22	0.000125
5	9	23	0.000124
5	9	24	0.000124
5	10	1	0.000117
5	10	2	0.000116
5	10	3	0.000116
5	10	4	0.000116
5	10	5	0.000116

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	1.49E-05
5	9	16	1.48E-05
5	9	17	1.48E-05
5	9	18	1.47E-05
5	9	19	1.38E-05
5	9	20	1.38E-05
5	9	21	1.37E-05
5	9	22	1.37E-05
5	9	23	1.37E-05
5	9	24	1.36E-05
5	10	1	1.28E-05
5	10	2	1.28E-05
5	10	3	1.28E-05
5	10	4	1.28E-05
5	10	5	1.28E-05

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.000116
5	10	7	0.000116
5	10	8	0.000117
5	10	9	0.000117
5	10	10	0.000118
5	10	11	0.000118
5	10	12	0.000119
5	10	13	0.000119
5	10	14	0.000119
5	10	15	0.000119
5	10	16	0.000119
5	10	17	0.000119
5	10	18	0.000119
5	10	19	0.000119
5	10	20	0.000118
5	10	21	0.000118
5	10	22	0.000117
5	10	23	0.000117
5	10	24	0.000117
5	11	1	0.000111
5	11	2	0.000111
5	11	3	0.000111
5	11	4	0.000111
5	11	5	0.000111
5	11	6	0.000111
5	11	7	0.000111
5	11	8	0.000111
5	11	9	0.000112
5	11	10	0.000112
5	11	11	0.000113
5	11	12	0.000113
5	11	13	0.000113
5	11	14	0.000114
5	11	15	0.000114
5	11	16	0.000114
5	11	17	0.000114
5	11	18	0.000113
5	11	19	0.000113
5	11	20	0.000113
5	11	21	0.000112
5	11	22	0.000112
5	11	23	0.000112
5	11	24	0.000112

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	1.28E-05
5	10	7	1.28E-05
5	10	8	1.28E-05
5	10	9	1.29E-05
5	10	10	1.29E-05
5	10	11	1.3E-05
5	10	12	1.31E-05
5	10	13	1.31E-05
5	10	14	1.31E-05
5	10	15	1.31E-05
5	10	16	1.31E-05
5	10	17	1.31E-05
5	10	18	1.31E-05
5	10	19	1.31E-05
5	10	20	1.3E-05
5	10	21	1.3E-05
5	10	22	1.29E-05
5	10	23	1.29E-05
5	10	24	1.29E-05
5	11	1	1.23E-05
5	11	2	1.22E-05
5	11	3	1.22E-05
5	11	4	1.22E-05
5	11	5	1.22E-05
5	11	6	1.22E-05
5	11	7	1.22E-05
5	11	8	1.23E-05
5	11	9	1.23E-05
5	11	10	1.24E-05
5	11	11	1.24E-05
5	11	12	1.25E-05
5	11	13	1.25E-05
5	11	14	1.25E-05
5	11	15	1.25E-05
5	11	16	1.25E-05
5	11	17	1.25E-05
5	11	18	1.25E-05
5	11	19	1.25E-05
5	11	20	1.24E-05
5	11	21	1.24E-05
5	11	22	1.23E-05
5	11	23	1.23E-05
5	11	24	1.23E-05

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.00931545
1	0	2	0.00921599
1	0	3	0.00910497
1	0	4	0.00904496
1	0	5	0.00902306
1	0	6	0.00902306
1	0	7	0.00907723
1	0	8	0.00930017
1	0	9	0.00961451
1	0	10	0.00981957
1	0	11	0.00998746
1	0	12	0.01029351
1	0	13	0.01037436
1	0	14	0.01042106
1	0	15	0.01047093
1	0	16	0.01045032
1	0	17	0.01044136
1	0	18	0.01037858
1	0	19	0.01030681
1	0	20	0.01005043
1	0	21	0.00987412
1	0	22	0.00971344
1	0	23	0.00957145
1	0	24	0.00944509
5	1	1	0.00559833
5	1	2	0.0055502
5	1	3	0.00549647
5	1	4	0.00546743
5	1	5	0.00545684
5	1	6	0.00545684
5	1	7	0.00548306
5	1	8	0.00559095
5	1	9	0.00574308
5	1	10	0.00584232
5	1	11	0.00592355
5	1	12	0.00607168
5	1	13	0.00611081
5	1	14	0.00613341
5	1	15	0.00615757
5	1	16	0.00614756
5	1	17	0.00614321
5	1	18	0.00611285
5	1	19	0.00607811
5	1	20	0.00595404
5	1	21	0.00586869
5	1	22	0.00579093
5	1	23	0.00572223
5	1	24	0.00566106
5	7	1	0.00106282
5	7	2	0.00105725
5	7	3	0.00105103
5	7	4	0.00104767
5	7	5	0.00104644
5	7	6	0.00104644
5	7	7	0.00104948

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	1.39E-06
1	0	2	1.39E-06
1	0	3	1.39E-06
1	0	4	1.39E-06
1	0	5	1.39E-06
1	0	6	1.39E-06
1	0	7	1.39E-06
1	0	8	1.39E-06
1	0	9	1.39E-06
1	0	10	1.39E-06
1	0	11	1.39E-06
1	0	12	1.39E-06
1	0	13	1.39E-06
1	0	14	1.39E-06
1	0	15	1.39E-06
1	0	16	1.39E-06
1	0	17	1.39E-06
1	0	18	1.39E-06
1	0	19	1.39E-06
1	0	20	1.39E-06
1	0	21	1.39E-06
1	0	22	1.39E-06
1	0	23	1.39E-06
1	0	24	1.39E-06
5	1	1	1.33E-06
5	1	2	1.33E-06
5	1	3	1.33E-06
5	1	4	1.33E-06
5	1	5	1.33E-06
5	1	6	1.33E-06
5	1	7	1.33E-06
5	1	8	1.33E-06
5	1	9	1.33E-06
5	1	10	1.33E-06
5	1	11	1.33E-06
5	1	12	1.33E-06
5	1	13	1.33E-06
5	1	14	1.33E-06
5	1	15	1.33E-06
5	1	16	1.33E-06
5	1	17	1.33E-06
5	1	18	1.33E-06
5	1	19	1.33E-06
5	1	20	1.33E-06
5	1	21	1.33E-06
5	1	22	1.33E-06
5	1	23	1.33E-06
5	1	24	1.33E-06
5	7	1	4.08E-07
5	7	2	4.08E-07
5	7	3	4.08E-07
5	7	4	4.08E-07
5	7	5	4.08E-07
5	7	6	4.08E-07
5	7	7	4.08E-07

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.00106197
5	7	9	0.00107958
5	7	10	0.00109107
5	7	11	0.00110048
5	7	12	0.00111763
5	7	13	0.00112216
5	7	14	0.00112478
5	7	15	0.00112757
5	7	16	0.00112641
5	7	17	0.00112591
5	7	18	0.0011224
5	7	19	0.00111837
5	7	20	0.00110401
5	7	21	0.00109413
5	7	22	0.00108513
5	7	23	0.00107717
5	7	24	0.00107009
5	8	1	0.00101065
5	8	2	0.00100557
5	8	3	0.0009999
5	8	4	0.00099684
5	8	5	0.00099572
5	8	6	0.00099572
5	8	7	0.00099849
5	8	8	0.00100987
5	8	9	0.00102591
5	8	10	0.00103638
5	8	11	0.00104495
5	8	12	0.00106056
5	8	13	0.00106469
5	8	14	0.00106708
5	8	15	0.00106962
5	8	16	0.00106857
5	8	17	0.00106811
5	8	18	0.00106491
5	8	19	0.00106124
5	8	20	0.00104816
5	8	21	0.00103916
5	8	22	0.00103096
5	8	23	0.00102371
5	8	24	0.00101726
5	9	1	0.00098021
5	9	2	0.00097548
5	9	3	0.0009702
5	9	4	0.00096736
5	9	5	0.00096631
5	9	6	0.00096631
5	9	7	0.00096889
5	9	8	0.00097948
5	9	9	0.00106469
5	9	10	0.00106708
5	9	11	0.00106962
5	9	12	0.00106857
5	9	13	0.00106811
5	9	14	0.00106491

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	4.08E-07
5	7	9	4.08E-07
5	7	10	4.08E-07
5	7	11	4.08E-07
5	7	12	4.08E-07
5	7	13	4.08E-07
5	7	14	4.08E-07
5	7	15	4.08E-07
5	7	16	4.08E-07
5	7	17	4.08E-07
5	7	18	4.08E-07
5	7	19	4.08E-07
5	7	20	4.08E-07
5	7	21	4.08E-07
5	7	22	4.08E-07
5	7	23	4.08E-07
5	7	24	4.08E-07
5	8	1	3.97E-07
5	8	2	3.97E-07
5	8	3	3.97E-07
5	8	4	3.97E-07
5	8	5	3.97E-07
5	8	6	3.97E-07
5	8	7	3.97E-07
5	8	8	3.97E-07
5	8	9	3.97E-07
5	8	10	3.97E-07
5	8	11	3.97E-07
5	8	12	3.97E-07
5	8	13	3.97E-07
5	8	14	3.97E-07
5	8	15	3.97E-07
5	8	16	3.97E-07
5	8	17	3.97E-07
5	8	18	3.97E-07
5	8	19	3.97E-07
5	8	20	3.97E-07
5	8	21	3.97E-07
5	8	22	3.97E-07
5	8	23	3.97E-07
5	8	24	3.97E-07
5	9	1	3.94E-07
5	9	2	3.94E-07
5	9	3	3.94E-07
5	9	4	3.94E-07
5	9	5	3.94E-07
5	9	6	3.94E-07
5	9	7	3.94E-07
5	9	8	3.94E-07
5	9	9	3.97E-07
5	9	10	3.97E-07
5	9	11	3.97E-07
5	9	12	3.97E-07
5	9	13	3.97E-07
5	9	14	3.97E-07

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.00106124
5	9	16	0.00104816
5	9	17	0.00103916
5	9	18	0.00103096
5	9	19	0.00102732
5	9	20	0.00101513
5	9	21	0.00100676
5	9	22	0.00099912
5	9	23	0.00099237
5	9	24	0.00098637
5	10	1	0.00095753
5	10	2	0.00095309
5	10	3	0.00094813
5	10	4	0.00094545
5	10	5	0.00094447

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	3.97E-07
5	9	16	3.97E-07
5	9	17	3.97E-07
5	9	18	3.97E-07
5	9	19	3.94E-07
5	9	20	3.94E-07
5	9	21	3.94E-07
5	9	22	3.94E-07
5	9	23	3.94E-07
5	9	24	3.94E-07
5	10	1	3.93E-07
5	10	2	3.93E-07
5	10	3	3.93E-07
5	10	4	3.93E-07
5	10	5	3.93E-07

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.00094447
5	10	7	0.00094689
5	10	8	0.00095685
5	10	9	0.0009709
5	10	10	0.00098006
5	10	11	0.00098757
5	10	12	0.00100124
5	10	13	0.00100486
5	10	14	0.00100695
5	10	15	0.00100918
5	10	16	0.00100826
5	10	17	0.00100786
5	10	18	0.00100505
5	10	19	0.00100184
5	10	20	0.00099038
5	10	21	0.0009825
5	10	22	0.00097532
5	10	23	0.00096897
5	10	24	0.00096333
5	11	1	0.00094109
5	11	2	0.00093689
5	11	3	0.0009322
5	11	4	0.00092966
5	11	5	0.00092873
5	11	6	0.00092873
5	11	7	0.00093102
5	11	8	0.00094045
5	11	9	0.00095374
5	11	10	0.0009624
5	11	11	0.0009695
5	11	12	0.00098244
5	11	13	0.00098586
5	11	14	0.00098783
5	11	15	0.00098994
5	11	16	0.00098907
5	11	17	0.00098869
5	11	18	0.00098604
5	11	19	0.000983
5	11	20	0.00097217
5	11	21	0.00096471
5	11	22	0.00095792
5	11	23	0.00095191
5	11	24	0.00094657

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	3.93E-07
5	10	7	3.93E-07
5	10	8	3.93E-07
5	10	9	3.93E-07
5	10	10	3.93E-07
5	10	11	3.93E-07
5	10	12	3.93E-07
5	10	13	3.93E-07
5	10	14	3.93E-07
5	10	15	3.93E-07
5	10	16	3.93E-07
5	10	17	3.93E-07
5	10	18	3.93E-07
5	10	19	3.93E-07
5	10	20	3.93E-07
5	10	21	3.93E-07
5	10	22	3.93E-07
5	10	23	3.93E-07
5	10	24	3.93E-07
5	11	1	3.95E-07
5	11	2	3.95E-07
5	11	3	3.95E-07
5	11	4	3.95E-07
5	11	5	3.95E-07
5	11	6	3.95E-07
5	11	7	3.95E-07
5	11	8	3.95E-07
5	11	9	3.95E-07
5	11	10	3.95E-07
5	11	11	3.95E-07
5	11	12	3.95E-07
5	11	13	3.95E-07
5	11	14	3.95E-07
5	11	15	3.95E-07
5	11	16	3.95E-07
5	11	17	3.95E-07
5	11	18	3.95E-07
5	11	19	3.95E-07
5	11	20	3.95E-07
5	11	21	3.95E-07
5	11	22	3.95E-07
5	11	23	3.95E-07
5	11	24	3.95E-07

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.006988
1	0	2	0.006988
1	0	3	0.006988
1	0	4	0.006988
1	0	5	0.006988
1	0	6	0.006988
1	0	7	0.006988
1	0	8	0.006988
1	0	9	0.006988
1	0	10	0.006988
1	0	11	0.006988
1	0	12	0.006988
1	0	13	0.006988
1	0	14	0.006988
1	0	15	0.006988
1	0	16	0.006988
1	0	17	0.006988
1	0	18	0.006988
1	0	19	0.006988
1	0	20	0.006988
1	0	21	0.006988
1	0	22	0.006988
1	0	23	0.006988
1	0	24	0.006988
5	1	1	0.232086
5	1	2	0.232086
5	1	3	0.232086
5	1	4	0.232086
5	1	5	0.232086
5	1	6	0.232086
5	1	7	0.232086
5	1	8	0.232086
5	1	9	0.232086
5	1	10	0.232086
5	1	11	0.232086
5	1	12	0.232086
5	1	13	0.232086
5	1	14	0.232086
5	1	15	0.232086
5	1	16	0.232086
5	1	17	0.232086
5	1	18	0.232086
5	1	19	0.232086
5	1	20	0.232086
5	1	21	0.232086
5	1	22	0.232086
5	1	23	0.232086
5	1	24	0.232086
5	7	1	0.034006
5	7	2	0.034006
5	7	3	0.034006
5	7	4	0.034006
5	7	5	0.034006
5	7	6	0.034006
5	7	7	0.034006

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.006189
1	0	2	0.006189
1	0	3	0.006189
1	0	4	0.006189
1	0	5	0.006189
1	0	6	0.006189
1	0	7	0.006189
1	0	8	0.006189
1	0	9	0.006189
1	0	10	0.006189
1	0	11	0.006189
1	0	12	0.006189
1	0	13	0.006189
1	0	14	0.006189
1	0	15	0.006189
1	0	16	0.006189
1	0	17	0.006189
1	0	18	0.006189
1	0	19	0.006189
1	0	20	0.006189
1	0	21	0.006189
1	0	22	0.006189
1	0	23	0.006189
1	0	24	0.006189
5	1	1	0.0327
5	1	2	0.0327
5	1	3	0.0327
5	1	4	0.0327
5	1	5	0.0327
5	1	6	0.0327
5	1	7	0.0327
5	1	8	0.0327
5	1	9	0.0327
5	1	10	0.0327
5	1	11	0.0327
5	1	12	0.0327
5	1	13	0.0327
5	1	14	0.0327
5	1	15	0.0327
5	1	16	0.0327
5	1	17	0.0327
5	1	18	0.0327
5	1	19	0.0327
5	1	20	0.0327
5	1	21	0.0327
5	1	22	0.0327
5	1	23	0.0327
5	1	24	0.0327
5	7	1	0.005423
5	7	2	0.005423
5	7	3	0.005423
5	7	4	0.005423
5	7	5	0.005423
5	7	6	0.005423
5	7	7	0.005423

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.034006
5	7	9	0.034006
5	7	10	0.034006
5	7	11	0.034006
5	7	12	0.034006
5	7	13	0.034006
5	7	14	0.034006
5	7	15	0.034006
5	7	16	0.034006
5	7	17	0.034006
5	7	18	0.034006
5	7	19	0.034006
5	7	20	0.034006
5	7	21	0.034006
5	7	22	0.034006
5	7	23	0.034006
5	7	24	0.034006
5	8	1	0.026882
5	8	2	0.026882
5	8	3	0.026882
5	8	4	0.026882
5	8	5	0.026882
5	8	6	0.026882
5	8	7	0.026882
5	8	8	0.026882
5	8	9	0.026882
5	8	10	0.026882
5	8	11	0.026882
5	8	12	0.026882
5	8	13	0.026882
5	8	14	0.026882
5	8	15	0.026882
5	8	16	0.026882
5	8	17	0.026882
5	8	18	0.026882
5	8	19	0.026882
5	8	20	0.026882
5	8	21	0.026882
5	8	22	0.026882
5	8	23	0.026882
5	8	24	0.026882
5	9	1	0.021451
5	9	2	0.021451
5	9	3	0.021451
5	9	4	0.021451
5	9	5	0.021451
5	9	6	0.021451
5	9	7	0.021451
5	9	8	0.021451
5	9	9	0.026882
5	9	10	0.026882
5	9	11	0.026882
5	9	12	0.026882
5	9	13	0.026882
5	9	14	0.026882

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.005423
5	7	9	0.005423
5	7	10	0.005423
5	7	11	0.005423
5	7	12	0.005423
5	7	13	0.005423
5	7	14	0.005423
5	7	15	0.005423
5	7	16	0.005423
5	7	17	0.005423
5	7	18	0.005423
5	7	19	0.005423
5	7	20	0.005423
5	7	21	0.005423
5	7	22	0.005423
5	7	23	0.005423
5	7	24	0.005423
5	8	1	0.004481
5	8	2	0.004481
5	8	3	0.004481
5	8	4	0.004481
5	8	5	0.004481
5	8	6	0.004481
5	8	7	0.004481
5	8	8	0.004481
5	8	9	0.004481
5	8	10	0.004481
5	8	11	0.004481
5	8	12	0.004481
5	8	13	0.004481
5	8	14	0.004481
5	8	15	0.004481
5	8	16	0.004481
5	8	17	0.004481
5	8	18	0.004481
5	8	19	0.004481
5	8	20	0.004481
5	8	21	0.004481
5	8	22	0.004481
5	8	23	0.004481
5	8	24	0.004481
5	9	1	0.003769
5	9	2	0.003769
5	9	3	0.003769
5	9	4	0.003769
5	9	5	0.003769
5	9	6	0.003769
5	9	7	0.003769
5	9	8	0.003769
5	9	9	0.004481
5	9	10	0.004481
5	9	11	0.004481
5	9	12	0.004481
5	9	13	0.004481
5	9	14	0.004481

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.026882
5	9	16	0.026882
5	9	17	0.026882
5	9	18	0.026882
5	9	19	0.021451
5	9	20	0.021451
5	9	21	0.021451
5	9	22	0.021451
5	9	23	0.021451
5	9	24	0.021451
5	10	1	0.016948
5	10	2	0.016948
5	10	3	0.016948
5	10	4	0.016948
5	10	5	0.016948

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.004481
5	9	16	0.004481
5	9	17	0.004481
5	9	18	0.004481
5	9	19	0.003769
5	9	20	0.003769
5	9	21	0.003769
5	9	22	0.003769
5	9	23	0.003769
5	9	24	0.003769
5	10	1	0.003185
5	10	2	0.003185
5	10	3	0.003185
5	10	4	0.003185
5	10	5	0.003185

CAR Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.016948
5	10	7	0.016948
5	10	8	0.016948
5	10	9	0.016948
5	10	10	0.016948
5	10	11	0.016948
5	10	12	0.016948
5	10	13	0.016948
5	10	14	0.016948
5	10	15	0.016948
5	10	16	0.016948
5	10	17	0.016948
5	10	18	0.016948
5	10	19	0.016948
5	10	20	0.016948
5	10	21	0.016948
5	10	22	0.016948
5	10	23	0.016948
5	10	24	0.016948
5	11	1	0.012944
5	11	2	0.012944
5	11	3	0.012944
5	11	4	0.012944
5	11	5	0.012944
5	11	6	0.012944
5	11	7	0.012944
5	11	8	0.012944
5	11	9	0.012944
5	11	10	0.012944
5	11	11	0.012944
5	11	12	0.012944
5	11	13	0.012944
5	11	14	0.012944
5	11	15	0.012944
5	11	16	0.012944
5	11	17	0.012944
5	11	18	0.012944
5	11	19	0.012944
5	11	20	0.012944
5	11	21	0.012944
5	11	22	0.012944
5	11	23	0.012944
5	11	24	0.012944

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	10	6	0.003185
5	10	7	0.003185
5	10	8	0.003185
5	10	9	0.003185
5	10	10	0.003185
5	10	11	0.003185
5	10	12	0.003185
5	10	13	0.003185
5	10	14	0.003185
5	10	15	0.003185
5	10	16	0.003185
5	10	17	0.003185
5	10	18	0.003185
5	10	19	0.003185
5	10	20	0.003185
5	10	21	0.003185
5	10	22	0.003185
5	10	23	0.003185
5	10	24	0.003185
5	11	1	0.002678
5	11	2	0.002678
5	11	3	0.002678
5	11	4	0.002678
5	11	5	0.002678
5	11	6	0.002678
5	11	7	0.002678
5	11	8	0.002678
5	11	9	0.002678
5	11	10	0.002678
5	11	11	0.002678
5	11	12	0.002678
5	11	13	0.002678
5	11	14	0.002678
5	11	15	0.002678
5	11	16	0.002678
5	11	17	0.002678
5	11	18	0.002678
5	11	19	0.002678
5	11	20	0.002678
5	11	21	0.002678
5	11	22	0.002678
5	11	23	0.002678
5	11	24	0.002678

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	3144.09665
1	0	2	3144.09665
1	0	3	3144.09665
1	0	4	3144.09665
1	0	5	3144.09665
1	0	6	3144.09665
1	0	7	3144.09665
1	0	8	3144.09665
1	0	9	3144.09665
1	0	10	3144.09665
1	0	11	3144.09665
1	0	12	3144.09665
1	0	13	3144.09665
1	0	14	3144.09665
1	0	15	3144.09665
1	0	16	3144.09665
1	0	17	3144.09665
1	0	18	3144.09665
1	0	19	3144.09665
1	0	20	3144.09665
1	0	21	3144.09665
1	0	22	3144.09665
1	0	23	3144.09665
1	0	24	3144.09665
5	1	1	2272.72214
5	1	2	2272.72214
5	1	3	2272.72214
5	1	4	2272.72214
5	1	5	2272.72214
5	1	6	2272.72214
5	1	7	2272.72214
5	1	8	2272.72214
5	1	9	2272.72214
5	1	10	2272.72214
5	1	11	2272.72214
5	1	12	2272.72214
5	1	13	2272.72214
5	1	14	2272.72214
5	1	15	2272.72214
5	1	16	2272.72214
5	1	17	2272.72214
5	1	18	2272.72214
5	1	19	2272.72214
5	1	20	2272.72214
5	1	21	2272.72214
5	1	22	2272.72214
5	1	23	2272.72214
5	1	24	2272.72214
5	7	1	564.081754
5	7	2	564.081754
5	7	3	564.081754
5	7	4	564.081754
5	7	5	564.081754
5	7	6	564.081754
5	7	7	564.081754
5	7	8	564.081754
5	7	9	564.081754
5	7	10	564.081754
5	7	11	564.081754

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.071295097
1	0	2	0.071295097
1	0	3	0.071295097
1	0	4	0.071295097
1	0	5	0.071295097
1	0	6	0.071295097
1	0	7	0.071295097
1	0	8	0.071295097
1	0	9	0.071295097
1	0	10	0.071295097
1	0	11	0.071295097
1	0	12	0.071295097
1	0	13	0.071295097
1	0	14	0.071295097
1	0	15	0.071295097
1	0	16	0.071295097
1	0	17	0.071295097
1	0	18	0.071295097
1	0	19	0.071295097
1	0	20	0.071295097
1	0	21	0.071295097
1	0	22	0.071295097
1	0	23	0.071295097
1	0	24	0.071295097
5	1	1	0.028518025
5	1	2	0.028518025
5	1	3	0.028518025
5	1	4	0.028518025
5	1	5	0.028518025
5	1	6	0.028518025
5	1	7	0.028518025
5	1	8	0.028518025
5	1	9	0.028518025
5	1	10	0.028518025
5	1	11	0.028518025
5	1	12	0.028518025
5	1	13	0.028518025
5	1	14	0.028518025
5	1	15	0.028518025
5	1	16	0.028518025
5	1	17	0.028518025
5	1	18	0.028518025
5	1	19	0.028518025
5	1	20	0.028518025
5	1	21	0.028518025
5	1	22	0.028518025
5	1	23	0.028518025
5	1	24	0.028518025
5	7	1	0.002376498
5	7	2	0.002376498
5	7	3	0.002376498
5	7	4	0.002376498
5	7	5	0.002376498
5	7	6	0.002376498
5	7	7	0.002376498
5	7	8	0.002376498
5	7	9	0.002376498
5	7	10	0.002376498
5	7	11	0.002376498

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	564.081754
5	7	13	564.081754
5	7	14	564.081754
5	7	15	564.081754
5	7	16	564.081754
5	7	17	564.081754
5	7	18	564.081754
5	7	19	564.081754
5	7	20	564.081754
5	7	21	564.081754
5	7	22	564.081754
5	7	23	564.081754
5	7	24	564.081754
5	8	1	491.744858
5	8	2	491.744858
5	8	3	491.744858
5	8	4	491.744858
5	8	5	491.744858
5	8	6	491.744858
5	8	7	491.744858
5	8	8	491.744858
5	8	9	491.744858
5	8	10	491.744858
5	8	11	491.744858
5	8	12	491.744858
5	8	13	491.744858
5	8	14	491.744858
5	8	15	491.744858
5	8	16	491.744858
5	8	17	491.744858
5	8	18	491.744858
5	8	19	491.744858
5	8	20	491.744858
5	8	21	491.744858
5	8	22	491.744858
5	8	23	491.744858
5	8	24	491.744858
5	9	1	474.472468
5	9	2	474.472468
5	9	3	474.472468
5	9	4	474.472468
5	9	5	474.472468
5	9	6	474.472468
5	9	7	474.472468
5	9	8	474.472468
5	9	9	474.472468
5	9	10	474.472468
5	9	11	474.472468
5	9	12	474.472468
5	9	13	474.472468
5	9	14	474.472468
5	9	15	474.472468
5	9	16	474.472468
5	9	17	474.472468
5	9	18	474.472468
5	9	19	474.472468
5	9	20	474.472468
5	9	21	474.472468
5	9	22	474.472468

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.002376498
5	7	13	0.002376498
5	7	14	0.002376498
5	7	15	0.002376498
5	7	16	0.002376498
5	7	17	0.002376498
5	7	18	0.002376498
5	7	19	0.002376498
5	7	20	0.002376498
5	7	21	0.002376498
5	7	22	0.002376498
5	7	23	0.002376498
5	7	24	0.002376498
5	8	1	0.002036997
5	8	2	0.002036997
5	8	3	0.002036997
5	8	4	0.002036997
5	8	5	0.002036997
5	8	6	0.002036997
5	8	7	0.002036997
5	8	8	0.002036997
5	8	9	0.002036997
5	8	10	0.002036997
5	8	11	0.002036997
5	8	12	0.002036997
5	8	13	0.002036997
5	8	14	0.002036997
5	8	15	0.002036997
5	8	16	0.002036997
5	8	17	0.002036997
5	8	18	0.002036997
5	8	19	0.002036997
5	8	20	0.002036997
5	8	21	0.002036997
5	8	22	0.002036997
5	8	23	0.002036997
5	8	24	0.002036997
5	9	1	0.001782378
5	9	2	0.001782378
5	9	3	0.001782378
5	9	4	0.001782378
5	9	5	0.001782378
5	9	6	0.001782378
5	9	7	0.001782378
5	9	8	0.001782378
5	9	9	0.001782378
5	9	10	0.001782378
5	9	11	0.001782378
5	9	12	0.001782378
5	9	13	0.001782378
5	9	14	0.001782378
5	9	15	0.001782378
5	9	16	0.001782378
5	9	17	0.001782378
5	9	18	0.001782378
5	9	19	0.001782378
5	9	20	0.001782378
5	9	21	0.001782378
5	9	22	0.001782378

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	474.472468
5	9	24	474.472468
5	10	1	461.554554
5	10	2	461.554554
5	10	3	461.554554
5	10	4	461.554554
5	10	5	461.554554
5	10	6	461.554554
5	10	7	461.554554
5	10	8	461.554554
5	10	9	461.554554
5	10	10	461.554554
5	10	11	461.554554
5	10	12	461.554554
5	10	13	461.554554
5	10	14	461.554554
5	10	15	461.554554
5	10	16	461.554554
5	10	17	461.554554
5	10	18	461.554554
5	10	19	461.554554
5	10	20	461.554554
5	10	21	461.554554
5	10	22	461.554554
5	10	23	461.554554
5	10	24	461.554554
5	11	1	455.277542
5	11	2	455.277542
5	11	3	455.277542
5	11	4	455.277542
5	11	5	455.277542
5	11	6	455.277542
5	11	7	455.277542
5	11	8	455.277542
5	11	9	455.277542
5	11	10	455.277542
5	11	11	455.277542
5	11	12	455.277542
5	11	13	455.277542
5	11	14	455.277542
5	11	15	455.277542
5	11	16	455.277542
5	11	17	455.277542
5	11	18	455.277542
5	11	19	455.277542
5	11	20	455.277542
5	11	21	455.277542
5	11	22	455.277542
5	11	23	455.277542
5	11	24	455.277542

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.001782378
5	9	24	0.001782378
5	10	1	0.001584335
5	10	2	0.001584335
5	10	3	0.001584335
5	10	4	0.001584335
5	10	5	0.001584335
5	10	6	0.001584335
5	10	7	0.001584335
5	10	8	0.001584335
5	10	9	0.001584335
5	10	10	0.001584335
5	10	11	0.001584335
5	10	12	0.001584335
5	10	13	0.001584335
5	10	14	0.001584335
5	10	15	0.001584335
5	10	16	0.001584335
5	10	17	0.001584335
5	10	18	0.001584335
5	10	19	0.001584335
5	10	20	0.001584335
5	10	21	0.001584335
5	10	22	0.001584335
5	10	23	0.001584335
5	10	24	0.001584335
5	11	1	0.001425897
5	11	2	0.001425897
5	11	3	0.001425897
5	11	4	0.001425897
5	11	5	0.001425897
5	11	6	0.001425897
5	11	7	0.001425897
5	11	8	0.001425897
5	11	9	0.001425897
5	11	10	0.001425897
5	11	11	0.001425897
5	11	12	0.001425897
5	11	13	0.001425897
5	11	14	0.001425897
5	11	15	0.001425897
5	11	16	0.001425897
5	11	17	0.001425897
5	11	18	0.001425897
5	11	19	0.001425897
5	11	20	0.001425897
5	11	21	0.001425897
5	11	22	0.001425897
5	11	23	0.001425897
5	11	24	0.001425897

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	2.7391302
1	0	2	2.7391302
1	0	3	2.7391302
1	0	4	2.7391302
1	0	5	2.7391302
1	0	6	2.7391302
1	0	7	2.7391302
1	0	8	2.7391302
1	0	9	2.7391302
1	0	10	2.7391302
1	0	11	2.7391302
1	0	12	2.7391302
1	0	13	2.7391302
1	0	14	2.7391302
1	0	15	2.7391302
1	0	16	2.7391302
1	0	17	2.7391302
1	0	18	2.7391302
1	0	19	2.7391302
1	0	20	2.7391302
1	0	21	2.7391302
1	0	22	2.7391302
1	0	23	2.7391302
1	0	24	2.7391302
5	1	1	1.6379558
5	1	2	1.6379558
5	1	3	1.6379558
5	1	4	1.6379558
5	1	5	1.6379558
5	1	6	1.6379558
5	1	7	1.6379558
5	1	8	1.6379558
5	1	9	1.6379558
5	1	10	1.6379562
5	1	11	1.6379558
5	1	12	1.6379558
5	1	13	1.6379558
5	1	14	1.6379558
5	1	15	1.6379558
5	1	16	1.6379558
5	1	17	1.6379558
5	1	18	1.6379558
5	1	19	1.6379558
5	1	20	1.6379558
5	1	21	1.6379558
5	1	22	1.6379558
5	1	23	1.6379558
5	1	24	1.6379558
5	7	1	0.1914116
5	7	2	0.1914116
5	7	3	0.1914116
5	7	4	0.1914116
5	7	5	0.1914116
5	7	6	0.1914116
5	7	7	0.1914116
5	7	8	0.1914116
5	7	9	0.1914116
5	7	10	0.1914116
5	7	11	0.1914116

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	7.836954983
1	0	2	7.836954983
1	0	3	7.836954983
1	0	4	7.836954983
1	0	5	7.836954983
1	0	6	7.836954983
1	0	7	7.836954983
1	0	8	7.836954983
1	0	9	7.836954983
1	0	10	7.836954983
1	0	11	7.836954983
1	0	12	7.836954983
1	0	13	7.836954983
1	0	14	7.836954983
1	0	15	7.836954983
1	0	16	7.836954983
1	0	17	7.836954983
1	0	18	7.836954983
1	0	19	7.836954983
1	0	20	7.836954983
1	0	21	7.836954983
1	0	22	7.836954983
1	0	23	7.836954983
1	0	24	7.836954983
5	1	1	5.780082221
5	1	2	5.780082221
5	1	3	5.780082221
5	1	4	5.780082221
5	1	5	5.780082221
5	1	6	5.780082221
5	1	7	5.780082221
5	1	8	5.780082221
5	1	9	5.780082221
5	1	10	5.780082221
5	1	11	5.780082221
5	1	12	5.780082221
5	1	13	5.780082221
5	1	14	5.780082221
5	1	15	5.780082221
5	1	16	5.780082221
5	1	17	5.780082221
5	1	18	5.780082221
5	1	19	5.780082221
5	1	20	5.780082221
5	1	21	5.780082221
5	1	22	5.780082221
5	1	23	5.780082221
5	1	24	5.780082221
5	7	1	1.210678827
5	7	2	1.210678827
5	7	3	1.210678827
5	7	4	1.210678827
5	7	5	1.210678827
5	7	6	1.210678827
5	7	7	1.210678827
5	7	8	1.210678827
5	7	9	1.210678827
5	7	10	1.210678827
5	7	11	1.210678827

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.1914116
5	7	13	0.1914116
5	7	14	0.1914116
5	7	15	0.1914116
5	7	16	0.1914116
5	7	17	0.1914116
5	7	18	0.1914116
5	7	19	0.1914116
5	7	20	0.1914116
5	7	21	0.1914116
5	7	22	0.1914116
5	7	23	0.1914116
5	7	24	0.1914116
5	8	1	0.1747461
5	8	2	0.1747461
5	8	3	0.1747461
5	8	4	0.1747461
5	8	5	0.1747461
5	8	6	0.1747461
5	8	7	0.1747461
5	8	8	0.1747461
5	8	9	0.1747461
5	8	10	0.1747461
5	8	11	0.1747461
5	8	12	0.1747461
5	8	13	0.1747461
5	8	14	0.1747461
5	8	15	0.1747461
5	8	16	0.1747461
5	8	17	0.1747461
5	8	18	0.1747461
5	8	19	0.1747461
5	8	20	0.1747461
5	8	21	0.1747461
5	8	22	0.1747461
5	8	23	0.1747461
5	8	24	0.1747461
5	9	1	0.1462083
5	9	2	0.1462083
5	9	3	0.1462083
5	9	4	0.1462083
5	9	5	0.1462083
5	9	6	0.1462083
5	9	7	0.1462083
5	9	8	0.1462083
5	9	9	0.1462083
5	9	10	0.1462083
5	9	11	0.1462083
5	9	12	0.1462083
5	9	13	0.1462083
5	9	14	0.1462083
5	9	15	0.1462083
5	9	16	0.1462083
5	9	17	0.1462083
5	9	18	0.1462083
5	9	19	0.1462083
5	9	20	0.1462083
5	9	21	0.1462083
5	9	22	0.1462083

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	1.210678827
5	7	13	1.210678827
5	7	14	1.210678827
5	7	15	1.210678827
5	7	16	1.210678827
5	7	17	1.210678827
5	7	18	1.210678827
5	7	19	1.210678827
5	7	20	1.210678827
5	7	21	1.210678827
5	7	22	1.210678827
5	7	23	1.210678827
5	7	24	1.210678827
5	8	1	1.151283819
5	8	2	1.151283819
5	8	3	1.151283819
5	8	4	1.151283819
5	8	5	1.151283819
5	8	6	1.151283819
5	8	7	1.151283819
5	8	8	1.151283819
5	8	9	1.151283819
5	8	10	1.151283819
5	8	11	1.151283819
5	8	12	1.151283819
5	8	13	1.151283819
5	8	14	1.151283819
5	8	15	1.151283819
5	8	16	1.151283819
5	8	17	1.151283819
5	8	18	1.151283819
5	8	19	1.151283819
5	8	20	1.151283819
5	8	21	1.151283819
5	8	22	1.151283819
5	8	23	1.151283819
5	8	24	1.151283819
5	9	1	1.150624072
5	9	2	1.150624072
5	9	3	1.150624072
5	9	4	1.150624072
5	9	5	1.150624072
5	9	6	1.150624072
5	9	7	1.150624072
5	9	8	1.150624072
5	9	9	1.150624072
5	9	10	1.150624072
5	9	11	1.150624072
5	9	12	1.150624072
5	9	13	1.150624072
5	9	14	1.150624072
5	9	15	1.150624072
5	9	16	1.150624072
5	9	17	1.150624072
5	9	18	1.150624072
5	9	19	1.150624072
5	9	20	1.150624072
5	9	21	1.150624072
5	9	22	1.150624072

TRK Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.1462083
5	9	24	0.1462083
5	10	1	0.1239141
5	10	2	0.1239141
5	10	3	0.1239141
5	10	4	0.1239141
5	10	5	0.1239141
5	10	6	0.1239141
5	10	7	0.1239141
5	10	8	0.1239141
5	10	9	0.1239141
5	10	10	0.1239141
5	10	11	0.1239141
5	10	12	0.1239141
5	10	13	0.1239141
5	10	14	0.1239141
5	10	15	0.1239141
5	10	16	0.1239141
5	10	17	0.1239141
5	10	18	0.1239141
5	10	19	0.1239141
5	10	20	0.1239141
5	10	21	0.1239141
5	10	22	0.1239141
5	10	23	0.1239141
5	10	24	0.1239141
5	11	1	0.105089
5	11	2	0.105089
5	11	3	0.105089
5	11	4	0.105089
5	11	5	0.105089
5	11	6	0.105089
5	11	7	0.105089
5	11	8	0.105089
5	11	9	0.105089
5	11	10	0.105089
5	11	11	0.105089
5	11	12	0.105089
5	11	13	0.105089
5	11	14	0.105089
5	11	15	0.105089
5	11	16	0.105089
5	11	17	0.105089
5	11	18	0.105089
5	11	19	0.105089
5	11	20	0.105089
5	11	21	0.105089
5	11	22	0.105089
5	11	23	0.105089
5	11	24	0.105089

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	1.150624072
5	9	24	1.150624072
5	10	1	1.151131501
5	10	2	1.151131501
5	10	3	1.151131501
5	10	4	1.151131501
5	10	5	1.151131501
5	10	6	1.151131501
5	10	7	1.151131501
5	10	8	1.151131501
5	10	9	1.151131501
5	10	10	1.151131501
5	10	11	1.151131501
5	10	12	1.151131501
5	10	13	1.151131501
5	10	14	1.151131501
5	10	15	1.151131501
5	10	16	1.151131501
5	10	17	1.151131501
5	10	18	1.151131501
5	10	19	1.151131501
5	10	20	1.151131501
5	10	21	1.151131501
5	10	22	1.151131501
5	10	23	1.151131501
5	10	24	1.151131501
5	11	1	1.160286587
5	11	2	1.160286587
5	11	3	1.160286587
5	11	4	1.160286587
5	11	5	1.160286587
5	11	6	1.160286587
5	11	7	1.160286587
5	11	8	1.160286587
5	11	9	1.160286587
5	11	10	1.160286587
5	11	11	1.160286587
5	11	12	1.160286587
5	11	13	1.160286587
5	11	14	1.160286587
5	11	15	1.160286587
5	11	16	1.160286587
5	11	17	1.160286587
5	11	18	1.160286587
5	11	19	1.160286587
5	11	20	1.160286587
5	11	21	1.160286587
5	11	22	1.160286587
5	11	23	1.160286587
5	11	24	1.160286587

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	10.411157
1	0	2	10.411157
1	0	3	10.411157
1	0	4	10.411157
1	0	5	10.411157
1	0	6	10.411157
1	0	7	10.411157
1	0	8	10.411157
1	0	9	10.411157
1	0	10	10.411157
1	0	11	10.411157
1	0	12	10.411157
1	0	13	10.411157
1	0	14	10.411157
1	0	15	10.411157
1	0	16	10.411157
1	0	17	10.411157
1	0	18	10.411157
1	0	19	10.411157
1	0	20	10.411157
1	0	21	10.411157
1	0	22	10.411157
1	0	23	10.411157
1	0	24	10.411157
5	1	1	6.106728609
5	1	2	6.106728609
5	1	3	6.106728609
5	1	4	6.106728609
5	1	5	6.106728609
5	1	6	6.106728609
5	1	7	6.106728609
5	1	8	6.106728609
5	1	9	6.106728609
5	1	10	6.106728609
5	1	11	6.106728609
5	1	12	6.106728609
5	1	13	6.106728609
5	1	14	6.106728609
5	1	15	6.106728609
5	1	16	6.106728609
5	1	17	6.106728609
5	1	18	6.106728609
5	1	19	6.106728609
5	1	20	6.106728609
5	1	21	6.106728609
5	1	22	6.106728609
5	1	23	6.106728609
5	1	24	6.106728609
5	7	1	0.801598576
5	7	2	0.801598576
5	7	3	0.801598576
5	7	4	0.801598576
5	7	5	0.801598576
5	7	6	0.801598576
5	7	7	0.801598576
5	7	8	0.801598576
5	7	9	0.801598576
5	7	10	0.801598576
5	7	11	0.801598576

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.0040798
1	0	2	0.0040798
1	0	3	0.0040798
1	0	4	0.0040798
1	0	5	0.0040798
1	0	6	0.0040798
1	0	7	0.0040798
1	0	8	0.0040798
1	0	9	0.0040798
1	0	10	0.0040798
1	0	11	0.0040798
1	0	12	0.0040798
1	0	13	0.0040798
1	0	14	0.0040798
1	0	15	0.0040798
1	0	16	0.0040798
1	0	17	0.0040798
1	0	18	0.0040798
1	0	19	0.0040798
1	0	20	0.0040798
1	0	21	0.0040798
1	0	22	0.0040798
1	0	23	0.0040798
1	0	24	0.0040798
5	1	1	0.0047627
5	1	2	0.0047636
5	1	3	0.0047634
5	1	4	0.0047633
5	1	5	0.004762
5	1	6	0.0047619
5	1	7	0.0047629
5	1	8	0.0047654
5	1	9	0.0047655
5	1	10	0.0047691
5	1	11	0.0047771
5	1	12	0.0047837
5	1	13	0.0047852
5	1	14	0.0047927
5	1	15	0.0047919
5	1	16	0.0047866
5	1	17	0.0047829
5	1	18	0.0047855
5	1	19	0.0047785
5	1	20	0.0047669
5	1	21	0.0047681
5	1	22	0.0047668
5	1	23	0.0047662
5	1	24	0.0047641
5	7	1	0.0006819
5	7	2	0.0006819
5	7	3	0.0006819
5	7	4	0.0006819
5	7	5	0.0006818
5	7	6	0.0006818
5	7	7	0.0006819
5	7	8	0.0006821
5	7	9	0.0006821
5	7	10	0.0006824
5	7	11	0.0006831

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.801598576
5	7	13	0.801598576
5	7	14	0.801598576
5	7	15	0.801598576
5	7	16	0.801598576
5	7	17	0.801598576
5	7	18	0.801598576
5	7	19	0.801598576
5	7	20	0.801598576
5	7	21	0.801598576
5	7	22	0.801598576
5	7	23	0.801598576
5	7	24	0.801598576
5	8	1	0.621739814
5	8	2	0.621739814
5	8	3	0.621739814
5	8	4	0.621739814
5	8	5	0.621739814
5	8	6	0.621739814
5	8	7	0.621739814
5	8	8	0.621739814
5	8	9	0.621739814
5	8	10	0.621739814
5	8	11	0.621739814
5	8	12	0.621739814
5	8	13	0.621739814
5	8	14	0.621739814
5	8	15	0.621739814
5	8	16	0.621739814
5	8	17	0.621739814
5	8	18	0.621739814
5	8	19	0.621739814
5	8	20	0.621739814
5	8	21	0.621739814
5	8	22	0.621739814
5	8	23	0.621739814
5	8	24	0.621739814
5	9	1	0.505050035
5	9	2	0.505050035
5	9	3	0.505050035
5	9	4	0.505050035
5	9	5	0.505050035
5	9	6	0.505049136
5	9	7	0.505050035
5	9	8	0.505050035
5	9	9	0.505050035
5	9	10	0.505050035
5	9	11	0.505050035
5	9	12	0.505050035
5	9	13	0.505050035
5	9	14	0.505050035
5	9	15	0.505050035
5	9	16	0.505050035
5	9	17	0.505050035
5	9	18	0.505050035
5	9	19	0.505050035
5	9	20	0.505050035
5	9	21	0.505050035
5	9	22	0.505050035

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.0006836
5	7	13	0.0006838
5	7	14	0.0006844
5	7	15	0.0006843
5	7	16	0.0006839
5	7	17	0.0006836
5	7	18	0.0006838
5	7	19	0.0006832
5	7	20	0.0006822
5	7	21	0.0006823
5	7	22	0.0006822
5	7	23	0.0006822
5	7	24	0.000682
5	8	1	0.0005786
5	8	2	0.0005786
5	8	3	0.0005786
5	8	4	0.0005786
5	8	5	0.0005785
5	8	6	0.0005785
5	8	7	0.0005786
5	8	8	0.0005788
5	8	9	0.0005788
5	8	10	0.000579
5	8	11	0.0005796
5	8	12	0.0005801
5	8	13	0.0005802
5	8	14	0.0005807
5	8	15	0.0005807
5	8	16	0.0005803
5	8	17	0.00058
5	8	18	0.0005802
5	8	19	0.0005797
5	8	20	0.0005789
5	8	21	0.000579
5	8	22	0.0005789
5	8	23	0.0005788
5	8	24	0.0005787
5	9	1	0.0004991
5	9	2	0.0004992
5	9	3	0.0004992
5	9	4	0.0004992
5	9	5	0.0004991
5	9	6	0.0004991
5	9	7	0.0004991
5	9	8	0.0004993
5	9	9	0.0004993
5	9	10	0.0004995
5	9	11	0.0005
5	9	12	0.0005004
5	9	13	0.0005005
5	9	14	0.000501
5	9	15	0.000501
5	9	16	0.0005006
5	9	17	0.0005004
5	9	18	0.0005006
5	9	19	0.0005001
5	9	20	0.0004994
5	9	21	0.0004995
5	9	22	0.0004994

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.505050035
5	9	24	0.505050035
5	10	1	0.414185684
5	10	2	0.414185684
5	10	3	0.414185684
5	10	4	0.414185684
5	10	5	0.414185684
5	10	6	0.414185684
5	10	7	0.414185684
5	10	8	0.414185684
5	10	9	0.414185684
5	10	10	0.414185684
5	10	11	0.414185684
5	10	12	0.414185684
5	10	13	0.414185684
5	10	14	0.414185684
5	10	15	0.414185684
5	10	16	0.414185684
5	10	17	0.414185684
5	10	18	0.414185684
5	10	19	0.414185684
5	10	20	0.414185684
5	10	21	0.414185684
5	10	22	0.414185684
5	10	23	0.414185684
5	10	24	0.414185684
5	11	1	0.340181652
5	11	2	0.340181652
5	11	3	0.340181652
5	11	4	0.340181652
5	11	5	0.340181652
5	11	6	0.340181652
5	11	7	0.340181652
5	11	8	0.340181652
5	11	9	0.340181652
5	11	10	0.340181652
5	11	11	0.340181652
5	11	12	0.340181652
5	11	13	0.340181652
5	11	14	0.340181652
5	11	15	0.340181652
5	11	16	0.340181652
5	11	17	0.340181652
5	11	18	0.340181652
5	11	19	0.340181652
5	11	20	0.340181652
5	11	21	0.340181652
5	11	22	0.340181652
5	11	23	0.340181652
5	11	24	0.340181652

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.0004993
5	9	24	0.0004992
5	10	1	0.000437
5	10	2	0.0004371
5	10	3	0.0004371
5	10	4	0.0004371
5	10	5	0.000437
5	10	6	0.000437
5	10	7	0.0004371
5	10	8	0.0004372
5	10	9	0.0004372
5	10	10	0.0004374
5	10	11	0.0004378
5	10	12	0.0004382
5	10	13	0.0004383
5	10	14	0.0004387
5	10	15	0.0004387
5	10	16	0.0004384
5	10	17	0.0004382
5	10	18	0.0004383
5	10	19	0.0004379
5	10	20	0.0004373
5	10	21	0.0004373
5	10	22	0.0004373
5	10	23	0.0004372
5	10	24	0.0004371
5	11	1	0.0003851
5	11	2	0.0003851
5	11	3	0.0003851
5	11	4	0.0003851
5	11	5	0.000385
5	11	6	0.000385
5	11	7	0.0003851
5	11	8	0.0003852
5	11	9	0.0003852
5	11	10	0.0003854
5	11	11	0.0003858
5	11	12	0.0003861
5	11	13	0.0003862
5	11	14	0.0003865
5	11	15	0.0003865
5	11	16	0.0003862
5	11	17	0.0003861
5	11	18	0.0003862
5	11	19	0.0003858
5	11	20	0.0003853
5	11	21	0.0003853
5	11	22	0.0003853
5	11	23	0.0003852
5	11	24	0.0003851

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0
1	0	2	0
1	0	3	0
1	0	4	0
1	0	5	0
1	0	6	0
1	0	7	0
1	0	8	0
1	0	9	0
1	0	10	0
1	0	11	0
1	0	12	0
1	0	13	0
1	0	14	0
1	0	15	0
1	0	16	0
1	0	17	0
1	0	18	0
1	0	19	0
1	0	20	0
1	0	21	0
1	0	22	0
1	0	23	0
1	0	24	0
5	1	1	0
5	1	2	0
5	1	3	0
5	1	4	0
5	1	5	0
5	1	6	0
5	1	7	0
5	1	8	0
5	1	9	0
5	1	10	0
5	1	11	0
5	1	12	0
5	1	13	0
5	1	14	0
5	1	15	0
5	1	16	0
5	1	17	0
5	1	18	0
5	1	19	0
5	1	20	0
5	1	21	0
5	1	22	0
5	1	23	0
5	1	24	0
5	7	1	0
5	7	2	0
5	7	3	0
5	7	4	0
5	7	5	0
5	7	6	0
5	7	7	0
5	7	8	0
5	7	9	0
5	7	10	0
5	7	11	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.0237526
1	0	2	0.0237526
1	0	3	0.0237526
1	0	4	0.0237526
1	0	5	0.0237526
1	0	6	0.0237526
1	0	7	0.0237526
1	0	8	0.0237526
1	0	9	0.0237526
1	0	10	0.0237526
1	0	11	0.0237526
1	0	12	0.0237526
1	0	13	0.0237526
1	0	14	0.0237526
1	0	15	0.0237526
1	0	16	0.0237526
1	0	17	0.0237526
1	0	18	0.0237526
1	0	19	0.0237526
1	0	20	0.0237526
1	0	21	0.0237526
1	0	22	0.0237526
1	0	23	0.0237526
1	0	24	0.0237526
5	1	1	0.0143637
5	1	2	0.0143637
5	1	3	0.0143637
5	1	4	0.0143637
5	1	5	0.0143637
5	1	6	0.0143637
5	1	7	0.0143637
5	1	8	0.0143637
5	1	9	0.0143637
5	1	10	0.0143637
5	1	11	0.0143637
5	1	12	0.0143637
5	1	13	0.0143637
5	1	14	0.0143637
5	1	15	0.0143637
5	1	16	0.0143637
5	1	17	0.0143637
5	1	18	0.0143637
5	1	19	0.0143637
5	1	20	0.0143637
5	1	21	0.0143637
5	1	22	0.0143637
5	1	23	0.0143637
5	1	24	0.0143637
5	7	1	0.0017048
5	7	2	0.0017048
5	7	3	0.0017048
5	7	4	0.0017048
5	7	5	0.0017048
5	7	6	0.0017048
5	7	7	0.0017048
5	7	8	0.0017048
5	7	9	0.0017048
5	7	10	0.0017048
5	7	11	0.0017048

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0
5	7	13	0
5	7	14	0
5	7	15	0
5	7	16	0
5	7	17	0
5	7	18	0
5	7	19	0
5	7	20	0
5	7	21	0
5	7	22	0
5	7	23	0
5	7	24	0
5	8	1	0
5	8	2	0
5	8	3	0
5	8	4	0
5	8	5	0
5	8	6	0
5	8	7	0
5	8	8	0
5	8	9	0
5	8	10	0
5	8	11	0
5	8	12	0
5	8	13	0
5	8	14	0
5	8	15	0
5	8	16	0
5	8	17	0
5	8	18	0
5	8	19	0
5	8	20	0
5	8	21	0
5	8	22	0
5	8	23	0
5	8	24	0
5	9	1	0
5	9	2	0
5	9	3	0
5	9	4	0
5	9	5	0
5	9	6	0
5	9	7	0
5	9	8	0
5	9	9	0
5	9	10	0
5	9	11	0
5	9	12	0
5	9	13	0
5	9	14	0
5	9	15	0
5	9	16	0
5	9	17	0
5	9	18	0
5	9	19	0
5	9	20	0
5	9	21	0
5	9	22	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.0017048
5	7	13	0.0017048
5	7	14	0.0017048
5	7	15	0.0017048
5	7	16	0.0017048
5	7	17	0.0017048
5	7	18	0.0017048
5	7	19	0.0017048
5	7	20	0.0017048
5	7	21	0.0017048
5	7	22	0.0017048
5	7	23	0.0017048
5	7	24	0.0017048
5	8	1	0.001496
5	8	2	0.001496
5	8	3	0.001496
5	8	4	0.001496
5	8	5	0.001496
5	8	6	0.001496
5	8	7	0.001496
5	8	8	0.001496
5	8	9	0.001496
5	8	10	0.001496
5	8	11	0.001496
5	8	12	0.001496
5	8	13	0.001496
5	8	14	0.001496
5	8	15	0.001496
5	8	16	0.001496
5	8	17	0.001496
5	8	18	0.001496
5	8	19	0.001496
5	8	20	0.001496
5	8	21	0.001496
5	8	22	0.001496
5	8	23	0.001496
5	8	24	0.001496
5	9	1	0.001247
5	9	2	0.001247
5	9	3	0.001247
5	9	4	0.001247
5	9	5	0.001247
5	9	6	0.001247
5	9	7	0.001247
5	9	8	0.001247
5	9	9	0.001247
5	9	10	0.001247
5	9	11	0.001247
5	9	12	0.001247
5	9	13	0.001247
5	9	14	0.001247
5	9	15	0.001247
5	9	16	0.001247
5	9	17	0.001247
5	9	18	0.001247
5	9	19	0.001247
5	9	20	0.001247
5	9	21	0.001247
5	9	22	0.001247

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0
5	9	24	0
5	10	1	0
5	10	2	0
5	10	3	0
5	10	4	0
5	10	5	0
5	10	6	0
5	10	7	0
5	10	8	0
5	10	9	0
5	10	10	0
5	10	11	0
5	10	12	0
5	10	13	0
5	10	14	0
5	10	15	0
5	10	16	0
5	10	17	0
5	10	18	0
5	10	19	0
5	10	20	0
5	10	21	0
5	10	22	0
5	10	23	0
5	10	24	0
5	11	1	0
5	11	2	0
5	11	3	0
5	11	4	0
5	11	5	0
5	11	6	0
5	11	7	0
5	11	8	0
5	11	9	0
5	11	10	0
5	11	11	0
5	11	12	0
5	11	13	0
5	11	14	0
5	11	15	0
5	11	16	0
5	11	17	0
5	11	18	0
5	11	19	0
5	11	20	0
5	11	21	0
5	11	22	0
5	11	23	0
5	11	24	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.001247
5	9	24	0.001247
5	10	1	0.0010522
5	10	2	0.0010522
5	10	3	0.0010522
5	10	4	0.0010522
5	10	5	0.0010522
5	10	6	0.0010522
5	10	7	0.0010522
5	10	8	0.0010522
5	10	9	0.0010522
5	10	10	0.0010522
5	10	11	0.0010522
5	10	12	0.0010522
5	10	13	0.0010522
5	10	14	0.0010522
5	10	15	0.0010522
5	10	16	0.0010522
5	10	17	0.0010522
5	10	18	0.0010522
5	10	19	0.0010522
5	10	20	0.0010522
5	10	21	0.0010522
5	10	22	0.0010522
5	10	23	0.0010522
5	10	24	0.0010522
5	11	1	0.0008857
5	11	2	0.0008857
5	11	3	0.0008857
5	11	4	0.0008857
5	11	5	0.0008857
5	11	6	0.0008857
5	11	7	0.0008857
5	11	8	0.0008857
5	11	9	0.0008857
5	11	10	0.0008857
5	11	11	0.0008857
5	11	12	0.0008857
5	11	13	0.0008857
5	11	14	0.0008857
5	11	15	0.0008857
5	11	16	0.0008857
5	11	17	0.0008857
5	11	18	0.0008857
5	11	19	0.0008857
5	11	20	0.0008857
5	11	21	0.0008857
5	11	22	0.0008857
5	11	23	0.0008857
5	11	24	0.0008857

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.0237767
1	0	2	0.0237767
1	0	3	0.0237767
1	0	4	0.0237767
1	0	5	0.0237767
1	0	6	0.0237767
1	0	7	0.0237767
1	0	8	0.0237767
1	0	9	0.0237767
1	0	10	0.0237767
1	0	11	0.0237767
1	0	12	0.0237767
1	0	13	0.0237767
1	0	14	0.0237767
1	0	15	0.0237767
1	0	16	0.0237767
1	0	17	0.0237767
1	0	18	0.0237767
1	0	19	0.0237767
1	0	20	0.0237767
1	0	21	0.0237767
1	0	22	0.0237767
1	0	23	0.0237767
1	0	24	0.0237767
5	1	1	0.0137663
5	1	2	0.0137663
5	1	3	0.0137663
5	1	4	0.0137663
5	1	5	0.0137663
5	1	6	0.0137663
5	1	7	0.0137663
5	1	8	0.0137663
5	1	9	0.0137663
5	1	10	0.0137663
5	1	11	0.0137663
5	1	12	0.0137663
5	1	13	0.0137663
5	1	14	0.0137663
5	1	15	0.0137663
5	1	16	0.0137663
5	1	17	0.0137663
5	1	18	0.0137663
5	1	19	0.0137663
5	1	20	0.0137663
5	1	21	0.0137663
5	1	22	0.0137663
5	1	23	0.0137663
5	1	24	0.0137663
5	7	1	0.0016095
5	7	2	0.0016095
5	7	3	0.0016095
5	7	4	0.0016095
5	7	5	0.0016095
5	7	6	0.0016095
5	7	7	0.0016095
5	7	8	0.0016095
5	7	9	0.0016095
5	7	10	0.0016095
5	7	11	0.0016095

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.000828604
1	0	2	0.000828604
1	0	3	0.000828604
1	0	4	0.000828604
1	0	5	0.000828604
1	0	6	0.000828604
1	0	7	0.000828604
1	0	8	0.000828604
1	0	9	0.000828604
1	0	10	0.000828604
1	0	11	0.000828604
1	0	12	0.000828604
1	0	13	0.000828604
1	0	14	0.000828604
1	0	15	0.000828604
1	0	16	0.000828604
1	0	17	0.000828604
1	0	18	0.000828604
1	0	19	0.000828604
1	0	20	0.000828604
1	0	21	0.000828604
1	0	22	0.000828604
1	0	23	0.000828604
1	0	24	0.000828604
5	1	1	0.000462407
5	1	2	0.000462407
5	1	3	0.000462407
5	1	4	0.000462407
5	1	5	0.000462407
5	1	6	0.000462407
5	1	7	0.000462407
5	1	8	0.000462407
5	1	9	0.000462407
5	1	10	0.000462407
5	1	11	0.000462407
5	1	12	0.000462407
5	1	13	0.000462407
5	1	14	0.000462407
5	1	15	0.000462407
5	1	16	0.000462407
5	1	17	0.000462407
5	1	18	0.000462407
5	1	19	0.000462407
5	1	20	0.000462407
5	1	21	0.000462407
5	1	22	0.000462407
5	1	23	0.000462407
5	1	24	0.000462407
5	7	1	5.46282E-05
5	7	2	5.46282E-05
5	7	3	5.46282E-05
5	7	4	5.46282E-05
5	7	5	5.46282E-05
5	7	6	5.46282E-05
5	7	7	5.46282E-05
5	7	8	5.46282E-05
5	7	9	5.46282E-05
5	7	10	5.46282E-05
5	7	11	5.46282E-05

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
5	7	12	0.0016095
5	7	13	0.0016095
5	7	14	0.0016095
5	7	15	0.0016095
5	7	16	0.0016095
5	7	17	0.0016095
5	7	18	0.0016095
5	7	19	0.0016095
5	7	20	0.0016095
5	7	21	0.0016095
5	7	22	0.0016095
5	7	23	0.0016095
5	7	24	0.0016095
5	8	1	0.0013842
5	8	2	0.0013842
5	8	3	0.0013842
5	8	4	0.0013842
5	8	5	0.0013842
5	8	6	0.0013842
5	8	7	0.0013842
5	8	8	0.0013842
5	8	9	0.0013842
5	8	10	0.0013842
5	8	11	0.0013842
5	8	12	0.0013842
5	8	13	0.0013842
5	8	14	0.0013842
5	8	15	0.0013842
5	8	16	0.0013842
5	8	17	0.0013842
5	8	18	0.0013842
5	8	19	0.0013842
5	8	20	0.0013842
5	8	21	0.0013842
5	8	22	0.0013842
5	8	23	0.0013842
5	8	24	0.0013842
5	9	1	0.0011464
5	9	2	0.0011464
5	9	3	0.0011464
5	9	4	0.0011464
5	9	5	0.0011464
5	9	6	0.0011464
5	9	7	0.0011464
5	9	8	0.0011464
5	9	9	0.0011464
5	9	10	0.0011464
5	9	11	0.0011464
5	9	12	0.0011464
5	9	13	0.0011464
5	9	14	0.0011464
5	9	15	0.0011464
5	9	16	0.0011464
5	9	17	0.0011464
5	9	18	0.0011464
5	9	19	0.0011464
5	9	20	0.0011464
5	9	21	0.0011464
5	9	22	0.0011464

PollutantID	27	Acrolein	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
5	7	12	5.46282E-05
5	7	13	5.46282E-05
5	7	14	5.46282E-05
5	7	15	5.46282E-05
5	7	16	5.46282E-05
5	7	17	5.46282E-05
5	7	18	5.46282E-05
5	7	19	5.46282E-05
5	7	20	5.46282E-05
5	7	21	5.46282E-05
5	7	22	5.46282E-05
5	7	23	5.46282E-05
5	7	24	5.46282E-05
5	8	1	4.1814E-05
5	8	2	4.1814E-05
5	8	3	4.1814E-05
5	8	4	4.1814E-05
5	8	5	4.1814E-05
5	8	6	4.1814E-05
5	8	7	4.1814E-05
5	8	8	4.1814E-05
5	8	9	4.1814E-05
5	8	10	4.1814E-05
5	8	11	4.1814E-05
5	8	12	4.1814E-05
5	8	13	4.1814E-05
5	8	14	4.1814E-05
5	8	15	4.1814E-05
5	8	16	4.1814E-05
5	8	17	4.1814E-05
5	8	18	4.1814E-05
5	8	19	4.1814E-05
5	8	20	4.1814E-05
5	8	21	4.1814E-05
5	8	22	4.1814E-05
5	8	23	4.1814E-05
5	8	24	4.1814E-05
5	9	1	3.39441E-05
5	9	2	3.39441E-05
5	9	3	3.39441E-05
5	9	4	3.39441E-05
5	9	5	3.39441E-05
5	9	6	3.39441E-05
5	9	7	3.39441E-05
5	9	8	3.39441E-05
5	9	9	3.39441E-05
5	9	10	3.39441E-05
5	9	11	3.39441E-05
5	9	12	3.39441E-05
5	9	13	3.39441E-05
5	9	14	3.39441E-05
5	9	15	3.39441E-05
5	9	16	3.39441E-05
5	9	17	3.39441E-05
5	9	18	3.39441E-05
5	9	19	3.39441E-05
5	9	20	3.39441E-05
5	9	21	3.39441E-05
5	9	22	3.39441E-05

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
5	9	23	0.0011464
5	9	24	0.0011464
5	10	1	0.0009601
5	10	2	0.0009601
5	10	3	0.0009601
5	10	4	0.0009601
5	10	5	0.0009601
5	10	6	0.0009601
5	10	7	0.0009601
5	10	8	0.0009601
5	10	9	0.0009601
5	10	10	0.0009601
5	10	11	0.0009601
5	10	12	0.0009601
5	10	13	0.0009601
5	10	14	0.0009601
5	10	15	0.0009601
5	10	16	0.0009601
5	10	17	0.0009601
5	10	18	0.0009601
5	10	19	0.0009601
5	10	20	0.0009601
5	10	21	0.0009601
5	10	22	0.0009601
5	10	23	0.0009601
5	10	24	0.0009601
5	11	1	0.0007995
5	11	2	0.0007995
5	11	3	0.0007995
5	11	4	0.0007995
5	11	5	0.0007995
5	11	6	0.0007995
5	11	7	0.0007995
5	11	8	0.0007995
5	11	9	0.0007995
5	11	10	0.0007995
5	11	11	0.0007995
5	11	12	0.0007995
5	11	13	0.0007995
5	11	14	0.0007995
5	11	15	0.0007995
5	11	16	0.0007995
5	11	17	0.0007995
5	11	18	0.0007995
5	11	19	0.0007995
5	11	20	0.0007995
5	11	21	0.0007995
5	11	22	0.0007995
5	11	23	0.0007995
5	11	24	0.0007995

PollutantID	27	Acrolein	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
5	9	23	3.39441E-05
5	9	24	3.39441E-05
5	10	1	2.7755E-05
5	10	2	2.7755E-05
5	10	3	2.7755E-05
5	10	4	2.7755E-05
5	10	5	2.7755E-05
5	10	6	2.7755E-05
5	10	7	2.7755E-05
5	10	8	2.7755E-05
5	10	9	2.7755E-05
5	10	10	2.7755E-05
5	10	11	2.7755E-05
5	10	12	2.7755E-05
5	10	13	2.7755E-05
5	10	14	2.7755E-05
5	10	15	2.7755E-05
5	10	16	2.7755E-05
5	10	17	2.7755E-05
5	10	18	2.7755E-05
5	10	19	2.7755E-05
5	10	20	2.7755E-05
5	10	21	2.7755E-05
5	10	22	2.7755E-05
5	10	23	2.7755E-05
5	10	24	2.7755E-05
5	11	1	2.22208E-05
5	11	2	2.22208E-05
5	11	3	2.22208E-05
5	11	4	2.22208E-05
5	11	5	2.22208E-05
5	11	6	2.22208E-05
5	11	7	2.22208E-05
5	11	8	2.22208E-05
5	11	9	2.22208E-05
5	11	10	2.22208E-05
5	11	11	2.22208E-05
5	11	12	2.22208E-05
5	11	13	2.22208E-05
5	11	14	2.22208E-05
5	11	15	2.22208E-05
5	11	16	2.22208E-05
5	11	17	2.22208E-05
5	11	18	2.22208E-05
5	11	19	2.22208E-05
5	11	20	2.22208E-05
5	11	21	2.22208E-05
5	11	22	2.22208E-05
5	11	23	2.22208E-05
5	11	24	2.22208E-05

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.013323816
1	0	2	0.013323816
1	0	3	0.013323816
1	0	4	0.013323816
1	0	5	0.013323816
1	0	6	0.013323816
1	0	7	0.013323816
1	0	8	0.013323816
1	0	9	0.013323816
1	0	10	0.013323816
1	0	11	0.013323816
1	0	12	0.013323816
1	0	13	0.013323816
1	0	14	0.013323816
1	0	15	0.013323816
1	0	16	0.013323816
1	0	17	0.013323816
1	0	18	0.013323816
1	0	19	0.013323816
1	0	20	0.013323816
1	0	21	0.013323816
1	0	22	0.013323816
1	0	23	0.013323816
1	0	24	0.013323816
5	1	1	0.00962282
5	1	2	0.00962282
5	1	3	0.00962282
5	1	4	0.00962282
5	1	5	0.00962282
5	1	6	0.00962282
5	1	7	0.00962282
5	1	8	0.00962282
5	1	9	0.00962282
5	1	10	0.00962282
5	1	11	0.00962282
5	1	12	0.00962282
5	1	13	0.00962282
5	1	14	0.00962282
5	1	15	0.00962282
5	1	16	0.00962282
5	1	17	0.00962282
5	1	18	0.00962282
5	1	19	0.00962282
5	1	20	0.00962282
5	1	21	0.00962282
5	1	22	0.00962282
5	1	23	0.00962282
5	1	24	0.00962282
5	7	1	0.002273855
5	7	2	0.002273855
5	7	3	0.002273855
5	7	4	0.002273855
5	7	5	0.002273855
5	7	6	0.002273855
5	7	7	0.002273855
5	7	8	0.002273855
5	7	9	0.002273855
5	7	10	0.002273855
5	7	11	0.002273855

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	2.89772E-06
1	0	2	2.89772E-06
1	0	3	2.89772E-06
1	0	4	2.89772E-06
1	0	5	2.89772E-06
1	0	6	2.89772E-06
1	0	7	2.89772E-06
1	0	8	2.89772E-06
1	0	9	2.89772E-06
1	0	10	2.89772E-06
1	0	11	2.89772E-06
1	0	12	2.89772E-06
1	0	13	2.89772E-06
1	0	14	2.89772E-06
1	0	15	2.89772E-06
1	0	16	2.89772E-06
1	0	17	2.89772E-06
1	0	18	2.89772E-06
1	0	19	2.89772E-06
1	0	20	2.89772E-06
1	0	21	2.89772E-06
1	0	22	2.89772E-06
1	0	23	2.89772E-06
1	0	24	2.89772E-06
5	1	1	3.07733E-06
5	1	2	3.07733E-06
5	1	3	3.07733E-06
5	1	4	3.07733E-06
5	1	5	3.07733E-06
5	1	6	3.07733E-06
5	1	7	3.07733E-06
5	1	8	3.07733E-06
5	1	9	3.07733E-06
5	1	10	3.07733E-06
5	1	11	3.07733E-06
5	1	12	3.07733E-06
5	1	13	3.07733E-06
5	1	14	3.07733E-06
5	1	15	3.07733E-06
5	1	16	3.07733E-06
5	1	17	3.07733E-06
5	1	18	3.07733E-06
5	1	19	3.07733E-06
5	1	20	3.07733E-06
5	1	21	3.07733E-06
5	1	22	3.07733E-06
5	1	23	3.07733E-06
5	1	24	3.07733E-06
5	7	1	6.14377E-07
5	7	2	6.14377E-07
5	7	3	6.14377E-07
5	7	4	6.14377E-07
5	7	5	6.14377E-07
5	7	6	6.14377E-07
5	7	7	6.14377E-07
5	7	8	6.14377E-07
5	7	9	6.14377E-07
5	7	10	6.14377E-07
5	7	11	6.14377E-07

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	0.002273855
5	7	13	0.002273855
5	7	14	0.002273855
5	7	15	0.002273855
5	7	16	0.002273855
5	7	17	0.002273855
5	7	18	0.002273855
5	7	19	0.002273855
5	7	20	0.002273855
5	7	21	0.002273855
5	7	22	0.002273855
5	7	23	0.002273855
5	7	24	0.002273855
5	8	1	0.00199528
5	8	2	0.00199528
5	8	3	0.00199528
5	8	4	0.00199528
5	8	5	0.00199528
5	8	6	0.00199528
5	8	7	0.00199528
5	8	8	0.00199528
5	8	9	0.00199528
5	8	10	0.00199528
5	8	11	0.00199528
5	8	12	0.00199528
5	8	13	0.00199528
5	8	14	0.00199528
5	8	15	0.00199528
5	8	16	0.00199528
5	8	17	0.00199528
5	8	18	0.00199528
5	8	19	0.00199528
5	8	20	0.00199528
5	8	21	0.00199528
5	8	22	0.00199528
5	8	23	0.00199528
5	8	24	0.00199528
5	9	1	0.00192649
5	9	2	0.00192649
5	9	3	0.00192649
5	9	4	0.00192649
5	9	5	0.00192649
5	9	6	0.00192649
5	9	7	0.00192649
5	9	8	0.00192649
5	9	9	0.00192649
5	9	10	0.00192649
5	9	11	0.00192649
5	9	12	0.00192649
5	9	13	0.00192649
5	9	14	0.00192649
5	9	15	0.00192649
5	9	16	0.00192649
5	9	17	0.00192649
5	9	18	0.00192649
5	9	19	0.00192649
5	9	20	0.00192649
5	9	21	0.00192649
5	9	22	0.00192649

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	12	6.14377E-07
5	7	13	6.14377E-07
5	7	14	6.14377E-07
5	7	15	6.14377E-07
5	7	16	6.14377E-07
5	7	17	6.14377E-07
5	7	18	6.14377E-07
5	7	19	6.14377E-07
5	7	20	6.14377E-07
5	7	21	6.14377E-07
5	7	22	6.14377E-07
5	7	23	6.14377E-07
5	7	24	6.14377E-07
5	8	1	5.38106E-07
5	8	2	5.38106E-07
5	8	3	5.38106E-07
5	8	4	5.38106E-07
5	8	5	5.38106E-07
5	8	6	5.38106E-07
5	8	7	5.38106E-07
5	8	8	5.38106E-07
5	8	9	5.38106E-07
5	8	10	5.38106E-07
5	8	11	5.38106E-07
5	8	12	5.38106E-07
5	8	13	5.38106E-07
5	8	14	5.38106E-07
5	8	15	5.38106E-07
5	8	16	5.38106E-07
5	8	17	5.38106E-07
5	8	18	5.38106E-07
5	8	19	5.38106E-07
5	8	20	5.38106E-07
5	8	21	5.38106E-07
5	8	22	5.38106E-07
5	8	23	5.38106E-07
5	8	24	5.38106E-07
5	9	1	5.14575E-07
5	9	2	5.14575E-07
5	9	3	5.14575E-07
5	9	4	5.14575E-07
5	9	5	5.14575E-07
5	9	6	5.14575E-07
5	9	7	5.14575E-07
5	9	8	5.14575E-07
5	9	9	5.14575E-07
5	9	10	5.14575E-07
5	9	11	5.14575E-07
5	9	12	5.14575E-07
5	9	13	5.14575E-07
5	9	14	5.14575E-07
5	9	15	5.14575E-07
5	9	16	5.14575E-07
5	9	17	5.14575E-07
5	9	18	5.14575E-07
5	9	19	5.14575E-07
5	9	20	5.14575E-07
5	9	21	5.14575E-07
5	9	22	5.14575E-07

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.00192649
5	9	24	0.00192649
5	10	1	0.001875181
5	10	2	0.001875181
5	10	3	0.001875181
5	10	4	0.001875181
5	10	5	0.001875181
5	10	6	0.001875181
5	10	7	0.001875181
5	10	8	0.001875181
5	10	9	0.001875181
5	10	10	0.001875181
5	10	11	0.001875181
5	10	12	0.001875181
5	10	13	0.001875181
5	10	14	0.001875181
5	10	15	0.001875181
5	10	16	0.001875181
5	10	17	0.001875181
5	10	18	0.001875181
5	10	19	0.001875181
5	10	20	0.001875181
5	10	21	0.001875181
5	10	22	0.001875181
5	10	23	0.001875181
5	10	24	0.001875181
5	11	1	0.001851435
5	11	2	0.001851435
5	11	3	0.001851435
5	11	4	0.001851435
5	11	5	0.001851435
5	11	6	0.001851435
5	11	7	0.001851435
5	11	8	0.001851435
5	11	9	0.001851435
5	11	10	0.001851435
5	11	11	0.001851435
5	11	12	0.001851435
5	11	13	0.001851435
5	11	14	0.001851435
5	11	15	0.001851435
5	11	16	0.001851435
5	11	17	0.001851435
5	11	18	0.001851435
5	11	19	0.001851435
5	11	20	0.001851435
5	11	21	0.001851435
5	11	22	0.001851435
5	11	23	0.001851435
5	11	24	0.001851435

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	5.14575E-07
5	9	24	5.14575E-07
5	10	1	4.96912E-07
5	10	2	4.96912E-07
5	10	3	4.96912E-07
5	10	4	4.96912E-07
5	10	5	4.96912E-07
5	10	6	4.96912E-07
5	10	7	4.96912E-07
5	10	8	4.96912E-07
5	10	9	4.96912E-07
5	10	10	4.96912E-07
5	10	11	4.96912E-07
5	10	12	4.96912E-07
5	10	13	4.96912E-07
5	10	14	4.96912E-07
5	10	15	4.96912E-07
5	10	16	4.96912E-07
5	10	17	4.96912E-07
5	10	18	4.96912E-07
5	10	19	4.96912E-07
5	10	20	4.96912E-07
5	10	21	4.96912E-07
5	10	22	4.96912E-07
5	10	23	4.96912E-07
5	10	24	4.96912E-07
5	11	1	4.87956E-07
5	11	2	4.87956E-07
5	11	3	4.87956E-07
5	11	4	4.87956E-07
5	11	5	4.87956E-07
5	11	6	4.87956E-07
5	11	7	4.87956E-07
5	11	8	4.87956E-07
5	11	9	4.87956E-07
5	11	10	4.87956E-07
5	11	11	4.87956E-07
5	11	12	4.87956E-07
5	11	13	4.87956E-07
5	11	14	4.87956E-07
5	11	15	4.87956E-07
5	11	16	4.87956E-07
5	11	17	4.87956E-07
5	11	18	4.87956E-07
5	11	19	4.87956E-07
5	11	20	4.87956E-07
5	11	21	4.87956E-07
5	11	22	4.87956E-07
5	11	23	4.87956E-07
5	11	24	4.87956E-07

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
1	0	1	0.0180073
1	0	2	0.0180073
1	0	3	0.0180073
1	0	4	0.0180073
1	0	5	0.0180073
1	0	6	0.0180073
1	0	7	0.0180073
1	0	8	0.0180073
1	0	9	0.0180073
1	0	10	0.0180073
1	0	11	0.0180073
1	0	12	0.0180073
1	0	13	0.0180073
1	0	14	0.0180073
1	0	15	0.0180073
1	0	16	0.0180073
1	0	17	0.0180073
1	0	18	0.0180073
1	0	19	0.0180073
1	0	20	0.0180073
1	0	21	0.0180073
1	0	22	0.0180073
1	0	23	0.0180073
1	0	24	0.0180073
5	1	1	0.6637282
5	1	2	0.6637282
5	1	3	0.6637282
5	1	4	0.6637282
5	1	5	0.6637282
5	1	6	0.6637282
5	1	7	0.6637282
5	1	8	0.6637282
5	1	9	0.6637282
5	1	10	0.6637282
5	1	11	0.6637282
5	1	12	0.6637282
5	1	13	0.6637282
5	1	14	0.6637282
5	1	15	0.6637282
5	1	16	0.6637282
5	1	17	0.6637282
5	1	18	0.6637282
5	1	19	0.6637282
5	1	20	0.6637282
5	1	21	0.6637282
5	1	22	0.6637282
5	1	23	0.6637282
5	1	24	0.6637282
5	7	1	0.1053415
5	7	2	0.1053415
5	7	3	0.1053415
5	7	4	0.1053415
5	7	5	0.1053415
5	7	6	0.1053415
5	7	7	0.1053415
5	7	8	0.1053415
5	7	9	0.1053415
5	7	10	0.1053415
5	7	11	0.1053415

PollutantID	9110	PM2.5	
RoadTypeI	AverageSpeedID	HourID	G/VKT TRK
1	0	1	0.016337
1	0	2	0.016337
1	0	3	0.016337
1	0	4	0.016337
1	0	5	0.016337
1	0	6	0.016337
1	0	7	0.016337
1	0	8	0.016337
1	0	9	0.016337
1	0	10	0.016337
1	0	11	0.016337
1	0	12	0.016337
1	0	13	0.016337
1	0	14	0.016337
1	0	15	0.016337
1	0	16	0.016337
1	0	17	0.016337
1	0	18	0.016337
1	0	19	0.016337
1	0	20	0.016337
1	0	21	0.016337
1	0	22	0.016337
1	0	23	0.016337
1	0	24	0.016337
5	1	1	0.0973483
5	1	2	0.0973483
5	1	3	0.0973483
5	1	4	0.0973483
5	1	5	0.0973483
5	1	6	0.0973483
5	1	7	0.0973483
5	1	8	0.0973483
5	1	9	0.0973483
5	1	10	0.0973483
5	1	11	0.0973483
5	1	12	0.0973483
5	1	13	0.0973483
5	1	14	0.0973483
5	1	15	0.0973483
5	1	16	0.0973483
5	1	17	0.0973483
5	1	18	0.0973483
5	1	19	0.0973483
5	1	20	0.0973483
5	1	21	0.0973483
5	1	22	0.0973483
5	1	23	0.0973483
5	1	24	0.0973483
5	7	1	0.0173844
5	7	2	0.0173844
5	7	3	0.0173844
5	7	4	0.0173844
5	7	5	0.0173844
5	7	6	0.0173844
5	7	7	0.0173844
5	7	8	0.0173844
5	7	9	0.0173844
5	7	10	0.0173844
5	7	11	0.0173844

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK
5	7	12	0.1053415
5	7	13	0.1053415
5	7	14	0.1053415
5	7	15	0.1053415
5	7	16	0.1053415
5	7	17	0.1053415
5	7	18	0.1053415
5	7	19	0.1053415
5	7	20	0.1053415
5	7	21	0.1053415
5	7	22	0.1053415
5	7	23	0.1053415
5	7	24	0.1053415
5	8	1	0.0817782
5	8	2	0.0817782
5	8	3	0.0817782
5	8	4	0.0817782
5	8	5	0.0817782
5	8	6	0.0817782
5	8	7	0.0817782
5	8	8	0.0817782
5	8	9	0.0817782
5	8	10	0.0817782
5	8	11	0.0817782
5	8	12	0.0817782
5	8	13	0.0817782
5	8	14	0.0817782
5	8	15	0.0817782
5	8	16	0.0817782
5	8	17	0.0817782
5	8	18	0.0817782
5	8	19	0.0817782
5	8	20	0.0817782
5	8	21	0.0817782
5	8	22	0.0817782
5	8	23	0.0817782
5	8	24	0.0817782
5	9	1	0.0617927
5	9	2	0.0617927
5	9	3	0.0617927
5	9	4	0.0617927
5	9	5	0.0617927
5	9	6	0.0617927
5	9	7	0.0617927
5	9	8	0.0617927
5	9	9	0.0617927
5	9	10	0.0617927
5	9	11	0.0617927
5	9	12	0.0617927
5	9	13	0.0617927
5	9	14	0.0617927
5	9	15	0.0617927
5	9	16	0.0617927
5	9	17	0.0617927
5	9	18	0.0617927
5	9	19	0.0617927
5	9	20	0.0617927
5	9	21	0.0617927
5	9	22	0.0617927

PollutantID	9110	PM2.5	
RoadTypeI	AverageSpeedID	HourID	G/VKT TRK
5	7	12	0.0173844
5	7	13	0.0173844
5	7	14	0.0173844
5	7	15	0.0173844
5	7	16	0.0173844
5	7	17	0.0173844
5	7	18	0.0173844
5	7	19	0.0173844
5	7	20	0.0173844
5	7	21	0.0173844
5	7	22	0.0173844
5	7	23	0.0173844
5	7	24	0.0173844
5	8	1	0.013512
5	8	2	0.013512
5	8	3	0.013512
5	8	4	0.013512
5	8	5	0.013512
5	8	6	0.013512
5	8	7	0.013512
5	8	8	0.013512
5	8	9	0.013512
5	8	10	0.013512
5	8	11	0.013512
5	8	12	0.013512
5	8	13	0.013512
5	8	14	0.013512
5	8	15	0.013512
5	8	16	0.013512
5	8	17	0.013512
5	8	18	0.013512
5	8	19	0.013512
5	8	20	0.013512
5	8	21	0.013512
5	8	22	0.013512
5	8	23	0.013512
5	8	24	0.013512
5	9	1	0.010686
5	9	2	0.010686
5	9	3	0.010686
5	9	4	0.010686
5	9	5	0.010686
5	9	6	0.010686
5	9	7	0.010686
5	9	8	0.010686
5	9	9	0.010686
5	9	10	0.010686
5	9	11	0.010686
5	9	12	0.010686
5	9	13	0.010686
5	9	14	0.010686
5	9	15	0.010686
5	9	16	0.010686
5	9	17	0.010686
5	9	18	0.010686
5	9	19	0.010686
5	9	20	0.010686
5	9	21	0.010686
5	9	22	0.010686

TRK Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	23	0.0617927
5	9	24	0.0617927
5	10	1	0.0462158
5	10	2	0.0462158
5	10	3	0.0462158
5	10	4	0.0462158
5	10	5	0.0462158
5	10	6	0.0462158
5	10	7	0.0462158
5	10	8	0.0462158
5	10	9	0.0462158
5	10	10	0.0462158
5	10	11	0.0462158
5	10	12	0.0462158
5	10	13	0.0462158
5	10	14	0.0462158
5	10	15	0.0462158
5	10	16	0.0462158
5	10	17	0.0462158
5	10	18	0.0462158
5	10	19	0.0462158
5	10	20	0.0462158
5	10	21	0.0462158
5	10	22	0.0462158
5	10	23	0.0462158
5	10	24	0.0462158
5	11	1	0.0344223
5	11	2	0.0344223
5	11	3	0.0344223
5	11	4	0.0344223
5	11	5	0.0344223
5	11	6	0.0344223
5	11	7	0.0344223
5	11	8	0.0344223
5	11	9	0.0344223
5	11	10	0.0344223
5	11	11	0.0344223
5	11	12	0.0344223
5	11	13	0.0344223
5	11	14	0.0344223
5	11	15	0.0344223
5	11	16	0.0344223
5	11	17	0.0344223
5	11	18	0.0344223
5	11	19	0.0344223
5	11	20	0.0344223
5	11	21	0.0344223
5	11	22	0.0344223
5	11	23	0.0344223
5	11	24	0.0344223

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeI	AverageSpeedID	HourID	TRK
5	9	23	0.010686
5	9	24	0.010686
5	10	1	0.0084853
5	10	2	0.0084853
5	10	3	0.0084853
5	10	4	0.0084853
5	10	5	0.0084853
5	10	6	0.0084853
5	10	7	0.0084853
5	10	8	0.0084853
5	10	9	0.0084853
5	10	10	0.0084853
5	10	11	0.0084853
5	10	12	0.0084853
5	10	13	0.0084853
5	10	14	0.0084853
5	10	15	0.0084853
5	10	16	0.0084853
5	10	17	0.0084853
5	10	18	0.0084853
5	10	19	0.0084853
5	10	20	0.0084853
5	10	21	0.0084853
5	10	22	0.0084853
5	10	23	0.0084853
5	10	24	0.0084853
5	11	1	0.0068416
5	11	2	0.0068416
5	11	3	0.0068416
5	11	4	0.0068416
5	11	5	0.0068416
5	11	6	0.0068416
5	11	7	0.0068416
5	11	8	0.0068416
5	11	9	0.0068416
5	11	10	0.0068416
5	11	11	0.0068416
5	11	12	0.0068416
5	11	13	0.0068416
5	11	14	0.0068416
5	11	15	0.0068416
5	11	16	0.0068416
5	11	17	0.0068416
5	11	18	0.0068416
5	11	19	0.0068416
5	11	20	0.0068416
5	11	21	0.0068416
5	11	22	0.0068416
5	11	23	0.0068416
5	11	24	0.0068416

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	4274.92
1	0	2	4274.92
1	0	3	4274.92
1	0	4	4274.92
1	0	5	4274.92
1	0	6	4274.92
1	0	7	4274.92
1	0	8	4274.92
1	0	9	4274.92
1	0	10	4274.92
1	0	11	4274.92
1	0	12	4274.92
1	0	13	4274.92
1	0	14	4274.92
1	0	15	4274.92
1	0	16	4274.92
1	0	17	4274.92
1	0	18	4274.92
1	0	19	4274.92
1	0	20	4274.92
1	0	21	4274.92
1	0	22	4274.92
1	0	23	4274.92
1	0	24	4274.92
5	1	1	3160.04
5	1	2	3160.04
5	1	3	3160.04
5	1	4	3160.04
5	1	5	3160.04
5	1	6	3160.04
5	1	7	3160.04
5	1	8	3160.04
5	1	9	3160.04
5	1	10	3160.04
5	1	11	3160.04
5	1	12	3160.04
5	1	13	3160.04
5	1	14	3160.04
5	1	15	3160.04
5	1	16	3160.04
5	1	17	3160.04
5	1	18	3160.04
5	1	19	3160.04
5	1	20	3160.04
5	1	21	3160.04
5	1	22	3160.04
5	1	23	3160.04
5	1	24	3160.04
5	7	1	871.007
5	7	2	871.007
5	7	3	871.007
5	7	4	871.007
5	7	5	871.007
5	7	6	871.007
5	7	7	871.007

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.115868
1	0	2	0.115868
1	0	3	0.115868
1	0	4	0.115868
1	0	5	0.115868
1	0	6	0.115868
1	0	7	0.115868
1	0	8	0.115868
1	0	9	0.115868
1	0	10	0.115868
1	0	11	0.115868
1	0	12	0.115868
1	0	13	0.115868
1	0	14	0.115868
1	0	15	0.115868
1	0	16	0.115868
1	0	17	0.115868
1	0	18	0.115868
1	0	19	0.115868
1	0	20	0.115868
1	0	21	0.115868
1	0	22	0.115868
1	0	23	0.115868
1	0	24	0.115868
5	1	1	0.0463475
5	1	2	0.0463475
5	1	3	0.0463475
5	1	4	0.0463475
5	1	5	0.0463475
5	1	6	0.0463475
5	1	7	0.0463475
5	1	8	0.0463475
5	1	9	0.0463475
5	1	10	0.0463475
5	1	11	0.0463475
5	1	12	0.0463475
5	1	13	0.0463475
5	1	14	0.0463475
5	1	15	0.0463475
5	1	16	0.0463475
5	1	17	0.0463475
5	1	18	0.0463475
5	1	19	0.0463475
5	1	20	0.0463475
5	1	21	0.0463475
5	1	22	0.0463475
5	1	23	0.0463475
5	1	24	0.0463475
5	7	1	0.0038623
5	7	2	0.0038623
5	7	3	0.0038623
5	7	4	0.0038623
5	7	5	0.0038623
5	7	6	0.0038623
5	7	7	0.0038623

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
5	7	8	871.007
5	7	9	871.007
5	7	10	871.007
5	7	11	871.007
5	7	12	871.007
5	7	13	871.007
5	7	14	871.007
5	7	15	871.007
5	7	16	871.007
5	7	17	871.007
5	7	18	871.007
5	7	19	871.007
5	7	20	871.007
5	7	21	871.007
5	7	22	871.007
5	7	23	871.007
5	7	24	871.007
5	8	1	823.491
5	8	2	823.491
5	8	3	823.491
5	8	4	823.491
5	8	5	823.491
5	8	6	823.491
5	8	7	823.491
5	8	8	823.491
5	8	9	823.491
5	8	10	823.491
5	8	11	823.491
5	8	12	823.491
5	8	13	823.491
5	8	14	823.491
5	8	15	823.491
5	8	16	823.491
5	8	17	823.491
5	8	18	823.491
5	8	19	823.491
5	8	20	823.491
5	8	21	823.491
5	8	22	823.491
5	8	23	823.491
5	8	24	823.491
5	9	1	787.849
5	9	2	787.849
5	9	3	787.849
5	9	4	787.849
5	9	5	787.849
5	9	6	787.849
5	9	7	787.849
5	9	8	787.849
5	9	9	787.849
5	9	10	787.849
5	9	11	787.849
5	9	12	787.849
5	9	13	787.849
5	9	14	787.849
5	9	15	787.849
5	9	16	787.849

PollutantID	6	Nitrous Oxide (N2O)	
5	7	8	0.0038623
5	7	9	0.0038623
5	7	10	0.0038623
5	7	11	0.0038623
5	7	12	0.0038623
5	7	13	0.0038623
5	7	14	0.0038623
5	7	15	0.0038623
5	7	16	0.0038623
5	7	17	0.0038623
5	7	18	0.0038623
5	7	19	0.0038623
5	7	20	0.0038623
5	7	21	0.0038623
5	7	22	0.0038623
5	7	23	0.0038623
5	7	24	0.0038623
5	8	1	0.0033105
5	8	2	0.0033105
5	8	3	0.0033105
5	8	4	0.0033105
5	8	5	0.0033105
5	8	6	0.0033105
5	8	7	0.0033105
5	8	8	0.0033105
5	8	9	0.0033105
5	8	10	0.0033105
5	8	11	0.0033105
5	8	12	0.0033105
5	8	13	0.0033105
5	8	14	0.0033105
5	8	15	0.0033105
5	8	16	0.0033105
5	8	17	0.0033105
5	8	18	0.0033105
5	8	19	0.0033105
5	8	20	0.0033105
5	8	21	0.0033105
5	8	22	0.0033105
5	8	23	0.0033105
5	8	24	0.0033105
5	9	1	0.0028967
5	9	2	0.0028967
5	9	3	0.0028967
5	9	4	0.0028967
5	9	5	0.0028967
5	9	6	0.0028967
5	9	7	0.0028967
5	9	8	0.0028967
5	9	9	0.0028967
5	9	10	0.0028967
5	9	11	0.0028967
5	9	12	0.0028967
5	9	13	0.0028967
5	9	14	0.0028967
5	9	15	0.0028967
5	9	16	0.0028967

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	90	Atmospheric CO2	
5	9	17	787.849
5	9	18	787.849
5	9	19	787.849
5	9	20	787.849
5	9	21	787.849
5	9	22	787.849
5	9	23	787.849
5	9	24	787.849
5	10	1	760.136
5	10	2	760.136
5	10	3	760.136
5	10	4	760.136
5	10	5	760.136
5	10	6	760.136
5	10	7	760.136
5	10	8	760.136
5	10	9	760.136
5	10	10	760.136
5	10	11	760.136
5	10	12	760.136
5	10	13	760.136
5	10	14	760.136
5	10	15	760.136
5	10	16	760.136
5	10	17	760.136
5	10	18	760.136
5	10	19	760.136
5	10	20	760.136
5	10	21	760.136
5	10	22	760.136
5	10	23	760.136
5	10	24	760.136
5	11	1	737.959
5	11	2	737.959
5	11	3	737.959
5	11	4	737.959
5	11	5	737.959
5	11	6	737.959
5	11	7	737.959
5	11	8	737.959
5	11	9	737.959
5	11	10	737.959
5	11	11	737.959
5	11	12	737.959
5	11	13	737.959
5	11	14	737.959
5	11	15	737.959
5	11	16	737.959
5	11	17	737.959
5	11	18	737.959
5	11	19	737.959
5	11	20	737.959
5	11	21	737.959
5	11	22	737.959
5	11	23	737.959
5	11	24	737.959

PollutantID	6	Nitrous Oxide (N2O)	
5	9	17	0.0028967
5	9	18	0.0028967
5	9	19	0.0028967
5	9	20	0.0028967
5	9	21	0.0028967
5	9	22	0.0028967
5	9	23	0.0028967
5	9	24	0.0028967
5	10	1	0.0025749
5	10	2	0.0025749
5	10	3	0.0025749
5	10	4	0.0025749
5	10	5	0.0025749
5	10	6	0.0025749
5	10	7	0.0025749
5	10	8	0.0025749
5	10	9	0.0025749
5	10	10	0.0025749
5	10	11	0.0025749
5	10	12	0.0025749
5	10	13	0.0025749
5	10	14	0.0025749
5	10	15	0.0025749
5	10	16	0.0025749
5	10	17	0.0025749
5	10	18	0.0025749
5	10	19	0.0025749
5	10	20	0.0025749
5	10	21	0.0025749
5	10	22	0.0025749
5	10	23	0.0025749
5	10	24	0.0025749
5	11	1	0.0023174
5	11	2	0.0023174
5	11	3	0.0023174
5	11	4	0.0023174
5	11	5	0.0023174
5	11	6	0.0023174
5	11	7	0.0023174
5	11	8	0.0023174
5	11	9	0.0023174
5	11	10	0.0023174
5	11	11	0.0023174
5	11	12	0.0023174
5	11	13	0.0023174
5	11	14	0.0023174
5	11	15	0.0023174
5	11	16	0.0023174
5	11	17	0.0023174
5	11	18	0.0023174
5	11	19	0.0023174
5	11	20	0.0023174
5	11	21	0.0023174
5	11	22	0.0023174
5	11	23	0.0023174
5	11	24	0.0023174

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	12.9904
1	0	2	12.9904
1	0	3	12.9904
1	0	4	12.9904
1	0	5	12.9904
1	0	6	12.9904
1	0	7	12.9904
1	0	8	12.9904
1	0	9	12.9904
1	0	10	12.9904
1	0	11	12.9904
1	0	12	12.9904
1	0	13	12.9904
1	0	14	12.9904
1	0	15	12.9904
1	0	16	12.9904
1	0	17	12.9904
1	0	18	12.9904
1	0	19	12.9904
1	0	20	12.9904
1	0	21	12.9904
1	0	22	12.9904
1	0	23	12.9904
1	0	24	12.9904
5	1	1	7.40422
5	1	2	7.40422
5	1	3	7.40422
5	1	4	7.40422
5	1	5	7.40422
5	1	6	7.40422
5	1	7	7.40422
5	1	8	7.40422
5	1	9	7.40422
5	1	10	7.40422
5	1	11	7.40422
5	1	12	7.40422
5	1	13	7.40422
5	1	14	7.40422
5	1	15	7.40422
5	1	16	7.40422
5	1	17	7.40422
5	1	18	7.40422
5	1	19	7.40422
5	1	20	7.40422
5	1	21	7.40422
5	1	22	7.40422
5	1	23	7.40422
5	1	24	7.40422
5	7	1	0.87517
5	7	2	0.87517
5	7	3	0.87517
5	7	4	0.87517
5	7	5	0.87517
5	7	6	0.87517
5	7	7	0.87517

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	14.7738
1	0	2	14.7738
1	0	3	14.7738
1	0	4	14.7738
1	0	5	14.7738
1	0	6	14.7738
1	0	7	14.7738
1	0	8	14.7738
1	0	9	14.7738
1	0	10	14.7738
1	0	11	14.7738
1	0	12	14.7738
1	0	13	14.7738
1	0	14	14.7738
1	0	15	14.7738
1	0	16	14.7738
1	0	17	14.7738
1	0	18	14.7738
1	0	19	14.7738
1	0	20	14.7738
1	0	21	14.7738
1	0	22	14.7738
1	0	23	14.7738
1	0	24	14.7738
5	1	1	13.9275
5	1	2	13.9275
5	1	3	13.9275
5	1	4	13.9275
5	1	5	13.9275
5	1	6	13.9275
5	1	7	13.9275
5	1	8	13.9275
5	1	9	13.9275
5	1	10	13.9275
5	1	11	13.9275
5	1	12	13.9275
5	1	13	13.9275
5	1	14	13.9275
5	1	15	13.9275
5	1	16	13.9275
5	1	17	13.9275
5	1	18	13.9275
5	1	19	13.9275
5	1	20	13.9275
5	1	21	13.9275
5	1	22	13.9275
5	1	23	13.9275
5	1	24	13.9275
5	7	1	3.45056
5	7	2	3.45056
5	7	3	3.45056
5	7	4	3.45056
5	7	5	3.45056
5	7	6	3.45056
5	7	7	3.45056

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
5	7	8	0.87517
5	7	9	0.87517
5	7	10	0.87517
5	7	11	0.87517
5	7	12	0.87517
5	7	13	0.87517
5	7	14	0.87517
5	7	15	0.87517
5	7	16	0.87517
5	7	17	0.87517
5	7	18	0.87517
5	7	19	0.87517
5	7	20	0.87517
5	7	21	0.87517
5	7	22	0.87517
5	7	23	0.87517
5	7	24	0.87517
5	8	1	0.735421
5	8	2	0.735421
5	8	3	0.735421
5	8	4	0.735421
5	8	5	0.735421
5	8	6	0.735421
5	8	7	0.735421
5	8	8	0.735421
5	8	9	0.735421
5	8	10	0.735421
5	8	11	0.735421
5	8	12	0.735421
5	8	13	0.735421
5	8	14	0.735421
5	8	15	0.735421
5	8	16	0.735421
5	8	17	0.735421
5	8	18	0.735421
5	8	19	0.735421
5	8	20	0.735421
5	8	21	0.735421
5	8	22	0.735421
5	8	23	0.735421
5	8	24	0.735421
5	9	1	0.630612
5	9	2	0.630612
5	9	3	0.630612
5	9	4	0.630612
5	9	5	0.630612
5	9	6	0.630612
5	9	7	0.630612
5	9	8	0.630612
5	9	9	0.630612
5	9	10	0.630612
5	9	11	0.630612
5	9	12	0.630612
5	9	13	0.630612
5	9	14	0.630612
5	9	15	0.630612
5	9	16	0.630612

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
5	7	8	3.45056
5	7	9	3.45056
5	7	10	3.45056
5	7	11	3.45056
5	7	12	3.45056
5	7	13	3.45056
5	7	14	3.45056
5	7	15	3.45056
5	7	16	3.45056
5	7	17	3.45056
5	7	18	3.45056
5	7	19	3.45056
5	7	20	3.45056
5	7	21	3.45056
5	7	22	3.45056
5	7	23	3.45056
5	7	24	3.45056
5	8	1	3.47022
5	8	2	3.47022
5	8	3	3.47022
5	8	4	3.47022
5	8	5	3.47022
5	8	6	3.47022
5	8	7	3.47022
5	8	8	3.47022
5	8	9	3.47022
5	8	10	3.47022
5	8	11	3.47022
5	8	12	3.47022
5	8	13	3.47022
5	8	14	3.47022
5	8	15	3.47022
5	8	16	3.47022
5	8	17	3.47022
5	8	18	3.47022
5	8	19	3.47022
5	8	20	3.47022
5	8	21	3.47022
5	8	22	3.47022
5	8	23	3.47022
5	8	24	3.47022
5	9	1	3.48497
5	9	2	3.48497
5	9	3	3.48497
5	9	4	3.48497
5	9	5	3.48497
5	9	6	3.48497
5	9	7	3.48497
5	9	8	3.48497
5	9	9	3.48497
5	9	10	3.48497
5	9	11	3.48497
5	9	12	3.48497
5	9	13	3.48497
5	9	14	3.48497
5	9	15	3.48497
5	9	16	3.48497

BUS Travel Emission Rate Calculation: GHG (2041)

PollutantID	5	Methane (CH4)	
5	9	17	0.630612
5	9	18	0.630612
5	9	19	0.630612
5	9	20	0.630612
5	9	21	0.630612
5	9	22	0.630612
5	9	23	0.630612
5	9	24	0.630612
5	10	1	0.549095
5	10	2	0.549095
5	10	3	0.549095
5	10	4	0.549095
5	10	5	0.549095
5	10	6	0.549095
5	10	7	0.549095
5	10	8	0.549094
5	10	9	0.549095
5	10	10	0.549095
5	10	11	0.549095
5	10	12	0.549095
5	10	13	0.549095
5	10	14	0.549095
5	10	15	0.549095
5	10	16	0.549095
5	10	17	0.549095
5	10	18	0.549095
5	10	19	0.549095
5	10	20	0.549095
5	10	21	0.549095
5	10	22	0.549095
5	10	23	0.549095
5	10	24	0.549095
5	11	1	0.48388
5	11	2	0.48388
5	11	3	0.483879
5	11	4	0.48388
5	11	5	0.48388
5	11	6	0.48388
5	11	7	0.48388
5	11	8	0.48388
5	11	9	0.48388
5	11	10	0.48388
5	11	11	0.48388
5	11	12	0.48388
5	11	13	0.48388
5	11	14	0.48388
5	11	15	0.48388
5	11	16	0.48388
5	11	17	0.48388
5	11	18	0.48388
5	11	19	0.48388
5	11	20	0.48388
5	11	21	0.48388
5	11	22	0.48388
5	11	23	0.48388
5	11	24	0.48388

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	2	Carbon monoxide (CO)	
5	9	17	3.48497
5	9	18	3.48497
5	9	19	3.48497
5	9	20	3.48497
5	9	21	3.48497
5	9	22	3.48497
5	9	23	3.48497
5	9	24	3.48497
5	10	1	3.49644
5	10	2	3.49644
5	10	3	3.49644
5	10	4	3.49644
5	10	5	3.49644
5	10	6	3.49644
5	10	7	3.49644
5	10	8	3.49644
5	10	9	3.49644
5	10	10	3.49644
5	10	11	3.49644
5	10	12	3.49644
5	10	13	3.49644
5	10	14	3.49644
5	10	15	3.49644
5	10	16	3.49644
5	10	17	3.49644
5	10	18	3.49644
5	10	19	3.49644
5	10	20	3.49644
5	10	21	3.49644
5	10	22	3.49644
5	10	23	3.49644
5	10	24	3.49644
5	11	1	3.50561
5	11	2	3.50561
5	11	3	3.50561
5	11	4	3.50561
5	11	5	3.50561
5	11	6	3.50561
5	11	7	3.50561
5	11	8	3.50561
5	11	9	3.50561
5	11	10	3.50561
5	11	11	3.50561
5	11	12	3.50561
5	11	13	3.50561
5	11	14	3.50561
5	11	15	3.50561
5	11	16	3.50561
5	11	17	3.50561
5	11	18	3.50561
5	11	19	3.50561
5	11	20	3.50561
5	11	21	3.50561
5	11	22	3.50561
5	11	23	3.50561
5	11	24	3.50561

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	23.5633
1	0	2	23.5633
1	0	3	23.5633
1	0	4	23.5633
1	0	5	23.5633
1	0	6	23.5633
1	0	7	23.5633
1	0	8	23.5633
1	0	9	23.5633
1	0	10	23.5633
1	0	11	23.5633
1	0	12	23.5633
1	0	13	23.5633
1	0	14	23.5633
1	0	15	23.5633
1	0	16	23.5633
1	0	17	23.5633
1	0	18	23.5633
1	0	19	23.5633
1	0	20	23.5633
1	0	21	23.5633
1	0	22	23.5633
1	0	23	23.5633
1	0	24	23.5633
5	1	1	13.867
5	1	2	13.867
5	1	3	13.867
5	1	4	13.867
5	1	5	13.867
5	1	6	13.867
5	1	7	13.867
5	1	8	13.867
5	1	9	13.867
5	1	10	13.867
5	1	11	13.867
5	1	12	13.867
5	1	13	13.867
5	1	14	13.867
5	1	15	13.867
5	1	16	13.867
5	1	17	13.867
5	1	18	13.867
5	1	19	13.867
5	1	20	13.867
5	1	21	13.867
5	1	22	13.867
5	1	23	13.867
5	1	24	13.867
5	7	1	1.61359
5	7	2	1.61359
5	7	3	1.61359
5	7	4	1.61359
5	7	5	1.61359
5	7	6	1.61359
5	7	7	1.61359

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.005792
1	0	2	0.005792
1	0	3	0.005792
1	0	4	0.005792
1	0	5	0.005792
1	0	6	0.005792
1	0	7	0.005792
1	0	8	0.005792
1	0	9	0.005792
1	0	10	0.005792
1	0	11	0.005792
1	0	12	0.005792
1	0	13	0.005792
1	0	14	0.005792
1	0	15	0.005792
1	0	16	0.005792
1	0	17	0.005792
1	0	18	0.005792
1	0	19	0.005792
1	0	20	0.005792
1	0	21	0.005792
1	0	22	0.005792
1	0	23	0.005792
1	0	24	0.005792
5	1	1	0.006022
5	1	2	0.006023
5	1	3	0.006023
5	1	4	0.006023
5	1	5	0.006022
5	1	6	0.006022
5	1	7	0.006023
5	1	8	0.006025
5	1	9	0.006025
5	1	10	0.006028
5	1	11	0.006035
5	1	12	0.006039
5	1	13	0.00604
5	1	14	0.006045
5	1	15	0.006045
5	1	16	0.00604
5	1	17	0.006045
5	1	18	0.006051
5	1	19	0.006054
5	1	20	0.006051
5	1	21	0.00605
5	1	22	0.006052
5	1	23	0.00605
5	1	24	0.006023
5	7	1	0.000962
5	7	2	0.000962
5	7	3	0.000962
5	7	4	0.000962
5	7	5	0.000962
5	7	6	0.000962
5	7	7	0.000962

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	3	Oxides of Nitrogen (NOx)	
5	7	8	1.61359
5	7	9	1.61359
5	7	10	1.61359
5	7	11	1.61359
5	7	12	1.61359
5	7	13	1.61359
5	7	14	1.61359
5	7	15	1.61359
5	7	16	1.61359
5	7	17	1.61359
5	7	18	1.61359
5	7	19	1.61359
5	7	20	1.61359
5	7	21	1.61359
5	7	22	1.61359
5	7	23	1.61359
5	7	24	1.61359
5	8	1	1.30592
5	8	2	1.30592
5	8	3	1.30592
5	8	4	1.30592
5	8	5	1.30592
5	8	6	1.30592
5	8	7	1.30592
5	8	8	1.30592
5	8	9	1.30592
5	8	10	1.30592
5	8	11	1.30592
5	8	12	1.30592
5	8	13	1.30592
5	8	14	1.30592
5	8	15	1.30592
5	8	16	1.30592
5	8	17	1.30592
5	8	18	1.30592
5	8	19	1.30592
5	8	20	1.30592
5	8	21	1.30592
5	8	22	1.30592
5	8	23	1.30592
5	8	24	1.30592
5	9	1	1.07518
5	9	2	1.07518
5	9	3	1.07518
5	9	4	1.07518
5	9	5	1.07518
5	9	6	1.07518
5	9	7	1.07518
5	9	8	1.07518
5	9	9	1.07518
5	9	10	1.07518
5	9	11	1.07518
5	9	12	1.07518
5	9	13	1.07518
5	9	14	1.07518
5	9	15	1.07518
5	9	16	1.07518

PollutantID	20	Benzene	
5	7	8	0.000962
5	7	9	0.000962
5	7	10	0.000962
5	7	11	0.000963
5	7	12	0.000963
5	7	13	0.000963
5	7	14	0.000964
5	7	15	0.000964
5	7	16	0.000963
5	7	17	0.000964
5	7	18	0.000964
5	7	19	0.000964
5	7	20	0.000964
5	7	21	0.000964
5	7	22	0.000964
5	7	23	0.000964
5	7	24	0.000962
5	8	1	0.000895
5	8	2	0.000895
5	8	3	0.000895
5	8	4	0.000895
5	8	5	0.000895
5	8	6	0.000895
5	8	7	0.000895
5	8	8	0.000895
5	8	9	0.000895
5	8	10	0.000896
5	8	11	0.000896
5	8	12	0.000896
5	8	13	0.000896
5	8	14	0.000897
5	8	15	0.000897
5	8	16	0.000896
5	8	17	0.000897
5	8	18	0.000897
5	8	19	0.000897
5	8	20	0.000897
5	8	21	0.000897
5	8	22	0.000897
5	8	23	0.000897
5	8	24	0.000895
5	9	1	0.000845
5	9	2	0.000845
5	9	3	0.000845
5	9	4	0.000845
5	9	5	0.000845
5	9	6	0.000845
5	9	7	0.000845
5	9	8	0.000846
5	9	9	0.000846
5	9	10	0.000846
5	9	11	0.000846
5	9	12	0.000846
5	9	13	0.000846
5	9	14	0.000847
5	9	15	0.000847
5	9	16	0.000846

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0
1	0	2	0
1	0	3	0
1	0	4	0
1	0	5	0
1	0	6	0
1	0	7	0
1	0	8	0
1	0	9	0
1	0	10	0
1	0	11	0
1	0	12	0
1	0	13	0
1	0	14	0
1	0	15	0
1	0	16	0
1	0	17	0
1	0	18	0
1	0	19	0
1	0	20	0
1	0	21	0
1	0	22	0
1	0	23	0
1	0	24	0
5	1	1	0
5	1	2	0
5	1	3	0
5	1	4	0
5	1	5	0
5	1	6	0
5	1	7	0
5	1	8	0
5	1	9	0
5	1	10	0
5	1	11	0
5	1	12	0
5	1	13	0
5	1	14	0
5	1	15	0
5	1	16	0
5	1	17	0
5	1	18	0
5	1	19	0
5	1	20	0
5	1	21	0
5	1	22	0
5	1	23	0
5	1	24	0
5	7	1	0
5	7	2	0
5	7	3	0
5	7	4	0
5	7	5	0
5	7	6	0
5	7	7	0

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.09306
1	0	2	0.09306
1	0	3	0.09306
1	0	4	0.09306
1	0	5	0.09306
1	0	6	0.09306
1	0	7	0.09306
1	0	8	0.09306
1	0	9	0.09306
1	0	10	0.09306
1	0	11	0.09306
1	0	12	0.09306
1	0	13	0.09306
1	0	14	0.09306
1	0	15	0.09306
1	0	16	0.09306
1	0	17	0.09306
1	0	18	0.09306
1	0	19	0.09306
1	0	20	0.09306
1	0	21	0.09306
1	0	22	0.09306
1	0	23	0.09306
1	0	24	0.09306
5	1	1	0.053335
5	1	2	0.053335
5	1	3	0.053335
5	1	4	0.053335
5	1	5	0.053335
5	1	6	0.053335
5	1	7	0.053335
5	1	8	0.053335
5	1	9	0.053335
5	1	10	0.053335
5	1	11	0.053335
5	1	12	0.053335
5	1	13	0.053335
5	1	14	0.053335
5	1	15	0.053335
5	1	16	0.053335
5	1	17	0.053335
5	1	18	0.053335
5	1	19	0.053335
5	1	20	0.053335
5	1	21	0.053335
5	1	22	0.053335
5	1	23	0.053335
5	1	24	0.053335
5	7	1	0.006298
5	7	2	0.006298
5	7	3	0.006298
5	7	4	0.006298
5	7	5	0.006298
5	7	6	0.006298
5	7	7	0.006298

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
5	7	8	0
5	7	9	0
5	7	10	0
5	7	11	0
5	7	12	0
5	7	13	0
5	7	14	0
5	7	15	0
5	7	16	0
5	7	17	0
5	7	18	0
5	7	19	0
5	7	20	0
5	7	21	0
5	7	22	0
5	7	23	0
5	7	24	0
5	8	1	0
5	8	2	0
5	8	3	0
5	8	4	0
5	8	5	0
5	8	6	0
5	8	7	0
5	8	8	0
5	8	9	0
5	8	10	0
5	8	11	0
5	8	12	0
5	8	13	0
5	8	14	0
5	8	15	0
5	8	16	0
5	8	17	0
5	8	18	0
5	8	19	0
5	8	20	0
5	8	21	0
5	8	22	0
5	8	23	0
5	8	24	0
5	9	1	0
5	9	2	0
5	9	3	0
5	9	4	0
5	9	5	0
5	9	6	0
5	9	7	0
5	9	8	0
5	9	9	0
5	9	10	0
5	9	11	0
5	9	12	0
5	9	13	0
5	9	14	0
5	9	15	0
5	9	16	0

PollutantID	25	Formaldehyde	
5	7	8	0.006298
5	7	9	0.006298
5	7	10	0.006298
5	7	11	0.006298
5	7	12	0.006298
5	7	13	0.006298
5	7	14	0.006298
5	7	15	0.006298
5	7	16	0.006298
5	7	17	0.006298
5	7	18	0.006298
5	7	19	0.006298
5	7	20	0.006298
5	7	21	0.006298
5	7	22	0.006298
5	7	23	0.006298
5	7	24	0.006298
5	8	1	0.005297
5	8	2	0.005297
5	8	3	0.005297
5	8	4	0.005297
5	8	5	0.005297
5	8	6	0.005297
5	8	7	0.005297
5	8	8	0.005297
5	8	9	0.005297
5	8	10	0.005297
5	8	11	0.005297
5	8	12	0.005297
5	8	13	0.005297
5	8	14	0.005297
5	8	15	0.005297
5	8	16	0.005297
5	8	17	0.005297
5	8	18	0.005297
5	8	19	0.005297
5	8	20	0.005297
5	8	21	0.005297
5	8	22	0.005297
5	8	23	0.005297
5	8	24	0.005297
5	9	1	0.004547
5	9	2	0.004547
5	9	3	0.004547
5	9	4	0.004547
5	9	5	0.004547
5	9	6	0.004547
5	9	7	0.004547
5	9	8	0.004547
5	9	9	0.004547
5	9	10	0.004547
5	9	11	0.004547
5	9	12	0.004547
5	9	13	0.004547
5	9	14	0.004547
5	9	15	0.004547
5	9	16	0.004547

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	24	1,3-Butadiene	
5	9	17	0
5	9	18	0
5	9	19	0
5	9	20	0
5	9	21	0
5	9	22	0
5	9	23	0
5	9	24	0
5	10	1	0
5	10	2	0
5	10	3	0
5	10	4	0
5	10	5	0
5	10	6	0
5	10	7	0
5	10	8	0
5	10	9	0
5	10	10	0
5	10	11	0
5	10	12	0
5	10	13	0
5	10	14	0
5	10	15	0
5	10	16	0
5	10	17	0
5	10	18	0
5	10	19	0
5	10	20	0
5	10	21	0
5	10	22	0
5	10	23	0
5	10	24	0
5	11	1	0
5	11	2	0
5	11	3	0
5	11	4	0
5	11	5	0
5	11	6	0
5	11	7	0
5	11	8	0
5	11	9	0
5	11	10	0
5	11	11	0
5	11	12	0
5	11	13	0
5	11	14	0
5	11	15	0
5	11	16	0
5	11	17	0
5	11	18	0
5	11	19	0
5	11	20	0
5	11	21	0
5	11	22	0
5	11	23	0
5	11	24	0

PollutantID	25	Formaldehyde	
5	9	17	0.004547
5	9	18	0.004547
5	9	19	0.004547
5	9	20	0.004547
5	9	21	0.004547
5	9	22	0.004547
5	9	23	0.004547
5	9	24	0.004547
5	10	1	0.003963
5	10	2	0.003963
5	10	3	0.003963
5	10	4	0.003963
5	10	5	0.003963
5	10	6	0.003963
5	10	7	0.003963
5	10	8	0.003963
5	10	9	0.003963
5	10	10	0.003963
5	10	11	0.003963
5	10	12	0.003963
5	10	13	0.003963
5	10	14	0.003963
5	10	15	0.003963
5	10	16	0.003963
5	10	17	0.003963
5	10	18	0.003963
5	10	19	0.003963
5	10	20	0.003963
5	10	21	0.003963
5	10	22	0.003963
5	10	23	0.003963
5	10	24	0.003963
5	11	1	0.003496
5	11	2	0.003496
5	11	3	0.003496
5	11	4	0.003496
5	11	5	0.003496
5	11	6	0.003496
5	11	7	0.003496
5	11	8	0.003496
5	11	9	0.003496
5	11	10	0.003496
5	11	11	0.003496
5	11	12	0.003496
5	11	13	0.003496
5	11	14	0.003496
5	11	15	0.003496
5	11	16	0.003496
5	11	17	0.003496
5	11	18	0.003496
5	11	19	0.003496
5	11	20	0.003496
5	11	21	0.003496
5	11	22	0.003496
5	11	23	0.003496
5	11	24	0.003496

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.084914
1	0	2	0.084914
1	0	3	0.084914
1	0	4	0.084914
1	0	5	0.084914
1	0	6	0.084914
1	0	7	0.084914
1	0	8	0.084914
1	0	9	0.084914
1	0	10	0.084914
1	0	11	0.084914
1	0	12	0.084914
1	0	13	0.084914
1	0	14	0.084914
1	0	15	0.084914
1	0	16	0.084914
1	0	17	0.084914
1	0	18	0.084914
1	0	19	0.084914
1	0	20	0.084914
1	0	21	0.084914
1	0	22	0.084914
1	0	23	0.084914
1	0	24	0.084914
5	1	1	0.048049
5	1	2	0.048049
5	1	3	0.048049
5	1	4	0.048049
5	1	5	0.048049
5	1	6	0.048049
5	1	7	0.048049
5	1	8	0.048049
5	1	9	0.048049
5	1	10	0.048049
5	1	11	0.048049
5	1	12	0.048049
5	1	13	0.048049
5	1	14	0.048049
5	1	15	0.048049
5	1	16	0.048049
5	1	17	0.048049
5	1	18	0.048049
5	1	19	0.048049
5	1	20	0.048049
5	1	21	0.048049
5	1	22	0.048049
5	1	23	0.048049
5	1	24	0.048049
5	7	1	0.005586
5	7	2	0.005586
5	7	3	0.005586
5	7	4	0.005586
5	7	5	0.005586
5	7	6	0.005586
5	7	7	0.005586

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.001288
1	0	2	0.001288
1	0	3	0.001288
1	0	4	0.001288
1	0	5	0.001288
1	0	6	0.001288
1	0	7	0.001288
1	0	8	0.001288
1	0	9	0.001288
1	0	10	0.001288
1	0	11	0.001288
1	0	12	0.001288
1	0	13	0.001288
1	0	14	0.001288
1	0	15	0.001288
1	0	16	0.001288
1	0	17	0.001288
1	0	18	0.001288
1	0	19	0.001288
1	0	20	0.001288
1	0	21	0.001288
1	0	22	0.001288
1	0	23	0.001288
1	0	24	0.001288
5	1	1	0.000712
5	1	2	0.000712
5	1	3	0.000712
5	1	4	0.000712
5	1	5	0.000712
5	1	6	0.000712
5	1	7	0.000712
5	1	8	0.000712
5	1	9	0.000712
5	1	10	0.000712
5	1	11	0.000712
5	1	12	0.000712
5	1	13	0.000712
5	1	14	0.000712
5	1	15	0.000712
5	1	16	0.000712
5	1	17	0.000712
5	1	18	0.000712
5	1	19	0.000712
5	1	20	0.000712
5	1	21	0.000712
5	1	22	0.000712
5	1	23	0.000712
5	1	24	0.000712
5	7	1	7.67E-05
5	7	2	7.67E-05
5	7	3	7.67E-05
5	7	4	7.67E-05
5	7	5	7.67E-05
5	7	6	7.67E-05
5	7	7	7.67E-05

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
5	7	8	0.005586
5	7	9	0.005586
5	7	10	0.005586
5	7	11	0.005586
5	7	12	0.005586
5	7	13	0.005586
5	7	14	0.005586
5	7	15	0.005586
5	7	16	0.005586
5	7	17	0.005586
5	7	18	0.005586
5	7	19	0.005586
5	7	20	0.005586
5	7	21	0.005586
5	7	22	0.005586
5	7	23	0.005586
5	7	24	0.005586
5	8	1	0.004674
5	8	2	0.004674
5	8	3	0.004674
5	8	4	0.004674
5	8	5	0.004674
5	8	6	0.004674
5	8	7	0.004674
5	8	8	0.004674
5	8	9	0.004674
5	8	10	0.004674
5	8	11	0.004674
5	8	12	0.004674
5	8	13	0.004674
5	8	14	0.004674
5	8	15	0.004674
5	8	16	0.004674
5	8	17	0.004674
5	8	18	0.004674
5	8	19	0.004674
5	8	20	0.004674
5	8	21	0.004674
5	8	22	0.004674
5	8	23	0.004674
5	8	24	0.004674
5	9	1	0.003989
5	9	2	0.003989
5	9	3	0.003989
5	9	4	0.003989
5	9	5	0.003989
5	9	6	0.003989
5	9	7	0.003989
5	9	8	0.003989
5	9	9	0.003989
5	9	10	0.003989
5	9	11	0.003989
5	9	12	0.003989
5	9	13	0.003989
5	9	14	0.003989
5	9	15	0.003989
5	9	16	0.003989

PollutantID	27	Acrolein	
5	7	8	7.67E-05
5	7	9	7.67E-05
5	7	10	7.67E-05
5	7	11	7.67E-05
5	7	12	7.67E-05
5	7	13	7.67E-05
5	7	14	7.67E-05
5	7	15	7.67E-05
5	7	16	7.67E-05
5	7	17	7.67E-05
5	7	18	7.67E-05
5	7	19	7.67E-05
5	7	20	7.67E-05
5	7	21	7.67E-05
5	7	22	7.67E-05
5	7	23	7.67E-05
5	7	24	7.67E-05
5	8	1	6.29E-05
5	8	2	6.29E-05
5	8	3	6.29E-05
5	8	4	6.29E-05
5	8	5	6.29E-05
5	8	6	6.29E-05
5	8	7	6.29E-05
5	8	8	6.29E-05
5	8	9	6.29E-05
5	8	10	6.29E-05
5	8	11	6.29E-05
5	8	12	6.29E-05
5	8	13	6.29E-05
5	8	14	6.29E-05
5	8	15	6.29E-05
5	8	16	6.29E-05
5	8	17	6.29E-05
5	8	18	6.29E-05
5	8	19	6.29E-05
5	8	20	6.29E-05
5	8	21	6.29E-05
5	8	22	6.29E-05
5	8	23	6.29E-05
5	8	24	6.29E-05
5	9	1	5.26E-05
5	9	2	5.26E-05
5	9	3	5.26E-05
5	9	4	5.26E-05
5	9	5	5.26E-05
5	9	6	5.26E-05
5	9	7	5.26E-05
5	9	8	5.26E-05
5	9	9	5.26E-05
5	9	10	5.26E-05
5	9	11	5.26E-05
5	9	12	5.26E-05
5	9	13	5.26E-05
5	9	14	5.26E-05
5	9	15	5.26E-05
5	9	16	5.26E-05

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	26	Acetaldehyde	
5	9	17	0.003989
5	9	18	0.003989
5	9	19	0.003989
5	9	20	0.003989
5	9	21	0.003989
5	9	22	0.003989
5	9	23	0.003989
5	9	24	0.003989
5	10	1	0.003457
5	10	2	0.003457
5	10	3	0.003457
5	10	4	0.003457
5	10	5	0.003457
5	10	6	0.003457
5	10	7	0.003457
5	10	8	0.003457
5	10	9	0.003457
5	10	10	0.003457
5	10	11	0.003457
5	10	12	0.003457
5	10	13	0.003457
5	10	14	0.003457
5	10	15	0.003457
5	10	16	0.003457
5	10	17	0.003457
5	10	18	0.003457
5	10	19	0.003457
5	10	20	0.003457
5	10	21	0.003457
5	10	22	0.003457
5	10	23	0.003457
5	10	24	0.003457
5	11	1	0.003031
5	11	2	0.003031
5	11	3	0.003031
5	11	4	0.003031
5	11	5	0.003031
5	11	6	0.003031
5	11	7	0.003031
5	11	8	0.003031
5	11	9	0.003031
5	11	10	0.003031
5	11	11	0.003031
5	11	12	0.003031
5	11	13	0.003031
5	11	14	0.003031
5	11	15	0.003031
5	11	16	0.003031
5	11	17	0.003031
5	11	18	0.003031
5	11	19	0.003031
5	11	20	0.003031
5	11	21	0.003031
5	11	22	0.003031
5	11	23	0.003031
5	11	24	0.003031

PollutantID	27	Acrolein	
5	9	17	5.26E-05
5	9	18	5.26E-05
5	9	19	5.26E-05
5	9	20	5.26E-05
5	9	21	5.26E-05
5	9	22	5.26E-05
5	9	23	5.26E-05
5	9	24	5.26E-05
5	10	1	4.45E-05
5	10	2	4.45E-05
5	10	3	4.45E-05
5	10	4	4.45E-05
5	10	5	4.45E-05
5	10	6	4.45E-05
5	10	7	4.45E-05
5	10	8	4.45E-05
5	10	9	4.45E-05
5	10	10	4.45E-05
5	10	11	4.45E-05
5	10	12	4.45E-05
5	10	13	4.45E-05
5	10	14	4.45E-05
5	10	15	4.45E-05
5	10	16	4.45E-05
5	10	17	4.45E-05
5	10	18	4.45E-05
5	10	19	4.45E-05
5	10	20	4.45E-05
5	10	21	4.45E-05
5	10	22	4.45E-05
5	10	23	4.45E-05
5	10	24	4.45E-05
5	11	1	3.81E-05
5	11	2	3.81E-05
5	11	3	3.81E-05
5	11	4	3.81E-05
5	11	5	3.81E-05
5	11	6	3.81E-05
5	11	7	3.81E-05
5	11	8	3.81E-05
5	11	9	3.81E-05
5	11	10	3.81E-05
5	11	11	3.81E-05
5	11	12	3.81E-05
5	11	13	3.81E-05
5	11	14	3.81E-05
5	11	15	3.81E-05
5	11	16	3.81E-05
5	11	17	3.81E-05
5	11	18	3.81E-05
5	11	19	3.81E-05
5	11	20	3.81E-05
5	11	21	3.81E-05
5	11	22	3.81E-05
5	11	23	3.81E-05
5	11	24	3.81E-05

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.0171189
1	0	2	0.0171189
1	0	3	0.0171189
1	0	4	0.0171189
1	0	5	0.0171189
1	0	6	0.0171189
1	0	7	0.0171189
1	0	8	0.0171189
1	0	9	0.0171189
1	0	10	0.0171189
1	0	11	0.0171189
1	0	12	0.0171189
1	0	13	0.0171189
1	0	14	0.0171189
1	0	15	0.0171189
1	0	16	0.0171189
1	0	17	0.0171189
1	0	18	0.0171189
1	0	19	0.0171189
1	0	20	0.0171189
1	0	21	0.0171189
1	0	22	0.0171189
1	0	23	0.0171189
1	0	24	0.0171189
5	1	1	0.0124423
5	1	2	0.0124423
5	1	3	0.0124423
5	1	4	0.0124423
5	1	5	0.0124423
5	1	6	0.0124423
5	1	7	0.0124423
5	1	8	0.0124423
5	1	9	0.0124423
5	1	10	0.0124423
5	1	11	0.0124423
5	1	12	0.0124423
5	1	13	0.0124423
5	1	14	0.0124423
5	1	15	0.0124423
5	1	16	0.0124423
5	1	17	0.0124423
5	1	18	0.0124423
5	1	19	0.0124423
5	1	20	0.0124423
5	1	21	0.0124423
5	1	22	0.0124423
5	1	23	0.0124423
5	1	24	0.0124423
5	7	1	0.00339774
5	7	2	0.00339774
5	7	3	0.00339774
5	7	4	0.00339774
5	7	5	0.00339774
5	7	6	0.00339774
5	7	7	0.00339774

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	2.39E-06
1	0	2	2.39E-06
1	0	3	2.39E-06
1	0	4	2.39E-06
1	0	5	2.39E-06
1	0	6	2.39E-06
1	0	7	2.39E-06
1	0	8	2.39E-06
1	0	9	2.39E-06
1	0	10	2.39E-06
1	0	11	2.39E-06
1	0	12	2.39E-06
1	0	13	2.39E-06
1	0	14	2.39E-06
1	0	15	2.39E-06
1	0	16	2.39E-06
1	0	17	2.39E-06
1	0	18	2.39E-06
1	0	19	2.39E-06
1	0	20	2.39E-06
1	0	21	2.39E-06
1	0	22	2.39E-06
1	0	23	2.39E-06
1	0	24	2.39E-06
5	1	1	2.33E-06
5	1	2	2.33E-06
5	1	3	2.33E-06
5	1	4	2.33E-06
5	1	5	2.33E-06
5	1	6	2.33E-06
5	1	7	2.33E-06
5	1	8	2.33E-06
5	1	9	2.33E-06
5	1	10	2.33E-06
5	1	11	2.33E-06
5	1	12	2.33E-06
5	1	13	2.33E-06
5	1	14	2.33E-06
5	1	15	2.33E-06
5	1	16	2.33E-06
5	1	17	2.33E-06
5	1	18	2.33E-06
5	1	19	2.33E-06
5	1	20	2.33E-06
5	1	21	2.33E-06
5	1	22	2.33E-06
5	1	23	2.33E-06
5	1	24	2.33E-06
5	7	1	7.55E-07
5	7	2	7.55E-07
5	7	3	7.55E-07
5	7	4	7.55E-07
5	7	5	7.55E-07
5	7	6	7.55E-07
5	7	7	7.55E-07

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
5	7	8	0.00339774
5	7	9	0.00339774
5	7	10	0.00339774
5	7	11	0.00339774
5	7	12	0.00339774
5	7	13	0.00339774
5	7	14	0.00339774
5	7	15	0.00339774
5	7	16	0.00339774
5	7	17	0.00339774
5	7	18	0.00339774
5	7	19	0.00339774
5	7	20	0.00339774
5	7	21	0.00339774
5	7	22	0.00339774
5	7	23	0.00339774
5	7	24	0.00339774
5	8	1	0.00321929
5	8	2	0.00321929
5	8	3	0.00321929
5	8	4	0.00321929
5	8	5	0.00321929
5	8	6	0.00321929
5	8	7	0.00321929
5	8	8	0.00321929
5	8	9	0.00321929
5	8	10	0.00321929
5	8	11	0.00321929
5	8	12	0.00321929
5	8	13	0.00321929
5	8	14	0.00321929
5	8	15	0.00321929
5	8	16	0.00321929
5	8	17	0.00321929
5	8	18	0.00321929
5	8	19	0.00321929
5	8	20	0.00321929
5	8	21	0.00321929
5	8	22	0.00321929
5	8	23	0.00321929
5	8	24	0.00321929
5	9	1	0.00308545
5	9	2	0.00308545
5	9	3	0.00308545
5	9	4	0.00308545
5	9	5	0.00308545
5	9	6	0.00308545
5	9	7	0.00308545
5	9	8	0.00308545
5	9	9	0.00308545
5	9	10	0.00308545
5	9	11	0.00308545
5	9	12	0.00308545
5	9	13	0.00308545
5	9	14	0.00308545
5	9	15	0.00308545
5	9	16	0.00308545

PollutantID	974	Benzo(a)pyrene	
5	7	8	7.55E-07
5	7	9	7.55E-07
5	7	10	7.55E-07
5	7	11	7.55E-07
5	7	12	7.55E-07
5	7	13	7.55E-07
5	7	14	7.55E-07
5	7	15	7.55E-07
5	7	16	7.55E-07
5	7	17	7.55E-07
5	7	18	7.55E-07
5	7	19	7.55E-07
5	7	20	7.55E-07
5	7	21	7.55E-07
5	7	22	7.55E-07
5	7	23	7.55E-07
5	7	24	7.55E-07
5	8	1	7.19E-07
5	8	2	7.19E-07
5	8	3	7.19E-07
5	8	4	7.19E-07
5	8	5	7.19E-07
5	8	6	7.19E-07
5	8	7	7.19E-07
5	8	8	7.19E-07
5	8	9	7.19E-07
5	8	10	7.19E-07
5	8	11	7.19E-07
5	8	12	7.19E-07
5	8	13	7.19E-07
5	8	14	7.19E-07
5	8	15	7.19E-07
5	8	16	7.19E-07
5	8	17	7.19E-07
5	8	18	7.19E-07
5	8	19	7.19E-07
5	8	20	7.19E-07
5	8	21	7.19E-07
5	8	22	7.19E-07
5	8	23	7.19E-07
5	8	24	7.19E-07
5	9	1	6.92E-07
5	9	2	6.92E-07
5	9	3	6.92E-07
5	9	4	6.92E-07
5	9	5	6.92E-07
5	9	6	6.92E-07
5	9	7	6.92E-07
5	9	8	6.92E-07
5	9	9	6.92E-07
5	9	10	6.92E-07
5	9	11	6.92E-07
5	9	12	6.92E-07
5	9	13	6.92E-07
5	9	14	6.92E-07
5	9	15	6.92E-07
5	9	16	6.92E-07

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	31	Sulfur Dioxide (SO2)	
5	9	17	0.00308545
5	9	18	0.00308545
5	9	19	0.00308545
5	9	20	0.00308545
5	9	21	0.00308545
5	9	22	0.00308545
5	9	23	0.00308545
5	9	24	0.00308545
5	10	1	0.00298135
5	10	2	0.00298135
5	10	3	0.00298135
5	10	4	0.00298135
5	10	5	0.00298135
5	10	6	0.00298135
5	10	7	0.00298135
5	10	8	0.00298135
5	10	9	0.00298135
5	10	10	0.00298135
5	10	11	0.00298135
5	10	12	0.00298135
5	10	13	0.00298135
5	10	14	0.00298135
5	10	15	0.00298135
5	10	16	0.00298135
5	10	17	0.00298135
5	10	18	0.00298135
5	10	19	0.00298135
5	10	20	0.00298135
5	10	21	0.00298135
5	10	22	0.00298135
5	10	23	0.00298135
5	10	24	0.00298135
5	11	1	0.00289807
5	11	2	0.00289807
5	11	3	0.00289807
5	11	4	0.00289807
5	11	5	0.00289807
5	11	6	0.00289807
5	11	7	0.00289807
5	11	8	0.00289807
5	11	9	0.00289807
5	11	10	0.00289807
5	11	11	0.00289807
5	11	12	0.00289807
5	11	13	0.00289807
5	11	14	0.00289807
5	11	15	0.00289807
5	11	16	0.00289807
5	11	17	0.00289807
5	11	18	0.00289807
5	11	19	0.00289807
5	11	20	0.00289807
5	11	21	0.00289807
5	11	22	0.00289807
5	11	23	0.00289807
5	11	24	0.00289807

PollutantID	974	Benzo(a)pyrene	
5	9	17	6.92E-07
5	9	18	6.92E-07
5	9	19	6.92E-07
5	9	20	6.92E-07
5	9	21	6.92E-07
5	9	22	6.92E-07
5	9	23	6.92E-07
5	9	24	6.92E-07
5	10	1	6.71E-07
5	10	2	6.71E-07
5	10	3	6.71E-07
5	10	4	6.71E-07
5	10	5	6.71E-07
5	10	6	6.71E-07
5	10	7	6.71E-07
5	10	8	6.71E-07
5	10	9	6.71E-07
5	10	10	6.71E-07
5	10	11	6.71E-07
5	10	12	6.71E-07
5	10	13	6.71E-07
5	10	14	6.71E-07
5	10	15	6.71E-07
5	10	16	6.71E-07
5	10	17	6.71E-07
5	10	18	6.71E-07
5	10	19	6.71E-07
5	10	20	6.71E-07
5	10	21	6.71E-07
5	10	22	6.71E-07
5	10	23	6.71E-07
5	10	24	6.71E-07
5	11	1	6.54E-07
5	11	2	6.54E-07
5	11	3	6.54E-07
5	11	4	6.54E-07
5	11	5	6.54E-07
5	11	6	6.54E-07
5	11	7	6.54E-07
5	11	8	6.54E-07
5	11	9	6.54E-07
5	11	10	6.54E-07
5	11	11	6.54E-07
5	11	12	6.54E-07
5	11	13	6.54E-07
5	11	14	6.54E-07
5	11	15	6.54E-07
5	11	16	6.54E-07
5	11	17	6.54E-07
5	11	18	6.54E-07
5	11	19	6.54E-07
5	11	20	6.54E-07
5	11	21	6.54E-07
5	11	22	6.54E-07
5	11	23	6.54E-07
5	11	24	6.54E-07

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.018157
1	0	2	0.018157
1	0	3	0.018157
1	0	4	0.018157
1	0	5	0.018157
1	0	6	0.018157
1	0	7	0.018157
1	0	8	0.018157
1	0	9	0.018157
1	0	10	0.018157
1	0	11	0.018157
1	0	12	0.018157
1	0	13	0.018157
1	0	14	0.018157
1	0	15	0.018157
1	0	16	0.018157
1	0	17	0.018157
1	0	18	0.018157
1	0	19	0.018157
1	0	20	0.018157
1	0	21	0.018157
1	0	22	0.018157
1	0	23	0.018157
1	0	24	0.018157
5	1	1	0.822428
5	1	2	0.822428
5	1	3	0.822428
5	1	4	0.822428
5	1	5	0.822428
5	1	6	0.822428
5	1	7	0.822428
5	1	8	0.822428
5	1	9	0.822428
5	1	10	0.822428
5	1	11	0.822428
5	1	12	0.822428
5	1	13	0.822428
5	1	14	0.822428
5	1	15	0.822428
5	1	16	0.822428
5	1	17	0.822428
5	1	18	0.822428
5	1	19	0.822428
5	1	20	0.822428
5	1	21	0.822428
5	1	22	0.822428
5	1	23	0.822428
5	1	24	0.822428
5	7	1	0.097192
5	7	2	0.097192
5	7	3	0.097192
5	7	4	0.097192
5	7	5	0.097192
5	7	6	0.097192
5	7	7	0.097192

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	BUS
1	0	1	0.016465
1	0	2	0.016465
1	0	3	0.016465
1	0	4	0.016465
1	0	5	0.016465
1	0	6	0.016465
1	0	7	0.016465
1	0	8	0.016465
1	0	9	0.016465
1	0	10	0.016465
1	0	11	0.016465
1	0	12	0.016465
1	0	13	0.016465
1	0	14	0.016465
1	0	15	0.016465
1	0	16	0.016465
1	0	17	0.016465
1	0	18	0.016465
1	0	19	0.016465
1	0	20	0.016465
1	0	21	0.016465
1	0	22	0.016465
1	0	23	0.016465
1	0	24	0.016465
5	1	1	0.118025
5	1	2	0.118025
5	1	3	0.118025
5	1	4	0.118025
5	1	5	0.118025
5	1	6	0.118025
5	1	7	0.118025
5	1	8	0.118025
5	1	9	0.118025
5	1	10	0.118025
5	1	11	0.118025
5	1	12	0.118025
5	1	13	0.118025
5	1	14	0.118025
5	1	15	0.118025
5	1	16	0.118025
5	1	17	0.118025
5	1	18	0.118025
5	1	19	0.118025
5	1	20	0.118025
5	1	21	0.118025
5	1	22	0.118025
5	1	23	0.118025
5	1	24	0.118025
5	7	1	0.016026
5	7	2	0.016026
5	7	3	0.016026
5	7	4	0.016026
5	7	5	0.016026
5	7	6	0.016026
5	7	7	0.016026

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
5	7	8	0.097192
5	7	9	0.097192
5	7	10	0.097192
5	7	11	0.097192
5	7	12	0.097192
5	7	13	0.097192
5	7	14	0.097192
5	7	15	0.097192
5	7	16	0.097192
5	7	17	0.097192
5	7	18	0.097192
5	7	19	0.097192
5	7	20	0.097192
5	7	21	0.097192
5	7	22	0.097192
5	7	23	0.097192
5	7	24	0.097192
5	8	1	0.074885
5	8	2	0.074885
5	8	3	0.074885
5	8	4	0.074885
5	8	5	0.074885
5	8	6	0.074885
5	8	7	0.074885
5	8	8	0.074885
5	8	9	0.074885
5	8	10	0.074885
5	8	11	0.074885
5	8	12	0.074885
5	8	13	0.074885
5	8	14	0.074885
5	8	15	0.074885
5	8	16	0.074885
5	8	17	0.074885
5	8	18	0.074885
5	8	19	0.074885
5	8	20	0.074885
5	8	21	0.074885
5	8	22	0.074885
5	8	23	0.074885
5	8	24	0.074885
5	9	1	0.057985
5	9	2	0.057985
5	9	3	0.057985
5	9	4	0.057985
5	9	5	0.057985
5	9	6	0.057985
5	9	7	0.057985
5	9	8	0.057985
5	9	9	0.057985
5	9	10	0.057985
5	9	11	0.057985
5	9	12	0.057985
5	9	13	0.057985
5	9	14	0.057985
5	9	15	0.057985
5	9	16	0.057985

PollutantID	9110	PM2.5	
5	7	8	0.016026
5	7	9	0.016026
5	7	10	0.016026
5	7	11	0.016026
5	7	12	0.016026
5	7	13	0.016026
5	7	14	0.016026
5	7	15	0.016026
5	7	16	0.016026
5	7	17	0.016026
5	7	18	0.016026
5	7	19	0.016026
5	7	20	0.016026
5	7	21	0.016026
5	7	22	0.016026
5	7	23	0.016026
5	7	24	0.016026
5	8	1	0.012876
5	8	2	0.012876
5	8	3	0.012876
5	8	4	0.012876
5	8	5	0.012876
5	8	6	0.012876
5	8	7	0.012876
5	8	8	0.012876
5	8	9	0.012876
5	8	10	0.012876
5	8	11	0.012876
5	8	12	0.012876
5	8	13	0.012876
5	8	14	0.012876
5	8	15	0.012876
5	8	16	0.012876
5	8	17	0.012876
5	8	18	0.012876
5	8	19	0.012876
5	8	20	0.012876
5	8	21	0.012876
5	8	22	0.012876
5	8	23	0.012876
5	8	24	0.012876
5	9	1	0.010487
5	9	2	0.010487
5	9	3	0.010487
5	9	4	0.010487
5	9	5	0.010487
5	9	6	0.010487
5	9	7	0.010487
5	9	8	0.010487
5	9	9	0.010487
5	9	10	0.010487
5	9	11	0.010487
5	9	12	0.010487
5	9	13	0.010487
5	9	14	0.010487
5	9	15	0.010487
5	9	16	0.010487

BUS Travel Emission Rate Calculation: CAC (2041)

PollutantID	9100	PM10	
5	9	17	0.057985
5	9	18	0.057985
5	9	19	0.057985
5	9	20	0.057985
5	9	21	0.057985
5	9	22	0.057985
5	9	23	0.057985
5	9	24	0.057985
5	10	1	0.04471
5	10	2	0.04471
5	10	3	0.04471
5	10	4	0.04471
5	10	5	0.04471
5	10	6	0.04471
5	10	7	0.04471
5	10	8	0.04471
5	10	9	0.04471
5	10	10	0.04471
5	10	11	0.04471
5	10	12	0.04471
5	10	13	0.04471
5	10	14	0.04471
5	10	15	0.04471
5	10	16	0.04471
5	10	17	0.04471
5	10	18	0.04471
5	10	19	0.04471
5	10	20	0.04471
5	10	21	0.04471
5	10	22	0.04471
5	10	23	0.04471
5	10	24	0.04471
5	11	1	0.033988
5	11	2	0.033988
5	11	3	0.033988
5	11	4	0.033988
5	11	5	0.033988
5	11	6	0.033988
5	11	7	0.033988
5	11	8	0.033988
5	11	9	0.033988
5	11	10	0.033988
5	11	11	0.033988
5	11	12	0.033988
5	11	13	0.033988
5	11	14	0.033988
5	11	15	0.033988
5	11	16	0.033988
5	11	17	0.033988
5	11	18	0.033988
5	11	19	0.033988
5	11	20	0.033988
5	11	21	0.033988
5	11	22	0.033988
5	11	23	0.033988
5	11	24	0.033988

PollutantID	9110	PM2.5	
5	9	17	0.010487
5	9	18	0.010487
5	9	19	0.010487
5	9	20	0.010487
5	9	21	0.010487
5	9	22	0.010487
5	9	23	0.010487
5	9	24	0.010487
5	10	1	0.00861
5	10	2	0.00861
5	10	3	0.00861
5	10	4	0.00861
5	10	5	0.00861
5	10	6	0.00861
5	10	7	0.00861
5	10	8	0.00861
5	10	9	0.00861
5	10	10	0.00861
5	10	11	0.00861
5	10	12	0.00861
5	10	13	0.00861
5	10	14	0.00861
5	10	15	0.00861
5	10	16	0.00861
5	10	17	0.00861
5	10	18	0.00861
5	10	19	0.00861
5	10	20	0.00861
5	10	21	0.00861
5	10	22	0.00861
5	10	23	0.00861
5	10	24	0.00861
5	11	1	0.007093
5	11	2	0.007093
5	11	3	0.007093
5	11	4	0.007093
5	11	5	0.007093
5	11	6	0.007093
5	11	7	0.007093
5	11	8	0.007093
5	11	9	0.007093
5	11	10	0.007093
5	11	11	0.007093
5	11	12	0.007093
5	11	13	0.007093
5	11	14	0.007093
5	11	15	0.007093
5	11	16	0.007093
5	11	17	0.007093
5	11	18	0.007093
5	11	19	0.007093
5	11	20	0.007093
5	11	21	0.007093
5	11	22	0.007093
5	11	23	0.007093
5	11	24	0.007093

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	2074.279
1	0	2	2052.314
1	0	3	2027.795
1	0	4	2014.544
1	0	5	2009.706
1	0	6	2009.706
1	0	7	2021.67
1	0	8	2070.908
1	0	9	2140.33
1	0	10	2185.617
1	0	11	2222.694
1	0	12	2290.286
1	0	13	2308.14
1	0	14	2318.46
1	0	15	2329.477
1	0	16	2324.904
1	0	17	2322.931
1	0	18	2309.072
1	0	19	2293.216
1	0	20	2236.597
1	0	21	2197.656
1	0	22	2162.174
1	0	23	2130.819
1	0	24	2102.905
5	1	1	1222.973
5	1	2	1212.39
5	1	3	1200.573
5	1	4	1194.187
5	1	5	1191.858
5	1	6	1191.858
5	1	7	1197.62
5	1	8	1221.349
5	1	9	1254.798
5	1	10	1276.624
5	1	11	1294.489
5	1	12	1327.06
5	1	13	1335.666
5	1	14	1340.633
5	1	15	1345.944
5	1	16	1343.743
5	1	17	1342.791
5	1	18	1336.112
5	1	19	1328.472
5	1	20	1301.192
5	1	21	1282.426
5	1	22	1265.327
5	1	23	1250.213
5	1	24	1236.767
5	7	1	233.263
5	7	2	232.0301
5	7	3	230.654
5	7	4	229.9103
5	7	5	229.6389
5	7	6	229.6389
5	7	7	230.3109

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.0531898
1	0	2	0.0531898
1	0	3	0.0531898
1	0	4	0.0531898
1	0	5	0.0531898
1	0	6	0.0531898
1	0	7	0.0531898
1	0	8	0.0531898
1	0	9	0.0531898
1	0	10	0.0531898
1	0	11	0.0531898
1	0	12	0.0531898
1	0	13	0.0531898
1	0	14	0.0531898
1	0	15	0.0531898
1	0	16	0.0531898
1	0	17	0.0531898
1	0	18	0.0531898
1	0	19	0.0531898
1	0	20	0.0531898
1	0	21	0.0531898
1	0	22	0.0531898
1	0	23	0.0531898
1	0	24	0.0531898
5	1	1	0.0219976
5	1	2	0.0219976
5	1	3	0.0219976
5	1	4	0.0219976
5	1	5	0.0219976
5	1	6	0.0219976
5	1	7	0.0219976
5	1	8	0.0219976
5	1	9	0.0219976
5	1	10	0.0219976
5	1	11	0.0219976
5	1	12	0.0219976
5	1	13	0.0219976
5	1	14	0.0219976
5	1	15	0.0219976
5	1	16	0.0219976
5	1	17	0.0219976
5	1	18	0.0219976
5	1	19	0.0219976
5	1	20	0.0219976
5	1	21	0.0219976
5	1	22	0.0219976
5	1	23	0.0219976
5	1	24	0.0219976
5	7	1	0.0018331
5	7	2	0.0018331
5	7	3	0.0018331
5	7	4	0.0018331
5	7	5	0.0018331
5	7	6	0.0018331
5	7	7	0.0018331

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	233.0742
5	7	9	236.9697
5	7	10	239.5114
5	7	11	241.5923
5	7	12	245.3851
5	7	13	246.3875
5	7	14	246.9666
5	7	15	247.5851
5	7	16	247.3289
5	7	17	247.2179
5	7	18	246.4396
5	7	19	245.5503
5	7	20	242.3725
5	7	21	240.1874
5	7	22	238.1958
5	7	23	236.4354
5	7	24	234.8696
5	8	1	221.2958
5	8	2	220.1732
5	8	3	218.9208
5	8	4	218.2437
5	8	5	217.9964
5	8	6	217.9964
5	8	7	218.608
5	8	8	221.1232
5	8	9	224.6696
5	8	10	226.9837
5	8	11	228.8783
5	8	12	232.3312
5	8	13	233.2434
5	8	14	233.77
5	8	15	234.3335
5	8	16	234.1
5	8	17	233.9987
5	8	18	233.2911
5	8	19	232.4812
5	8	20	229.5884
5	8	21	227.5993
5	8	22	225.7858
5	8	23	224.1837
5	8	24	222.7578
5	9	1	214.1841
5	9	2	213.1393
5	9	3	211.974
5	9	4	211.3443
5	9	5	211.1141
5	9	6	211.1141
5	9	7	211.6828
5	9	8	214.0237
5	9	9	233.2434
5	9	10	233.77
5	9	11	234.3335
5	9	12	234.1
5	9	13	233.9987
5	9	14	233.2911

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.0018331
5	7	9	0.0018331
5	7	10	0.0018331
5	7	11	0.0018331
5	7	12	0.0018331
5	7	13	0.0018331
5	7	14	0.0018331
5	7	15	0.0018331
5	7	16	0.0018331
5	7	17	0.0018331
5	7	18	0.0018331
5	7	19	0.0018331
5	7	20	0.0018331
5	7	21	0.0018331
5	7	22	0.0018331
5	7	23	0.0018331
5	7	24	0.0018331
5	8	1	0.0015713
5	8	2	0.0015713
5	8	3	0.0015713
5	8	4	0.0015713
5	8	5	0.0015713
5	8	6	0.0015713
5	8	7	0.0015713
5	8	8	0.0015713
5	8	9	0.0015713
5	8	10	0.0015713
5	8	11	0.0015713
5	8	12	0.0015713
5	8	13	0.0015713
5	8	14	0.0015713
5	8	15	0.0015713
5	8	16	0.0015713
5	8	17	0.0015713
5	8	18	0.0015713
5	8	19	0.0015713
5	8	20	0.0015713
5	8	21	0.0015713
5	8	22	0.0015713
5	8	23	0.0015713
5	8	24	0.0015713
5	9	1	0.0013748
5	9	2	0.0013748
5	9	3	0.0013748
5	9	4	0.0013748
5	9	5	0.0013748
5	9	6	0.0013748
5	9	7	0.0013748
5	9	8	0.0013748
5	9	9	0.0015713
5	9	10	0.0015713
5	9	11	0.0015713
5	9	12	0.0015713
5	9	13	0.0015713
5	9	14	0.0015713

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	232.4812
5	9	16	229.5884
5	9	17	227.5993
5	9	18	225.7858
5	9	19	224.5926
5	9	20	221.9009
5	9	21	220.0499
5	9	22	218.3628
5	9	23	216.8714
5	9	24	215.5447
5	10	1	208.8481
5	10	2	207.8661
5	10	3	206.7708
5	10	4	206.178
5	10	5	205.962
5	10	6	205.962
5	10	7	206.4968
5	10	8	208.6971
5	10	9	211.7996
5	10	10	213.8237
5	10	11	215.4803
5	10	12	218.5012
5	10	13	219.2988
5	10	14	219.7598
5	10	15	220.2527
5	10	16	220.0486
5	10	17	219.9601
5	10	18	219.3411
5	10	19	218.6326
5	10	20	216.1022
5	10	21	214.3615
5	10	22	212.7763
5	10	23	211.3741
5	10	24	210.1273
5	11	1	204.9094
5	11	2	203.9815
5	11	3	202.9457
5	11	4	202.3858
5	11	5	202.1815
5	11	6	202.1815
5	11	7	202.6869
5	11	8	204.7672
5	11	9	207.7007
5	11	10	209.6147
5	11	11	211.1812
5	11	12	214.0375
5	11	13	214.7918
5	11	14	215.2277
5	11	15	215.6932
5	11	16	215.5008
5	11	17	215.4167
5	11	18	214.8316
5	11	19	214.1615
5	11	20	211.7687
5	11	21	210.1234

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.0015713
5	9	16	0.0015713
5	9	17	0.0015713
5	9	18	0.0015713
5	9	19	0.0013748
5	9	20	0.0013748
5	9	21	0.0013748
5	9	22	0.0013748
5	9	23	0.0013748
5	9	24	0.0013748
5	10	1	0.0012221
5	10	2	0.0012221
5	10	3	0.0012221
5	10	4	0.0012221
5	10	5	0.0012221
5	10	6	0.0012221
5	10	7	0.0012221
5	10	8	0.0012221
5	10	9	0.0012221
5	10	10	0.0012221
5	10	11	0.0012221
5	10	12	0.0012221
5	10	13	0.0012221
5	10	14	0.0012221
5	10	15	0.0012221
5	10	16	0.0012221
5	10	17	0.0012221
5	10	18	0.0012221
5	10	19	0.0012221
5	10	20	0.0012221
5	10	21	0.0012221
5	10	22	0.0012221
5	10	23	0.0012221
5	10	24	0.0012221
5	11	1	0.0010999
5	11	2	0.0010999
5	11	3	0.0010999
5	11	4	0.0010999
5	11	5	0.0010999
5	11	6	0.0010999
5	11	7	0.0010999
5	11	8	0.0010999
5	11	9	0.0010999
5	11	10	0.0010999
5	11	11	0.0010999
5	11	12	0.0010999
5	11	13	0.0010999
5	11	14	0.0010999
5	11	15	0.0010999
5	11	16	0.0010999
5	11	17	0.0010999
5	11	18	0.0010999
5	11	19	0.0010999
5	11	20	0.0010999
5	11	21	0.0010999

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	208.6242
5	11	23	207.2991
5	11	24	206.1193

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.0010999
5	11	23	0.0010999
5	11	24	0.0010999

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.087686
1	0	2	0.087502
1	0	3	0.087297
1	0	4	0.087186
1	0	5	0.087145
1	0	6	0.087145
1	0	7	0.087245
1	0	8	0.087657
1	0	9	0.08824
1	0	10	0.088619
1	0	11	0.08893
1	0	12	0.089497
1	0	13	0.089646
1	0	14	0.089733
1	0	15	0.089825
1	0	16	0.089787
1	0	17	0.08977
1	0	18	0.089654
1	0	19	0.089521
1	0	20	0.089046
1	0	21	0.08872
1	0	22	0.088423
1	0	23	0.08816
1	0	24	0.087926
5	1	1	0.073885
5	1	2	0.073633
5	1	3	0.07335
5	1	4	0.073197
5	1	5	0.073141
5	1	6	0.073141
5	1	7	0.073279
5	1	8	0.073847
5	1	9	0.074646
5	1	10	0.075168
5	1	11	0.075596
5	1	12	0.076374
5	1	13	0.07658
5	1	14	0.076699
5	1	15	0.076826
5	1	16	0.076773
5	1	17	0.076751
5	1	18	0.076591
5	1	19	0.076408
5	1	20	0.075756
5	1	21	0.075307
5	1	22	0.074898
5	1	23	0.074537
5	1	24	0.074215
5	7	1	0.016054
5	7	2	0.015979
5	7	3	0.015896
5	7	4	0.015851
5	7	5	0.015835
5	7	6	0.015835
5	7	7	0.015875

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	6.083314742
1	0	2	6.083314742
1	0	3	6.083314742
1	0	4	6.083314742
1	0	5	6.083314742
1	0	6	6.083314742
1	0	7	6.083314742
1	0	8	6.083314742
1	0	9	6.083314742
1	0	10	6.083314742
1	0	11	6.083314742
1	0	12	6.083314742
1	0	13	6.083314742
1	0	14	6.083314742
1	0	15	6.083314742
1	0	16	6.083314742
1	0	17	6.083314742
1	0	18	6.083314742
1	0	19	6.083314742
1	0	20	6.083314742
1	0	21	6.083314742
1	0	22	6.083314742
1	0	23	6.083314742
1	0	24	6.083314742
5	1	1	9.544119147
5	1	2	9.34808574
5	1	3	9.27823459
5	1	4	9.27823459
5	1	5	9.27823459
5	1	6	9.27823459
5	1	7	9.27823459
5	1	8	9.511158745
5	1	9	10.19080404
5	1	10	10.63417415
5	1	11	10.99720784
5	1	12	11.65897721
5	1	13	11.83374265
5	1	14	11.93473428
5	1	15	12.04264989
5	1	16	11.99791423
5	1	17	11.97855245
5	1	18	11.84288973
5	1	19	11.68767199
5	1	20	11.13334374
5	1	21	10.75208487
5	1	22	10.40464215
5	1	23	10.09764225
5	1	24	9.824385855
5	7	1	2.710157852
5	7	2	2.639476319
5	7	3	2.605373925
5	7	4	2.605373925
5	7	5	2.605373925
5	7	6	2.605373925
5	7	7	2.605373925

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.016042
5	7	9	0.016277
5	7	10	0.01643
5	7	11	0.016556
5	7	12	0.016785
5	7	13	0.016845
5	7	14	0.01688
5	7	15	0.016917
5	7	16	0.016902
5	7	17	0.016895
5	7	18	0.016848
5	7	19	0.016794
5	7	20	0.016603
5	7	21	0.016471
5	7	22	0.016351
5	7	23	0.016245
5	7	24	0.01615
5	8	1	0.014126
5	8	2	0.01406
5	8	3	0.013985
5	8	4	0.013945
5	8	5	0.01393
5	8	6	0.01393
5	8	7	0.013966
5	8	8	0.014116
5	8	9	0.014327
5	8	10	0.014464
5	8	11	0.014577
5	8	12	0.014782
5	8	13	0.014837
5	8	14	0.014868
5	8	15	0.014901
5	8	16	0.014888
5	8	17	0.014882
5	8	18	0.014839
5	8	19	0.014791
5	8	20	0.014619
5	8	21	0.014501
5	8	22	0.014393
5	8	23	0.014298
5	8	24	0.014213
5	9	1	0.012611
5	9	2	0.01255
5	9	3	0.012483
5	9	4	0.012446
5	9	5	0.012433
5	9	6	0.012433
5	9	7	0.012466
5	9	8	0.012601
5	9	9	0.014837
5	9	10	0.014868
5	9	11	0.014901
5	9	12	0.014888
5	9	13	0.014882
5	9	14	0.014839

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	2.699320496
5	7	9	2.922751438
5	7	10	3.068518513
5	7	11	3.187840735
5	7	12	3.405391723
5	7	13	3.462850269
5	7	14	3.496057938
5	7	15	3.531525072
5	7	16	3.516828383
5	7	17	3.510470745
5	7	18	3.465860035
5	7	19	3.414833154
5	7	20	3.232602287
5	7	21	3.107279295
5	7	22	2.993065799
5	7	23	2.892129512
5	7	24	2.802302161
5	8	1	2.478232707
5	8	2	2.414179816
5	8	3	2.382524116
5	8	4	2.382524116
5	8	5	2.382524116
5	8	6	2.382524116
5	8	7	2.382524116
5	8	8	2.468412274
5	8	9	2.670870663
5	8	10	2.802952052
5	8	11	2.911070405
5	8	12	3.10820022
5	8	13	3.160264647
5	8	14	3.19035216
5	8	15	3.222491279
5	8	16	3.209173404
5	8	17	3.203410747
5	8	18	3.162989261
5	8	19	3.116747145
5	8	20	2.951628201
5	8	21	2.838069722
5	8	22	2.734581699
5	8	23	2.643122471
5	8	24	2.561727308
5	9	1	2.278793719
5	9	2	2.220648638
5	9	3	2.191601146
5	9	4	2.191601146
5	9	5	2.191601146
5	9	6	2.191601146
5	9	7	2.191601146
5	9	8	2.269878084
5	9	9	3.160264647
5	9	10	3.19035216
5	9	11	3.222491279
5	9	12	3.209173404
5	9	13	3.203410747
5	9	14	3.162989261

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.014791
5	9	16	0.014619
5	9	17	0.014501
5	9	18	0.014393
5	9	19	0.013214
5	9	20	0.013058
5	9	21	0.012951
5	9	22	0.012853
5	9	23	0.012767
5	9	24	0.01269
5	10	1	0.011526
5	10	2	0.01147
5	10	3	0.011408
5	10	4	0.011374
5	10	5	0.011362
5	10	6	0.011362
5	10	7	0.011392
5	10	8	0.011518
5	10	9	0.011694
5	10	10	0.01181
5	10	11	0.011904
5	10	12	0.012076
5	10	13	0.012122
5	10	14	0.012148
5	10	15	0.012176
5	10	16	0.012164
5	10	17	0.012159
5	10	18	0.012124
5	10	19	0.012084
5	10	20	0.01194
5	10	21	0.01184
5	10	22	0.01175
5	10	23	0.01167
5	10	24	0.011599
5	11	1	0.010818
5	11	2	0.010766
5	11	3	0.010707
5	11	4	0.010675
5	11	5	0.010664
5	11	6	0.010664
5	11	7	0.010693
5	11	8	0.01081
5	11	9	0.010976
5	11	10	0.011085
5	11	11	0.011173
5	11	12	0.011335
5	11	13	0.011378
5	11	14	0.011402
5	11	15	0.011429
5	11	16	0.011418
5	11	17	0.011413
5	11	18	0.01138
5	11	19	0.011342
5	11	20	0.011206
5	11	21	0.011113

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	3.116747145
5	9	16	2.951628201
5	9	17	2.838069722
5	9	18	2.734581699
5	9	19	2.858465059
5	9	20	2.708556219
5	9	21	2.60547106
5	9	22	2.511516263
5	9	23	2.428487351
5	9	24	2.354594153
5	10	1	2.14984303
5	10	2	2.095581048
5	10	3	2.068529068
5	10	4	2.068529068
5	10	5	2.068529068
5	10	6	2.068529068
5	10	7	2.068529068
5	10	8	2.141523417
5	10	9	2.313029282
5	10	10	2.424919419
5	10	11	2.516519796
5	10	12	2.683509027
5	10	13	2.727616186
5	10	14	2.75310733
5	10	15	2.780331151
5	10	16	2.769046793
5	10	17	2.76416738
5	10	18	2.729921499
5	10	19	2.690751645
5	10	20	2.55087356
5	10	21	2.454668551
5	10	22	2.36699724
5	10	23	2.289524191
5	10	24	2.220571429
5	11	1	2.091043041
5	11	2	2.038706806
5	11	3	2.013169532
5	11	4	2.013169532
5	11	5	2.013169532
5	11	6	2.013169532
5	11	7	2.013169532
5	11	8	2.083022745
5	11	9	2.248471939
5	11	10	2.356406368
5	11	11	2.444759714
5	11	12	2.605847605
5	11	13	2.648397651
5	11	14	2.672986056
5	11	15	2.699247565
5	11	16	2.688361867
5	11	17	2.683657108
5	11	18	2.650622863
5	11	19	2.612835549
5	11	20	2.477901843
5	11	21	2.385102863

CAR Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.011028
5	11	23	0.010954
5	11	24	0.010887

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	2.300529725
5	11	23	2.225791087
5	11	24	2.15927294

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.695055101
1	0	2	0.626042742
1	0	3	0.594194804
1	0	4	0.594194804
1	0	5	0.594194804
1	0	6	0.594194804
1	0	7	0.594194804
1	0	8	0.676086142
1	0	9	0.888987314
1	0	10	1.025466272
1	0	11	1.137809797
1	0	12	1.348941764
1	0	13	1.40081112
1	0	14	1.438585758
1	0	15	1.478141393
1	0	16	1.465354909
1	0	17	1.463001966
1	0	18	1.425170427
1	0	19	1.382022398
1	0	20	1.208648218
1	0	21	1.083887995
1	0	22	0.974521856
1	0	23	0.875620791
1	0	24	0.783916706
5	1	1	0.484636099
5	1	2	0.484636099
5	1	3	0.484636099
5	1	4	0.484636099
5	1	5	0.484636099
5	1	6	0.484636099
5	1	7	0.484636099
5	1	8	0.484636099
5	1	9	0.492512306
5	1	10	0.51896767
5	1	11	0.545111061
5	1	12	0.59594981
5	1	13	0.607687811
5	1	14	0.617844467
5	1	15	0.628305994
5	1	16	0.625516332
5	1	17	0.625669001
5	1	18	0.617682495
5	1	19	0.608684049
5	1	20	0.568428765
5	1	21	0.538295252
5	1	22	0.513274702
5	1	23	0.493797831
5	1	24	0.48486478
5	7	1	0.215170884
5	7	2	0.215170884
5	7	3	0.215170884
5	7	4	0.215170884
5	7	5	0.215170884
5	7	6	0.215170884
5	7	7	0.215170884

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.016264
1	0	2	0.016231
1	0	3	0.016195
1	0	4	0.016175
1	0	5	0.016168
1	0	6	0.016168
1	0	7	0.016186
1	0	8	0.016259
1	0	9	0.016363
1	0	10	0.016431
1	0	11	0.016486
1	0	12	0.016588
1	0	13	0.016614
1	0	14	0.01663
1	0	15	0.016646
1	0	16	0.016639
1	0	17	0.016636
1	0	18	0.016616
1	0	19	0.016592
1	0	20	0.016507
1	0	21	0.016449
1	0	22	0.016396
1	0	23	0.016349
1	0	24	0.016307
5	1	1	0.017989
5	1	2	0.017938
5	1	3	0.017879
5	1	4	0.017846
5	1	5	0.017834
5	1	6	0.017835
5	1	7	0.017865
5	1	8	0.017981
5	1	9	0.018153
5	1	10	0.018276
5	1	11	0.01838
5	1	12	0.018552
5	1	13	0.018611
5	1	14	0.018654
5	1	15	0.018693
5	1	16	0.018684
5	1	17	0.018682
5	1	18	0.018638
5	1	19	0.018583
5	1	20	0.018438
5	1	21	0.01832
5	1	22	0.018216
5	1	23	0.018134
5	1	24	0.018061
5	7	1	0.003257
5	7	2	0.003244
5	7	3	0.00323
5	7	4	0.003222
5	7	5	0.003219
5	7	6	0.00322
5	7	7	0.003227

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.215170884
5	7	9	0.215170884
5	7	10	0.215170884
5	7	11	0.215170884
5	7	12	0.215170884
5	7	13	0.215170884
5	7	14	0.215170884
5	7	15	0.215170884
5	7	16	0.215170884
5	7	17	0.215170884
5	7	18	0.215170884
5	7	19	0.215170884
5	7	20	0.215170884
5	7	21	0.215170884
5	7	22	0.215170884
5	7	23	0.215170884
5	7	24	0.215170884
5	8	1	0.210437282
5	8	2	0.210437282
5	8	3	0.210437282
5	8	4	0.210437282
5	8	5	0.210437282
5	8	6	0.210437282
5	8	7	0.210437316
5	8	8	0.210437282
5	8	9	0.210437282
5	8	10	0.210437282
5	8	11	0.210437316
5	8	12	0.210437282
5	8	13	0.210437282
5	8	14	0.210437282
5	8	15	0.210437282
5	8	16	0.210437282
5	8	17	0.210437282
5	8	18	0.210437282
5	8	19	0.210437282
5	8	20	0.210437282
5	8	21	0.210437282
5	8	22	0.210437282
5	8	23	0.210437282
5	8	24	0.210437282
5	9	1	0.209493469
5	9	2	0.209493469
5	9	3	0.209493469
5	9	4	0.209493469
5	9	5	0.209493469
5	9	6	0.209493469
5	9	7	0.209493469
5	9	8	0.209493469
5	9	9	0.210437282
5	9	10	0.210437282
5	9	11	0.210437282
5	9	12	0.210437282
5	9	13	0.210437282
5	9	14	0.210437282

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.003255
5	7	9	0.003296
5	7	10	0.003324
5	7	11	0.003347
5	7	12	0.003387
5	7	13	0.003399
5	7	14	0.003406
5	7	15	0.003414
5	7	16	0.003411
5	7	17	0.003411
5	7	18	0.003401
5	7	19	0.003391
5	7	20	0.003357
5	7	21	0.003332
5	7	22	0.00331
5	7	23	0.003291
5	7	24	0.003274
5	8	1	0.002872
5	8	2	0.002861
5	8	3	0.002848
5	8	4	0.002841
5	8	5	0.002839
5	8	6	0.002839
5	8	7	0.002845
5	8	8	0.002871
5	8	9	0.002907
5	8	10	0.002932
5	8	11	0.002952
5	8	12	0.002988
5	8	13	0.002998
5	8	14	0.003005
5	8	15	0.003012
5	8	16	0.00301
5	8	17	0.003009
5	8	18	0.003001
5	8	19	0.002991
5	8	20	0.002961
5	8	21	0.002939
5	8	22	0.002919
5	8	23	0.002903
5	8	24	0.002888
5	9	1	0.002573
5	9	2	0.002563
5	9	3	0.002551
5	9	4	0.002545
5	9	5	0.002543
5	9	6	0.002543
5	9	7	0.002548
5	9	8	0.002571
5	9	9	0.002998
5	9	10	0.003005
5	9	11	0.003012
5	9	12	0.00301
5	9	13	0.003009
5	9	14	0.003001

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.210437282
5	9	16	0.210437282
5	9	17	0.210437282
5	9	18	0.210437282
5	9	19	0.209493469
5	9	20	0.209493469
5	9	21	0.209493469
5	9	22	0.209493469
5	9	23	0.209493469
5	9	24	0.209493469
5	10	1	0.209942037
5	10	2	0.209942037
5	10	3	0.209942037
5	10	4	0.209942037
5	10	5	0.209942037
5	10	6	0.209942037
5	10	7	0.209942037
5	10	8	0.209942037
5	10	9	0.209942037
5	10	10	0.209942037
5	10	11	0.209942037
5	10	12	0.209942037
5	10	13	0.209942037
5	10	14	0.209942037
5	10	15	0.209942037
5	10	16	0.209942037
5	10	17	0.209942037
5	10	18	0.209942037
5	10	19	0.209942037
5	10	20	0.209942037
5	10	21	0.209942037
5	10	22	0.209942037
5	10	23	0.209942037
5	10	24	0.209942037
5	11	1	0.21230703
5	11	2	0.21230703
5	11	3	0.21230703
5	11	4	0.21230703
5	11	5	0.21230703
5	11	6	0.21230703
5	11	7	0.21230703
5	11	8	0.21230703
5	11	9	0.21230703
5	11	10	0.21230703
5	11	11	0.21230703
5	11	12	0.21230703
5	11	13	0.21230703
5	11	14	0.21230703
5	11	15	0.21230703
5	11	16	0.21230703
5	11	17	0.21230703
5	11	18	0.21230703
5	11	19	0.21230703
5	11	20	0.21230703
5	11	21	0.21230703

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.002991
5	9	16	0.002961
5	9	17	0.002939
5	9	18	0.002919
5	9	19	0.00268
5	9	20	0.002653
5	9	21	0.002633
5	9	22	0.002615
5	9	23	0.0026
5	9	24	0.002586
5	10	1	0.002354
5	10	2	0.002344
5	10	3	0.002334
5	10	4	0.002328
5	10	5	0.002326
5	10	6	0.002326
5	10	7	0.002331
5	10	8	0.002352
5	10	9	0.002382
5	10	10	0.002403
5	10	11	0.002419
5	10	12	0.002449
5	10	13	0.002458
5	10	14	0.002463
5	10	15	0.002468
5	10	16	0.002467
5	10	17	0.002466
5	10	18	0.002459
5	10	19	0.002452
5	10	20	0.002427
5	10	21	0.002409
5	10	22	0.002392
5	10	23	0.002379
5	10	24	0.002366
5	11	1	0.002202
5	11	2	0.002194
5	11	3	0.002184
5	11	4	0.002179
5	11	5	0.002177
5	11	6	0.002177
5	11	7	0.002182
5	11	8	0.002201
5	11	9	0.002229
5	11	10	0.002248
5	11	11	0.002263
5	11	12	0.002291
5	11	13	0.002299
5	11	14	0.002304
5	11	15	0.002309
5	11	16	0.002307
5	11	17	0.002306
5	11	18	0.0023
5	11	19	0.002293
5	11	20	0.00227
5	11	21	0.002253

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.21230703
5	11	23	0.21230703
5	11	24	0.21230703

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.002238
5	11	23	0.002225
5	11	24	0.002214

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.001885
1	0	2	0.001882
1	0	3	0.001878
1	0	4	0.001875
1	0	5	0.001875
1	0	6	0.001875
1	0	7	0.001877
1	0	8	0.001885
1	0	9	0.001896
1	0	10	0.001904
1	0	11	0.00191
1	0	12	0.001921
1	0	13	0.001924
1	0	14	0.001926
1	0	15	0.001927
1	0	16	0.001927
1	0	17	0.001926
1	0	18	0.001924
1	0	19	0.001921
1	0	20	0.001912
1	0	21	0.001906
1	0	22	0.0019
1	0	23	0.001895
1	0	24	0.00189
5	1	1	0.00112
5	1	2	0.001115
5	1	3	0.00111
5	1	4	0.001108
5	1	5	0.001107
5	1	6	0.001107
5	1	7	0.001109
5	1	8	0.001119
5	1	9	0.001133
5	1	10	0.001142
5	1	11	0.001149
5	1	12	0.001162
5	1	13	0.001166
5	1	14	0.001168
5	1	15	0.00117
5	1	16	0.001169
5	1	17	0.001169
5	1	18	0.001166
5	1	19	0.001163
5	1	20	0.001152
5	1	21	0.001144
5	1	22	0.001137
5	1	23	0.001131
5	1	24	0.001125
5	7	1	0.000225
5	7	2	0.000224
5	7	3	0.000223
5	7	4	0.000222
5	7	5	0.000222
5	7	6	0.000222
5	7	7	0.000223

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.010237
1	0	2	0.010215
1	0	3	0.010191
1	0	4	0.010178
1	0	5	0.010173
1	0	6	0.010173
1	0	7	0.010185
1	0	8	0.010233
1	0	9	0.010302
1	0	10	0.010347
1	0	11	0.010383
1	0	12	0.01045
1	0	13	0.010468
1	0	14	0.010478
1	0	15	0.010489
1	0	16	0.010484
1	0	17	0.010482
1	0	18	0.010468
1	0	19	0.010453
1	0	20	0.010397
1	0	21	0.010359
1	0	22	0.010323
1	0	23	0.010293
1	0	24	0.010265
5	1	1	0.007485
5	1	2	0.007459
5	1	3	0.00743
5	1	4	0.007414
5	1	5	0.007408
5	1	6	0.007408
5	1	7	0.007422
5	1	8	0.007481
5	1	9	0.007563
5	1	10	0.007616
5	1	11	0.00766
5	1	12	0.00774
5	1	13	0.007761
5	1	14	0.007774
5	1	15	0.007787
5	1	16	0.007781
5	1	17	0.007779
5	1	18	0.007763
5	1	19	0.007744
5	1	20	0.007677
5	1	21	0.007631
5	1	22	0.007589
5	1	23	0.007552
5	1	24	0.007519
5	7	1	0.001283
5	7	2	0.001277
5	7	3	0.001271
5	7	4	0.001267
5	7	5	0.001266
5	7	6	0.001266
5	7	7	0.001269

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.000225
5	7	9	0.000228
5	7	10	0.000231
5	7	11	0.000232
5	7	12	0.000236
5	7	13	0.000237
5	7	14	0.000237
5	7	15	0.000238
5	7	16	0.000238
5	7	17	0.000237
5	7	18	0.000237
5	7	19	0.000236
5	7	20	0.000233
5	7	21	0.000231
5	7	22	0.00023
5	7	23	0.000228
5	7	24	0.000227
5	8	1	0.000196
5	8	2	0.000195
5	8	3	0.000194
5	8	4	0.000193
5	8	5	0.000193
5	8	6	0.000193
5	8	7	0.000194
5	8	8	0.000196
5	8	9	0.000199
5	8	10	0.000201
5	8	11	0.000203
5	8	12	0.000206
5	8	13	0.000206
5	8	14	0.000207
5	8	15	0.000207
5	8	16	0.000207
5	8	17	0.000207
5	8	18	0.000206
5	8	19	0.000206
5	8	20	0.000203
5	8	21	0.000201
5	8	22	0.0002
5	8	23	0.000198
5	8	24	0.000197
5	9	1	0.000173
5	9	2	0.000172
5	9	3	0.000171
5	9	4	0.00017
5	9	5	0.00017
5	9	6	0.00017
5	9	7	0.000171
5	9	8	0.000173
5	9	9	0.000206
5	9	10	0.000207
5	9	11	0.000207
5	9	12	0.000207
5	9	13	0.000207
5	9	14	0.000206

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.001282
5	7	9	0.001299
5	7	10	0.001311
5	7	11	0.00132
5	7	12	0.001338
5	7	13	0.001342
5	7	14	0.001345
5	7	15	0.001348
5	7	16	0.001346
5	7	17	0.001346
5	7	18	0.001342
5	7	19	0.001338
5	7	20	0.001324
5	7	21	0.001314
5	7	22	0.001305
5	7	23	0.001297
5	7	24	0.00129
5	8	1	0.001138
5	8	2	0.001133
5	8	3	0.001127
5	8	4	0.001124
5	8	5	0.001123
5	8	6	0.001123
5	8	7	0.001125
5	8	8	0.001137
5	8	9	0.001153
5	8	10	0.001163
5	8	11	0.001172
5	8	12	0.001188
5	8	13	0.001192
5	8	14	0.001194
5	8	15	0.001197
5	8	16	0.001196
5	8	17	0.001195
5	8	18	0.001192
5	8	19	0.001188
5	8	20	0.001175
5	8	21	0.001166
5	8	22	0.001158
5	8	23	0.001151
5	8	24	0.001144
5	9	1	0.001026
5	9	2	0.001021
5	9	3	0.001016
5	9	4	0.001013
5	9	5	0.001012
5	9	6	0.001012
5	9	7	0.001014
5	9	8	0.001025
5	9	9	0.001192
5	9	10	0.001194
5	9	11	0.001197
5	9	12	0.001196
5	9	13	0.001195
5	9	14	0.001192

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.000206
5	9	16	0.000203
5	9	17	0.000201
5	9	18	0.0002
5	9	19	0.000182
5	9	20	0.000179
5	9	21	0.000178
5	9	22	0.000176
5	9	23	0.000175
5	9	24	0.000174
5	10	1	0.000156
5	10	2	0.000155
5	10	3	0.000154
5	10	4	0.000154
5	10	5	0.000154
5	10	6	0.000154
5	10	7	0.000154
5	10	8	0.000156
5	10	9	0.000159
5	10	10	0.00016
5	10	11	0.000162
5	10	12	0.000164
5	10	13	0.000165
5	10	14	0.000165
5	10	15	0.000166
5	10	16	0.000165
5	10	17	0.000165
5	10	18	0.000165
5	10	19	0.000164
5	10	20	0.000162
5	10	21	0.000161
5	10	22	0.000159
5	10	23	0.000158
5	10	24	0.000157
5	11	1	0.000145
5	11	2	0.000144
5	11	3	0.000144
5	11	4	0.000143
5	11	5	0.000143
5	11	6	0.000143
5	11	7	0.000143
5	11	8	0.000145
5	11	9	0.000147
5	11	10	0.000149
5	11	11	0.00015
5	11	12	0.000153
5	11	13	0.000153
5	11	14	0.000154
5	11	15	0.000154
5	11	16	0.000154
5	11	17	0.000154
5	11	18	0.000153
5	11	19	0.000153
5	11	20	0.000151
5	11	21	0.000149

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.001188
5	9	16	0.001175
5	9	17	0.001166
5	9	18	0.001158
5	9	19	0.001072
5	9	20	0.00106
5	9	21	0.001052
5	9	22	0.001044
5	9	23	0.001038
5	9	24	0.001032
5	10	1	0.000942
5	10	2	0.000938
5	10	3	0.000933
5	10	4	0.00093
5	10	5	0.00093
5	10	6	0.00093
5	10	7	0.000932
5	10	8	0.000942
5	10	9	0.000955
5	10	10	0.000964
5	10	11	0.000972
5	10	12	0.000985
5	10	13	0.000989
5	10	14	0.000991
5	10	15	0.000993
5	10	16	0.000992
5	10	17	0.000992
5	10	18	0.000989
5	10	19	0.000986
5	10	20	0.000974
5	10	21	0.000967
5	10	22	0.00096
5	10	23	0.000953
5	10	24	0.000948
5	11	1	0.000883
5	11	2	0.000878
5	11	3	0.000874
5	11	4	0.000871
5	11	5	0.000871
5	11	6	0.000871
5	11	7	0.000873
5	11	8	0.000882
5	11	9	0.000895
5	11	10	0.000903
5	11	11	0.00091
5	11	12	0.000922
5	11	13	0.000926
5	11	14	0.000928
5	11	15	0.00093
5	11	16	0.000929
5	11	17	0.000929
5	11	18	0.000926
5	11	19	0.000923
5	11	20	0.000913
5	11	21	0.000905

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.000148
5	11	23	0.000147
5	11	24	0.000146

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.000899
5	11	23	0.000893
5	11	24	0.000888

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.006665
1	0	2	0.006665
1	0	3	0.006665
1	0	4	0.006665
1	0	5	0.006665
1	0	6	0.006665
1	0	7	0.006665
1	0	8	0.006665
1	0	9	0.006665
1	0	10	0.006665
1	0	11	0.006665
1	0	12	0.006665
1	0	13	0.006667
1	0	14	0.006667
1	0	15	0.006668
1	0	16	0.006668
1	0	17	0.006668
1	0	18	0.006667
1	0	19	0.006666
1	0	20	0.006665
1	0	21	0.006665
1	0	22	0.006665
1	0	23	0.006665
1	0	24	0.006665
5	1	1	0.004548
5	1	2	0.004548
5	1	3	0.004548
5	1	4	0.004548
5	1	5	0.004548
5	1	6	0.004548
5	1	7	0.004548
5	1	8	0.004548
5	1	9	0.004549
5	1	10	0.004553
5	1	11	0.004563
5	1	12	0.004602
5	1	13	0.004612
5	1	14	0.004618
5	1	15	0.004625
5	1	16	0.004622
5	1	17	0.004621
5	1	18	0.004613
5	1	19	0.004604
5	1	20	0.004571
5	1	21	0.004554
5	1	22	0.004551
5	1	23	0.004548
5	1	24	0.004548
5	7	1	0.000821
5	7	2	0.000821
5	7	3	0.000821
5	7	4	0.000821
5	7	5	0.000821
5	7	6	0.000821
5	7	7	0.000821

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.000667
1	0	2	0.000665
1	0	3	0.000664
1	0	4	0.000663
1	0	5	0.000662
1	0	6	0.000662
1	0	7	0.000663
1	0	8	0.000666
1	0	9	0.000671
1	0	10	0.000674
1	0	11	0.000676
1	0	12	0.000681
1	0	13	0.000682
1	0	14	0.000682
1	0	15	0.000683
1	0	16	0.000683
1	0	17	0.000683
1	0	18	0.000682
1	0	19	0.000681
1	0	20	0.000677
1	0	21	0.000675
1	0	22	0.000672
1	0	23	0.00067
1	0	24	0.000668
5	1	1	0.000451
5	1	2	0.000449
5	1	3	0.000447
5	1	4	0.000446
5	1	5	0.000446
5	1	6	0.000446
5	1	7	0.000447
5	1	8	0.00045
5	1	9	0.000456
5	1	10	0.000459
5	1	11	0.000462
5	1	12	0.000467
5	1	13	0.000468
5	1	14	0.000469
5	1	15	0.00047
5	1	16	0.00047
5	1	17	0.00047
5	1	18	0.000469
5	1	19	0.000467
5	1	20	0.000463
5	1	21	0.00046
5	1	22	0.000457
5	1	23	0.000455
5	1	24	0.000453
5	7	1	7.28E-05
5	7	2	7.25E-05
5	7	3	7.21E-05
5	7	4	7.19E-05
5	7	5	7.19E-05
5	7	6	7.19E-05
5	7	7	7.2E-05

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.000821
5	7	9	0.000821
5	7	10	0.000822
5	7	11	0.000824
5	7	12	0.000834
5	7	13	0.000837
5	7	14	0.000839
5	7	15	0.000841
5	7	16	0.00084
5	7	17	0.00084
5	7	18	0.000837
5	7	19	0.000835
5	7	20	0.000826
5	7	21	0.000822
5	7	22	0.000822
5	7	23	0.000821
5	7	24	0.000821
5	8	1	0.000723
5	8	2	0.000723
5	8	3	0.000723
5	8	4	0.000723
5	8	5	0.000723
5	8	6	0.000723
5	8	7	0.000723
5	8	8	0.000723
5	8	9	0.000723
5	8	10	0.000724
5	8	11	0.000727
5	8	12	0.000736
5	8	13	0.000739
5	8	14	0.000741
5	8	15	0.000742
5	8	16	0.000742
5	8	17	0.000741
5	8	18	0.000739
5	8	19	0.000737
5	8	20	0.000728
5	8	21	0.000724
5	8	22	0.000724
5	8	23	0.000723
5	8	24	0.000723
5	9	1	0.000647
5	9	2	0.000647
5	9	3	0.000647
5	9	4	0.000647
5	9	5	0.000647
5	9	6	0.000647
5	9	7	0.000647
5	9	8	0.000647
5	9	9	0.000739
5	9	10	0.000741
5	9	11	0.000742
5	9	12	0.000742
5	9	13	0.000741
5	9	14	0.000739

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	7.28E-05
5	7	9	7.38E-05
5	7	10	7.45E-05
5	7	11	7.5E-05
5	7	12	7.61E-05
5	7	13	7.63E-05
5	7	14	7.65E-05
5	7	15	7.66E-05
5	7	16	7.66E-05
5	7	17	7.65E-05
5	7	18	7.63E-05
5	7	19	7.61E-05
5	7	20	7.52E-05
5	7	21	7.47E-05
5	7	22	7.41E-05
5	7	23	7.37E-05
5	7	24	7.32E-05
5	8	1	6.48E-05
5	8	2	6.45E-05
5	8	3	6.42E-05
5	8	4	6.4E-05
5	8	5	6.39E-05
5	8	6	6.39E-05
5	8	7	6.41E-05
5	8	8	6.47E-05
5	8	9	6.57E-05
5	8	10	6.63E-05
5	8	11	6.68E-05
5	8	12	6.77E-05
5	8	13	6.8E-05
5	8	14	6.81E-05
5	8	15	6.83E-05
5	8	16	6.82E-05
5	8	17	6.82E-05
5	8	18	6.8E-05
5	8	19	6.78E-05
5	8	20	6.7E-05
5	8	21	6.65E-05
5	8	22	6.6E-05
5	8	23	6.56E-05
5	8	24	6.52E-05
5	9	1	5.86E-05
5	9	2	5.83E-05
5	9	3	5.8E-05
5	9	4	5.79E-05
5	9	5	5.78E-05
5	9	6	5.78E-05
5	9	7	5.79E-05
5	9	8	5.86E-05
5	9	9	6.8E-05
5	9	10	6.81E-05
5	9	11	6.83E-05
5	9	12	6.82E-05
5	9	13	6.82E-05
5	9	14	6.8E-05

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.000737
5	9	16	0.000728
5	9	17	0.000724
5	9	18	0.000724
5	9	19	0.00066
5	9	20	0.000653
5	9	21	0.000648
5	9	22	0.000647
5	9	23	0.000647
5	9	24	0.000647
5	10	1	0.000591
5	10	2	0.000591
5	10	3	0.000591
5	10	4	0.000591
5	10	5	0.000591
5	10	6	0.000591
5	10	7	0.000591
5	10	8	0.000591
5	10	9	0.000591
5	10	10	0.000591
5	10	11	0.000595
5	10	12	0.000604
5	10	13	0.000606
5	10	14	0.000607
5	10	15	0.000609
5	10	16	0.000608
5	10	17	0.000608
5	10	18	0.000606
5	10	19	0.000604
5	10	20	0.000597
5	10	21	0.000593
5	10	22	0.000591
5	10	23	0.000591
5	10	24	0.000591
5	11	1	0.000552
5	11	2	0.000552
5	11	3	0.000552
5	11	4	0.000552
5	11	5	0.000552
5	11	6	0.000552
5	11	7	0.000552
5	11	8	0.000552
5	11	9	0.000552
5	11	10	0.000553
5	11	11	0.000556
5	11	12	0.000564
5	11	13	0.000566
5	11	14	0.000567
5	11	15	0.000569
5	11	16	0.000568
5	11	17	0.000568
5	11	18	0.000566
5	11	19	0.000564
5	11	20	0.000558
5	11	21	0.000554

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	6.78E-05
5	9	16	6.7E-05
5	9	17	6.65E-05
5	9	18	6.6E-05
5	9	19	6.14E-05
5	9	20	6.07E-05
5	9	21	6.02E-05
5	9	22	5.97E-05
5	9	23	5.93E-05
5	9	24	5.9E-05
5	10	1	5.4E-05
5	10	2	5.37E-05
5	10	3	5.34E-05
5	10	4	5.33E-05
5	10	5	5.32E-05
5	10	6	5.32E-05
5	10	7	5.34E-05
5	10	8	5.39E-05
5	10	9	5.48E-05
5	10	10	5.53E-05
5	10	11	5.57E-05
5	10	12	5.65E-05
5	10	13	5.68E-05
5	10	14	5.69E-05
5	10	15	5.7E-05
5	10	16	5.7E-05
5	10	17	5.69E-05
5	10	18	5.68E-05
5	10	19	5.66E-05
5	10	20	5.59E-05
5	10	21	5.54E-05
5	10	22	5.5E-05
5	10	23	5.46E-05
5	10	24	5.43E-05
5	11	1	5.06E-05
5	11	2	5.03E-05
5	11	3	5E-05
5	11	4	4.99E-05
5	11	5	4.98E-05
5	11	6	4.98E-05
5	11	7	5E-05
5	11	8	5.05E-05
5	11	9	5.13E-05
5	11	10	5.18E-05
5	11	11	5.22E-05
5	11	12	5.3E-05
5	11	13	5.32E-05
5	11	14	5.33E-05
5	11	15	5.34E-05
5	11	16	5.34E-05
5	11	17	5.33E-05
5	11	18	5.32E-05
5	11	19	5.3E-05
5	11	20	5.24E-05
5	11	21	5.19E-05

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.000552
5	11	23	0.000552
5	11	24	0.000552

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	5.15E-05
5	11	23	5.12E-05
5	11	24	5.09E-05

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.02761506
1	0	2	0.02761506
1	0	3	0.02761506
1	0	4	0.02761506
1	0	5	0.02761506
1	0	6	0.02761506
1	0	7	0.02761506
1	0	8	0.02761506
1	0	9	0.02761506
1	0	10	0.02789069
1	0	11	0.02836387
1	0	12	0.02922652
1	0	13	0.02945439
1	0	14	0.02958608
1	0	15	0.02972672
1	0	16	0.02966842
1	0	17	0.0296432
1	0	18	0.02946629
1	0	19	0.02926397
1	0	20	0.02854137
1	0	21	0.0280444
1	0	22	0.02761696
1	0	23	0.02761506
1	0	24	0.02761506
5	1	1	0.01639151
5	1	2	0.01639151
5	1	3	0.01639151
5	1	4	0.01639151
5	1	5	0.01639151
5	1	6	0.01639151
5	1	7	0.01639151
5	1	8	0.01639151
5	1	9	0.01639151
5	1	10	0.01639151
5	1	11	0.01655977
5	1	12	0.01697563
5	1	13	0.01708554
5	1	14	0.01714899
5	1	15	0.01721679
5	1	16	0.01718871
5	1	17	0.01717653
5	1	18	0.01709127
5	1	19	0.01699367
5	1	20	0.01664533
5	1	21	0.01640573
5	1	22	0.01639151
5	1	23	0.01639151
5	1	24	0.01639151
5	7	1	0.00314532
5	7	2	0.00314532
5	7	3	0.00314532
5	7	4	0.00314532
5	7	5	0.00314532
5	7	6	0.00314532
5	7	7	0.00314532

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	8.32E-06
1	0	2	8.32E-06
1	0	3	8.32E-06
1	0	4	8.32E-06
1	0	5	8.32E-06
1	0	6	8.32E-06
1	0	7	8.32E-06
1	0	8	8.32E-06
1	0	9	8.32E-06
1	0	10	8.32E-06
1	0	11	8.32E-06
1	0	12	8.32E-06
1	0	13	8.32E-06
1	0	14	8.32E-06
1	0	15	8.32E-06
1	0	16	8.32E-06
1	0	17	8.32E-06
1	0	18	8.32E-06
1	0	19	8.32E-06
1	0	20	8.32E-06
1	0	21	8.32E-06
1	0	22	8.32E-06
1	0	23	8.32E-06
1	0	24	8.32E-06
5	1	1	4.11E-06
5	1	2	4.11E-06
5	1	3	4.11E-06
5	1	4	4.11E-06
5	1	5	4.11E-06
5	1	6	4.11E-06
5	1	7	4.11E-06
5	1	8	4.11E-06
5	1	9	4.11E-06
5	1	10	4.11E-06
5	1	11	4.11E-06
5	1	12	4.12E-06
5	1	13	4.12E-06
5	1	14	4.12E-06
5	1	15	4.12E-06
5	1	16	4.12E-06
5	1	17	4.12E-06
5	1	18	4.12E-06
5	1	19	4.12E-06
5	1	20	4.11E-06
5	1	21	4.11E-06
5	1	22	4.11E-06
5	1	23	4.11E-06
5	1	24	4.11E-06
5	7	1	1.24E-06
5	7	2	1.24E-06
5	7	3	1.24E-06
5	7	4	1.24E-06
5	7	5	1.24E-06
5	7	6	1.24E-06
5	7	7	1.24E-06

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.00314532
5	7	9	0.00314532
5	7	10	0.00314532
5	7	11	0.00314532
5	7	12	0.00314532
5	7	13	0.00314532
5	7	14	0.0031486
5	7	15	0.00315647
5	7	16	0.00315321
5	7	17	0.0031518
5	7	18	0.00314532
5	7	19	0.00314532
5	7	20	0.00314532
5	7	21	0.00314532
5	7	22	0.00314532
5	7	23	0.00314532
5	7	24	0.00314532
5	8	1	0.00298666
5	8	2	0.00298666
5	8	3	0.00298666
5	8	4	0.00298666
5	8	5	0.00298666
5	8	6	0.00298666
5	8	7	0.00298666
5	8	8	0.00298666
5	8	9	0.00298666
5	8	10	0.00298666
5	8	11	0.00298666
5	8	12	0.00298666
5	8	13	0.00298666
5	8	14	0.00298666
5	8	15	0.0029891
5	8	16	0.00298773
5	8	17	0.00298714
5	8	18	0.00298666
5	8	19	0.00298666
5	8	20	0.00298666
5	8	21	0.00298666
5	8	22	0.00298666
5	8	23	0.00298666
5	8	24	0.00298666
5	9	1	0.00289312
5	9	2	0.00289312
5	9	3	0.00289312
5	9	4	0.00289312
5	9	5	0.00289312
5	9	6	0.00289312
5	9	7	0.00289312
5	9	8	0.00289312
5	9	9	0.00298666
5	9	10	0.00298666
5	9	11	0.0029891
5	9	12	0.00298773
5	9	13	0.00298714
5	9	14	0.00298666

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	1.24E-06
5	7	9	1.24E-06
5	7	10	1.24E-06
5	7	11	1.24E-06
5	7	12	1.24E-06
5	7	13	1.24E-06
5	7	14	1.24E-06
5	7	15	1.24E-06
5	7	16	1.24E-06
5	7	17	1.24E-06
5	7	18	1.24E-06
5	7	19	1.24E-06
5	7	20	1.24E-06
5	7	21	1.24E-06
5	7	22	1.24E-06
5	7	23	1.24E-06
5	7	24	1.24E-06
5	8	1	1.15E-06
5	8	2	1.15E-06
5	8	3	1.15E-06
5	8	4	1.15E-06
5	8	5	1.15E-06
5	8	6	1.15E-06
5	8	7	1.15E-06
5	8	8	1.15E-06
5	8	9	1.15E-06
5	8	10	1.15E-06
5	8	11	1.15E-06
5	8	12	1.15E-06
5	8	13	1.15E-06
5	8	14	1.15E-06
5	8	15	1.15E-06
5	8	16	1.15E-06
5	8	17	1.15E-06
5	8	18	1.15E-06
5	8	19	1.15E-06
5	8	20	1.15E-06
5	8	21	1.15E-06
5	8	22	1.15E-06
5	8	23	1.15E-06
5	8	24	1.15E-06
5	9	1	1.08E-06
5	9	2	1.08E-06
5	9	3	1.08E-06
5	9	4	1.08E-06
5	9	5	1.08E-06
5	9	6	1.08E-06
5	9	7	1.08E-06
5	9	8	1.08E-06
5	9	9	1.15E-06
5	9	10	1.15E-06
5	9	11	1.15E-06
5	9	12	1.15E-06
5	9	13	1.15E-06
5	9	14	1.15E-06

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.00298666
5	9	16	0.00298666
5	9	17	0.00298666
5	9	18	0.00298666
5	9	19	0.00289312
5	9	20	0.00289312
5	9	21	0.00289312
5	9	22	0.00289312
5	9	23	0.00289312
5	9	24	0.00289312
5	10	1	0.00282331
5	10	2	0.00282331
5	10	3	0.00282331
5	10	4	0.00282331
5	10	5	0.00282331
5	10	6	0.00282331
5	10	7	0.00282331
5	10	8	0.00282331
5	10	9	0.00282331
5	10	10	0.00282331
5	10	11	0.00282331
5	10	12	0.00282331
5	10	13	0.00282331
5	10	14	0.00282331
5	10	15	0.00282331
5	10	16	0.00282331
5	10	17	0.00282331
5	10	18	0.00282331
5	10	19	0.00282331
5	10	20	0.00282331
5	10	21	0.00282331
5	10	22	0.00282331
5	10	23	0.00282331
5	10	24	0.00282331
5	11	1	0.00277247
5	11	2	0.00277247
5	11	3	0.00277247
5	11	4	0.00277247
5	11	5	0.00277247
5	11	6	0.00277247
5	11	7	0.00277247
5	11	8	0.00277247
5	11	9	0.00277247
5	11	10	0.00277247
5	11	11	0.00277247
5	11	12	0.00277247
5	11	13	0.00277247
5	11	14	0.00277247
5	11	15	0.00277247
5	11	16	0.00277247
5	11	17	0.00277247
5	11	18	0.00277247
5	11	19	0.00277247
5	11	20	0.00277247
5	11	21	0.00277247

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	1.15E-06
5	9	16	1.15E-06
5	9	17	1.15E-06
5	9	18	1.15E-06
5	9	19	1.08E-06
5	9	20	1.08E-06
5	9	21	1.08E-06
5	9	22	1.08E-06
5	9	23	1.08E-06
5	9	24	1.08E-06
5	10	1	1.04E-06
5	10	2	1.04E-06
5	10	3	1.04E-06
5	10	4	1.04E-06
5	10	5	1.04E-06
5	10	6	1.04E-06
5	10	7	1.04E-06
5	10	8	1.04E-06
5	10	9	1.04E-06
5	10	10	1.04E-06
5	10	11	1.04E-06
5	10	12	1.04E-06
5	10	13	1.04E-06
5	10	14	1.04E-06
5	10	15	1.04E-06
5	10	16	1.04E-06
5	10	17	1.04E-06
5	10	18	1.04E-06
5	10	19	1.04E-06
5	10	20	1.04E-06
5	10	21	1.04E-06
5	10	22	1.04E-06
5	10	23	1.04E-06
5	10	24	1.04E-06
5	11	1	1.03E-06
5	11	2	1.03E-06
5	11	3	1.03E-06
5	11	4	1.03E-06
5	11	5	1.03E-06
5	11	6	1.03E-06
5	11	7	1.03E-06
5	11	8	1.03E-06
5	11	9	1.03E-06
5	11	10	1.03E-06
5	11	11	1.03E-06
5	11	12	1.03E-06
5	11	13	1.03E-06
5	11	14	1.03E-06
5	11	15	1.03E-06
5	11	16	1.03E-06
5	11	17	1.03E-06
5	11	18	1.03E-06
5	11	19	1.03E-06
5	11	20	1.03E-06
5	11	21	1.03E-06

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.00277247
5	11	23	0.00277247
5	11	24	0.00277247

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	1.03E-06
5	11	23	1.03E-06
5	11	24	1.03E-06

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.035818
1	0	2	0.035818
1	0	3	0.035818
1	0	4	0.035818
1	0	5	0.035818
1	0	6	0.035818
1	0	7	0.035818
1	0	8	0.035818
1	0	9	0.035818
1	0	10	0.035818
1	0	11	0.035818
1	0	12	0.035818
1	0	13	0.035818
1	0	14	0.035818
1	0	15	0.035818
1	0	16	0.035818
1	0	17	0.035818
1	0	18	0.035818
1	0	19	0.035818
1	0	20	0.035818
1	0	21	0.035818
1	0	22	0.035818
1	0	23	0.035818
1	0	24	0.035818
5	1	1	0.246117
5	1	2	0.246117
5	1	3	0.246117
5	1	4	0.246117
5	1	5	0.246117
5	1	6	0.246117
5	1	7	0.246117
5	1	8	0.246117
5	1	9	0.246117
5	1	10	0.246117
5	1	11	0.246117
5	1	12	0.246117
5	1	13	0.246117
5	1	14	0.246117
5	1	15	0.246117
5	1	16	0.246117
5	1	17	0.246117
5	1	18	0.246117
5	1	19	0.246117
5	1	20	0.246117
5	1	21	0.246117
5	1	22	0.246118
5	1	23	0.246117
5	1	24	0.246117
5	7	1	0.036783
5	7	2	0.036783
5	7	3	0.036783
5	7	4	0.036783
5	7	5	0.036783
5	7	6	0.036783
5	7	7	0.036783

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
1	0	1	0.032495
1	0	2	0.032495
1	0	3	0.032495
1	0	4	0.032495
1	0	5	0.032495
1	0	6	0.032495
1	0	7	0.032495
1	0	8	0.032495
1	0	9	0.032495
1	0	10	0.032495
1	0	11	0.032495
1	0	12	0.032495
1	0	13	0.032495
1	0	14	0.032495
1	0	15	0.032495
1	0	16	0.032495
1	0	17	0.032495
1	0	18	0.032495
1	0	19	0.032495
1	0	20	0.032495
1	0	21	0.032495
1	0	22	0.032495
1	0	23	0.032495
1	0	24	0.032495
5	1	1	0.044208
5	1	2	0.044208
5	1	3	0.044208
5	1	4	0.044208
5	1	5	0.044208
5	1	6	0.044208
5	1	7	0.044208
5	1	8	0.044208
5	1	9	0.044208
5	1	10	0.044208
5	1	11	0.044208
5	1	12	0.044208
5	1	13	0.044208
5	1	14	0.044208
5	1	15	0.044208
5	1	16	0.044208
5	1	17	0.044208
5	1	18	0.044208
5	1	19	0.044208
5	1	20	0.044208
5	1	21	0.044208
5	1	22	0.044208
5	1	23	0.044208
5	1	24	0.044208
5	7	1	0.007742
5	7	2	0.007742
5	7	3	0.007742
5	7	4	0.007742
5	7	5	0.007742
5	7	6	0.007742
5	7	7	0.007742

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.036783
5	7	9	0.036783
5	7	10	0.036783
5	7	11	0.036783
5	7	12	0.036783
5	7	13	0.036783
5	7	14	0.036783
5	7	15	0.036783
5	7	16	0.036783
5	7	17	0.036783
5	7	18	0.036783
5	7	19	0.036783
5	7	20	0.036783
5	7	21	0.036783
5	7	22	0.036783
5	7	23	0.036783
5	7	24	0.036783
5	8	1	0.029343
5	8	2	0.029343
5	8	3	0.029343
5	8	4	0.029343
5	8	5	0.029343
5	8	6	0.029343
5	8	7	0.029343
5	8	8	0.029343
5	8	9	0.029343
5	8	10	0.029343
5	8	11	0.029343
5	8	12	0.029343
5	8	13	0.029343
5	8	14	0.029343
5	8	15	0.029343
5	8	16	0.029343
5	8	17	0.029343
5	8	18	0.029343
5	8	19	0.029343
5	8	20	0.029343
5	8	21	0.029343
5	8	22	0.029343
5	8	23	0.029343
5	8	24	0.029343
5	9	1	0.023678
5	9	2	0.023678
5	9	3	0.023678
5	9	4	0.023678
5	9	5	0.023678
5	9	6	0.023678
5	9	7	0.023678
5	9	8	0.023678
5	9	9	0.029343
5	9	10	0.029343
5	9	11	0.029343
5	9	12	0.029343
5	9	13	0.029343
5	9	14	0.029343

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	7	8	0.007742
5	7	9	0.007742
5	7	10	0.007742
5	7	11	0.007742
5	7	12	0.007742
5	7	13	0.007742
5	7	14	0.007742
5	7	15	0.007742
5	7	16	0.007742
5	7	17	0.007742
5	7	18	0.007742
5	7	19	0.007742
5	7	20	0.007742
5	7	21	0.007742
5	7	22	0.007742
5	7	23	0.007742
5	7	24	0.007742
5	8	1	0.006561
5	8	2	0.006561
5	8	3	0.006561
5	8	4	0.006561
5	8	5	0.006561
5	8	6	0.006561
5	8	7	0.006561
5	8	8	0.006561
5	8	9	0.006561
5	8	10	0.006561
5	8	11	0.006561
5	8	12	0.006561
5	8	13	0.006561
5	8	14	0.006561
5	8	15	0.006561
5	8	16	0.006561
5	8	17	0.006561
5	8	18	0.006561
5	8	19	0.006561
5	8	20	0.006561
5	8	21	0.006561
5	8	22	0.006561
5	8	23	0.006561
5	8	24	0.006561
5	9	1	0.005675
5	9	2	0.005675
5	9	3	0.005675
5	9	4	0.005675
5	9	5	0.005675
5	9	6	0.005675
5	9	7	0.005675
5	9	8	0.005675
5	9	9	0.006561
5	9	10	0.006561
5	9	11	0.006561
5	9	12	0.006561
5	9	13	0.006561
5	9	14	0.006561

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.029343
5	9	16	0.029343
5	9	17	0.029343
5	9	18	0.029343
5	9	19	0.023678
5	9	20	0.023678
5	9	21	0.023678
5	9	22	0.023678
5	9	23	0.023678
5	9	24	0.023678
5	10	1	0.019008
5	10	2	0.019008
5	10	3	0.019008
5	10	4	0.019008
5	10	5	0.019008
5	10	6	0.019008
5	10	7	0.019008
5	10	8	0.019008
5	10	9	0.019008
5	10	10	0.019008
5	10	11	0.019008
5	10	12	0.019008
5	10	13	0.019008
5	10	14	0.019008
5	10	15	0.019008
5	10	16	0.019008
5	10	17	0.019008
5	10	18	0.019008
5	10	19	0.019008
5	10	20	0.019008
5	10	21	0.019008
5	10	22	0.019008
5	10	23	0.019008
5	10	24	0.019008
5	11	1	0.014895
5	11	2	0.014895
5	11	3	0.014895
5	11	4	0.014895
5	11	5	0.014895
5	11	6	0.014895
5	11	7	0.014895
5	11	8	0.014895
5	11	9	0.014895
5	11	10	0.014895
5	11	11	0.014895
5	11	12	0.014895
5	11	13	0.014895
5	11	14	0.014895
5	11	15	0.014895
5	11	16	0.014895
5	11	17	0.014895
5	11	18	0.014895
5	11	19	0.014895
5	11	20	0.014895
5	11	21	0.014895

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	9	15	0.006561
5	9	16	0.006561
5	9	17	0.006561
5	9	18	0.006561
5	9	19	0.005675
5	9	20	0.005675
5	9	21	0.005675
5	9	22	0.005675
5	9	23	0.005675
5	9	24	0.005675
5	10	1	0.004971
5	10	2	0.004971
5	10	3	0.004971
5	10	4	0.004971
5	10	5	0.004971
5	10	6	0.004971
5	10	7	0.004971
5	10	8	0.004971
5	10	9	0.004971
5	10	10	0.004971
5	10	11	0.004971
5	10	12	0.004971
5	10	13	0.004971
5	10	14	0.004971
5	10	15	0.004971
5	10	16	0.004971
5	10	17	0.004971
5	10	18	0.004971
5	10	19	0.004971
5	10	20	0.004971
5	10	21	0.004971
5	10	22	0.004971
5	10	23	0.004971
5	10	24	0.004971
5	11	1	0.004395
5	11	2	0.004395
5	11	3	0.004395
5	11	4	0.004395
5	11	5	0.004395
5	11	6	0.004395
5	11	7	0.004395
5	11	8	0.004395
5	11	9	0.004395
5	11	10	0.004395
5	11	11	0.004395
5	11	12	0.004395
5	11	13	0.004395
5	11	14	0.004395
5	11	15	0.004395
5	11	16	0.004395
5	11	17	0.004395
5	11	18	0.004395
5	11	19	0.004395
5	11	20	0.004395
5	11	21	0.004395

CAR Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.014895
5	11	23	0.014895
5	11	24	0.014895

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	CAR
5	11	22	0.004395
5	11	23	0.004395
5	11	24	0.004395

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	3894.817
1	0	2	3894.817
1	0	3	3894.817
1	0	4	3894.817
1	0	5	3894.817
1	0	6	3894.817
1	0	7	3894.817
1	0	8	3894.817
1	0	9	3894.817
1	0	10	3894.817
1	0	11	3894.817
1	0	12	3894.817
1	0	13	3894.817
1	0	14	3894.817
1	0	15	3894.817
1	0	16	3894.817
1	0	17	3894.817
1	0	18	3894.817
1	0	19	3894.817
1	0	20	3894.817
1	0	21	3894.817
1	0	22	3894.817
1	0	23	3894.817
1	0	24	3894.817
5	1	1	2863.159
5	1	2	2863.159
5	1	3	2863.159
5	1	4	2863.159
5	1	5	2863.159
5	1	6	2863.159
5	1	7	2863.159
5	1	8	2863.159
5	1	9	2863.159
5	1	10	2863.159
5	1	11	2863.159
5	1	12	2863.159
5	1	13	2863.159
5	1	14	2863.159
5	1	15	2863.159
5	1	16	2863.159
5	1	17	2863.159
5	1	18	2863.159
5	1	19	2863.159
5	1	20	2863.159
5	1	21	2863.159
5	1	22	2863.159
5	1	23	2863.159
5	1	24	2863.159
5	7	1	706.3083
5	7	2	706.3083
5	7	3	706.3083
5	7	4	706.3083
5	7	5	706.3083
5	7	6	706.3083
5	7	7	706.3083

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.0868828
1	0	2	0.0868828
1	0	3	0.0868828
1	0	4	0.0868828
1	0	5	0.0868828
1	0	6	0.0868828
1	0	7	0.0868828
1	0	8	0.0868828
1	0	9	0.0868828
1	0	10	0.0868828
1	0	11	0.0868828
1	0	12	0.0868828
1	0	13	0.0868828
1	0	14	0.0868828
1	0	15	0.0868828
1	0	16	0.0868828
1	0	17	0.0868828
1	0	18	0.0868828
1	0	19	0.0868828
1	0	20	0.0868828
1	0	21	0.0868828
1	0	22	0.0868828
1	0	23	0.0868828
1	0	24	0.0868828
5	1	1	0.0347532
5	1	2	0.0347532
5	1	3	0.0347532
5	1	4	0.0347532
5	1	5	0.0347532
5	1	6	0.0347532
5	1	7	0.0347532
5	1	8	0.0347532
5	1	9	0.0347532
5	1	10	0.0347532
5	1	11	0.0347532
5	1	12	0.0347532
5	1	13	0.0347532
5	1	14	0.0347532
5	1	15	0.0347532
5	1	16	0.0347532
5	1	17	0.0347532
5	1	18	0.0347532
5	1	19	0.0347532
5	1	20	0.0347532
5	1	21	0.0347532
5	1	22	0.0347532
5	1	23	0.0347532
5	1	24	0.0347532
5	7	1	0.0028961
5	7	2	0.0028961
5	7	3	0.0028961
5	7	4	0.0028961
5	7	5	0.0028961
5	7	6	0.0028961
5	7	7	0.0028961

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	706.3083
5	7	9	706.3083
5	7	10	706.3083
5	7	11	706.3083
5	7	12	706.3083
5	7	13	706.3083
5	7	14	706.3083
5	7	15	706.3083
5	7	16	706.3083
5	7	17	706.3083
5	7	18	706.3083
5	7	19	706.3083
5	7	20	706.3083
5	7	21	706.3083
5	7	22	706.3083
5	7	23	706.3083
5	7	24	706.3083
5	8	1	619.5887
5	8	2	619.5887
5	8	3	619.5887
5	8	4	619.5887
5	8	5	619.5887
5	8	6	619.5887
5	8	7	619.5887
5	8	8	619.5887
5	8	9	619.5887
5	8	10	619.5887
5	8	11	619.5887
5	8	12	619.5887
5	8	13	619.5887
5	8	14	619.5887
5	8	15	619.5887
5	8	16	619.5887
5	8	17	619.5887
5	8	18	619.5887
5	8	19	619.5887
5	8	20	619.5887
5	8	21	619.5887
5	8	22	619.5887
5	8	23	619.5887
5	8	24	619.5887
5	9	1	597.2598
5	9	2	597.2598
5	9	3	597.2598
5	9	4	597.2598
5	9	5	597.2598
5	9	6	597.2598
5	9	7	597.2598
5	9	8	597.2598
5	9	9	597.2598
5	9	10	597.2598
5	9	11	597.2598
5	9	12	597.2598
5	9	13	597.2598
5	9	14	597.2598

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.0028961
5	7	9	0.0028961
5	7	10	0.0028961
5	7	11	0.0028961
5	7	12	0.0028961
5	7	13	0.0028961
5	7	14	0.0028961
5	7	15	0.0028961
5	7	16	0.0028961
5	7	17	0.0028961
5	7	18	0.0028961
5	7	19	0.0028961
5	7	20	0.0028961
5	7	21	0.0028961
5	7	22	0.0028961
5	7	23	0.0028961
5	7	24	0.0028961
5	8	1	0.0024824
5	8	2	0.0024824
5	8	3	0.0024824
5	8	4	0.0024824
5	8	5	0.0024824
5	8	6	0.0024824
5	8	7	0.0024824
5	8	8	0.0024824
5	8	9	0.0024824
5	8	10	0.0024824
5	8	11	0.0024824
5	8	12	0.0024824
5	8	13	0.0024824
5	8	14	0.0024824
5	8	15	0.0024824
5	8	16	0.0024824
5	8	17	0.0024824
5	8	18	0.0024824
5	8	19	0.0024824
5	8	20	0.0024824
5	8	21	0.0024824
5	8	22	0.0024824
5	8	23	0.0024824
5	8	24	0.0024824
5	9	1	0.0021721
5	9	2	0.0021721
5	9	3	0.0021721
5	9	4	0.0021721
5	9	5	0.0021721
5	9	6	0.0021721
5	9	7	0.0021721
5	9	8	0.0021721
5	9	9	0.0021721
5	9	10	0.0021721
5	9	11	0.0021721
5	9	12	0.0021721
5	9	13	0.0021721
5	9	14	0.0021721

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	597.2598
5	9	16	597.2598
5	9	17	597.2598
5	9	18	597.2598
5	9	19	597.2598
5	9	20	597.2598
5	9	21	597.2598
5	9	22	597.2598
5	9	23	597.2598
5	9	24	597.2598
5	10	1	580.4266
5	10	2	580.4266
5	10	3	580.4266
5	10	4	580.4266
5	10	5	580.4266
5	10	6	580.4266
5	10	7	580.4266
5	10	8	580.4266
5	10	9	580.4266
5	10	10	580.4266
5	10	11	580.4266
5	10	12	580.4266
5	10	13	580.4266
5	10	14	580.4266
5	10	15	580.4266
5	10	16	580.4266
5	10	17	580.4266
5	10	18	580.4266
5	10	19	580.4266
5	10	20	580.4266
5	10	21	580.4266
5	10	22	580.4266
5	10	23	580.4266
5	10	24	580.4266
5	11	1	571.1512
5	11	2	571.1512
5	11	3	571.1512
5	11	4	571.1512
5	11	5	571.1512
5	11	6	571.1512
5	11	7	571.1512
5	11	8	571.1512
5	11	9	571.1512
5	11	10	571.1512
5	11	11	571.1512
5	11	12	571.1512
5	11	13	571.1512
5	11	14	571.1512
5	11	15	571.1512
5	11	16	571.1512
5	11	17	571.1512
5	11	18	571.1512
5	11	19	571.1512
5	11	20	571.1512
5	11	21	571.1512

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.0021721
5	9	16	0.0021721
5	9	17	0.0021721
5	9	18	0.0021721
5	9	19	0.0021721
5	9	20	0.0021721
5	9	21	0.0021721
5	9	22	0.0021721
5	9	23	0.0021721
5	9	24	0.0021721
5	10	1	0.0019307
5	10	2	0.0019307
5	10	3	0.0019307
5	10	4	0.0019307
5	10	5	0.0019307
5	10	6	0.0019307
5	10	7	0.0019307
5	10	8	0.0019307
5	10	9	0.0019307
5	10	10	0.0019307
5	10	11	0.0019307
5	10	12	0.0019307
5	10	13	0.0019307
5	10	14	0.0019307
5	10	15	0.0019307
5	10	16	0.0019307
5	10	17	0.0019307
5	10	18	0.0019307
5	10	19	0.0019307
5	10	20	0.0019307
5	10	21	0.0019307
5	10	22	0.0019307
5	10	23	0.0019307
5	10	24	0.0019307
5	11	1	0.0017377
5	11	2	0.0017377
5	11	3	0.0017377
5	11	4	0.0017377
5	11	5	0.0017377
5	11	6	0.0017377
5	11	7	0.0017377
5	11	8	0.0017377
5	11	9	0.0017377
5	11	10	0.0017377
5	11	11	0.0017377
5	11	12	0.0017377
5	11	13	0.0017377
5	11	14	0.0017377
5	11	15	0.0017377
5	11	16	0.0017377
5	11	17	0.0017377
5	11	18	0.0017377
5	11	19	0.0017377
5	11	20	0.0017377
5	11	21	0.0017377

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	90	Atmospheric CO2	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	571.1512
5	11	23	571.1512
5	11	24	571.1512

PollutantID	6	Nitrous Oxide (N2O)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.0017377
5	11	23	0.0017377
5	11	24	0.0017377

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	1.469764
1	0	2	1.469764
1	0	3	1.469764
1	0	4	1.469764
1	0	5	1.469764
1	0	6	1.469764
1	0	7	1.469764
1	0	8	1.469764
1	0	9	1.469764
1	0	10	1.469764
1	0	11	1.469764
1	0	12	1.469764
1	0	13	1.469764
1	0	14	1.469764
1	0	15	1.469764
1	0	16	1.469764
1	0	17	1.469764
1	0	18	1.469764
1	0	19	1.469764
1	0	20	1.469764
1	0	21	1.469764
1	0	22	1.469764
1	0	23	1.469764
1	0	24	1.469764
5	1	1	0.845089
5	1	2	0.845089
5	1	3	0.845089
5	1	4	0.845089
5	1	5	0.845089
5	1	6	0.845089
5	1	7	0.845089
5	1	8	0.845089
5	1	9	0.845089
5	1	10	0.845089
5	1	11	0.845089
5	1	12	0.845089
5	1	13	0.845089
5	1	14	0.845089
5	1	15	0.845089
5	1	16	0.845089
5	1	17	0.845089
5	1	18	0.845089
5	1	19	0.845089
5	1	20	0.845089
5	1	21	0.845089
5	1	22	0.845089
5	1	23	0.845089
5	1	24	0.845089
5	7	1	0.106372
5	7	2	0.106372
5	7	3	0.106372
5	7	4	0.106372
5	7	5	0.106372
5	7	6	0.106372
5	7	7	0.106372

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	12.10738624
1	0	2	12.10738624
1	0	3	12.10738624
1	0	4	12.10738624
1	0	5	12.10738624
1	0	6	12.10738624
1	0	7	12.10738624
1	0	8	12.10738624
1	0	9	12.10738624
1	0	10	12.10738624
1	0	11	12.10738624
1	0	12	12.10738624
1	0	13	12.10738624
1	0	14	12.10738624
1	0	15	12.10738624
1	0	16	12.10738624
1	0	17	12.10738624
1	0	18	12.10738624
1	0	19	12.10738624
1	0	20	12.10738624
1	0	21	12.10738624
1	0	22	12.10738624
1	0	23	12.10738624
1	0	24	12.10738624
5	1	1	9.017187817
5	1	2	9.017187817
5	1	3	9.017187817
5	1	4	9.017187817
5	1	5	9.017187817
5	1	6	9.017187817
5	1	7	9.017187817
5	1	8	9.017187817
5	1	9	9.017187817
5	1	10	9.017187817
5	1	11	9.017187817
5	1	12	9.017187817
5	1	13	9.017187817
5	1	14	9.017187817
5	1	15	9.017187817
5	1	16	9.017187817
5	1	17	9.017187817
5	1	18	9.017187817
5	1	19	9.017187817
5	1	20	9.017187817
5	1	21	9.017187817
5	1	22	9.017187817
5	1	23	9.017187817
5	1	24	9.017187817
5	7	1	2.170258429
5	7	2	2.170258429
5	7	3	2.170258429
5	7	4	2.170258429
5	7	5	2.170258429
5	7	6	2.170258429
5	7	7	2.170258429

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.106372
5	7	9	0.106372
5	7	10	0.106372
5	7	11	0.106372
5	7	12	0.106372
5	7	13	0.106372
5	7	14	0.106372
5	7	15	0.106372
5	7	16	0.106372
5	7	17	0.106372
5	7	18	0.106372
5	7	19	0.106372
5	7	20	0.106372
5	7	21	0.106372
5	7	22	0.106372
5	7	23	0.106372
5	7	24	0.106372
5	8	1	0.094366
5	8	2	0.094366
5	8	3	0.094366
5	8	4	0.094366
5	8	5	0.094366
5	8	6	0.094366
5	8	7	0.094366
5	8	8	0.094366
5	8	9	0.094366
5	8	10	0.094366
5	8	11	0.094366
5	8	12	0.094366
5	8	13	0.094366
5	8	14	0.094366
5	8	15	0.094366
5	8	16	0.094366
5	8	17	0.094366
5	8	18	0.094366
5	8	19	0.094366
5	8	20	0.094366
5	8	21	0.094366
5	8	22	0.094366
5	8	23	0.094366
5	8	24	0.094366
5	9	1	0.080073
5	9	2	0.080073
5	9	3	0.080073
5	9	4	0.080073
5	9	5	0.080073
5	9	6	0.080073
5	9	7	0.080073
5	9	8	0.080073
5	9	9	0.080073
5	9	10	0.080073
5	9	11	0.080073
5	9	12	0.080073
5	9	13	0.080073
5	9	14	0.080073

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	2.170258429
5	7	9	2.170258429
5	7	10	2.170258429
5	7	11	2.170258429
5	7	12	2.170258429
5	7	13	2.170258429
5	7	14	2.170258429
5	7	15	2.170258429
5	7	16	2.170258429
5	7	17	2.170258429
5	7	18	2.170258429
5	7	19	2.170258429
5	7	20	2.170258429
5	7	21	2.170258429
5	7	22	2.170258429
5	7	23	2.170258429
5	7	24	2.170258429
5	8	1	1.919365269
5	8	2	1.919365269
5	8	3	1.919365269
5	8	4	1.919365269
5	8	5	1.919365269
5	8	6	1.919365269
5	8	7	1.919365269
5	8	8	1.919365269
5	8	9	1.919365269
5	8	10	1.919365269
5	8	11	1.919365269
5	8	12	1.919365269
5	8	13	1.919365269
5	8	14	1.919365269
5	8	15	1.919365269
5	8	16	1.919365269
5	8	17	1.919365269
5	8	18	1.919365269
5	8	19	1.919365269
5	8	20	1.919365269
5	8	21	1.919365269
5	8	22	1.919365269
5	8	23	1.919365269
5	8	24	1.919365269
5	9	1	1.824970349
5	9	2	1.824970349
5	9	3	1.824970349
5	9	4	1.824970349
5	9	5	1.824970349
5	9	6	1.824970349
5	9	7	1.824970349
5	9	8	1.824970349
5	9	9	1.824970349
5	9	10	1.824970349
5	9	11	1.824970349
5	9	12	1.824970349
5	9	13	1.824970349
5	9	14	1.824970349

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.080073
5	9	16	0.080073
5	9	17	0.080073
5	9	18	0.080073
5	9	19	0.080073
5	9	20	0.080073
5	9	21	0.080073
5	9	22	0.080073
5	9	23	0.080073
5	9	24	0.080073
5	10	1	0.068891
5	10	2	0.068891
5	10	3	0.068891
5	10	4	0.068891
5	10	5	0.068891
5	10	6	0.068891
5	10	7	0.068891
5	10	8	0.068891
5	10	9	0.068891
5	10	10	0.068891
5	10	11	0.068891
5	10	12	0.068891
5	10	13	0.068891
5	10	14	0.068891
5	10	15	0.068891
5	10	16	0.068891
5	10	17	0.068891
5	10	18	0.068891
5	10	19	0.068891
5	10	20	0.068891
5	10	21	0.068891
5	10	22	0.068891
5	10	23	0.068891
5	10	24	0.068891
5	11	1	0.059322
5	11	2	0.059322
5	11	3	0.059322
5	11	4	0.059322
5	11	5	0.059322
5	11	6	0.059322
5	11	7	0.059322
5	11	8	0.059322
5	11	9	0.059322
5	11	10	0.059322
5	11	11	0.059322
5	11	12	0.059322
5	11	13	0.059322
5	11	14	0.059322
5	11	15	0.059322
5	11	16	0.059322
5	11	17	0.059322
5	11	18	0.059322
5	11	19	0.059322
5	11	20	0.059322
5	11	21	0.059322

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	1.824970349
5	9	16	1.824970349
5	9	17	1.824970349
5	9	18	1.824970349
5	9	19	1.824970349
5	9	20	1.824970349
5	9	21	1.824970349
5	9	22	1.824970349
5	9	23	1.824970349
5	9	24	1.824970349
5	10	1	1.751555142
5	10	2	1.751555142
5	10	3	1.751555142
5	10	4	1.751555142
5	10	5	1.751555142
5	10	6	1.751555142
5	10	7	1.751555142
5	10	8	1.751555142
5	10	9	1.751555142
5	10	10	1.751555142
5	10	11	1.751555142
5	10	12	1.751555142
5	10	13	1.751555142
5	10	14	1.751555142
5	10	15	1.751555142
5	10	16	1.751555142
5	10	17	1.751555142
5	10	18	1.751555142
5	10	19	1.751555142
5	10	20	1.751555142
5	10	21	1.751555142
5	10	22	1.751555142
5	10	23	1.751555142
5	10	24	1.751555142
5	11	1	1.692616538
5	11	2	1.692616538
5	11	3	1.692616538
5	11	4	1.692616538
5	11	5	1.692616538
5	11	6	1.692616538
5	11	7	1.692616538
5	11	8	1.692616538
5	11	9	1.692616538
5	11	10	1.692616538
5	11	11	1.692616538
5	11	12	1.692616538
5	11	13	1.692616538
5	11	14	1.692616538
5	11	15	1.692616538
5	11	16	1.692616538
5	11	17	1.692616538
5	11	18	1.692616538
5	11	19	1.692616538
5	11	20	1.692616538
5	11	21	1.692616538

TRK Travel Emission Rate Calculation: GHG (2019)

PollutantID	5	Methane (CH4)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.059322
5	11	23	0.059322
5	11	24	0.059322

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	2	Carbon monoxide (CO)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	1.692616538
5	11	23	1.692616538
5	11	24	1.692616538

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	15.18488268
1	0	2	15.18488268
1	0	3	15.18488268
1	0	4	15.18488268
1	0	5	15.18488268
1	0	6	15.18488268
1	0	7	15.18488268
1	0	8	15.18488268
1	0	9	15.18488268
1	0	10	15.18488268
1	0	11	15.18488268
1	0	12	15.18488268
1	0	13	15.18488268
1	0	14	15.18488268
1	0	15	15.18488268
1	0	16	15.18488268
1	0	17	15.18488268
1	0	18	15.18488268
1	0	19	15.18488268
1	0	20	15.18488268
1	0	21	15.18488268
1	0	22	15.18488268
1	0	23	15.18488268
1	0	24	15.18488268
5	1	1	10.19604645
5	1	2	10.19604645
5	1	3	10.19604645
5	1	4	10.19604645
5	1	5	10.19604645
5	1	6	10.19604645
5	1	7	10.19604645
5	1	8	10.19604645
5	1	9	10.19604645
5	1	10	10.19604645
5	1	11	10.19604645
5	1	12	10.19604645
5	1	13	10.19604645
5	1	14	10.19604645
5	1	15	10.19604645
5	1	16	10.19604645
5	1	17	10.19604645
5	1	18	10.19604645
5	1	19	10.19604645
5	1	20	10.19604645
5	1	21	10.19604645
5	1	22	10.19604645
5	1	23	10.19604645
5	1	24	10.19604645
5	7	1	1.74461956
5	7	2	1.74461956
5	7	3	1.74461956
5	7	4	1.74461956
5	7	5	1.74461956
5	7	6	1.74461956
5	7	7	1.74461956

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.024388
1	0	2	0.024388
1	0	3	0.024388
1	0	4	0.024388
1	0	5	0.024388
1	0	6	0.024388
1	0	7	0.024388
1	0	8	0.024388
1	0	9	0.024388
1	0	10	0.024388
1	0	11	0.024388
1	0	12	0.024388
1	0	13	0.024388
1	0	14	0.024388
1	0	15	0.024388
1	0	16	0.024388
1	0	17	0.024388
1	0	18	0.024388
1	0	19	0.024388
1	0	20	0.024388
1	0	21	0.024388
1	0	22	0.024388
1	0	23	0.024388
1	0	24	0.024388
5	1	1	0.018945
5	1	2	0.01895
5	1	3	0.018949
5	1	4	0.018948
5	1	5	0.018942
5	1	6	0.018942
5	1	7	0.018947
5	1	8	0.018959
5	1	9	0.018957
5	1	10	0.018973
5	1	11	0.019011
5	1	12	0.019042
5	1	13	0.019048
5	1	14	0.019083
5	1	15	0.019078
5	1	16	0.019052
5	1	17	0.019034
5	1	18	0.019048
5	1	19	0.019015
5	1	20	0.018959
5	1	21	0.018968
5	1	22	0.018963
5	1	23	0.018961
5	1	24	0.018952
5	7	1	0.00289
5	7	2	0.002891
5	7	3	0.002891
5	7	4	0.002891
5	7	5	0.00289
5	7	6	0.00289
5	7	7	0.002891

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	1.74461956
5	7	9	1.74461956
5	7	10	1.74461956
5	7	11	1.74461956
5	7	12	1.74461956
5	7	13	1.74461956
5	7	14	1.74461956
5	7	15	1.74461956
5	7	16	1.74461956
5	7	17	1.74461956
5	7	18	1.74461956
5	7	19	1.74461956
5	7	20	1.74461956
5	7	21	1.74461956
5	7	22	1.74461956
5	7	23	1.74461956
5	7	24	1.74461956
5	8	1	1.469730179
5	8	2	1.469730179
5	8	3	1.469730179
5	8	4	1.469730179
5	8	5	1.469730179
5	8	6	1.469730179
5	8	7	1.469730179
5	8	8	1.469730179
5	8	9	1.469730179
5	8	10	1.469730179
5	8	11	1.469730179
5	8	12	1.469730179
5	8	13	1.469730179
5	8	14	1.469730179
5	8	15	1.469730179
5	8	16	1.469730179
5	8	17	1.469730179
5	8	18	1.469730179
5	8	19	1.469730179
5	8	20	1.469730179
5	8	21	1.469730179
5	8	22	1.469730179
5	8	23	1.469730179
5	8	24	1.469730179
5	9	1	1.328015322
5	9	2	1.328015322
5	9	3	1.328015322
5	9	4	1.328015322
5	9	5	1.328015322
5	9	6	1.328015322
5	9	7	1.328015322
5	9	8	1.328015322
5	9	9	1.328015322
5	9	10	1.328015322
5	9	11	1.328015322
5	9	12	1.328015322
5	9	13	1.328015322
5	9	14	1.328015322

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.002892
5	7	9	0.002891
5	7	10	0.002893
5	7	11	0.002896
5	7	12	0.002899
5	7	13	0.002899
5	7	14	0.002902
5	7	15	0.002902
5	7	16	0.002899
5	7	17	0.002898
5	7	18	0.002899
5	7	19	0.002896
5	7	20	0.002892
5	7	21	0.002892
5	7	22	0.002892
5	7	23	0.002892
5	7	24	0.002891
5	8	1	0.002397
5	8	2	0.002398
5	8	3	0.002397
5	8	4	0.002397
5	8	5	0.002397
5	8	6	0.002397
5	8	7	0.002397
5	8	8	0.002398
5	8	9	0.002398
5	8	10	0.002399
5	8	11	0.002402
5	8	12	0.002404
5	8	13	0.002405
5	8	14	0.002407
5	8	15	0.002407
5	8	16	0.002405
5	8	17	0.002404
5	8	18	0.002405
5	8	19	0.002402
5	8	20	0.002398
5	8	21	0.002399
5	8	22	0.002399
5	8	23	0.002398
5	8	24	0.002398
5	9	1	0.002036
5	9	2	0.002037
5	9	3	0.002037
5	9	4	0.002037
5	9	5	0.002036
5	9	6	0.002036
5	9	7	0.002037
5	9	8	0.002037
5	9	9	0.002037
5	9	10	0.002038
5	9	11	0.002041
5	9	12	0.002043
5	9	13	0.002043
5	9	14	0.002045

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	1.328015322
5	9	16	1.328015322
5	9	17	1.328015322
5	9	18	1.328015322
5	9	19	1.328015322
5	9	20	1.328015322
5	9	21	1.328015322
5	9	22	1.328015322
5	9	23	1.328015322
5	9	24	1.328015322
5	10	1	1.218168806
5	10	2	1.218168806
5	10	3	1.218168806
5	10	4	1.218168806
5	10	5	1.218168806
5	10	6	1.218168806
5	10	7	1.218168806
5	10	8	1.218168806
5	10	9	1.218168806
5	10	10	1.218168806
5	10	11	1.218168806
5	10	12	1.218168806
5	10	13	1.218168806
5	10	14	1.218168806
5	10	15	1.218168806
5	10	16	1.218168806
5	10	17	1.218168806
5	10	18	1.218168806
5	10	19	1.218168806
5	10	20	1.218168806
5	10	21	1.218168806
5	10	22	1.218168806
5	10	23	1.218168806
5	10	24	1.218168806
5	11	1	1.132984982
5	11	2	1.132984982
5	11	3	1.132984982
5	11	4	1.132984982
5	11	5	1.132984982
5	11	6	1.132984982
5	11	7	1.132984982
5	11	8	1.132984982
5	11	9	1.132984982
5	11	10	1.132984982
5	11	11	1.132984982
5	11	12	1.132984982
5	11	13	1.132984982
5	11	14	1.132984982
5	11	15	1.132984982
5	11	16	1.132984982
5	11	17	1.132984982
5	11	18	1.132984982
5	11	19	1.132984982
5	11	20	1.132984982
5	11	21	1.132984982

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.002045
5	9	16	0.002043
5	9	17	0.002042
5	9	18	0.002043
5	9	19	0.002041
5	9	20	0.002037
5	9	21	0.002038
5	9	22	0.002038
5	9	23	0.002037
5	9	24	0.002037
5	10	1	0.001754
5	10	2	0.001755
5	10	3	0.001755
5	10	4	0.001755
5	10	5	0.001754
5	10	6	0.001754
5	10	7	0.001755
5	10	8	0.001755
5	10	9	0.001755
5	10	10	0.001756
5	10	11	0.001758
5	10	12	0.00176
5	10	13	0.00176
5	10	14	0.001762
5	10	15	0.001762
5	10	16	0.00176
5	10	17	0.001759
5	10	18	0.00176
5	10	19	0.001758
5	10	20	0.001755
5	10	21	0.001756
5	10	22	0.001755
5	10	23	0.001755
5	10	24	0.001755
5	11	1	0.001517
5	11	2	0.001517
5	11	3	0.001517
5	11	4	0.001517
5	11	5	0.001516
5	11	6	0.001516
5	11	7	0.001517
5	11	8	0.001517
5	11	9	0.001517
5	11	10	0.001518
5	11	11	0.00152
5	11	12	0.001521
5	11	13	0.001522
5	11	14	0.001523
5	11	15	0.001523
5	11	16	0.001522
5	11	17	0.001521
5	11	18	0.001522
5	11	19	0.00152
5	11	20	0.001517
5	11	21	0.001518

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	3	Oxides of Nitrogen (NOx)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	1.132984982
5	11	23	1.132984982
5	11	24	1.132984982

PollutantID	20	Benzene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.001517
5	11	23	0.001517
5	11	24	0.001517

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.004556
1	0	2	0.004556
1	0	3	0.004556
1	0	4	0.004556
1	0	5	0.004556
1	0	6	0.004556
1	0	7	0.004556
1	0	8	0.004556
1	0	9	0.004556
1	0	10	0.004556
1	0	11	0.004556
1	0	12	0.004556
1	0	13	0.004556
1	0	14	0.004556
1	0	15	0.004556
1	0	16	0.004556
1	0	17	0.004556
1	0	18	0.004556
1	0	19	0.004556
1	0	20	0.004556
1	0	21	0.004556
1	0	22	0.004556
1	0	23	0.004556
1	0	24	0.004556
5	1	1	0.002735
5	1	2	0.002735
5	1	3	0.002735
5	1	4	0.002735
5	1	5	0.002735
5	1	6	0.002735
5	1	7	0.002735
5	1	8	0.002735
5	1	9	0.002735
5	1	10	0.002735
5	1	11	0.002735
5	1	12	0.002735
5	1	13	0.002735
5	1	14	0.002735
5	1	15	0.002735
5	1	16	0.002735
5	1	17	0.002735
5	1	18	0.002735
5	1	19	0.002735
5	1	20	0.002735
5	1	21	0.002735
5	1	22	0.002735
5	1	23	0.002735
5	1	24	0.002735
5	7	1	0.000341
5	7	2	0.000341
5	7	3	0.000341
5	7	4	0.000341
5	7	5	0.000341
5	7	6	0.000341
5	7	7	0.000341

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.138907
1	0	2	0.138907
1	0	3	0.138907
1	0	4	0.138907
1	0	5	0.138907
1	0	6	0.138907
1	0	7	0.138907
1	0	8	0.138907
1	0	9	0.138907
1	0	10	0.138907
1	0	11	0.138907
1	0	12	0.138907
1	0	13	0.138907
1	0	14	0.138907
1	0	15	0.138907
1	0	16	0.138907
1	0	17	0.138907
1	0	18	0.138907
1	0	19	0.138907
1	0	20	0.138907
1	0	21	0.138907
1	0	22	0.138907
1	0	23	0.138907
1	0	24	0.138907
5	1	1	0.08311
5	1	2	0.08311
5	1	3	0.08311
5	1	4	0.08311
5	1	5	0.08311
5	1	6	0.08311
5	1	7	0.08311
5	1	8	0.08311
5	1	9	0.08311
5	1	10	0.08311
5	1	11	0.08311
5	1	12	0.08311
5	1	13	0.08311
5	1	14	0.08311
5	1	15	0.08311
5	1	16	0.08311
5	1	17	0.08311
5	1	18	0.08311
5	1	19	0.08311
5	1	20	0.08311
5	1	21	0.08311
5	1	22	0.08311
5	1	23	0.08311
5	1	24	0.08311
5	7	1	0.00975
5	7	2	0.00975
5	7	3	0.00975
5	7	4	0.00975
5	7	5	0.00975
5	7	6	0.00975
5	7	7	0.00975

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.000341
5	7	9	0.000341
5	7	10	0.000341
5	7	11	0.000341
5	7	12	0.000341
5	7	13	0.000341
5	7	14	0.000341
5	7	15	0.000341
5	7	16	0.000341
5	7	17	0.000341
5	7	18	0.000341
5	7	19	0.000341
5	7	20	0.000341
5	7	21	0.000341
5	7	22	0.000341
5	7	23	0.000341
5	7	24	0.000341
5	8	1	0.000302
5	8	2	0.000302
5	8	3	0.000302
5	8	4	0.000302
5	8	5	0.000302
5	8	6	0.000302
5	8	7	0.000302
5	8	8	0.000302
5	8	9	0.000302
5	8	10	0.000302
5	8	11	0.000302
5	8	12	0.000302
5	8	13	0.000302
5	8	14	0.000302
5	8	15	0.000302
5	8	16	0.000302
5	8	17	0.000302
5	8	18	0.000302
5	8	19	0.000302
5	8	20	0.000302
5	8	21	0.000302
5	8	22	0.000302
5	8	23	0.000302
5	8	24	0.000302
5	9	1	0.00027
5	9	2	0.00027
5	9	3	0.00027
5	9	4	0.00027
5	9	5	0.00027
5	9	6	0.00027
5	9	7	0.00027
5	9	8	0.00027
5	9	9	0.00027
5	9	10	0.00027
5	9	11	0.00027
5	9	12	0.00027
5	9	13	0.00027
5	9	14	0.00027

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.00975
5	7	9	0.00975
5	7	10	0.00975
5	7	11	0.00975
5	7	12	0.00975
5	7	13	0.00975
5	7	14	0.00975
5	7	15	0.00975
5	7	16	0.00975
5	7	17	0.00975
5	7	18	0.00975
5	7	19	0.00975
5	7	20	0.00975
5	7	21	0.00975
5	7	22	0.00975
5	7	23	0.00975
5	7	24	0.00975
5	8	1	0.008774
5	8	2	0.008774
5	8	3	0.008774
5	8	4	0.008774
5	8	5	0.008774
5	8	6	0.008774
5	8	7	0.008774
5	8	8	0.008774
5	8	9	0.008774
5	8	10	0.008774
5	8	11	0.008774
5	8	12	0.008774
5	8	13	0.008774
5	8	14	0.008774
5	8	15	0.008774
5	8	16	0.008774
5	8	17	0.008774
5	8	18	0.008774
5	8	19	0.008774
5	8	20	0.008774
5	8	21	0.008774
5	8	22	0.008774
5	8	23	0.008774
5	8	24	0.008774
5	9	1	0.007905
5	9	2	0.007905
5	9	3	0.007905
5	9	4	0.007905
5	9	5	0.007905
5	9	6	0.007905
5	9	7	0.007905
5	9	8	0.007905
5	9	9	0.007905
5	9	10	0.007905
5	9	11	0.007905
5	9	12	0.007905
5	9	13	0.007905
5	9	14	0.007905

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.00027
5	9	16	0.00027
5	9	17	0.00027
5	9	18	0.00027
5	9	19	0.00027
5	9	20	0.00027
5	9	21	0.00027
5	9	22	0.00027
5	9	23	0.00027
5	9	24	0.00027
5	10	1	0.000246
5	10	2	0.000246
5	10	3	0.000246
5	10	4	0.000246
5	10	5	0.000246
5	10	6	0.000246
5	10	7	0.000246
5	10	8	0.000246
5	10	9	0.000246
5	10	10	0.000246
5	10	11	0.000246
5	10	12	0.000246
5	10	13	0.000246
5	10	14	0.000246
5	10	15	0.000246
5	10	16	0.000246
5	10	17	0.000246
5	10	18	0.000246
5	10	19	0.000246
5	10	20	0.000246
5	10	21	0.000246
5	10	22	0.000246
5	10	23	0.000246
5	10	24	0.000246
5	11	1	0.000226
5	11	2	0.000226
5	11	3	0.000226
5	11	4	0.000226
5	11	5	0.000226
5	11	6	0.000226
5	11	7	0.000226
5	11	8	0.000226
5	11	9	0.000226
5	11	10	0.000226
5	11	11	0.000226
5	11	12	0.000226
5	11	13	0.000226
5	11	14	0.000226
5	11	15	0.000226
5	11	16	0.000226
5	11	17	0.000226
5	11	18	0.000226
5	11	19	0.000226
5	11	20	0.000226
5	11	21	0.000226

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.007905
5	9	16	0.007905
5	9	17	0.007905
5	9	18	0.007905
5	9	19	0.007905
5	9	20	0.007905
5	9	21	0.007905
5	9	22	0.007905
5	9	23	0.007905
5	9	24	0.007905
5	10	1	0.007228
5	10	2	0.007228
5	10	3	0.007228
5	10	4	0.007228
5	10	5	0.007228
5	10	6	0.007228
5	10	7	0.007228
5	10	8	0.007228
5	10	9	0.007228
5	10	10	0.007228
5	10	11	0.007228
5	10	12	0.007228
5	10	13	0.007228
5	10	14	0.007228
5	10	15	0.007228
5	10	16	0.007228
5	10	17	0.007228
5	10	18	0.007228
5	10	19	0.007228
5	10	20	0.007228
5	10	21	0.007228
5	10	22	0.007228
5	10	23	0.007228
5	10	24	0.007228
5	11	1	0.006675
5	11	2	0.006675
5	11	3	0.006675
5	11	4	0.006675
5	11	5	0.006675
5	11	6	0.006675
5	11	7	0.006675
5	11	8	0.006675
5	11	9	0.006675
5	11	10	0.006675
5	11	11	0.006675
5	11	12	0.006675
5	11	13	0.006675
5	11	14	0.006675
5	11	15	0.006675
5	11	16	0.006675
5	11	17	0.006675
5	11	18	0.006675
5	11	19	0.006675
5	11	20	0.006675
5	11	21	0.006675

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	24	1,3-Butadiene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.000226
5	11	23	0.000226
5	11	24	0.000226

PollutantID	25	Formaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.006675
5	11	23	0.006675
5	11	24	0.006675

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.069926
1	0	2	0.069926
1	0	3	0.069926
1	0	4	0.069926
1	0	5	0.069926
1	0	6	0.069926
1	0	7	0.069926
1	0	8	0.069926
1	0	9	0.069926
1	0	10	0.069926
1	0	11	0.069926
1	0	12	0.069926
1	0	13	0.069926
1	0	14	0.069926
1	0	15	0.069926
1	0	16	0.069926
1	0	17	0.069926
1	0	18	0.069926
1	0	19	0.069926
1	0	20	0.069926
1	0	21	0.069926
1	0	22	0.069926
1	0	23	0.069926
1	0	24	0.069926
5	1	1	0.041228
5	1	2	0.041228
5	1	3	0.041228
5	1	4	0.041228
5	1	5	0.041228
5	1	6	0.041228
5	1	7	0.041228
5	1	8	0.041228
5	1	9	0.041228
5	1	10	0.041228
5	1	11	0.041228
5	1	12	0.041228
5	1	13	0.041228
5	1	14	0.041228
5	1	15	0.041228
5	1	16	0.041228
5	1	17	0.041228
5	1	18	0.041228
5	1	19	0.041228
5	1	20	0.041228
5	1	21	0.041228
5	1	22	0.041228
5	1	23	0.041228
5	1	24	0.041228
5	7	1	0.004902
5	7	2	0.004902
5	7	3	0.004902
5	7	4	0.004902
5	7	5	0.004902
5	7	6	0.004902
5	7	7	0.004902

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.010442
1	0	2	0.010442
1	0	3	0.010442
1	0	4	0.010442
1	0	5	0.010442
1	0	6	0.010442
1	0	7	0.010442
1	0	8	0.010442
1	0	9	0.010442
1	0	10	0.010442
1	0	11	0.010442
1	0	12	0.010442
1	0	13	0.010442
1	0	14	0.010442
1	0	15	0.010442
1	0	16	0.010442
1	0	17	0.010442
1	0	18	0.010442
1	0	19	0.010442
1	0	20	0.010442
1	0	21	0.010442
1	0	22	0.010442
1	0	23	0.010442
1	0	24	0.010442
5	1	1	0.006174
5	1	2	0.006174
5	1	3	0.006174
5	1	4	0.006174
5	1	5	0.006174
5	1	6	0.006174
5	1	7	0.006174
5	1	8	0.006174
5	1	9	0.006174
5	1	10	0.006174
5	1	11	0.006174
5	1	12	0.006174
5	1	13	0.006174
5	1	14	0.006174
5	1	15	0.006174
5	1	16	0.006174
5	1	17	0.006174
5	1	18	0.006174
5	1	19	0.006174
5	1	20	0.006174
5	1	21	0.006174
5	1	22	0.006174
5	1	23	0.006174
5	1	24	0.006174
5	7	1	0.000715
5	7	2	0.000715
5	7	3	0.000715
5	7	4	0.000715
5	7	5	0.000715
5	7	6	0.000715
5	7	7	0.000715

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.004902
5	7	9	0.004902
5	7	10	0.004902
5	7	11	0.004902
5	7	12	0.004902
5	7	13	0.004902
5	7	14	0.004902
5	7	15	0.004902
5	7	16	0.004902
5	7	17	0.004902
5	7	18	0.004902
5	7	19	0.004902
5	7	20	0.004902
5	7	21	0.004902
5	7	22	0.004902
5	7	23	0.004902
5	7	24	0.004902
5	8	1	0.004357
5	8	2	0.004357
5	8	3	0.004357
5	8	4	0.004357
5	8	5	0.004357
5	8	6	0.004357
5	8	7	0.004357
5	8	8	0.004357
5	8	9	0.004357
5	8	10	0.004357
5	8	11	0.004357
5	8	12	0.004357
5	8	13	0.004357
5	8	14	0.004357
5	8	15	0.004357
5	8	16	0.004357
5	8	17	0.004357
5	8	18	0.004357
5	8	19	0.004357
5	8	20	0.004357
5	8	21	0.004357
5	8	22	0.004357
5	8	23	0.004357
5	8	24	0.004357
5	9	1	0.003892
5	9	2	0.003892
5	9	3	0.003892
5	9	4	0.003892
5	9	5	0.003892
5	9	6	0.003892
5	9	7	0.003892
5	9	8	0.003892
5	9	9	0.003892
5	9	10	0.003892
5	9	11	0.003892
5	9	12	0.003892
5	9	13	0.003892
5	9	14	0.003892

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.000715
5	7	9	0.000715
5	7	10	0.000715
5	7	11	0.000715
5	7	12	0.000715
5	7	13	0.000715
5	7	14	0.000715
5	7	15	0.000715
5	7	16	0.000715
5	7	17	0.000715
5	7	18	0.000715
5	7	19	0.000715
5	7	20	0.000715
5	7	21	0.000715
5	7	22	0.000715
5	7	23	0.000715
5	7	24	0.000715
5	8	1	0.000644
5	8	2	0.000644
5	8	3	0.000644
5	8	4	0.000644
5	8	5	0.000644
5	8	6	0.000644
5	8	7	0.000644
5	8	8	0.000644
5	8	9	0.000644
5	8	10	0.000644
5	8	11	0.000644
5	8	12	0.000644
5	8	13	0.000644
5	8	14	0.000644
5	8	15	0.000644
5	8	16	0.000644
5	8	17	0.000644
5	8	18	0.000644
5	8	19	0.000644
5	8	20	0.000644
5	8	21	0.000644
5	8	22	0.000644
5	8	23	0.000644
5	8	24	0.000644
5	9	1	0.000583
5	9	2	0.000583
5	9	3	0.000583
5	9	4	0.000583
5	9	5	0.000583
5	9	6	0.000583
5	9	7	0.000583
5	9	8	0.000583
5	9	9	0.000583
5	9	10	0.000583
5	9	11	0.000583
5	9	12	0.000583
5	9	13	0.000583
5	9	14	0.000583

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.003892
5	9	16	0.003892
5	9	17	0.003892
5	9	18	0.003892
5	9	19	0.003892
5	9	20	0.003892
5	9	21	0.003892
5	9	22	0.003892
5	9	23	0.003892
5	9	24	0.003892
5	10	1	0.003529
5	10	2	0.003529
5	10	3	0.003529
5	10	4	0.003529
5	10	5	0.003529
5	10	6	0.003529
5	10	7	0.003529
5	10	8	0.003529
5	10	9	0.003529
5	10	10	0.003529
5	10	11	0.003529
5	10	12	0.003529
5	10	13	0.003529
5	10	14	0.003529
5	10	15	0.003529
5	10	16	0.003529
5	10	17	0.003529
5	10	18	0.003529
5	10	19	0.003529
5	10	20	0.003529
5	10	21	0.003529
5	10	22	0.003529
5	10	23	0.003529
5	10	24	0.003529
5	11	1	0.003228
5	11	2	0.003228
5	11	3	0.003228
5	11	4	0.003228
5	11	5	0.003228
5	11	6	0.003228
5	11	7	0.003228
5	11	8	0.003228
5	11	9	0.003228
5	11	10	0.003228
5	11	11	0.003228
5	11	12	0.003228
5	11	13	0.003228
5	11	14	0.003228
5	11	15	0.003228
5	11	16	0.003228
5	11	17	0.003228
5	11	18	0.003228
5	11	19	0.003228
5	11	20	0.003228
5	11	21	0.003228

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.000583
5	9	16	0.000583
5	9	17	0.000583
5	9	18	0.000583
5	9	19	0.000583
5	9	20	0.000583
5	9	21	0.000583
5	9	22	0.000583
5	9	23	0.000583
5	9	24	0.000583
5	10	1	0.000535
5	10	2	0.000535
5	10	3	0.000535
5	10	4	0.000535
5	10	5	0.000535
5	10	6	0.000535
5	10	7	0.000535
5	10	8	0.000535
5	10	9	0.000535
5	10	10	0.000535
5	10	11	0.000535
5	10	12	0.000535
5	10	13	0.000535
5	10	14	0.000535
5	10	15	0.000535
5	10	16	0.000535
5	10	17	0.000535
5	10	18	0.000535
5	10	19	0.000535
5	10	20	0.000535
5	10	21	0.000535
5	10	22	0.000535
5	10	23	0.000535
5	10	24	0.000535
5	11	1	0.000497
5	11	2	0.000497
5	11	3	0.000497
5	11	4	0.000497
5	11	5	0.000497
5	11	6	0.000497
5	11	7	0.000497
5	11	8	0.000497
5	11	9	0.000497
5	11	10	0.000497
5	11	11	0.000497
5	11	12	0.000497
5	11	13	0.000497
5	11	14	0.000497
5	11	15	0.000497
5	11	16	0.000497
5	11	17	0.000497
5	11	18	0.000497
5	11	19	0.000497
5	11	20	0.000497
5	11	21	0.000497

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	26	Acetaldehyde	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.003228
5	11	23	0.003228
5	11	24	0.003228

PollutantID	27	Acrolein	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.000497
5	11	23	0.000497
5	11	24	0.000497

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.0229053
1	0	2	0.0229053
1	0	3	0.0229053
1	0	4	0.0229053
1	0	5	0.0229053
1	0	6	0.0229053
1	0	7	0.0229053
1	0	8	0.0229053
1	0	9	0.0229053
1	0	10	0.0229053
1	0	11	0.0229053
1	0	12	0.0229053
1	0	13	0.0229053
1	0	14	0.0229053
1	0	15	0.0229053
1	0	16	0.0229053
1	0	17	0.0229053
1	0	18	0.0229053
1	0	19	0.0229053
1	0	20	0.0229053
1	0	21	0.0229053
1	0	22	0.0229053
1	0	23	0.0229053
1	0	24	0.0229053
5	1	1	0.01667646
5	1	2	0.01667646
5	1	3	0.01667646
5	1	4	0.01667646
5	1	5	0.01667646
5	1	6	0.01667646
5	1	7	0.01667646
5	1	8	0.01667646
5	1	9	0.01667646
5	1	10	0.01667646
5	1	11	0.01667646
5	1	12	0.01667646
5	1	13	0.01667646
5	1	14	0.01667646
5	1	15	0.01667646
5	1	16	0.01667646
5	1	17	0.01667646
5	1	18	0.01667646
5	1	19	0.01667646
5	1	20	0.01667646
5	1	21	0.01667646
5	1	22	0.01667646
5	1	23	0.01667646
5	1	24	0.01667646
5	7	1	0.00379331
5	7	2	0.00379331
5	7	3	0.00379331
5	7	4	0.00379331
5	7	5	0.00379331
5	7	6	0.00379331
5	7	7	0.00379331

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.000123
1	0	2	0.000123
1	0	3	0.000123
1	0	4	0.000123
1	0	5	0.000123
1	0	6	0.000123
1	0	7	0.000123
1	0	8	0.000123
1	0	9	0.000123
1	0	10	0.000123
1	0	11	0.000123
1	0	12	0.000123
1	0	13	0.000123
1	0	14	0.000123
1	0	15	0.000123
1	0	16	0.000123
1	0	17	0.000123
1	0	18	0.000123
1	0	19	0.000123
1	0	20	0.000123
1	0	21	0.000123
1	0	22	0.000123
1	0	23	0.000123
1	0	24	0.000123
5	1	1	3.85E-05
5	1	2	3.85E-05
5	1	3	3.85E-05
5	1	4	3.85E-05
5	1	5	3.85E-05
5	1	6	3.85E-05
5	1	7	3.85E-05
5	1	8	3.85E-05
5	1	9	3.85E-05
5	1	10	3.85E-05
5	1	11	3.85E-05
5	1	12	3.85E-05
5	1	13	3.85E-05
5	1	14	3.85E-05
5	1	15	3.85E-05
5	1	16	3.85E-05
5	1	17	3.85E-05
5	1	18	3.85E-05
5	1	19	3.85E-05
5	1	20	3.85E-05
5	1	21	3.85E-05
5	1	22	3.85E-05
5	1	23	3.85E-05
5	1	24	3.85E-05
5	7	1	6.05E-06
5	7	2	6.05E-06
5	7	3	6.05E-06
5	7	4	6.05E-06
5	7	5	6.05E-06
5	7	6	6.05E-06
5	7	7	6.05E-06

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.00379331
5	7	9	0.00379331
5	7	10	0.00379331
5	7	11	0.00379331
5	7	12	0.00379331
5	7	13	0.00379331
5	7	14	0.00379331
5	7	15	0.00379331
5	7	16	0.00379331
5	7	17	0.00379331
5	7	18	0.00379331
5	7	19	0.00379331
5	7	20	0.00379331
5	7	21	0.00379331
5	7	22	0.00379331
5	7	23	0.00379331
5	7	24	0.00379331
5	8	1	0.00337519
5	8	2	0.00337519
5	8	3	0.00337519
5	8	4	0.00337519
5	8	5	0.00337519
5	8	6	0.00337519
5	8	7	0.00337519
5	8	8	0.00337519
5	8	9	0.00337519
5	8	10	0.00337519
5	8	11	0.00337519
5	8	12	0.00337519
5	8	13	0.00337519
5	8	14	0.00337519
5	8	15	0.00337519
5	8	16	0.00337519
5	8	17	0.00337519
5	8	18	0.00337519
5	8	19	0.00337519
5	8	20	0.00337519
5	8	21	0.00337519
5	8	22	0.00337519
5	8	23	0.00337519
5	8	24	0.00337519
5	9	1	0.00326609
5	9	2	0.00326609
5	9	3	0.00326609
5	9	4	0.00326609
5	9	5	0.00326609
5	9	6	0.00326609
5	9	7	0.00326609
5	9	8	0.00326609
5	9	9	0.00326609
5	9	10	0.00326609
5	9	11	0.00326609
5	9	12	0.00326609
5	9	13	0.00326609
5	9	14	0.00326609

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	6.05E-06
5	7	9	6.05E-06
5	7	10	6.05E-06
5	7	11	6.05E-06
5	7	12	6.05E-06
5	7	13	6.05E-06
5	7	14	6.05E-06
5	7	15	6.05E-06
5	7	16	6.05E-06
5	7	17	6.05E-06
5	7	18	6.05E-06
5	7	19	6.05E-06
5	7	20	6.05E-06
5	7	21	6.05E-06
5	7	22	6.05E-06
5	7	23	6.05E-06
5	7	24	6.05E-06
5	8	1	4.78E-06
5	8	2	4.78E-06
5	8	3	4.78E-06
5	8	4	4.78E-06
5	8	5	4.78E-06
5	8	6	4.78E-06
5	8	7	4.78E-06
5	8	8	4.78E-06
5	8	9	4.78E-06
5	8	10	4.78E-06
5	8	11	4.78E-06
5	8	12	4.78E-06
5	8	13	4.78E-06
5	8	14	4.78E-06
5	8	15	4.78E-06
5	8	16	4.78E-06
5	8	17	4.78E-06
5	8	18	4.78E-06
5	8	19	4.78E-06
5	8	20	4.78E-06
5	8	21	4.78E-06
5	8	22	4.78E-06
5	8	23	4.78E-06
5	8	24	4.78E-06
5	9	1	4.34E-06
5	9	2	4.34E-06
5	9	3	4.34E-06
5	9	4	4.34E-06
5	9	5	4.34E-06
5	9	6	4.34E-06
5	9	7	4.34E-06
5	9	8	4.34E-06
5	9	9	4.34E-06
5	9	10	4.34E-06
5	9	11	4.34E-06
5	9	12	4.34E-06
5	9	13	4.34E-06
5	9	14	4.34E-06

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.00326609
5	9	16	0.00326609
5	9	17	0.00326609
5	9	18	0.00326609
5	9	19	0.00326609
5	9	20	0.00326609
5	9	21	0.00326609
5	9	22	0.00326609
5	9	23	0.00326609
5	9	24	0.00326609
5	10	1	0.0031848
5	10	2	0.0031848
5	10	3	0.0031848
5	10	4	0.0031848
5	10	5	0.0031848
5	10	6	0.0031848
5	10	7	0.0031848
5	10	8	0.0031848
5	10	9	0.0031848
5	10	10	0.0031848
5	10	11	0.0031848
5	10	12	0.0031848
5	10	13	0.0031848
5	10	14	0.0031848
5	10	15	0.0031848
5	10	16	0.0031848
5	10	17	0.0031848
5	10	18	0.0031848
5	10	19	0.0031848
5	10	20	0.0031848
5	10	21	0.0031848
5	10	22	0.0031848
5	10	23	0.0031848
5	10	24	0.0031848
5	11	1	0.00314807
5	11	2	0.00314807
5	11	3	0.00314807
5	11	4	0.00314807
5	11	5	0.00314807
5	11	6	0.00314807
5	11	7	0.00314807
5	11	8	0.00314807
5	11	9	0.00314807
5	11	10	0.00314807
5	11	11	0.00314807
5	11	12	0.00314807
5	11	13	0.00314807
5	11	14	0.00314807
5	11	15	0.00314807
5	11	16	0.00314807
5	11	17	0.00314807
5	11	18	0.00314807
5	11	19	0.00314807
5	11	20	0.00314807
5	11	21	0.00314807

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	4.34E-06
5	9	16	4.34E-06
5	9	17	4.34E-06
5	9	18	4.34E-06
5	9	19	4.34E-06
5	9	20	4.34E-06
5	9	21	4.34E-06
5	9	22	4.34E-06
5	9	23	4.34E-06
5	9	24	4.34E-06
5	10	1	4E-06
5	10	2	4E-06
5	10	3	4E-06
5	10	4	4E-06
5	10	5	4E-06
5	10	6	4E-06
5	10	7	4E-06
5	10	8	4E-06
5	10	9	4E-06
5	10	10	4E-06
5	10	11	4E-06
5	10	12	4E-06
5	10	13	4E-06
5	10	14	4E-06
5	10	15	4E-06
5	10	16	4E-06
5	10	17	4E-06
5	10	18	4E-06
5	10	19	4E-06
5	10	20	4E-06
5	10	21	4E-06
5	10	22	4E-06
5	10	23	4E-06
5	10	24	4E-06
5	11	1	3.75E-06
5	11	2	3.75E-06
5	11	3	3.75E-06
5	11	4	3.75E-06
5	11	5	3.75E-06
5	11	6	3.75E-06
5	11	7	3.75E-06
5	11	8	3.75E-06
5	11	9	3.75E-06
5	11	10	3.75E-06
5	11	11	3.75E-06
5	11	12	3.75E-06
5	11	13	3.75E-06
5	11	14	3.75E-06
5	11	15	3.75E-06
5	11	16	3.75E-06
5	11	17	3.75E-06
5	11	18	3.75E-06
5	11	19	3.75E-06
5	11	20	3.75E-06
5	11	21	3.75E-06

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	31	Sulfur Dioxide (SO2)	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.00314807
5	11	23	0.00314807
5	11	24	0.00314807

PollutantID	974	Benzo(a)pyrene	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	3.75E-06
5	11	23	3.75E-06
5	11	24	3.75E-06

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.767244
1	0	2	0.767244
1	0	3	0.767244
1	0	4	0.767244
1	0	5	0.767244
1	0	6	0.767244
1	0	7	0.767244
1	0	8	0.767244
1	0	9	0.767244
1	0	10	0.767244
1	0	11	0.767244
1	0	12	0.767244
1	0	13	0.767244
1	0	14	0.767244
1	0	15	0.767244
1	0	16	0.767244
1	0	17	0.767244
1	0	18	0.767244
1	0	19	0.767244
1	0	20	0.767244
1	0	21	0.767244
1	0	22	0.767244
1	0	23	0.767244
1	0	24	0.767244
5	1	1	0.938173
5	1	2	0.938173
5	1	3	0.938173
5	1	4	0.938173
5	1	5	0.938173
5	1	6	0.938173
5	1	7	0.938173
5	1	8	0.938173
5	1	9	0.938173
5	1	10	0.938173
5	1	11	0.938173
5	1	12	0.938173
5	1	13	0.938173
5	1	14	0.938173
5	1	15	0.938173
5	1	16	0.938173
5	1	17	0.938173
5	1	18	0.938173
5	1	19	0.938173
5	1	20	0.938173
5	1	21	0.938173
5	1	22	0.938173
5	1	23	0.938173
5	1	24	0.938173
5	7	1	0.153527
5	7	2	0.153527
5	7	3	0.153527
5	7	4	0.153527
5	7	5	0.153527
5	7	6	0.153527
5	7	7	0.153527

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
1	0	1	0.705609
1	0	2	0.705609
1	0	3	0.705609
1	0	4	0.705609
1	0	5	0.705609
1	0	6	0.705609
1	0	7	0.705609
1	0	8	0.705609
1	0	9	0.705609
1	0	10	0.705609
1	0	11	0.705609
1	0	12	0.705609
1	0	13	0.705609
1	0	14	0.705609
1	0	15	0.705609
1	0	16	0.705609
1	0	17	0.705609
1	0	18	0.705609
1	0	19	0.705609
1	0	20	0.705609
1	0	21	0.705609
1	0	22	0.705609
1	0	23	0.705609
1	0	24	0.705609
5	1	1	0.388435
5	1	2	0.388435
5	1	3	0.388435
5	1	4	0.388435
5	1	5	0.388435
5	1	6	0.388435
5	1	7	0.388435
5	1	8	0.388435
5	1	9	0.388435
5	1	10	0.388435
5	1	11	0.388435
5	1	12	0.388435
5	1	13	0.388435
5	1	14	0.388435
5	1	15	0.388435
5	1	16	0.388435
5	1	17	0.388435
5	1	18	0.388435
5	1	19	0.388435
5	1	20	0.388435
5	1	21	0.388435
5	1	22	0.388435
5	1	23	0.388435
5	1	24	0.388435
5	7	1	0.066083
5	7	2	0.066083
5	7	3	0.066083
5	7	4	0.066083
5	7	5	0.066083
5	7	6	0.066083
5	7	7	0.066083

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.153527
5	7	9	0.153527
5	7	10	0.153527
5	7	11	0.153527
5	7	12	0.153527
5	7	13	0.153527
5	7	14	0.153527
5	7	15	0.153527
5	7	16	0.153527
5	7	17	0.153527
5	7	18	0.153527
5	7	19	0.153527
5	7	20	0.153527
5	7	21	0.153527
5	7	22	0.153527
5	7	23	0.153527
5	7	24	0.153527
5	8	1	0.122464
5	8	2	0.122464
5	8	3	0.122464
5	8	4	0.122464
5	8	5	0.122464
5	8	6	0.122464
5	8	7	0.122464
5	8	8	0.122464
5	8	9	0.122464
5	8	10	0.122464
5	8	11	0.122464
5	8	12	0.122464
5	8	13	0.122464
5	8	14	0.122464
5	8	15	0.122464
5	8	16	0.122464
5	8	17	0.122464
5	8	18	0.122464
5	8	19	0.122464
5	8	20	0.122464
5	8	21	0.122464
5	8	22	0.122464
5	8	23	0.122464
5	8	24	0.122464
5	9	1	0.099414
5	9	2	0.099414
5	9	3	0.099414
5	9	4	0.099414
5	9	5	0.099414
5	9	6	0.099414
5	9	7	0.099414
5	9	8	0.099414
5	9	9	0.099414
5	9	10	0.099414
5	9	11	0.099414
5	9	12	0.099414
5	9	13	0.099414
5	9	14	0.099414

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	7	8	0.066083
5	7	9	0.066083
5	7	10	0.066083
5	7	11	0.066083
5	7	12	0.066083
5	7	13	0.066083
5	7	14	0.066083
5	7	15	0.066083
5	7	16	0.066083
5	7	17	0.066083
5	7	18	0.066083
5	7	19	0.066083
5	7	20	0.066083
5	7	21	0.066083
5	7	22	0.066083
5	7	23	0.066083
5	7	24	0.066083
5	8	1	0.054085
5	8	2	0.054085
5	8	3	0.054085
5	8	4	0.054085
5	8	5	0.054085
5	8	6	0.054085
5	8	7	0.054085
5	8	8	0.054085
5	8	9	0.054085
5	8	10	0.054085
5	8	11	0.054085
5	8	12	0.054085
5	8	13	0.054085
5	8	14	0.054085
5	8	15	0.054085
5	8	16	0.054085
5	8	17	0.054085
5	8	18	0.054085
5	8	19	0.054085
5	8	20	0.054085
5	8	21	0.054085
5	8	22	0.054085
5	8	23	0.054085
5	8	24	0.054085
5	9	1	0.047786
5	9	2	0.047786
5	9	3	0.047786
5	9	4	0.047786
5	9	5	0.047786
5	9	6	0.047786
5	9	7	0.047786
5	9	8	0.047786
5	9	9	0.047786
5	9	10	0.047786
5	9	11	0.047786
5	9	12	0.047786
5	9	13	0.047786
5	9	14	0.047786

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.099414
5	9	16	0.099414
5	9	17	0.099414
5	9	18	0.099414
5	9	19	0.099414
5	9	20	0.099414
5	9	21	0.099414
5	9	22	0.099414
5	9	23	0.099414
5	9	24	0.099414
5	10	1	0.08155
5	10	2	0.08155
5	10	3	0.08155
5	10	4	0.08155
5	10	5	0.08155
5	10	6	0.08155
5	10	7	0.08155
5	10	8	0.08155
5	10	9	0.08155
5	10	10	0.08155
5	10	11	0.08155
5	10	12	0.08155
5	10	13	0.08155
5	10	14	0.08155
5	10	15	0.08155
5	10	16	0.08155
5	10	17	0.08155
5	10	18	0.08155
5	10	19	0.08155
5	10	20	0.08155
5	10	21	0.08155
5	10	22	0.08155
5	10	23	0.08155
5	10	24	0.08155
5	11	1	0.068628
5	11	2	0.068628
5	11	3	0.068628
5	11	4	0.068628
5	11	5	0.068628
5	11	6	0.068628
5	11	7	0.068628
5	11	8	0.068628
5	11	9	0.068628
5	11	10	0.068628
5	11	11	0.068628
5	11	12	0.068628
5	11	13	0.068628
5	11	14	0.068628
5	11	15	0.068628
5	11	16	0.068628
5	11	17	0.068628
5	11	18	0.068628
5	11	19	0.068628
5	11	20	0.068628
5	11	21	0.068628

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	9	15	0.047786
5	9	16	0.047786
5	9	17	0.047786
5	9	18	0.047786
5	9	19	0.047786
5	9	20	0.047786
5	9	21	0.047786
5	9	22	0.047786
5	9	23	0.047786
5	9	24	0.047786
5	10	1	0.042925
5	10	2	0.042925
5	10	3	0.042925
5	10	4	0.042925
5	10	5	0.042925
5	10	6	0.042925
5	10	7	0.042925
5	10	8	0.042925
5	10	9	0.042925
5	10	10	0.042925
5	10	11	0.042925
5	10	12	0.042925
5	10	13	0.042925
5	10	14	0.042925
5	10	15	0.042925
5	10	16	0.042925
5	10	17	0.042925
5	10	18	0.042925
5	10	19	0.042925
5	10	20	0.042925
5	10	21	0.042925
5	10	22	0.042925
5	10	23	0.042925
5	10	24	0.042925
5	11	1	0.039433
5	11	2	0.039433
5	11	3	0.039433
5	11	4	0.039433
5	11	5	0.039433
5	11	6	0.039433
5	11	7	0.039433
5	11	8	0.039433
5	11	9	0.039433
5	11	10	0.039433
5	11	11	0.039433
5	11	12	0.039433
5	11	13	0.039433
5	11	14	0.039433
5	11	15	0.039433
5	11	16	0.039433
5	11	17	0.039433
5	11	18	0.039433
5	11	19	0.039433
5	11	20	0.039433
5	11	21	0.039433

TRK Travel Emission Rate Calculation: CAC (2019)

PollutantID	9100	PM10	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.068628
5	11	23	0.068628
5	11	24	0.068628

PollutantID	9110	PM2.5	
			G/VKT
RoadTypeID	AverageSpeedID	HourID	TRK
5	11	22	0.039433
5	11	23	0.039433
5	11	24	0.039433

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Appendix F

Emission Rate Summary

Air Quality Impact Assessment
Appendix F

Dundas Bus Rapid Transit (BRT)
Metrolinx, September 2021

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	1.82E-02	4.14E-04	2.01E-05	4.87E-03	1.14E-03	2.08E-05	0.00E+00	5.65E-06	2.66E-06	7.92E-09	2.91E-07	3.1	9.22E-05	1.57E-05
S1	60	8	2	5	1.18E-02	2.76E-04	1.34E-05	3.25E-03	7.59E-04	1.38E-05	0.00E+00	3.76E-06	1.77E-06	5.28E-09	1.94E-07	2.1	6.13E-05	1.04E-05
S1	60	8	3	5	1.01E-02	2.41E-04	1.16E-05	2.84E-03	6.64E-04	1.21E-05	0.00E+00	3.28E-06	1.54E-06	4.62E-09	1.69E-07	1.8	5.34E-05	9.13E-06
S1	60	8	4	5	7.11E-03	1.72E-04	8.28E-06	2.03E-03	4.75E-04	8.63E-06	0.00E+00	2.34E-06	1.10E-06	3.30E-09	1.21E-07	1.3	3.81E-05	6.52E-06
S1	60	8	5	5	9.90E-03	2.41E-04	1.16E-05	2.84E-03	6.64E-04	1.21E-05	0.00E+00	3.28E-06	1.54E-06	4.62E-09	1.69E-07	1.8	5.33E-05	9.13E-06
S1	60	8	6	5	2.40E-02	5.86E-04	2.81E-05	6.91E-03	1.61E-03	2.93E-05	0.00E+00	7.96E-06	3.74E-06	1.12E-08	4.11E-07	4.3	1.29E-04	2.22E-05
S1	60	8	7	5	7.31E-02	1.76E-03	8.46E-05	2.07E-02	4.84E-03	8.80E-05	0.00E+00	2.39E-05	1.12E-05	3.37E-08	1.23E-06	13.1	3.89E-04	6.65E-05
S1	60	8	8	5	1.18E-01	2.69E-03	1.31E-04	3.17E-02	7.40E-03	1.35E-04	0.00E+00	3.67E-05	1.73E-05	5.15E-08	1.89E-06	20.2	5.99E-04	1.02E-04
S1	60	8	9	5	1.02E-01	2.17E-03	1.07E-04	2.56E-02	5.98E-03	1.10E-04	0.00E+00	2.98E-05	1.40E-05	4.16E-08	1.54E-06	16.6	4.89E-04	8.22E-05
S1	60	8	10	5	8.77E-02	1.79E-03	8.95E-05	2.11E-02	4.94E-03	9.10E-05	0.00E+00	2.47E-05	1.16E-05	3.43E-08	1.27E-06	13.8	4.06E-04	6.79E-05
S1	60	8	11	5	8.20E-02	1.62E-03	8.16E-05	1.91E-02	4.46E-03	8.25E-05	0.00E+00	2.24E-05	1.05E-05	3.10E-08	1.16E-06	12.6	3.69E-04	6.13E-05
S1	60	8	12	5	9.80E-02	1.83E-03	9.34E-05	2.15E-02	5.03E-03	9.36E-05	0.00E+00	2.53E-05	1.20E-05	3.50E-08	1.31E-06	14.4	4.20E-04	6.92E-05
S1	60	8	13	5	1.05E-01	1.93E-03	9.90E-05	2.27E-02	5.32E-03	9.90E-05	0.00E+00	2.68E-05	1.27E-05	3.70E-08	1.39E-06	15.3	4.45E-04	7.31E-05
S1	60	8	14	5	1.08E-01	1.96E-03	1.01E-04	2.32E-02	5.41E-03	1.01E-04	0.00E+00	2.73E-05	1.29E-05	3.76E-08	1.41E-06	15.6	4.54E-04	7.44E-05
S1	60	8	15	5	1.13E-01	2.03E-03	1.05E-04	2.40E-02	5.60E-03	1.05E-04	0.00E+00	2.83E-05	1.34E-05	3.89E-08	1.46E-06	16.2	4.70E-04	7.70E-05
S1	60	8	16	5	1.22E-01	2.21E-03	1.14E-04	2.60E-02	6.08E-03	1.13E-04	0.00E+00	3.07E-05	1.45E-05	4.22E-08	1.59E-06	17.6	5.10E-04	8.35E-05
S1	60	8	17	5	1.50E-01	2.72E-03	1.40E-04	3.21E-02	7.50E-03	1.40E-04	0.00E+00	3.79E-05	1.79E-05	5.21E-08	1.96E-06	21.7	6.29E-04	1.03E-04
S1	60	8	18	5	1.60E-01	2.93E-03	1.50E-04	3.45E-02	8.07E-03	1.50E-04	0.00E+00	4.07E-05	1.92E-05	5.61E-08	2.11E-06	23.2	6.76E-04	1.11E-04
S1	60	8	19	5	1.09E-01	2.03E-03	1.04E-04	2.40E-02	5.60E-03	1.04E-04	0.00E+00	2.82E-05	1.33E-05	3.89E-08	1.46E-06	16.1	4.68E-04	7.70E-05
S1	60	8	20	5	6.88E-02	1.34E-03	6.79E-05	1.58E-02	3.70E-03	6.86E-05	0.00E+00	1.86E-05	8.76E-06	2.57E-08	9.60E-07	10.5	3.07E-04	5.09E-05
S1	60	8	21	5	5.63E-02	1.14E-03	5.70E-05	1.34E-02	3.13E-03	5.78E-05	0.00E+00	1.57E-05	7.38E-06	2.18E-08	8.10E-07	8.8	2.58E-04	4.31E-05
S1	60	8	22	5	4.62E-02	9.65E-04	4.79E-05	1.14E-02	2.66E-03	4.89E-05	0.00E+00	1.33E-05	6.25E-06	1.85E-08	6.85E-07	7.4	2.18E-04	3.65E-05
S1	60	8	23	5	3.68E-02	7.93E-04	3.91E-05	9.34E-03	2.18E-03	4.00E-05	0.00E+00	1.09E-05	5.12E-06	1.52E-08	5.61E-07	6.0	1.78E-04	3.00E-05
S1	60	8	24	5	2.65E-02	5.86E-04	2.87E-05	6.91E-03	1.61E-03	2.95E-05	0.00E+00	8.02E-06	3.77E-06	1.12E-08	4.14E-07	4.4	1.31E-04	2.22E-05
S2	60	8	1	5	8.35E-03	1.90E-04	9.26E-06	2.24E-03	5.24E-04	9.56E-06	0.00E+00	2.60E-06	1.22E-06	3.64E-09	1.34E-07	1.4	4.24E-05	7.20E-06
S2	60	8	2	5	5.44E-03	1.27E-04	6.14E-06	1.49E-03	3.49E-04	6.36E-06	0.00E+00	1.73E-06	8.12E-07	2.43E-09	8.91E-08	0.9	2.82E-05	4.80E-06
S2	60	8	3	5	4.64E-03	1.11E-04	5.34E-06	1.31E-03	3.05E-04	5.56E-06	0.00E+00	1.51E-06	7.09E-07	2.12E-09	7.78E-08	0.8	2.46E-05	4.20E-06
S2	60	8	4	5	3.27E-03	7.92E-05	3.81E-06	9.34E-04	2.18E-04	3.97E-06	0.00E+00	1.08E-06	5.06E-07	1.52E-09	5.55E-08	0.6	1.75E-05	3.00E-06
S2	60	8	5	5	4.55E-03	1.11E-04	5.32E-06	1.31E-03	3.05E-04	5.55E-06	0.00E+00	1.51E-06	7.08E-07	2.12E-09	7.77E-08	0.8	2.45E-05	4.20E-06
S2	60	8	6	5	1.11E-02	2.69E-04	1.29E-05	3.18E-03	7.42E-04	1.35E-05	0.00E+00	3.66E-06	1.72E-06	5.16E-09	1.89E-07	2.0	5.95E-05	1.02E-05
S2	60	8	7	5	3.36E-02	8.08E-04	3.89E-05	9.53E-03	2.23E-03	4.05E-05	0.00E+00	1.10E-05	5.17E-06	1.55E-08	5.67E-07	6.0	1.79E-04	3.06E-05
S2	60	8	8	5	5.41E-02	1.24E-03	6.01E-05	1.46E-02	3.40E-03	6.21E-05	0.00E+00	1.69E-05	7.93E-06	2.37E-08	8.71E-07	9.3	2.76E-04	4.68E-05
S2	60	8	9	5	4.68E-02	9.98E-04	4.93E-05	1.18E-02	2.75E-03	5.05E-05	0.00E+00	1.37E-05	6.45E-06	1.91E-08	7.07E-07	7.6	2.25E-04	3.78E-05
S2	60	8	10	5	4.03E-02	8.24E-04	4.11E-05	9.71E-03	2.27E-03	4.18E-05	0.00E+00	1.13E-05	5.34E-06	1.58E-08	5.86E-07	6.4	1.87E-04	3.12E-05
S2	60	8	11	5	3.77E-02	7.45E-04	3.75E-05	8.78E-03	2.05E-03	3.79E-05	0.00E+00	1.03E-05	4.85E-06	1.43E-08	5.31E-07	5.8	1.70E-04	2.82E-05
S2	60	8	12	5	4.50E-02	8.40E-04	4.29E-05	9.90E-03	2.31E-03	4.30E-05	0.00E+00	1.17E-05	5.50E-06	1.61E-08	6.03E-07	6.6	1.93E-04	3.18E-05
S2	60	8	13	5	4.83E-02	8.87E-04	4.55E-05	1.05E-02	2.44E-03	4.55E-05	0.00E+00	1.23E-05	5.82E-06	1.70E-08	6.38E-07	7.0	2.05E-04	3.36E-05
S2	60	8	14	5	4.96E-02	9.03E-04	4.64E-05	1.06E-02	2.49E-03	4.64E-05	0.00E+00	1.26E-05	5.93E-06	1.73E-08	6.50E-07	7.2	2.09E-04	3.42E-05
S2	60	8	15	5	5.18E-02	9.35E-04	4.82E-05	1.10E-02	2.57E-03	4.81E-05	0.00E+00	1.30E-05	6.14E-06	1.79E-08	6.73E-07	7.4	2.16E-04	3.54E-05
S2	60	8	16	5	5.60E-02	1.01E-03	5.22E-05	1.20E-02	2.79E-03	5.22E-05	0.00E+00	1.41E-05	6.66E-06	1.94E-08	7.30E-07	8.1	2.34E-04	3.84E-05
S2	60	8	17	5	6.90E-02	1.25E-03	6.44E-05	1.48E-02	3.45E-03	6.44E-05	0.00E+00	1.74E-05	8.22E-06	2.40E-08	9.01E-07	10.0	2.89E-04	4.74E-05
S2	60	8	18	5	7.34E-02	1.35E-03	6.91E-05	1.59E-02	3.71E-03	6.92E-05	0.00E+00	1.87E-05	8.83E-06	2.58E-08	9.68E-07	10.7	3.11E-04	5.10E-05
S2	60	8	19	5	5.03E-02	9.35E-04	4.78E-05	1.10E-02	2.57E-03	4.79E-05	0.00E+00	1.30E-05	6.12E-06	1.79E-08	6.71E-07	7.4	2.15E-04	3.54E-05
S2	60	8	20	5	3.17E-02	6.18E-04	3.12E-05	7.28E-03	1.70E-03	3.15E-05	0.00E+00	8.54E-06	4.03E-06	1.18E-08	4.41E-07	4.8	1.41E-04	2.34E-05
S2	60	8	21	5	2.59E-02	5.23E-04	2.62E-05	6.16E-03	1.44E-03	2.66E-05	0.00E+00	7.21E-06	3.40E-06	1.00E-08	3.72E-07	4.0	1.19E-04	1.98E-05
S2	60	8	22	5	2.12E-02	4.44E-04	2.20E-05	5.23E-03	1.22E-03	2.25E-05	0.00E+00	6.10E-06	2.87E-06	8.50E-09	3.15E-07	3.4	1.00E-04	1.68E-05
S2	60	8	23	5	1.69E-02	3.64E-04	1.80E-05	4.30E-03	1.00E-03	1.84E-05	0.00E+00	5.00E-06	2.35E-06	6.98E-09	2.58E-07	2.8	8.20E-05	1.38E-05
S2	60	8	24	5	1.22E-02	2.69E-04	1.32E-05	3.18E-03	7.42E-04	1.36E-05	0.00E+00	3.68E-06	1.73E-06	5.16E-09	1.90E-07	2.0	6.03E-05	1.02E-05
S3	60	8	1	5	8.43E-03	1.92E-04	9.34E-06	8.19E-04	1.79E-04	9.65E-06	0.00E+00	2.62E-06	1.23E-06	3.67E-09	1.35E-07	1.4	4.28E-05	7.26E-06
S3	60	8	2	5	5.49E-03	1.28E-04	6.20E-06	5.46E-04	1.20E-04	6.42E-06	0.00E+00	1.74E-06	8.20E-07	2.45E-09	8.99E-08	1.0	2.84E-05	4.84E-06
S3	60	8	3	5	4.68E-03	1.12E-04	5.39E-06	4.77E-04	1.05E-04	5.61E-06	0.00E+00	1.52E-06	7.16E-07	2.14E-09	7.85E-08	0.8	2.48E-05	4.24E-06
S3	60	8	4	5	3.30E-03	7.99E-05	3.84E-06	3.41E-04	7.47E-05	4.00E-06	0.00E+00	1.09E-06	5.11E-07	1.53E-09	5.60E-08	0.6	1.77E-05	3.03E-06
S3	60	8	5	5	4.59E-03	1.12E-04	5.37E-06	4.77E-04	1.05E-04	5.60E-06	0.00E+00	1.52E-06	7.14E-07	2.14E-09	7.84E-08	0.8	2.47E-05	4.24E-06
S3	60	8	6	5	1.11E-02	2.72E-04	1.30E-05	1.16E-03	2.54E-04	1.36E-05	0.00E+00	3.69E-06	1.74E-06	5.20E-09	1.90E-07	2.0	6.00E-05	1.03E-05
S3	60	8	7	5	3.39E-02	8.15E-04	3.92E-05	3.48E-03	7.62E-04	4.08E-05	0.00E+00	1.11E-05	5.21E-06	1.56E-08	5.72E-07	6.1	1.80E-04	3.09E-05
S3	60	8	8	5	5.46E-02	1.25E-03	6.07E-05	5.32E-03	1.17E-03	6.27E-05	0.00E+00	1.70E-05	8.01E-06	2.39E-08	8.78E-07	9.4	2.78E-04	4.72E-05
S3	60	8	9	5	4.72E-02	1.01E-03	4.98E-05	4.30E-03	9.41E-04	5.09E-05	0.00E+00	1.38E-05	6.51E-06	1.93E-08	7.14E-07	7.7	2.27E-04	3.81E-05
S3	60	8	10	5	4.07E-02	8.31E-04	4.15E-05	3.55E-03	7.77E-04	4.22E-05	0.00E+00	1.14E-05	5.39E-06	1.59E-08	5.91E-07	6.4	1.88E-04	3.15E-05
S3	60	8	11	5	3.80E-02	7.51E-04	3.78E-05	3.21E-03	7.02E-04	3.83E-05	0.00E+00	1.04E-05	4.89E-06	1.44E-08	5.36E-07	5.8	1.71E-04	2.84E-05
S3	60	8	12	5	4.54E-02	8.47E-04	4.33E-05	3.62E-03	7.92E-04	4.34E-05	0.00E+00	1.18E-05	5.55E-06	1.62E-08	6.08E-07	6.7	1.95E-04	3.21E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	13	5	4.87E-02	8.95E-04	4.59E-05	3.82E-03	8.37E-04	4.59E-05	0.00E+00	1.24E-05	5.87E-06	1.71E-08	6.43E-07	7.1	2.06E-04	3.39E-05
S3	60	8	14	5	5.00E-02	9.11E-04	4.69E-05	3.89E-03	8.52E-04	4.68E-05	0.00E+00	1.27E-05	5.98E-06	1.74E-08	6.55E-07	7.2	2.10E-04	3.45E-05
S3	60	8	15	5	5.22E-02	9.43E-04	4.86E-05	4.02E-03	8.82E-04	4.85E-05	0.00E+00	1.31E-05	6.19E-06	1.81E-08	6.79E-07	7.5	2.18E-04	3.57E-05
S3	60	8	16	5	5.65E-02	1.02E-03	5.27E-05	4.37E-03	9.56E-04	5.26E-05	0.00E+00	1.42E-05	6.72E-06	1.96E-08	7.36E-07	8.1	2.36E-04	3.87E-05
S3	60	8	17	5	6.96E-02	1.26E-03	6.50E-05	5.39E-03	1.18E-03	6.49E-05	0.00E+00	1.76E-05	8.29E-06	2.42E-08	9.09E-07	10.0	2.92E-04	4.78E-05
S3	60	8	18	5	7.40E-02	1.36E-03	6.97E-05	5.80E-03	1.27E-03	6.98E-05	0.00E+00	1.89E-05	8.91E-06	2.60E-08	9.77E-07	10.8	3.13E-04	5.14E-05
S3	60	8	19	5	5.07E-02	9.43E-04	4.82E-05	4.02E-03	8.82E-04	4.83E-05	0.00E+00	1.31E-05	6.18E-06	1.81E-08	6.77E-07	7.5	2.17E-04	3.57E-05
S3	60	8	20	5	3.19E-02	6.24E-04	3.15E-05	2.66E-03	5.83E-04	3.18E-05	0.00E+00	8.62E-06	4.06E-06	1.19E-08	4.45E-07	4.9	1.42E-04	2.36E-05
S3	60	8	21	5	2.61E-02	5.28E-04	2.64E-05	2.25E-03	4.93E-04	2.68E-05	0.00E+00	7.27E-06	3.43E-06	1.01E-08	3.76E-07	4.1	1.20E-04	2.00E-05
S3	60	8	22	5	2.14E-02	4.48E-04	2.22E-05	1.91E-03	4.18E-04	2.27E-05	0.00E+00	6.15E-06	2.90E-06	8.57E-09	3.18E-07	3.4	1.01E-04	1.69E-05
S3	60	8	23	5	1.71E-02	3.68E-04	1.81E-05	1.57E-03	3.44E-04	1.86E-05	0.00E+00	5.04E-06	2.37E-06	7.04E-09	2.60E-07	2.8	8.27E-05	1.39E-05
S3	60	8	24	5	1.23E-02	2.72E-04	1.33E-05	1.16E-03	2.54E-04	1.37E-05	0.00E+00	3.72E-06	1.75E-06	5.20E-09	1.92E-07	2.1	6.09E-05	1.03E-05
S4	60	8	1	5	1.90E-02	4.32E-04	2.11E-05	1.84E-03	4.04E-04	2.17E-05	0.00E+00	5.90E-06	2.78E-06	8.28E-09	3.05E-07	3.3	9.64E-05	1.64E-05
S4	60	8	2	5	1.24E-02	2.88E-04	1.40E-05	1.23E-03	2.69E-04	1.45E-05	0.00E+00	3.93E-06	1.85E-06	5.52E-09	2.03E-07	2.2	6.41E-05	1.09E-05
S4	60	8	3	5	1.06E-02	2.52E-04	1.21E-05	1.08E-03	2.36E-04	1.26E-05	0.00E+00	3.43E-06	1.61E-06	4.83E-09	1.77E-07	1.9	5.59E-05	9.55E-06
S4	60	8	4	5	7.43E-03	1.80E-04	8.65E-06	7.69E-04	1.68E-04	9.02E-06	0.00E+00	2.45E-06	1.15E-06	3.45E-09	1.26E-07	1.3	3.98E-05	6.82E-06
S4	60	8	5	5	1.03E-02	2.52E-04	1.21E-05	1.08E-03	2.36E-04	1.26E-05	0.00E+00	3.42E-06	1.61E-06	4.83E-09	1.77E-07	1.9	5.57E-05	9.55E-06
S4	60	8	6	5	2.51E-02	6.13E-04	2.94E-05	2.61E-03	5.72E-04	3.06E-05	0.00E+00	8.32E-06	3.91E-06	1.17E-08	4.29E-07	4.5	1.35E-04	2.32E-05
S4	60	8	7	5	7.64E-02	1.84E-03	8.84E-05	7.84E-03	1.72E-03	9.20E-05	0.00E+00	2.50E-05	1.17E-05	3.52E-08	1.29E-06	13.7	4.07E-04	6.96E-05
S4	60	8	8	5	1.23E-01	2.81E-03	1.37E-04	1.20E-02	2.63E-03	1.41E-04	0.00E+00	3.83E-05	1.80E-05	5.38E-08	1.98E-06	21.1	6.26E-04	1.06E-04
S4	60	8	9	5	1.06E-01	2.27E-03	1.12E-04	9.68E-03	2.12E-03	1.15E-04	0.00E+00	3.11E-05	1.47E-05	4.35E-08	1.61E-06	17.3	5.11E-04	8.59E-05
S4	60	8	10	5	9.17E-02	1.87E-03	9.35E-05	7.99E-03	1.75E-03	9.51E-05	0.00E+00	2.58E-05	1.21E-05	3.59E-08	1.33E-06	14.5	4.25E-04	7.09E-05
S4	60	8	11	5	8.57E-02	1.69E-03	8.53E-05	7.22E-03	1.58E-03	8.62E-05	0.00E+00	2.34E-05	1.10E-05	3.24E-08	1.21E-06	13.2	3.86E-04	6.41E-05
S4	60	8	12	5	1.02E-01	1.91E-03	9.76E-05	8.15E-03	1.78E-03	9.78E-05	0.00E+00	2.65E-05	1.25E-05	3.66E-08	1.37E-06	15.1	4.39E-04	7.23E-05
S4	60	8	13	5	1.10E-01	2.02E-03	1.03E-04	8.61E-03	1.89E-03	1.04E-04	0.00E+00	2.80E-05	1.32E-05	3.86E-08	1.45E-06	16.0	4.65E-04	7.64E-05
S4	60	8	14	5	1.13E-01	2.05E-03	1.06E-04	8.76E-03	1.92E-03	1.06E-04	0.00E+00	2.86E-05	1.35E-05	3.93E-08	1.48E-06	16.3	4.74E-04	7.77E-05
S4	60	8	15	5	1.18E-01	2.13E-03	1.10E-04	9.07E-03	1.99E-03	1.09E-04	0.00E+00	2.96E-05	1.40E-05	4.07E-08	1.53E-06	16.9	4.92E-04	8.05E-05
S4	60	8	16	5	1.27E-01	2.31E-03	1.19E-04	9.84E-03	2.16E-03	1.19E-04	0.00E+00	3.21E-05	1.51E-05	4.42E-08	1.66E-06	18.3	5.33E-04	8.73E-05
S4	60	8	17	5	1.57E-01	2.85E-03	1.46E-04	1.21E-02	2.66E-03	1.46E-04	0.00E+00	3.96E-05	1.87E-05	5.45E-08	2.05E-06	22.6	6.58E-04	1.08E-04
S4	60	8	18	5	1.67E-01	3.06E-03	1.57E-04	1.31E-02	2.86E-03	1.57E-04	0.00E+00	4.26E-05	2.01E-05	5.86E-08	2.20E-06	24.3	7.06E-04	1.16E-04
S4	60	8	19	5	1.14E-01	2.13E-03	1.09E-04	9.07E-03	1.99E-03	1.09E-04	0.00E+00	2.95E-05	1.39E-05	4.07E-08	1.53E-06	16.8	4.89E-04	8.05E-05
S4	60	8	20	5	7.20E-02	1.41E-03	7.10E-05	5.99E-03	1.31E-03	7.17E-05	0.00E+00	1.94E-05	9.15E-06	2.69E-08	1.00E-06	11.0	3.21E-04	5.32E-05
S4	60	8	21	5	5.88E-02	1.19E-03	5.95E-05	5.07E-03	1.11E-03	6.04E-05	0.00E+00	1.64E-05	7.72E-06	2.28E-08	8.46E-07	9.2	2.70E-04	4.50E-05
S4	60	8	22	5	4.83E-02	1.01E-03	5.01E-05	4.30E-03	9.43E-04	5.11E-05	0.00E+00	1.39E-05	6.53E-06	1.93E-08	7.16E-07	7.7	2.28E-04	3.82E-05
S4	60	8	23	5	3.85E-02	8.29E-04	4.09E-05	3.54E-03	7.75E-04	4.19E-05	0.00E+00	1.14E-05	5.35E-06	1.59E-08	5.87E-07	6.3	1.86E-04	3.14E-05
S4	60	8	24	5	2.77E-02	6.13E-04	3.00E-05	2.61E-03	5.72E-04	3.09E-05	0.00E+00	8.38E-06	3.94E-06	1.17E-08	4.33E-07	4.6	1.37E-04	2.32E-05
S5	60	8	1	5	5.90E-03	1.34E-04	6.54E-06	5.73E-04	1.26E-04	6.76E-06	0.00E+00	1.83E-06	8.63E-07	2.57E-09	9.47E-08	1.0	3.00E-05	5.09E-06
S5	60	8	2	5	3.85E-03	8.96E-05	4.34E-06	3.82E-04	8.37E-05	4.50E-06	0.00E+00	1.22E-06	5.74E-07	1.72E-09	6.30E-08	0.7	1.99E-05	3.39E-06
S5	60	8	3	5	3.28E-03	7.84E-05	3.78E-06	3.34E-04	7.33E-05	3.93E-06	0.00E+00	1.07E-06	5.01E-07	1.50E-09	5.50E-08	0.6	1.74E-05	2.97E-06
S5	60	8	4	5	2.31E-03	5.60E-05	2.69E-06	2.39E-04	5.23E-05	2.80E-06	0.00E+00	7.61E-07	3.58E-07	1.07E-09	3.92E-08	0.4	1.24E-05	2.12E-06
S5	60	8	5	5	3.22E-03	7.84E-05	3.76E-06	3.34E-04	7.33E-05	3.92E-06	0.00E+00	1.06E-06	5.00E-07	1.50E-09	5.49E-08	0.6	1.73E-05	2.97E-06
S5	60	8	6	5	7.81E-03	1.90E-04	9.13E-06	8.12E-04	1.78E-04	9.53E-06	0.00E+00	2.59E-06	1.22E-06	3.64E-09	1.33E-07	1.4	4.21E-05	7.21E-06
S5	60	8	7	5	2.37E-02	5.71E-04	2.75E-05	2.44E-03	5.34E-04	2.86E-05	0.00E+00	7.76E-06	3.65E-06	1.09E-08	4.01E-07	4.2	1.26E-04	2.16E-05
S5	60	8	8	5	3.82E-02	8.74E-04	4.25E-05	3.73E-03	8.17E-04	4.39E-05	0.00E+00	1.19E-05	5.61E-06	1.67E-08	6.15E-07	6.6	1.95E-04	3.31E-05
S5	60	8	9	5	3.31E-02	7.06E-04	3.49E-05	3.01E-03	6.59E-04	3.57E-05	0.00E+00	9.68E-06	4.56E-06	1.35E-08	5.00E-07	5.4	1.59E-04	2.67E-05
S5	60	8	10	5	2.85E-02	5.82E-04	2.91E-05	2.48E-03	5.44E-04	2.96E-05	0.00E+00	8.02E-06	3.78E-06	1.11E-08	4.14E-07	4.5	1.32E-04	2.20E-05
S5	60	8	11	5	2.66E-02	5.26E-04	2.65E-05	2.25E-03	4.92E-04	2.68E-05	0.00E+00	7.27E-06	3.42E-06	1.01E-08	3.76E-07	4.1	1.20E-04	1.99E-05
S5	60	8	12	5	3.18E-02	5.94E-04	3.03E-05	2.53E-03	5.55E-04	3.04E-05	0.00E+00	8.24E-06	3.88E-06	1.14E-08	4.26E-07	4.7	1.37E-04	2.25E-05
S5	60	8	13	5	3.41E-02	6.27E-04	3.22E-05	2.68E-03	5.86E-04	3.22E-05	0.00E+00	8.71E-06	4.11E-06	1.20E-08	4.51E-07	5.0	1.45E-04	2.37E-05
S5	60	8	14	5	3.50E-02	6.38E-04	3.28E-05	2.72E-03	5.97E-04	3.28E-05	0.00E+00	8.88E-06	4.19E-06	1.22E-08	4.59E-07	5.1	1.47E-04	2.42E-05
S5	60	8	15	5	3.66E-02	6.61E-04	3.41E-05	2.82E-03	6.18E-04	3.40E-05	0.00E+00	9.20E-06	4.34E-06	1.27E-08	4.76E-07	5.3	1.53E-04	2.50E-05
S5	60	8	16	5	3.96E-02	7.17E-04	3.69E-05	3.06E-03	6.70E-04	3.69E-05	0.00E+00	9.97E-06	4.71E-06	1.37E-08	5.16E-07	5.7	1.66E-04	2.71E-05
S5	60	8	17	5	4.87E-02	8.85E-04	4.55E-05	3.77E-03	8.27E-04	4.55E-05	0.00E+00	1.23E-05	5.81E-06	1.69E-08	6.37E-07	7.0	2.04E-04	3.35E-05
S5	60	8	18	5	5.19E-02	9.52E-04	4.88E-05	4.06E-03	8.90E-04	4.89E-05	0.00E+00	1.32E-05	6.24E-06	1.82E-08	6.84E-07	7.5	2.20E-04	3.60E-05
S5	60	8	19	5	3.55E-02	6.61E-04	3.38E-05	2.82E-03	6.18E-04	3.39E-05	0.00E+00	9.17E-06	4.33E-06	1.27E-08	4.74E-07	5.2	1.52E-04	2.50E-05
S5	60	8	20	5	2.24E-02	4.37E-04	2.21E-05	1.86E-03	4.08E-04	2.23E-05	0.00E+00	6.04E-06	2.85E-06	8.36E-09	3.12E-07	3.4	9.97E-05	1.65E-05
S5	60	8	21	5	1.83E-02	3.70E-04	1.85E-05	1.58E-03	3.45E-04	1.88E-05	0.00E+00	5.09E-06	2.40E-06	7.08E-09	2.63E-07	2.9	8.39E-05	1.40E-05
S5	60	8	22	5	1.50E-02	3.14E-04	1.56E-05	1.34E-03	2.93E-04	1.59E-05	0.00E+00	4.31E-06	2.03E-06	6.00E-09	2.23E-07	2.4	7.08E-05	1.19E-05
S5	60	8	23	5	1.20E-02	2.58E-04	1.27E-05	1.10E-03	2.41E-04	1.30E-05	0.00E+00	3.53E-06	1.66E-06	4.93E-09	1.82E-07	2.0	5.79E-05	9.75E-06
S5	60	8	24	5	8.61E-03	1.90E-04	9.33E-06	8.12E-04	1.78E-04	9.59E-06	0.00E+00	2.60E-06	1.23E-06	3.64E-09	1.34E-07	1.4	4.26E-05	7.21E-06
S6	60	8	1	5	6.37E-03	1.45E-04	7.06E-06	6.19E-04	1.36E-04	7.29E-06	0.00E+00	1.98E-06	9.31E-07	2.78E-09	1.02E-07	1.1	3.23E-05	5.49E-06
S6	60	8	2	5	4.15E-03	9.67E-05	4.68E-06	4.12E-04	9.03E-05	4.85E-06	0.00E+00	1.32E-06	6.19E-07	1.85E-09	6.80E-08	0.7	2.15E-05	3.66E-06
S6	60	8	3	5	3.54E-03	8.46E-05	4.07E-06	3.61E-04	7.90E-05	4.24E-06	0.00E+00	1.15E-06	5.41E-07	1.62E-09	5.93E-08	0.6	1.87E-05	3.20E-06
S6	60	8	4	5	2.49E-03	6.04E-05	2.90E-06	2.58E-04	5.65E-05	3.02E-06	0.00E+00	8.21E-07	3.86E-07	1.16E-09	4.23E-08	0.4	1.34E-05	2.29E-06
S6	60	8	5	5	3.47E-03	8.46E-05	4.06E-06	3.61E-04	7.90E-05	4.23E-06	0.00E+00	1.15E-06	5.40E-07	1.62E-09	5.93E-08	0.6	1.87E-05	3.20E-06
S6	60	8	6	5	8.43E-03	2.05E-04	9.85E-06	8.76E-04	1.92E-04	1.03E-05	0.00E+00	2.79E-06	1.31E-06	3.93E-09	1.44E-07	1.5	4.54E-05	7.77E-06
S6	60	8	7	5	2.56E-02	6.16E-04	2.96E-05	2.63E-03	5.76E-04	3.09E-05	0.00E+00	8.38E-06	3.94E-06	1.18E-08	4.32E-07	4.6	1.36E-04	2.33E-05
S6	60	8	8	5	4.12E-02	9.42E-04	4.59E-05	4.02E-03	8.81E-04	4.74E-05	0.00E+00	1.29E-05	6.05E-06	1.80E-08	6.64E-07	7.1	2.10E-04	3.57E-05
S6	60	8	9	5	3.57E-02	7.61E-04	3.76E-05	3.25E-03	7.11E-04	3.85E-05	0.00E+00	1.04E-05	4.92E-06	1.46E-08	5.39E-07	5.8	1.71E-04	2.88E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	10	5	3.07E-02	6.28E-04	3.14E-05	2.68E-03	5.87E-04	3.19E-05	0.00E+00	8.65E-06	4.07E-06	1.20E-08	4.47E-07	4.8	1.42E-04	2.38E-05
S6	60	8	11	5	2.87E-02	5.68E-04	2.86E-05	2.42E-03	5.31E-04	2.89E-05	0.00E+00	7.84E-06	3.69E-06	1.09E-08	4.05E-07	4.4	1.29E-04	2.15E-05
S6	60	8	12	5	3.43E-02	6.40E-04	3.27E-05	2.73E-03	5.98E-04	3.28E-05	0.00E+00	8.88E-06	4.19E-06	1.23E-08	4.59E-07	5.1	1.47E-04	2.42E-05
S6	60	8	13	5	3.68E-02	6.77E-04	3.47E-05	2.89E-03	6.32E-04	3.47E-05	0.00E+00	9.40E-06	4.44E-06	1.30E-08	4.86E-07	5.4	1.56E-04	2.56E-05
S6	60	8	14	5	3.78E-02	6.89E-04	3.54E-05	2.94E-03	6.44E-04	3.54E-05	0.00E+00	9.58E-06	4.52E-06	1.32E-08	4.95E-07	5.5	1.59E-04	2.61E-05
S6	60	8	15	5	3.95E-02	7.13E-04	3.67E-05	3.04E-03	6.66E-04	3.67E-05	0.00E+00	9.92E-06	4.68E-06	1.36E-08	5.13E-07	5.7	1.65E-04	2.70E-05
S6	60	8	16	5	4.27E-02	7.73E-04	3.98E-05	3.30E-03	7.23E-04	3.98E-05	0.00E+00	1.08E-05	5.08E-06	1.48E-08	5.56E-07	6.2	1.79E-04	2.93E-05
S6	60	8	17	5	5.26E-02	9.54E-04	4.91E-05	4.07E-03	8.92E-04	4.91E-05	0.00E+00	1.33E-05	6.26E-06	1.83E-08	6.87E-07	7.6	2.21E-04	3.61E-05
S6	60	8	18	5	5.59E-02	1.03E-03	5.27E-05	4.38E-03	9.60E-04	5.27E-05	0.00E+00	1.43E-05	6.73E-06	1.97E-08	7.38E-07	8.1	2.37E-04	3.89E-05
S6	60	8	19	5	3.83E-02	7.13E-04	3.64E-05	3.04E-03	6.66E-04	3.65E-05	0.00E+00	9.89E-06	4.67E-06	1.36E-08	5.12E-07	5.6	1.64E-04	2.70E-05
S6	60	8	20	5	2.41E-02	4.71E-04	2.38E-05	2.01E-03	4.40E-04	2.40E-05	0.00E+00	6.51E-06	3.07E-06	9.02E-09	3.37E-07	3.7	1.08E-04	1.78E-05
S6	60	8	21	5	1.97E-02	3.99E-04	2.00E-05	1.70E-03	3.73E-04	2.03E-05	0.00E+00	5.49E-06	2.59E-06	7.63E-09	2.84E-07	3.1	9.05E-05	1.51E-05
S6	60	8	22	5	1.62E-02	3.38E-04	1.68E-05	1.44E-03	3.16E-04	1.71E-05	0.00E+00	4.65E-06	2.19E-06	6.48E-09	2.40E-07	2.6	7.64E-05	1.28E-05
S6	60	8	23	5	1.29E-02	2.78E-04	1.37E-05	1.19E-03	2.60E-04	1.40E-05	0.00E+00	3.81E-06	1.79E-06	5.32E-09	1.97E-07	2.1	6.25E-05	1.05E-05
S6	60	8	24	5	9.29E-03	2.05E-04	1.01E-05	8.76E-04	1.92E-04	1.03E-05	0.00E+00	2.81E-06	1.32E-06	3.93E-09	1.45E-07	1.6	4.60E-05	7.77E-06
S7	60	8	1	5	1.10E-02	2.51E-04	1.22E-05	1.07E-03	2.35E-04	1.26E-05	0.00E+00	3.43E-06	1.61E-06	4.80E-09	1.77E-07	1.9	5.60E-05	9.50E-06
S7	60	8	2	5	7.18E-03	1.67E-04	8.11E-06	7.14E-04	1.56E-04	8.40E-06	0.00E+00	2.28E-06	1.07E-06	3.20E-09	1.18E-07	1.3	3.72E-05	6.33E-06
S7	60	8	3	5	6.12E-03	1.46E-04	7.05E-06	6.25E-04	1.37E-04	7.33E-06	0.00E+00	1.99E-06	9.36E-07	2.80E-09	1.03E-07	1.1	3.24E-05	5.54E-06
S7	60	8	4	5	4.31E-03	1.05E-04	5.02E-06	4.46E-04	9.77E-05	5.23E-06	0.00E+00	1.42E-06	6.68E-07	2.00E-09	7.33E-08	0.8	2.31E-05	3.96E-06
S7	60	8	5	5	6.01E-03	1.46E-04	7.02E-06	6.25E-04	1.37E-04	7.32E-06	0.00E+00	1.99E-06	9.35E-07	2.80E-09	1.03E-07	1.1	3.23E-05	5.54E-06
S7	60	8	6	5	1.46E-02	3.56E-04	1.71E-05	1.52E-03	3.32E-04	1.78E-05	0.00E+00	4.83E-06	2.27E-06	6.81E-09	2.49E-07	2.6	7.85E-05	1.35E-05
S7	60	8	7	5	4.43E-02	1.07E-03	5.13E-05	4.55E-03	9.97E-04	5.34E-05	0.00E+00	1.45E-05	6.82E-06	2.04E-08	7.48E-07	7.9	2.36E-04	4.04E-05
S7	60	8	8	5	7.14E-02	1.63E-03	7.94E-05	6.96E-03	1.52E-03	8.20E-05	0.00E+00	2.23E-05	1.05E-05	3.12E-08	1.15E-06	12.3	3.64E-04	6.18E-05
S7	60	8	9	5	6.18E-02	1.32E-03	6.51E-05	5.62E-03	1.23E-03	6.66E-05	0.00E+00	1.81E-05	8.51E-06	2.52E-08	9.33E-07	10.1	2.97E-04	4.99E-05
S7	60	8	10	5	5.32E-02	1.09E-03	5.43E-05	4.64E-03	1.02E-03	5.52E-05	0.00E+00	1.50E-05	7.05E-06	2.08E-08	7.73E-07	8.4	2.46E-04	4.12E-05
S7	60	8	11	5	4.97E-02	9.83E-04	4.95E-05	4.19E-03	9.19E-04	5.01E-05	0.00E+00	1.36E-05	6.40E-06	1.88E-08	7.01E-07	7.6	2.24E-04	3.72E-05
S7	60	8	12	5	5.94E-02	1.11E-03	5.66E-05	4.73E-03	1.04E-03	5.68E-05	0.00E+00	1.54E-05	7.25E-06	2.12E-08	7.95E-07	8.8	2.55E-04	4.20E-05
S7	60	8	13	5	6.37E-02	1.17E-03	6.01E-05	5.00E-03	1.09E-03	6.01E-05	0.00E+00	1.63E-05	7.68E-06	2.24E-08	8.42E-07	9.3	2.70E-04	4.43E-05
S7	60	8	14	5	6.54E-02	1.19E-03	6.13E-05	5.09E-03	1.11E-03	6.12E-05	0.00E+00	1.66E-05	7.82E-06	2.28E-08	8.57E-07	9.5	2.75E-04	4.51E-05
S7	60	8	15	5	6.83E-02	1.23E-03	6.36E-05	5.26E-03	1.15E-03	6.35E-05	0.00E+00	1.72E-05	8.10E-06	2.36E-08	8.88E-07	9.8	2.85E-04	4.67E-05
S7	60	8	16	5	7.39E-02	1.34E-03	6.89E-05	5.71E-03	1.25E-03	6.88E-05	0.00E+00	1.86E-05	8.79E-06	2.56E-08	9.63E-07	10.7	3.09E-04	5.07E-05
S7	60	8	17	5	9.10E-02	1.65E-03	8.50E-05	7.05E-03	1.54E-03	8.49E-05	0.00E+00	2.30E-05	1.08E-05	3.16E-08	1.19E-06	13.1	3.82E-04	6.25E-05
S7	60	8	18	5	9.68E-02	1.78E-03	9.12E-05	7.58E-03	1.66E-03	9.13E-05	0.00E+00	2.47E-05	1.17E-05	3.40E-08	1.28E-06	14.1	4.10E-04	6.73E-05
S7	60	8	19	5	6.63E-02	1.23E-03	6.31E-05	5.26E-03	1.15E-03	6.32E-05	0.00E+00	1.71E-05	8.08E-06	2.36E-08	8.86E-07	9.8	2.84E-04	4.67E-05
S7	60	8	20	5	4.18E-02	8.16E-04	4.12E-05	3.48E-03	7.62E-04	4.16E-05	0.00E+00	1.13E-05	5.31E-06	1.56E-08	5.83E-07	6.4	1.86E-04	3.09E-05
S7	60	8	21	5	3.41E-02	6.90E-04	3.46E-05	2.94E-03	6.45E-04	3.51E-05	0.00E+00	9.51E-06	4.48E-06	1.32E-08	4.91E-07	5.3	1.57E-04	2.61E-05
S7	60	8	22	5	2.80E-02	5.86E-04	2.91E-05	2.50E-03	5.47E-04	2.97E-05	0.00E+00	8.05E-06	3.79E-06	1.12E-08	4.16E-07	4.5	1.32E-04	2.22E-05
S7	60	8	23	5	2.23E-02	4.81E-04	2.37E-05	2.05E-03	4.50E-04	2.43E-05	0.00E+00	6.59E-06	3.10E-06	9.21E-09	3.41E-07	3.7	1.08E-04	1.82E-05
S7	60	8	24	5	1.61E-02	3.56E-04	1.74E-05	1.52E-03	3.32E-04	1.79E-05	0.00E+00	4.86E-06	2.29E-06	6.81E-09	2.51E-07	2.7	7.96E-05	1.35E-05
S8	60	8	1	5	8.10E-03	1.84E-04	8.98E-06	7.87E-04	1.72E-04	9.27E-06	0.00E+00	2.52E-06	1.18E-06	3.53E-09	1.30E-07	1.4	4.11E-05	6.98E-06
S8	60	8	2	5	5.28E-03	1.23E-04	5.96E-06	5.25E-04	1.15E-04	6.17E-06	0.00E+00	1.68E-06	7.88E-07	2.35E-09	8.65E-08	0.9	2.73E-05	4.65E-06
S8	60	8	3	5	4.50E-03	1.08E-04	5.18E-06	4.59E-04	1.01E-04	5.39E-06	0.00E+00	1.46E-06	6.88E-07	2.06E-09	7.55E-08	0.8	2.38E-05	4.07E-06
S8	60	8	4	5	3.17E-03	7.68E-05	3.69E-06	3.28E-04	7.18E-05	3.85E-06	0.00E+00	1.04E-06	4.91E-07	1.47E-09	5.39E-08	0.6	1.70E-05	2.91E-06
S8	60	8	5	5	4.41E-03	1.08E-04	5.16E-06	4.59E-04	1.01E-04	5.38E-06	0.00E+00	1.46E-06	6.87E-07	2.06E-09	7.54E-08	0.8	2.38E-05	4.07E-06
S8	60	8	6	5	1.07E-02	2.61E-04	1.25E-05	1.11E-03	2.44E-04	1.31E-05	0.00E+00	3.55E-06	1.67E-06	5.00E-09	1.83E-07	1.9	5.77E-05	9.89E-06
S8	60	8	7	5	3.26E-02	7.84E-04	3.77E-05	3.34E-03	7.33E-04	3.93E-05	0.00E+00	1.07E-05	5.01E-06	1.50E-08	5.50E-07	5.8	1.73E-04	2.97E-05
S8	60	8	8	5	5.25E-02	1.20E-03	5.83E-05	5.11E-03	1.12E-03	6.03E-05	0.00E+00	1.64E-05	7.70E-06	2.29E-08	8.44E-07	9.0	2.67E-04	4.54E-05
S8	60	8	9	5	4.54E-02	9.68E-04	4.79E-05	4.13E-03	9.05E-04	4.89E-05	0.00E+00	1.33E-05	6.25E-06	1.85E-08	6.86E-07	7.4	2.18E-04	3.67E-05
S8	60	8	10	5	3.91E-02	7.99E-04	3.99E-05	3.41E-03	7.47E-04	4.06E-05	0.00E+00	1.10E-05	5.18E-06	1.53E-08	5.68E-07	6.2	1.81E-04	3.03E-05
S8	60	8	11	5	3.65E-02	7.22E-04	3.64E-05	3.08E-03	6.75E-04	3.68E-05	0.00E+00	9.97E-06	4.70E-06	1.38E-08	5.15E-07	5.6	1.65E-04	2.73E-05
S8	60	8	12	5	4.37E-02	8.15E-04	4.16E-05	3.48E-03	7.61E-04	4.17E-05	0.00E+00	1.13E-05	5.33E-06	1.56E-08	5.84E-07	6.4	1.87E-04	3.08E-05
S8	60	8	13	5	4.68E-02	8.61E-04	4.42E-05	3.67E-03	8.04E-04	4.42E-05	0.00E+00	1.20E-05	5.64E-06	1.65E-08	6.18E-07	6.8	1.98E-04	3.26E-05
S8	60	8	14	5	4.81E-02	8.76E-04	4.50E-05	3.74E-03	8.19E-04	4.50E-05	0.00E+00	1.22E-05	5.75E-06	1.68E-08	6.30E-07	7.0	2.02E-04	3.32E-05
S8	60	8	15	5	5.02E-02	9.07E-04	4.67E-05	3.87E-03	8.48E-04	4.66E-05	0.00E+00	1.26E-05	5.96E-06	1.74E-08	6.53E-07	7.2	2.10E-04	3.43E-05
S8	60	8	16	5	5.43E-02	9.84E-04	5.06E-05	4.20E-03	9.19E-04	5.06E-05	0.00E+00	1.37E-05	6.46E-06	1.88E-08	7.08E-07	7.8	2.27E-04	3.72E-05
S8	60	8	17	5	6.69E-02	1.21E-03	6.25E-05	5.18E-03	1.13E-03	6.24E-05	0.00E+00	1.69E-05	7.97E-06	2.32E-08	8.74E-07	9.7	2.81E-04	4.60E-05
S8	60	8	18	5	7.12E-02	1.31E-03	6.70E-05	5.57E-03	1.22E-03	6.71E-05	0.00E+00	1.82E-05	8.56E-06	2.50E-08	9.39E-07	10.4	3.01E-04	4.95E-05
S8	60	8	19	5	4.87E-02	9.07E-04	4.64E-05	3.87E-03	8.48E-04	4.65E-05	0.00E+00	1.26E-05	5.94E-06	1.74E-08	6.51E-07	7.2	2.09E-04	3.43E-05
S8	60	8	20	5	3.07E-02	5.99E-04	3.03E-05	2.56E-03	5.60E-04	3.06E-05	0.00E+00	8.28E-06	3.90E-06	1.15E-08	4.28E-07	4.7	1.37E-04	2.27E-05
S8	60	8	21	5	2.51E-02	5.07E-04	2.54E-05	2.16E-03	4.74E-04	2.58E-05	0.00E+00	6.99E-06	3.29E-06	9.71E-09	3.61E-07	3.9	1.15E-04	1.92E-05
S8	60	8	22	5	2.06E-02	4.30E-04	2.14E-05	1.84E-03	4.02E-04	2.18E-05	0.00E+00	5.91E-06	2.78E-06	8.24E-09	3.05E-07	3.3	9.72E-05	1.63E-05
S8	60	8	23	5	1.64E-02	3.54E-04	1.74E-05	1.51E-03	3.30E-04	1.79E-05	0.00E+00	4.85E-06	2.28E-06	6.77E-09	2.50E-07	2.7	7.95E-05	1.34E-05
S8	60	8	24	5	1.18E-02	2.61E-04	1.28E-05	1.11E-03	2.44E-04	1.32E-05	0.00E+00	3.57E-06	1.68E-06	5.00E-09	1.85E-07	2.0	5.85E-05	9.89E-06
S9	60	8	1	5	8.27E-03	1.88E-04	9.17E-06	8.04E-04	1.76E-04	9.47E-06	0.00E+00	2.57E-06	1.21E-06	3.61E-09	1.33E-07	1.4	4.20E-05	7.13E-06
S9	60	8	2	5	5.39E-03	1.26E-04	6.08E-06	5.36E-04	1.17E-04	6.30E-06	0.00E+00	1.71E-06	8.05E-07	2.40E-09	8.83E-08	0.9	2.79E-05	4.75E-06
S9	60	8	3	5	4.60E-03	1.10E-04	5.29E-06	4.69E-04	1.03E-04	5.51E-06	0.00E+00	1.49E-06	7.03E-07	2.10E-09	7.71E-08	0.8	2.43E-05	4.16E-06
S9	60	8	4	5	3.24E-03	7.85E-05	3.77E-06	3.35E-04	7.34E-05	3.93E-06	0.00E+00	1.07E-06	5.01E-07	1.50E-09	5.50E-08	0.6	1.74E-05	2.97E-06
S9	60	8	5	5	4.51E-03	1.10E-04	5.27E-06	4.69E-04	1.03E-04	5.50E-06	0.00E+00	1.49E-06	7.02E-07	2.10E-09	7.70E-08	0.8	2.43E-05	4.16E-06
S9	60	8	6	5	1.09E-02	2.67E-04	1.28E-05	1.14E-03	2.49E-04	1.34E-05	0.00E+00	3.62E-06	1.70E-06	5.11E-09	1.87E-07	2.0	5.90E-05	1.01E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	7	5	3.33E-02	8.01E-04	3.85E-05	3.42E-03	7.48E-04	4.01E-05	0.00E+00	1.09E-05	5.12E-06	1.53E-08	5.62E-07	6.0	1.77E-04	3.03E-05
S9	60	8	8	5	5.36E-02	1.22E-03	5.96E-05	5.22E-03	1.14E-03	6.15E-05	0.00E+00	1.67E-05	7.86E-06	2.34E-08	8.62E-07	9.2	2.73E-04	4.64E-05
S9	60	8	9	5	4.64E-02	9.89E-04	4.89E-05	4.22E-03	9.24E-04	5.00E-05	0.00E+00	1.36E-05	6.39E-06	1.89E-08	7.01E-07	7.6	2.23E-04	3.74E-05
S9	60	8	10	5	3.99E-02	8.16E-04	4.08E-05	3.48E-03	7.63E-04	4.14E-05	0.00E+00	1.12E-05	5.29E-06	1.56E-08	5.81E-07	6.3	1.85E-04	3.09E-05
S9	60	8	11	5	3.73E-02	7.38E-04	3.71E-05	3.15E-03	6.90E-04	3.76E-05	0.00E+00	1.02E-05	4.80E-06	1.41E-08	5.26E-07	5.7	1.68E-04	2.79E-05
S9	60	8	12	5	4.46E-02	8.32E-04	4.25E-05	3.55E-03	7.78E-04	4.26E-05	0.00E+00	1.15E-05	5.45E-06	1.59E-08	5.97E-07	6.6	1.91E-04	3.15E-05
S9	60	8	13	5	4.78E-02	8.79E-04	4.51E-05	3.75E-03	8.22E-04	4.51E-05	0.00E+00	1.22E-05	5.76E-06	1.68E-08	6.32E-07	7.0	2.03E-04	3.33E-05
S9	60	8	14	5	4.91E-02	8.95E-04	4.60E-05	3.82E-03	8.36E-04	4.60E-05	0.00E+00	1.24E-05	5.87E-06	1.71E-08	6.44E-07	7.1	2.07E-04	3.39E-05
S9	60	8	15	5	5.13E-02	9.26E-04	4.77E-05	3.95E-03	8.66E-04	4.76E-05	0.00E+00	1.29E-05	6.08E-06	1.77E-08	6.67E-07	7.4	2.14E-04	3.51E-05
S9	60	8	16	5	5.54E-02	1.00E-03	5.17E-05	4.29E-03	9.39E-04	5.17E-05	0.00E+00	1.40E-05	6.60E-06	1.92E-08	7.23E-07	8.0	2.32E-04	3.80E-05
S9	60	8	17	5	6.83E-02	1.24E-03	6.38E-05	5.29E-03	1.16E-03	6.38E-05	0.00E+00	1.73E-05	8.14E-06	2.37E-08	8.92E-07	9.9	2.87E-04	4.69E-05
S9	60	8	18	5	7.27E-02	1.33E-03	6.85E-05	5.69E-03	1.25E-03	6.85E-05	0.00E+00	1.85E-05	8.75E-06	2.56E-08	9.59E-07	10.6	3.08E-04	5.05E-05
S9	60	8	19	5	4.98E-02	9.26E-04	4.74E-05	3.95E-03	8.66E-04	4.75E-05	0.00E+00	1.29E-05	6.06E-06	1.77E-08	6.65E-07	7.3	2.13E-04	3.51E-05
S9	60	8	20	5	3.14E-02	6.12E-04	3.09E-05	2.61E-03	5.72E-04	3.12E-05	0.00E+00	8.46E-06	3.99E-06	1.17E-08	4.37E-07	4.8	1.40E-04	2.32E-05
S9	60	8	21	5	2.56E-02	5.18E-04	2.59E-05	2.21E-03	4.84E-04	2.63E-05	0.00E+00	7.14E-06	3.36E-06	9.92E-09	3.69E-07	4.0	1.18E-04	1.96E-05
S9	60	8	22	5	2.10E-02	4.40E-04	2.18E-05	1.88E-03	4.11E-04	2.23E-05	0.00E+00	6.04E-06	2.84E-06	8.42E-09	3.12E-07	3.4	9.93E-05	1.66E-05
S9	60	8	23	5	1.68E-02	3.61E-04	1.78E-05	1.54E-03	3.37E-04	1.82E-05	0.00E+00	4.95E-06	2.33E-06	6.91E-09	2.56E-07	2.8	8.12E-05	1.37E-05
S9	60	8	24	5	1.21E-02	2.67E-04	1.31E-05	1.14E-03	2.49E-04	1.34E-05	0.00E+00	3.65E-06	1.72E-06	5.11E-09	1.88E-07	2.0	5.98E-05	1.01E-05
S10	60	8	1	5	1.70E-02	3.87E-04	1.89E-05	1.65E-03	3.62E-04	1.95E-05	0.00E+00	5.29E-06	2.49E-06	7.42E-09	2.73E-07	2.9	8.64E-05	1.47E-05
S10	60	8	2	5	1.11E-02	2.58E-04	1.25E-05	1.10E-03	2.41E-04	1.30E-05	0.00E+00	3.52E-06	1.65E-06	4.94E-09	1.82E-07	1.9	5.74E-05	9.78E-06
S10	60	8	3	5	9.45E-03	2.26E-04	1.09E-05	9.64E-04	2.11E-04	1.13E-05	0.00E+00	3.07E-06	1.44E-06	4.33E-09	1.59E-07	1.7	5.00E-05	8.55E-06
S10	60	8	4	5	6.66E-03	1.61E-04	7.75E-06	6.89E-04	1.51E-04	8.08E-06	0.00E+00	2.19E-06	1.03E-06	3.09E-09	1.13E-07	1.2	3.57E-05	6.11E-06
S10	60	8	5	5	9.27E-03	2.26E-04	1.08E-05	9.64E-04	2.11E-04	1.13E-05	0.00E+00	3.07E-06	1.44E-06	4.33E-09	1.58E-07	1.7	4.99E-05	8.55E-06
S10	60	8	6	5	2.25E-02	5.49E-04	2.63E-05	2.34E-03	5.13E-04	2.75E-05	0.00E+00	7.45E-06	3.50E-06	1.05E-08	3.84E-07	4.1	1.21E-04	2.08E-05
S10	60	8	7	5	6.84E-02	1.65E-03	7.92E-05	7.02E-03	1.54E-03	8.24E-05	0.00E+00	2.24E-05	1.05E-05	3.15E-08	1.15E-06	12.2	3.64E-04	6.23E-05
S10	60	8	8	5	1.10E-01	2.52E-03	1.22E-04	1.07E-02	2.35E-03	1.27E-04	0.00E+00	3.44E-05	1.62E-05	4.82E-08	1.77E-06	18.9	5.61E-04	9.53E-05
S10	60	8	9	5	9.54E-02	2.03E-03	1.01E-04	8.68E-03	1.90E-03	1.03E-04	0.00E+00	2.79E-05	1.31E-05	3.89E-08	1.44E-06	15.5	4.58E-04	7.70E-05
S10	60	8	10	5	8.21E-02	1.68E-03	8.38E-05	7.16E-03	1.57E-03	8.52E-05	0.00E+00	2.31E-05	1.09E-05	3.21E-08	1.19E-06	13.0	3.80E-04	6.35E-05
S10	60	8	11	5	7.67E-02	1.52E-03	7.64E-05	6.47E-03	1.42E-03	7.73E-05	0.00E+00	2.09E-05	9.87E-06	2.90E-08	1.08E-06	11.8	3.46E-04	5.74E-05
S10	60	8	12	5	9.17E-02	1.71E-03	8.74E-05	7.30E-03	1.60E-03	8.76E-05	0.00E+00	2.37E-05	1.12E-05	3.28E-08	1.23E-06	13.5	3.93E-04	6.48E-05
S10	60	8	13	5	9.84E-02	1.81E-03	9.27E-05	7.71E-03	1.69E-03	9.27E-05	0.00E+00	2.51E-05	1.18E-05	3.46E-08	1.30E-06	14.3	4.17E-04	6.84E-05
S10	60	8	14	5	1.01E-01	1.84E-03	9.46E-05	7.85E-03	1.72E-03	9.45E-05	0.00E+00	2.56E-05	1.21E-05	3.52E-08	1.32E-06	14.6	4.25E-04	6.96E-05
S10	60	8	15	5	1.05E-01	1.90E-03	9.81E-05	8.12E-03	1.78E-03	9.80E-05	0.00E+00	2.65E-05	1.25E-05	3.65E-08	1.37E-06	15.2	4.40E-04	7.21E-05
S10	60	8	16	5	1.14E-01	2.07E-03	1.06E-04	8.81E-03	1.93E-03	1.06E-04	0.00E+00	2.87E-05	1.36E-05	3.96E-08	1.49E-06	16.4	4.77E-04	7.82E-05
S10	60	8	17	5	1.40E-01	2.55E-03	1.31E-04	1.09E-02	2.38E-03	1.31E-04	0.00E+00	3.55E-05	1.67E-05	4.88E-08	1.83E-06	20.3	5.89E-04	9.65E-05
S10	60	8	18	5	1.49E-01	2.74E-03	1.41E-04	1.17E-02	2.56E-03	1.41E-04	0.00E+00	3.81E-05	1.80E-05	5.25E-08	1.97E-06	21.8	6.33E-04	1.04E-04
S10	60	8	19	5	1.02E-01	1.90E-03	9.74E-05	8.12E-03	1.78E-03	9.76E-05	0.00E+00	2.64E-05	1.25E-05	3.65E-08	1.37E-06	15.0	4.38E-04	7.21E-05
S10	60	8	20	5	6.45E-02	1.26E-03	6.36E-05	5.37E-03	1.18E-03	6.42E-05	0.00E+00	1.74E-05	8.20E-06	2.41E-08	8.99E-07	9.8	2.87E-04	4.77E-05
S10	60	8	21	5	5.27E-02	1.07E-03	5.33E-05	4.54E-03	9.96E-04	5.41E-05	0.00E+00	1.47E-05	6.92E-06	2.04E-08	7.58E-07	8.2	2.42E-04	4.03E-05
S10	60	8	22	5	4.33E-02	9.04E-04	4.49E-05	3.86E-03	8.45E-04	4.58E-05	0.00E+00	1.24E-05	5.85E-06	1.73E-08	6.42E-07	6.9	2.04E-04	3.42E-05
S10	60	8	23	5	3.45E-02	7.42E-04	3.66E-05	3.17E-03	6.94E-04	3.75E-05	0.00E+00	1.02E-05	4.79E-06	1.42E-08	5.26E-07	5.7	1.67E-04	2.81E-05
S10	60	8	24	5	2.48E-02	5.49E-04	2.69E-05	2.34E-03	5.13E-04	2.77E-05	0.00E+00	7.51E-06	3.53E-06	1.05E-08	3.88E-07	4.2	1.23E-04	2.08E-05
S11	60	8	1	5	6.41E-03	1.46E-04	7.11E-06	6.23E-04	1.36E-04	7.34E-06	0.00E+00	1.99E-06	9.38E-07	2.80E-09	1.03E-07	1.1	3.26E-05	5.53E-06
S11	60	8	2	5	4.18E-03	9.74E-05	4.72E-06	4.15E-04	9.10E-05	4.89E-06	0.00E+00	1.33E-06	6.24E-07	1.86E-09	6.85E-08	0.7	2.16E-05	3.69E-06
S11	60	8	3	5	3.56E-03	8.52E-05	4.10E-06	3.63E-04	7.96E-05	4.27E-06	0.00E+00	1.16E-06	5.45E-07	1.63E-09	5.98E-08	0.6	1.89E-05	3.22E-06
S11	60	8	4	5	2.51E-03	6.08E-05	2.92E-06	2.60E-04	5.69E-05	3.05E-06	0.00E+00	8.27E-07	3.89E-07	1.16E-09	4.26E-08	0.5	1.35E-05	2.30E-06
S11	60	8	5	5	3.49E-03	8.52E-05	4.09E-06	3.63E-04	7.96E-05	4.26E-06	0.00E+00	1.16E-06	5.44E-07	1.63E-09	5.97E-08	0.6	1.88E-05	3.22E-06
S11	60	8	6	5	8.49E-03	2.07E-04	9.92E-06	8.83E-04	1.93E-04	1.04E-05	0.00E+00	2.81E-06	1.32E-06	3.96E-09	1.45E-07	1.5	4.57E-05	7.83E-06
S11	60	8	7	5	2.58E-02	6.21E-04	2.99E-05	2.65E-03	5.80E-04	3.11E-05	0.00E+00	8.44E-06	3.97E-06	1.19E-08	4.35E-07	4.6	1.37E-04	2.35E-05
S11	60	8	8	5	4.15E-02	9.49E-04	4.62E-05	4.05E-03	8.87E-04	4.77E-05	0.00E+00	1.30E-05	6.09E-06	1.82E-08	6.69E-07	7.1	2.12E-04	3.59E-05
S11	60	8	9	5	3.59E-02	7.67E-04	3.79E-05	3.27E-03	7.17E-04	3.88E-05	0.00E+00	1.05E-05	4.95E-06	1.47E-08	5.43E-07	5.9	1.73E-04	2.90E-05
S11	60	8	10	5	3.10E-02	6.33E-04	3.16E-05	2.70E-03	5.91E-04	3.21E-05	0.00E+00	8.71E-06	4.10E-06	1.21E-08	4.50E-07	4.9	1.43E-04	2.40E-05
S11	60	8	11	5	2.89E-02	5.72E-04	2.88E-05	2.44E-03	5.35E-04	2.91E-05	0.00E+00	7.90E-06	3.72E-06	1.10E-08	4.08E-07	4.5	1.30E-04	2.17E-05
S11	60	8	12	5	3.46E-02	6.45E-04	3.30E-05	2.75E-03	6.03E-04	3.30E-05	0.00E+00	8.95E-06	4.22E-06	1.23E-08	4.63E-07	5.1	1.48E-04	2.44E-05
S11	60	8	13	5	3.71E-02	6.81E-04	3.50E-05	2.91E-03	6.37E-04	3.50E-05	0.00E+00	9.47E-06	4.47E-06	1.30E-08	4.90E-07	5.4	1.57E-04	2.58E-05
S11	60	8	14	5	3.81E-02	6.94E-04	3.57E-05	2.96E-03	6.48E-04	3.56E-05	0.00E+00	9.64E-06	4.55E-06	1.33E-08	4.99E-07	5.5	1.60E-04	2.63E-05
S11	60	8	15	5	3.98E-02	7.18E-04	3.70E-05	3.06E-03	6.71E-04	3.69E-05	0.00E+00	9.99E-06	4.72E-06	1.37E-08	5.17E-07	5.7	1.66E-04	2.72E-05
S11	60	8	16	5	4.30E-02	7.79E-04	4.01E-05	3.32E-03	7.28E-04	4.00E-05	0.00E+00	1.08E-05	5.11E-06	1.49E-08	5.60E-07	6.2	1.80E-04	2.95E-05
S11	60	8	17	5	5.30E-02	9.61E-04	4.95E-05	4.10E-03	8.99E-04	4.94E-05	0.00E+00	1.34E-05	6.31E-06	1.84E-08	6.92E-07	7.6	2.22E-04	3.64E-05
S11	60	8	18	5	5.63E-02	1.03E-03	5.31E-05	4.41E-03	9.67E-04	5.31E-05	0.00E+00	1.44E-05	6.78E-06	1.98E-08	7.43E-07	8.2	2.39E-04	3.92E-05
S11	60	8	19	5	3.86E-02	7.18E-04	3.67E-05	3.06E-03	6.71E-04	3.68E-05	0.00E+00	9.96E-06	4.70E-06	1.37E-08	5.15E-07	5.7	1.65E-04	2.72E-05
S11	60	8	20	5	2.43E-02	4.75E-04	2.40E-05	2.02E-03	4.44E-04	2.42E-05	0.00E+00	6.56E-06	3.09E-06	9.09E-09	3.39E-07	3.7	1.08E-04	1.80E-05
S11	60	8	21	5	1.99E-02	4.02E-04	2.01E-05	1.71E-03	3.75E-04	2.04E-05	0.00E+00	5.53E-06	2.61E-06	7.69E-09	2.86E-07	3.1	9.12E-05	1.52E-05
S11	60	8	22	5	1.63E-02	3.41E-04	1.69E-05	1.45E-03	3.18E-04	1.73E-05	0.00E+00	4.68E-06	2.21E-06	6.52E-09	2.42E-07	2.6	7.70E-05	1.29E-05
S11	60	8	23	5	1.30E-02	2.80E-04	1.38E-05	1.19E-03	2.62E-04	1.41E-05	0.00E+00	3.84E-06	1.81E-06	5.36E-09	1.98E-07	2.1	6.29E-05	1.06E-05
S11	60	8	24	5	9.35E-03	2.07E-04	1.01E-05	8.83E-04	1.93E-04	1.04E-05	0.00E+00	2.83E-06	1.33E-06	3.96E-09	1.46E-07	1.6	4.63E-05	7.83E-06
S12	60	8	1	5	1.24E-02	2.82E-04	1.37E-05	1.20E-03	2.63E-04	1.42E-05	0.00E+00	3.84E-06	1.81E-06	5.39E-09	1.98E-07	2.1	6.28E-05	1.07E-05
S12	60	8	2	5	8.06E-03	1.88E-04	9.10E-06	8.01E-04	1.75E-04	9.42E-06	0.00E+00	2.56E-06	1.20E-06	3.59E-09	1.32E-07	1.4	4.17E-05	7.11E-06
S12	60	8	3	5	6.87E-03	1.64E-04	7.91E-06	7.01E-04	1.54E-04	8.23E-06	0.00E+00	2.23E-06	1.05E-06	3.14E-09	1.15E-07	1.2	3.64E-05	6.22E-06

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	4	5	4.84E-03	1.17E-04	5.64E-06	5.01E-04	1.10E-04	5.87E-06	0.00E+00	1.59E-06	7.49E-07	2.25E-09	8.22E-08	0.9	2.59E-05	4.44E-06
S12	60	8	5	5	6.74E-03	1.64E-04	7.88E-06	7.01E-04	1.54E-04	8.22E-06	0.00E+00	2.23E-06	1.05E-06	3.14E-09	1.15E-07	1.2	3.63E-05	6.22E-06
S12	60	8	6	5	1.64E-02	3.99E-04	1.91E-05	1.70E-03	3.73E-04	2.00E-05	0.00E+00	5.42E-06	2.55E-06	7.64E-09	2.80E-07	3.0	8.81E-05	1.51E-05
S12	60	8	7	5	4.97E-02	1.20E-03	5.76E-05	5.11E-03	1.12E-03	5.99E-05	0.00E+00	1.63E-05	7.65E-06	2.29E-08	8.39E-07	8.9	2.65E-04	4.53E-05
S12	60	8	8	5	8.01E-02	1.83E-03	8.91E-05	7.81E-03	1.71E-03	9.20E-05	0.00E+00	2.50E-05	1.18E-05	3.50E-08	1.29E-06	13.8	4.08E-04	6.93E-05
S12	60	8	9	5	6.93E-02	1.48E-03	7.31E-05	6.31E-03	1.38E-03	7.47E-05	0.00E+00	2.03E-05	9.55E-06	2.83E-08	1.05E-06	11.3	3.33E-04	5.60E-05
S12	60	8	10	5	5.97E-02	1.22E-03	6.09E-05	5.21E-03	1.14E-03	6.19E-05	0.00E+00	1.68E-05	7.91E-06	2.34E-08	8.68E-07	9.4	2.77E-04	4.62E-05
S12	60	8	11	5	5.58E-02	1.10E-03	5.55E-05	4.71E-03	1.03E-03	5.62E-05	0.00E+00	1.52E-05	7.18E-06	2.11E-08	7.87E-07	8.6	2.51E-04	4.18E-05
S12	60	8	12	5	6.67E-02	1.24E-03	6.36E-05	5.31E-03	1.16E-03	6.37E-05	0.00E+00	1.73E-05	8.14E-06	2.38E-08	8.92E-07	9.8	2.86E-04	4.71E-05
S12	60	8	13	5	7.15E-02	1.31E-03	6.74E-05	5.61E-03	1.23E-03	6.74E-05	0.00E+00	1.83E-05	8.62E-06	2.52E-08	9.44E-07	10.4	3.03E-04	4.97E-05
S12	60	8	14	5	7.34E-02	1.34E-03	6.88E-05	5.71E-03	1.25E-03	6.87E-05	0.00E+00	1.86E-05	8.78E-06	2.56E-08	9.62E-07	10.6	3.09E-04	5.06E-05
S12	60	8	15	5	7.67E-02	1.38E-03	7.14E-05	5.91E-03	1.29E-03	7.12E-05	0.00E+00	1.93E-05	9.09E-06	2.65E-08	9.97E-07	11.0	3.20E-04	5.24E-05
S12	60	8	16	5	8.29E-02	1.50E-03	7.73E-05	6.41E-03	1.40E-03	7.72E-05	0.00E+00	2.09E-05	9.86E-06	2.88E-08	1.08E-06	12.0	3.47E-04	5.69E-05
S12	60	8	17	5	1.02E-01	1.85E-03	9.54E-05	7.91E-03	1.73E-03	9.53E-05	0.00E+00	2.58E-05	1.22E-05	3.55E-08	1.33E-06	14.7	4.28E-04	7.02E-05
S12	60	8	18	5	1.09E-01	1.99E-03	1.02E-04	8.51E-03	1.86E-03	1.02E-04	0.00E+00	2.77E-05	1.31E-05	3.82E-08	1.43E-06	15.8	4.60E-04	7.55E-05
S12	60	8	19	5	7.44E-02	1.38E-03	7.08E-05	5.91E-03	1.29E-03	7.10E-05	0.00E+00	1.92E-05	9.06E-06	2.65E-08	9.94E-07	10.9	3.19E-04	5.24E-05
S12	60	8	20	5	4.69E-02	9.15E-04	4.62E-05	3.90E-03	8.55E-04	4.67E-05	0.00E+00	1.26E-05	5.96E-06	1.75E-08	6.54E-07	7.1	2.09E-04	3.46E-05
S12	60	8	21	5	3.83E-02	7.74E-04	3.88E-05	3.30E-03	7.24E-04	3.93E-05	0.00E+00	1.07E-05	5.03E-06	1.48E-08	5.51E-07	6.0	1.76E-04	2.93E-05
S12	60	8	22	5	3.15E-02	6.57E-04	3.26E-05	2.80E-03	6.14E-04	3.33E-05	0.00E+00	9.03E-06	4.25E-06	1.26E-08	4.66E-07	5.0	1.48E-04	2.49E-05
S12	60	8	23	5	2.51E-02	5.40E-04	2.66E-05	2.30E-03	5.05E-04	2.73E-05	0.00E+00	7.40E-06	3.48E-06	1.03E-08	3.82E-07	4.1	1.21E-04	2.04E-05
S12	60	8	24	5	1.80E-02	3.99E-04	1.96E-05	1.70E-03	3.73E-04	2.01E-05	0.00E+00	5.46E-06	2.57E-06	7.64E-09	2.82E-07	3.0	8.93E-05	1.51E-05
S13	60	8	1	5	1.05E-02	2.38E-04	1.16E-05	1.02E-03	2.23E-04	1.20E-05	0.00E+00	3.25E-06	1.53E-06	4.56E-09	1.68E-07	1.8	5.32E-05	9.02E-06
S13	60	8	2	5	6.82E-03	1.59E-04	7.70E-06	6.78E-04	1.49E-04	7.98E-06	0.00E+00	2.16E-06	1.02E-06	3.04E-09	1.12E-07	1.2	3.53E-05	6.01E-06
S13	60	8	3	5	5.82E-03	1.39E-04	6.70E-06	5.93E-04	1.30E-04	6.97E-06	0.00E+00	1.89E-06	8.89E-07	2.66E-09	9.76E-08	1.0	3.08E-05	5.26E-06
S13	60	8	4	5	4.10E-03	9.93E-05	4.77E-06	4.24E-04	9.28E-05	4.97E-06	0.00E+00	1.35E-06	6.34E-07	1.90E-09	6.96E-08	0.7	2.20E-05	3.76E-06
S13	60	8	5	5	5.70E-03	1.39E-04	6.67E-06	5.93E-04	1.30E-04	6.96E-06	0.00E+00	1.89E-06	8.88E-07	2.66E-09	9.74E-08	1.0	3.07E-05	5.26E-06
S13	60	8	6	5	1.39E-02	3.38E-04	1.62E-05	1.44E-03	3.16E-04	1.69E-05	0.00E+00	4.59E-06	2.16E-06	6.46E-09	2.37E-07	2.5	7.46E-05	1.28E-05
S13	60	8	7	5	4.21E-02	1.01E-03	4.87E-05	4.32E-03	9.47E-04	5.07E-05	0.00E+00	1.38E-05	6.47E-06	1.94E-08	7.10E-07	7.5	2.24E-04	3.83E-05
S13	60	8	8	5	6.78E-02	1.55E-03	7.54E-05	6.61E-03	1.45E-03	7.79E-05	0.00E+00	2.11E-05	9.94E-06	2.97E-08	1.09E-06	11.6	3.45E-04	5.86E-05
S13	60	8	9	5	5.87E-02	1.25E-03	6.18E-05	5.34E-03	1.17E-03	6.32E-05	0.00E+00	1.72E-05	8.08E-06	2.40E-08	8.87E-07	9.6	2.82E-04	4.74E-05
S13	60	8	10	5	5.05E-02	1.03E-03	5.16E-05	4.41E-03	9.65E-04	5.24E-05	0.00E+00	1.42E-05	6.70E-06	1.98E-08	7.35E-07	8.0	2.34E-04	3.91E-05
S13	60	8	11	5	4.72E-02	9.34E-04	4.70E-05	3.98E-03	8.73E-04	4.75E-05	0.00E+00	1.29E-05	6.07E-06	1.79E-08	6.66E-07	7.3	2.13E-04	3.53E-05
S13	60	8	12	5	5.65E-02	1.05E-03	5.38E-05	4.49E-03	9.84E-04	5.39E-05	0.00E+00	1.46E-05	6.89E-06	2.02E-08	7.55E-07	8.3	2.42E-04	3.98E-05
S13	60	8	13	5	6.05E-02	1.11E-03	5.71E-05	4.75E-03	1.04E-03	5.71E-05	0.00E+00	1.55E-05	7.29E-06	2.13E-08	7.99E-07	8.8	2.56E-04	4.21E-05
S13	60	8	14	5	6.21E-02	1.13E-03	5.82E-05	4.83E-03	1.06E-03	5.82E-05	0.00E+00	1.57E-05	7.43E-06	2.17E-08	8.14E-07	9.0	2.61E-04	4.29E-05
S13	60	8	15	5	6.49E-02	1.17E-03	6.04E-05	5.00E-03	1.10E-03	6.03E-05	0.00E+00	1.63E-05	7.70E-06	2.24E-08	8.44E-07	9.3	2.71E-04	4.44E-05
S13	60	8	16	5	7.01E-02	1.27E-03	6.54E-05	5.42E-03	1.19E-03	6.54E-05	0.00E+00	1.77E-05	8.34E-06	2.43E-08	9.15E-07	10.1	2.94E-04	4.81E-05
S13	60	8	17	5	8.64E-02	1.57E-03	8.07E-05	6.69E-03	1.47E-03	8.07E-05	0.00E+00	2.18E-05	1.03E-05	3.00E-08	1.13E-06	12.5	3.63E-04	5.94E-05
S13	60	8	18	5	9.20E-02	1.69E-03	8.66E-05	7.20E-03	1.58E-03	8.67E-05	0.00E+00	2.35E-05	1.11E-05	3.23E-08	1.21E-06	13.4	3.89E-04	6.39E-05
S13	60	8	19	5	6.30E-02	1.17E-03	5.99E-05	5.00E-03	1.10E-03	6.01E-05	0.00E+00	1.63E-05	7.67E-06	2.24E-08	8.41E-07	9.3	2.70E-04	4.44E-05
S13	60	8	20	5	3.97E-02	7.75E-04	3.91E-05	3.30E-03	7.24E-04	3.95E-05	0.00E+00	1.07E-05	5.05E-06	1.48E-08	5.53E-07	6.0	1.77E-04	2.93E-05
S13	60	8	21	5	3.24E-02	6.55E-04	3.28E-05	2.80E-03	6.13E-04	3.33E-05	0.00E+00	9.03E-06	4.26E-06	1.25E-08	4.67E-07	5.1	1.49E-04	2.48E-05
S13	60	8	22	5	2.66E-02	5.56E-04	2.76E-05	2.37E-03	5.20E-04	2.82E-05	0.00E+00	7.64E-06	3.60E-06	1.06E-08	3.95E-07	4.3	1.26E-04	2.11E-05
S13	60	8	23	5	2.12E-02	4.57E-04	2.25E-05	1.95E-03	4.27E-04	2.31E-05	0.00E+00	6.26E-06	2.95E-06	8.75E-09	3.23E-07	3.5	1.03E-04	1.73E-05
S13	60	8	24	5	1.53E-02	3.38E-04	1.65E-05	1.44E-03	3.16E-04	1.70E-05	0.00E+00	4.62E-06	2.17E-06	6.46E-09	2.38E-07	2.6	7.56E-05	1.28E-05
S14	60	8	1	5	6.00E-03	1.37E-04	6.65E-06	5.83E-04	1.28E-04	6.87E-06	0.00E+00	1.86E-06	8.77E-07	2.61E-09	9.62E-08	1.0	3.05E-05	5.17E-06
S14	60	8	2	5	3.91E-03	9.11E-05	4.41E-06	3.88E-04	8.51E-05	4.57E-06	0.00E+00	1.24E-06	5.84E-07	1.74E-09	6.40E-08	0.7	2.02E-05	3.45E-06
S14	60	8	3	5	3.33E-03	7.97E-05	3.84E-06	3.40E-04	7.45E-05	3.99E-06	0.00E+00	1.08E-06	5.09E-07	1.53E-09	5.59E-08	0.6	1.76E-05	3.02E-06
S14	60	8	4	5	2.35E-03	5.69E-05	2.73E-06	2.43E-04	5.32E-05	2.85E-06	0.00E+00	7.73E-07	3.63E-07	1.09E-09	3.99E-08	0.4	1.26E-05	2.15E-06
S14	60	8	5	5	3.27E-03	7.97E-05	3.82E-06	3.40E-04	7.45E-05	3.99E-06	0.00E+00	1.08E-06	5.09E-07	1.53E-09	5.58E-08	0.6	1.76E-05	3.02E-06
S14	60	8	6	5	7.94E-03	1.94E-04	9.28E-06	8.26E-04	1.81E-04	9.68E-06	0.00E+00	2.63E-06	1.24E-06	3.70E-09	1.36E-07	1.4	4.27E-05	7.33E-06
S14	60	8	7	5	2.41E-02	5.81E-04	2.79E-05	2.48E-03	5.43E-04	2.91E-05	0.00E+00	7.89E-06	3.71E-06	1.11E-08	4.07E-07	4.3	1.28E-04	2.20E-05
S14	60	8	8	5	3.89E-02	8.88E-04	4.32E-05	3.79E-03	8.30E-04	4.46E-05	0.00E+00	1.21E-05	5.70E-06	1.70E-08	6.25E-07	6.7	1.98E-04	3.36E-05
S14	60	8	9	5	3.36E-02	7.17E-04	3.54E-05	3.06E-03	6.70E-04	3.62E-05	0.00E+00	9.84E-06	4.63E-06	1.37E-08	5.08E-07	5.5	1.61E-04	2.71E-05
S14	60	8	10	5	2.90E-02	5.92E-04	2.96E-05	2.53E-03	5.53E-04	3.00E-05	0.00E+00	8.15E-06	3.84E-06	1.13E-08	4.21E-07	4.6	1.34E-04	2.24E-05
S14	60	8	11	5	2.71E-02	5.35E-04	2.69E-05	2.28E-03	5.00E-04	2.72E-05	0.00E+00	7.38E-06	3.48E-06	1.02E-08	3.82E-07	4.2	1.22E-04	2.03E-05
S14	60	8	12	5	3.24E-02	6.03E-04	3.08E-05	2.57E-03	5.64E-04	3.09E-05	0.00E+00	8.37E-06	3.95E-06	1.16E-08	4.33E-07	4.8	1.39E-04	2.28E-05
S14	60	8	13	5	3.47E-02	6.37E-04	3.27E-05	2.72E-03	5.96E-04	3.27E-05	0.00E+00	8.86E-06	4.18E-06	1.22E-08	4.58E-07	5.1	1.47E-04	2.41E-05
S14	60	8	14	5	3.56E-02	6.49E-04	3.34E-05	2.77E-03	6.06E-04	3.33E-05	0.00E+00	9.02E-06	4.26E-06	1.24E-08	4.67E-07	5.2	1.50E-04	2.46E-05
S14	60	8	15	5	3.72E-02	6.72E-04	3.46E-05	2.87E-03	6.28E-04	3.45E-05	0.00E+00	9.35E-06	4.41E-06	1.29E-08	4.83E-07	5.3	1.55E-04	2.54E-05
S14	60	8	16	5	4.02E-02	7.28E-04	3.75E-05	3.11E-03	6.81E-04	3.75E-05	0.00E+00	1.01E-05	4.78E-06	1.39E-08	5.24E-07	5.8	1.68E-04	2.76E-05
S14	60	8	17	5	4.95E-02	8.99E-04	4.63E-05	3.84E-03	8.40E-04	4.62E-05	0.00E+00	1.25E-05	5.90E-06	1.72E-08	6.47E-07	7.2	2.08E-04	3.40E-05
S14	60	8	18	5	5.27E-02	9.68E-04	4.96E-05	4.13E-03	9.04E-04	4.97E-05	0.00E+00	1.34E-05	6.34E-06	1.85E-08	6.95E-07	7.7	2.23E-04	3.66E-05
S14	60	8	19	5	3.61E-02	6.72E-04	3.43E-05	2.87E-03	6.28E-04	3.44E-05	0.00E+00	9.32E-06	4.40E-06	1.29E-08	4.82E-07	5.3	1.55E-04	2.54E-05
S14	60	8	20	5	2.27E-02	4.44E-04	2.24E-05	1.89E-03	4.15E-04	2.26E-05	0.00E+00	6.13E-06	2.89E-06	8.50E-09	3.17E-07	3.5	1.01E-04	1.68E-05
S14	60	8	21	5	1.86E-02	3.76E-04	1.88E-05	1.60E-03	3.51E-04	1.91E-05	0.00E+00	5.18E-06	2.44E-06	7.19E-09	2.67E-07	2.9	8.53E-05	1.42E-05
S14	60	8	22	5	1.53E-02	3.19E-04	1.58E-05	1.36E-03	2.98E-04	1.61E-05	0.00E+00	4.38E-06	2.06E-06	6.10E-09	2.26E-07	2.4	7.20E-05	1.21E-05
S14	60	8	23	5	1.22E-02	2.62E-04	1.29E-05	1.12E-03	2.45E-04	1.32E-05	0.00E+00	3.59E-06	1.69E-06	5.01E-09	1.85E-07	2.0	5.89E-05	9.91E-06
S14	60	8	24	5	8.75E-03	1.94E-04	9.48E-06	8.26E-04	1.81E-04	9.75E-06	0.00E+00	2.65E-06	1.25E-06	3.70E-09	1.37E-07	1.5	4.33E-05	7.33E-06

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	1	5	7.03E-03	1.60E-04	7.80E-06	6.83E-04	1.50E-04	8.05E-06	0.00E+00	2.18E-06	1.03E-06	3.06E-09	1.13E-07	1.2	3.57E-05	6.06E-06
S15	60	8	2	5	4.58E-03	1.07E-04	5.17E-06	4.55E-04	9.98E-05	5.36E-06	0.00E+00	1.45E-06	6.84E-07	2.04E-09	7.50E-08	0.8	2.37E-05	4.04E-06
S15	60	8	3	5	3.91E-03	9.34E-05	4.50E-06	3.98E-04	8.73E-05	4.68E-06	0.00E+00	1.27E-06	5.97E-07	1.79E-09	6.55E-08	0.7	2.07E-05	3.54E-06
S15	60	8	4	5	2.75E-03	6.67E-05	3.20E-06	2.85E-04	6.23E-05	3.34E-06	0.00E+00	9.06E-07	4.26E-07	1.28E-09	4.68E-08	0.5	1.47E-05	2.53E-06
S15	60	8	5	5	3.83E-03	9.34E-05	4.48E-06	3.98E-04	8.73E-05	4.67E-06	0.00E+00	1.27E-06	5.96E-07	1.79E-09	6.54E-08	0.7	2.06E-05	3.54E-06
S15	60	8	6	5	9.30E-03	2.27E-04	1.09E-05	9.68E-04	2.12E-04	1.13E-05	0.00E+00	3.08E-06	1.45E-06	4.34E-09	1.59E-07	1.7	5.01E-05	8.59E-06
S15	60	8	7	5	2.83E-02	6.80E-04	3.27E-05	2.90E-03	6.36E-04	3.41E-05	0.00E+00	9.25E-06	4.35E-06	1.30E-08	4.77E-07	5.1	1.51E-04	2.58E-05
S15	60	8	8	5	4.55E-02	1.04E-03	5.06E-05	4.44E-03	9.73E-04	5.23E-05	0.00E+00	1.42E-05	6.68E-06	1.99E-08	7.33E-07	7.8	2.32E-04	3.94E-05
S15	60	8	9	5	3.94E-02	8.40E-04	4.15E-05	3.59E-03	7.86E-04	4.25E-05	0.00E+00	1.15E-05	5.43E-06	1.61E-08	5.95E-07	6.4	1.89E-04	3.18E-05
S15	60	8	10	5	3.39E-02	6.94E-04	3.46E-05	2.96E-03	6.48E-04	3.52E-05	0.00E+00	9.55E-06	4.50E-06	1.33E-08	4.93E-07	5.4	1.57E-04	2.63E-05
S15	60	8	11	5	3.17E-02	6.27E-04	3.16E-05	2.67E-03	5.86E-04	3.19E-05	0.00E+00	8.66E-06	4.08E-06	1.20E-08	4.47E-07	4.9	1.43E-04	2.37E-05
S15	60	8	12	5	3.79E-02	7.07E-04	3.61E-05	3.02E-03	6.61E-04	3.62E-05	0.00E+00	9.81E-06	4.63E-06	1.35E-08	5.07E-07	5.6	1.63E-04	2.68E-05
S15	60	8	13	5	4.07E-02	7.47E-04	3.83E-05	3.19E-03	6.98E-04	3.83E-05	0.00E+00	1.04E-05	4.90E-06	1.43E-08	5.37E-07	5.9	1.72E-04	2.83E-05
S15	60	8	14	5	4.17E-02	7.60E-04	3.91E-05	3.24E-03	7.11E-04	3.91E-05	0.00E+00	1.06E-05	4.99E-06	1.46E-08	5.47E-07	6.0	1.76E-04	2.88E-05
S15	60	8	15	5	4.36E-02	7.87E-04	4.06E-05	3.36E-03	7.36E-04	4.05E-05	0.00E+00	1.10E-05	5.17E-06	1.51E-08	5.67E-07	6.3	1.82E-04	2.98E-05
S15	60	8	16	5	4.71E-02	8.54E-04	4.40E-05	3.64E-03	7.98E-04	4.39E-05	0.00E+00	1.19E-05	5.61E-06	1.63E-08	6.14E-07	6.8	1.97E-04	3.23E-05
S15	60	8	17	5	5.81E-02	1.05E-03	5.42E-05	4.50E-03	9.85E-04	5.42E-05	0.00E+00	1.47E-05	6.92E-06	2.02E-08	7.58E-07	8.4	2.44E-04	3.99E-05
S15	60	8	18	5	6.18E-02	1.13E-03	5.82E-05	4.84E-03	1.06E-03	5.82E-05	0.00E+00	1.58E-05	7.43E-06	2.17E-08	8.15E-07	9.0	2.61E-04	4.29E-05
S15	60	8	19	5	4.23E-02	7.87E-04	4.02E-05	3.36E-03	7.36E-04	4.03E-05	0.00E+00	1.09E-05	5.15E-06	1.51E-08	5.65E-07	6.2	1.81E-04	2.98E-05
S15	60	8	20	5	2.66E-02	5.20E-04	2.63E-05	2.22E-03	4.86E-04	2.65E-05	0.00E+00	7.19E-06	3.39E-06	9.96E-09	3.72E-07	4.1	1.19E-04	1.97E-05
S15	60	8	21	5	2.18E-02	4.40E-04	2.20E-05	1.88E-03	4.11E-04	2.24E-05	0.00E+00	6.07E-06	2.86E-06	8.43E-09	3.13E-07	3.4	9.99E-05	1.67E-05
S15	60	8	22	5	1.79E-02	3.74E-04	1.86E-05	1.59E-03	3.49E-04	1.89E-05	0.00E+00	5.13E-06	2.42E-06	7.15E-09	2.65E-07	2.9	8.44E-05	1.41E-05
S15	60	8	23	5	1.43E-02	3.07E-04	1.51E-05	1.31E-03	2.87E-04	1.55E-05	0.00E+00	4.21E-06	1.98E-06	5.87E-09	2.17E-07	2.3	6.90E-05	1.16E-05
S15	60	8	24	5	1.03E-02	2.27E-04	1.11E-05	9.68E-04	2.12E-04	1.14E-05	0.00E+00	3.10E-06	1.46E-06	4.34E-09	1.60E-07	1.7	5.08E-05	8.59E-06
S16	60	8	1	5	4.25E-03	9.69E-05	4.72E-06	4.13E-04	9.05E-05	4.87E-06	0.00E+00	1.32E-06	6.22E-07	1.85E-09	6.82E-08	0.7	2.16E-05	3.67E-06
S16	60	8	2	5	2.77E-03	6.46E-05	3.13E-06	2.75E-04	6.04E-05	3.24E-06	0.00E+00	8.80E-07	4.14E-07	1.24E-09	4.54E-08	0.5	1.44E-05	2.44E-06
S16	60	8	3	5	2.36E-03	5.65E-05	2.72E-06	2.41E-04	5.28E-05	2.83E-06	0.00E+00	7.68E-07	3.61E-07	1.08E-09	3.96E-08	0.4	1.25E-05	2.14E-06
S16	60	8	4	5	1.66E-03	4.04E-05	1.94E-06	1.72E-04	3.77E-05	2.02E-06	0.00E+00	5.48E-07	2.58E-07	7.73E-10	2.83E-08	0.3	8.92E-06	1.53E-06
S16	60	8	5	5	2.32E-03	5.65E-05	2.71E-06	2.41E-04	5.28E-05	2.83E-06	0.00E+00	7.67E-07	3.61E-07	1.08E-09	3.96E-08	0.4	1.25E-05	2.14E-06
S16	60	8	6	5	5.63E-03	1.37E-04	6.58E-06	5.85E-04	1.28E-04	6.87E-06	0.00E+00	1.86E-06	8.76E-07	2.63E-09	9.61E-08	1.0	3.03E-05	5.19E-06
S16	60	8	7	5	1.71E-02	4.12E-04	1.98E-05	1.76E-03	3.85E-04	2.06E-05	0.00E+00	5.60E-06	2.63E-06	7.88E-09	2.89E-07	3.1	9.11E-05	1.56E-05
S16	60	8	8	5	2.76E-02	6.30E-04	3.06E-05	2.69E-03	5.88E-04	3.16E-05	0.00E+00	8.59E-06	4.04E-06	1.21E-08	4.43E-07	4.7	1.40E-04	2.38E-05
S16	60	8	9	5	2.38E-02	5.09E-04	2.51E-05	2.17E-03	4.75E-04	2.57E-05	0.00E+00	6.98E-06	3.28E-06	9.74E-09	3.60E-07	3.9	1.14E-04	1.92E-05
S16	60	8	10	5	2.05E-02	4.20E-04	2.10E-05	1.79E-03	3.92E-04	2.13E-05	0.00E+00	5.78E-06	2.72E-06	8.04E-09	2.99E-07	3.2	9.51E-05	1.59E-05
S16	60	8	11	5	1.92E-02	3.79E-04	1.91E-05	1.62E-03	3.55E-04	1.93E-05	0.00E+00	5.24E-06	2.47E-06	7.26E-09	2.71E-07	3.0	8.64E-05	1.44E-05
S16	60	8	12	5	2.29E-02	4.28E-04	2.19E-05	1.83E-03	4.00E-04	2.19E-05	0.00E+00	5.94E-06	2.80E-06	8.19E-09	3.07E-07	3.4	9.84E-05	1.62E-05
S16	60	8	13	5	2.46E-02	4.52E-04	2.32E-05	1.93E-03	4.22E-04	2.32E-05	0.00E+00	6.28E-06	2.96E-06	8.65E-09	3.25E-07	3.6	1.04E-04	1.71E-05
S16	60	8	14	5	2.53E-02	4.60E-04	2.37E-05	1.96E-03	4.30E-04	2.36E-05	0.00E+00	6.40E-06	3.02E-06	8.81E-09	3.31E-07	3.7	1.06E-04	1.74E-05
S16	60	8	15	5	2.64E-02	4.76E-04	2.45E-05	2.03E-03	4.45E-04	2.45E-05	0.00E+00	6.63E-06	3.13E-06	9.12E-09	3.43E-07	3.8	1.10E-04	1.80E-05
S16	60	8	16	5	2.85E-02	5.17E-04	2.66E-05	2.20E-03	4.83E-04	2.66E-05	0.00E+00	7.19E-06	3.39E-06	9.89E-09	3.72E-07	4.1	1.19E-04	1.96E-05
S16	60	8	17	5	3.51E-02	6.38E-04	3.28E-05	2.72E-03	5.96E-04	3.28E-05	0.00E+00	8.87E-06	4.19E-06	1.22E-08	4.59E-07	5.1	1.47E-04	2.41E-05
S16	60	8	18	5	3.74E-02	6.86E-04	3.52E-05	2.93E-03	6.41E-04	3.52E-05	0.00E+00	9.53E-06	4.50E-06	1.31E-08	4.93E-07	5.4	1.58E-04	2.60E-05
S16	60	8	19	5	2.56E-02	4.76E-04	2.43E-05	2.03E-03	4.45E-04	2.44E-05	0.00E+00	6.61E-06	3.12E-06	9.12E-09	3.42E-07	3.8	1.10E-04	1.80E-05
S16	60	8	20	5	1.61E-02	3.15E-04	1.59E-05	1.34E-03	2.94E-04	1.61E-05	0.00E+00	4.35E-06	2.05E-06	6.03E-09	2.25E-07	2.5	7.19E-05	1.19E-05
S16	60	8	21	5	1.32E-02	2.66E-04	1.33E-05	1.14E-03	2.49E-04	1.35E-05	0.00E+00	3.67E-06	1.73E-06	5.10E-09	1.90E-07	2.1	6.05E-05	1.01E-05
S16	60	8	22	5	1.08E-02	2.26E-04	1.12E-05	9.64E-04	2.11E-04	1.14E-05	0.00E+00	3.11E-06	1.46E-06	4.33E-09	1.60E-07	1.7	5.10E-05	8.56E-06
S16	60	8	23	5	8.63E-03	1.86E-04	9.16E-06	7.92E-04	1.74E-04	9.38E-06	0.00E+00	2.54E-06	1.20E-06	3.55E-09	1.31E-07	1.4	4.17E-05	7.03E-06
S16	60	8	24	5	6.20E-03	1.37E-04	6.72E-06	5.85E-04	1.28E-04	6.91E-06	0.00E+00	1.88E-06	8.83E-07	2.63E-09	9.69E-08	1.0	3.07E-05	5.19E-06
S17	60	8	1	5	8.10E-03	1.84E-04	8.98E-06	7.87E-04	1.72E-04	9.27E-06	0.00E+00	2.52E-06	1.18E-06	3.53E-09	1.30E-07	1.4	4.11E-05	6.98E-06
S17	60	8	2	5	5.28E-03	1.23E-04	5.96E-06	5.24E-04	1.15E-04	6.17E-06	0.00E+00	1.68E-06	7.88E-07	2.35E-09	8.64E-08	0.9	2.73E-05	4.65E-06
S17	60	8	3	5	4.50E-03	1.08E-04	5.18E-06	4.59E-04	1.01E-04	5.39E-06	0.00E+00	1.46E-06	6.88E-07	2.06E-09	7.55E-08	0.8	2.38E-05	4.07E-06
S17	60	8	4	5	3.17E-03	7.68E-05	3.69E-06	3.28E-04	7.18E-05	3.85E-06	0.00E+00	1.04E-06	4.91E-07	1.47E-09	5.39E-08	0.6	1.70E-05	2.91E-06
S17	60	8	5	5	4.41E-03	1.08E-04	5.16E-06	4.59E-04	1.01E-04	5.38E-06	0.00E+00	1.46E-06	6.87E-07	2.06E-09	7.54E-08	0.8	2.38E-05	4.07E-06
S17	60	8	6	5	1.07E-02	2.61E-04	1.25E-05	1.11E-03	2.44E-04	1.31E-05	0.00E+00	3.55E-06	1.67E-06	5.00E-09	1.83E-07	1.9	5.77E-05	9.89E-06
S17	60	8	7	5	3.26E-02	7.84E-04	3.77E-05	3.34E-03	7.33E-04	3.92E-05	0.00E+00	1.07E-05	5.01E-06	1.50E-08	5.50E-07	5.8	1.73E-04	2.97E-05
S17	60	8	8	5	5.25E-02	1.20E-03	5.83E-05	5.11E-03	1.12E-03	6.02E-05	0.00E+00	1.64E-05	7.69E-06	2.29E-08	8.44E-07	9.0	2.67E-04	4.54E-05
S17	60	8	9	5	4.54E-02	9.68E-04	4.79E-05	4.13E-03	9.05E-04	4.89E-05	0.00E+00	1.33E-05	6.25E-06	1.85E-08	6.86E-07	7.4	2.18E-04	3.66E-05
S17	60	8	10	5	3.91E-02	7.99E-04	3.99E-05	3.41E-03	7.47E-04	4.06E-05	0.00E+00	1.10E-05	5.18E-06	1.53E-08	5.68E-07	6.2	1.81E-04	3.02E-05
S17	60	8	11	5	3.65E-02	7.22E-04	3.64E-05	3.08E-03	6.75E-04	3.68E-05	0.00E+00	9.97E-06	4.70E-06	1.38E-08	5.15E-07	5.6	1.65E-04	2.73E-05
S17	60	8	12	5	4.37E-02	8.14E-04	4.16E-05	3.47E-03	7.61E-04	4.17E-05	0.00E+00	1.13E-05	5.33E-06	1.56E-08	5.84E-07	6.4	1.87E-04	3.08E-05
S17	60	8	13	5	4.68E-02	8.61E-04	4.41E-05	3.67E-03	8.04E-04	4.42E-05	0.00E+00	1.20E-05	5.64E-06	1.65E-08	6.18E-07	6.8	1.98E-04	3.26E-05
S17	60	8	14	5	4.81E-02	8.76E-04	4.50E-05	3.74E-03	8.19E-04	4.50E-05	0.00E+00	1.22E-05	5.75E-06	1.68E-08	6.30E-07	7.0	2.02E-04	3.32E-05
S17	60	8	15	5	5.02E-02	9.07E-04	4.67E-05	3.87E-03	8.47E-04	4.66E-05	0.00E+00	1.26E-05	5.95E-06	1.74E-08	6.53E-07	7.2	2.10E-04	3.43E-05
S17	60	8	16	5	5.43E-02	9.84E-04	5.06E-05	4.20E-03	9.19E-04	5.06E-05	0.00E+00	1.37E-05	6.46E-06	1.88E-08	7.08E-07	7.8	2.27E-04	3.72E-05
S17	60	8	17	5	6.69E-02	1.21E-03	6.25E-05	5.18E-03	1.13E-03	6.24E-05	0.00E+00	1.69E-05	7.97E-06	2.32E-08	8.73E-07	9.7	2.81E-04	4.60E-05
S17	60	8	18	5	7.12E-02	1.31E-03	6.70E-05	5.57E-03	1.22E-03	6.71E-05	0.00E+00	1.81E-05	8.56E-06	2.50E-08	9.39E-07	10.4	3.01E-04	4.94E-05
S17	60	8	19	5	4.87E-02	9.07E-04	4.64E-05	3.87E-03	8.47E-04	4.65E-05	0.00E+00	1.26E-05	5.94E-06	1.74E-08	6.51E-07	7.2	2.09E-04	3.43E-05
S17	60	8	20	5	3.07E-02	5.99E-04	3.03E-05	2.56E-03	5.60E-04	3.06E-05	0.00E+00	8.28E-06	3.90E-06	1.15E-08	4.28E-07	4.7	1.37E-04	2.27E-05
S17	60	8	21	5	2.51E-02	5.07E-04	2.54E-05	2.16E-03	4.74E-04	2.58E-05	0.00E+00	6.99E-06	3.29E-06	9.71E-09	3.61E-07	3.9	1.15E-04	1.92E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S17	60	8	22	5	2.06E-02	4.30E-04	2.14E-05	1.84E-03	4.02E-04	2.18E-05	0.00E+00	5.91E-06	2.78E-06	8.24E-09	3.05E-07	3.3	9.72E-05	1.63E-05
S17	60	8	23	5	1.64E-02	3.53E-04	1.74E-05	1.51E-03	3.30E-04	1.79E-05	0.00E+00	4.84E-06	2.28E-06	6.77E-09	2.50E-07	2.7	7.95E-05	1.34E-05
S17	60	8	24	5	1.18E-02	2.61E-04	1.28E-05	1.11E-03	2.44E-04	1.32E-05	0.00E+00	3.57E-06	1.68E-06	5.00E-09	1.84E-07	2.0	5.85E-05	9.89E-06
S18	65	9	1	5	9.90E-03	2.58E-04	1.13E-05	9.56E-04	2.15E-04	1.12E-05	0.00E+00	3.04E-06	1.42E-06	4.53E-09	1.56E-07	1.7	4.89E-05	7.91E-06
S18	65	9	2	5	6.46E-03	1.72E-04	7.48E-06	6.37E-04	1.43E-04	7.43E-06	0.00E+00	2.03E-06	9.47E-07	3.02E-09	1.04E-07	1.2	3.25E-05	5.27E-06
S18	65	9	3	5	5.51E-03	1.50E-04	6.51E-06	5.58E-04	1.25E-04	6.49E-06	0.00E+00	1.77E-06	8.27E-07	2.64E-09	9.09E-08	1.0	2.83E-05	4.61E-06
S18	65	9	4	5	3.88E-03	1.07E-04	4.64E-06	3.98E-04	8.96E-05	4.63E-06	0.00E+00	1.26E-06	5.90E-07	1.89E-09	6.49E-08	0.7	2.02E-05	3.30E-06
S18	65	9	5	5	5.41E-03	1.50E-04	6.48E-06	5.58E-04	1.25E-04	6.48E-06	0.00E+00	1.77E-06	8.26E-07	2.64E-09	9.08E-08	1.0	2.83E-05	4.61E-06
S18	65	9	6	5	1.31E-02	3.65E-04	1.57E-05	1.35E-03	3.05E-04	1.57E-05	0.00E+00	4.29E-06	2.01E-06	6.42E-09	2.20E-07	2.4	6.86E-05	1.12E-05
S18	65	9	7	5	3.99E-02	1.10E-03	4.74E-05	4.06E-03	9.14E-04	4.73E-05	0.00E+00	1.29E-05	6.02E-06	1.93E-08	6.62E-07	7.3	2.06E-04	3.36E-05
S18	65	9	8	5	6.41E-02	1.68E-03	7.32E-05	6.22E-03	1.40E-03	7.26E-05	0.00E+00	1.98E-05	9.25E-06	2.95E-08	1.02E-06	11.3	3.18E-04	5.14E-05
S18	65	9	9	5	6.82E-02	1.25E-03	6.43E-05	5.35E-03	1.17E-03	6.43E-05	0.00E+00	1.74E-05	8.22E-06	2.40E-08	9.01E-07	9.9	2.89E-04	4.75E-05
S18	65	9	10	5	5.68E-02	1.03E-03	5.32E-05	4.41E-03	9.67E-04	5.32E-05	0.00E+00	1.44E-05	6.79E-06	1.98E-08	7.44E-07	8.2	2.39E-04	3.92E-05
S18	65	9	11	5	5.18E-02	9.35E-04	4.82E-05	3.99E-03	8.74E-04	4.81E-05	0.00E+00	1.30E-05	6.14E-06	1.79E-08	6.73E-07	7.4	2.16E-04	3.54E-05
S18	65	9	12	5	5.82E-02	1.05E-03	5.43E-05	4.50E-03	9.86E-04	5.42E-05	0.00E+00	1.47E-05	6.92E-06	2.02E-08	7.59E-07	8.4	2.44E-04	3.99E-05
S18	65	9	13	5	6.14E-02	1.11E-03	5.73E-05	4.75E-03	1.04E-03	5.73E-05	0.00E+00	1.55E-05	7.31E-06	2.13E-08	8.02E-07	8.9	2.57E-04	4.22E-05
S18	65	9	14	5	6.18E-02	1.13E-03	5.82E-05	4.84E-03	1.06E-03	5.82E-05	0.00E+00	1.58E-05	7.44E-06	2.17E-08	8.15E-07	9.0	2.62E-04	4.29E-05
S18	65	9	15	5	6.31E-02	1.17E-03	6.00E-05	5.01E-03	1.10E-03	6.02E-05	0.00E+00	1.63E-05	7.69E-06	2.25E-08	8.43E-07	9.3	2.70E-04	4.44E-05
S18	65	9	16	5	6.52E-02	1.27E-03	6.43E-05	5.43E-03	1.19E-03	6.49E-05	0.00E+00	1.76E-05	8.30E-06	2.44E-08	9.10E-07	9.9	2.91E-04	4.82E-05
S18	65	9	17	5	7.78E-02	1.57E-03	7.87E-05	6.71E-03	1.47E-03	7.99E-05	0.00E+00	2.17E-05	1.02E-05	3.01E-08	1.12E-06	12.2	3.57E-04	5.95E-05
S18	65	9	18	5	8.10E-02	1.69E-03	8.40E-05	7.22E-03	1.58E-03	8.57E-05	0.00E+00	2.32E-05	1.09E-05	3.24E-08	1.20E-06	13.0	3.82E-04	6.40E-05
S18	65	9	19	5	5.91E-02	1.27E-03	5.81E-05	4.70E-03	1.06E-03	5.59E-05	0.00E+00	1.52E-05	7.13E-06	2.23E-08	7.83E-07	9.0	2.48E-04	3.89E-05
S18	65	9	20	5	3.73E-02	8.38E-04	3.80E-05	3.11E-03	6.99E-04	3.68E-05	0.00E+00	1.00E-05	4.69E-06	1.47E-08	5.15E-07	5.9	1.63E-04	2.57E-05
S18	65	9	21	5	3.05E-02	7.09E-04	3.18E-05	2.63E-03	5.91E-04	3.10E-05	0.00E+00	8.45E-06	3.96E-06	1.25E-08	4.35E-07	4.9	1.37E-04	2.17E-05
S18	65	9	22	5	2.51E-02	6.02E-04	2.68E-05	2.23E-03	5.02E-04	2.62E-05	0.00E+00	7.15E-06	3.35E-06	1.06E-08	3.68E-07	4.1	1.16E-04	1.85E-05
S18	65	9	23	5	2.00E-02	4.94E-04	2.19E-05	1.83E-03	4.12E-04	2.15E-05	0.00E+00	5.86E-06	2.74E-06	8.69E-09	3.01E-07	3.4	9.45E-05	1.52E-05
S18	65	9	24	5	1.44E-02	3.65E-04	1.61E-05	1.35E-03	3.05E-04	1.59E-05	0.00E+00	4.32E-06	2.02E-06	6.42E-09	2.22E-07	2.5	6.96E-05	1.12E-05
S19	65	9	1	5	1.44E-02	3.75E-04	1.64E-05	1.39E-03	3.13E-04	1.62E-05	0.00E+00	4.43E-06	2.07E-06	6.59E-09	2.28E-07	2.5	7.11E-05	1.15E-05
S19	65	9	2	5	9.39E-03	2.50E-04	1.09E-05	9.27E-04	2.08E-04	1.08E-05	0.00E+00	2.95E-06	1.38E-06	4.39E-09	1.51E-07	1.7	4.73E-05	7.67E-06
S19	65	9	3	5	8.02E-03	2.19E-04	9.47E-06	8.11E-04	1.82E-04	9.44E-06	0.00E+00	2.57E-06	1.20E-06	3.84E-09	1.32E-07	1.5	4.12E-05	6.71E-06
S19	65	9	4	5	5.65E-03	1.56E-04	6.74E-06	5.79E-04	1.30E-04	6.74E-06	0.00E+00	1.84E-06	8.58E-07	2.75E-09	9.44E-08	1.0	2.94E-05	4.79E-06
S19	65	9	5	5	7.87E-03	2.19E-04	9.43E-06	8.11E-04	1.82E-04	9.43E-06	0.00E+00	2.57E-06	1.20E-06	3.84E-09	1.32E-07	1.5	4.11E-05	6.71E-06
S19	65	9	6	5	1.91E-02	5.32E-04	2.29E-05	1.97E-03	4.43E-04	2.29E-05	0.00E+00	6.24E-06	2.92E-06	9.34E-09	3.21E-07	3.5	9.98E-05	1.63E-05
S19	65	9	7	5	5.80E-02	1.59E-03	6.89E-05	5.91E-03	1.33E-03	6.88E-05	0.00E+00	1.87E-05	8.76E-06	2.80E-08	9.63E-07	10.6	3.00E-04	4.89E-05
S19	65	9	8	5	9.33E-02	2.44E-03	1.07E-04	9.04E-03	2.03E-03	1.06E-04	0.00E+00	2.88E-05	1.35E-05	4.28E-08	1.48E-06	16.5	4.62E-04	7.48E-05
S19	65	9	9	5	9.92E-02	1.82E-03	9.35E-05	7.78E-03	1.70E-03	9.35E-05	0.00E+00	2.53E-05	1.20E-05	3.49E-08	1.31E-06	14.5	4.20E-04	6.90E-05
S19	65	9	10	5	8.26E-02	1.50E-03	7.74E-05	6.42E-03	1.41E-03	7.73E-05	0.00E+00	2.09E-05	9.87E-06	2.88E-08	1.08E-06	12.0	3.48E-04	5.70E-05
S19	65	9	11	5	7.53E-02	1.36E-03	7.01E-05	5.80E-03	1.27E-03	7.00E-05	0.00E+00	1.89E-05	8.93E-06	2.60E-08	9.79E-07	10.8	3.15E-04	5.15E-05
S19	65	9	12	5	8.46E-02	1.53E-03	7.90E-05	6.54E-03	1.43E-03	7.89E-05	0.00E+00	2.13E-05	1.01E-05	2.94E-08	1.10E-06	12.2	3.55E-04	5.81E-05
S19	65	9	13	5	8.93E-02	1.62E-03	8.34E-05	6.91E-03	1.51E-03	8.33E-05	0.00E+00	2.25E-05	1.06E-05	3.10E-08	1.17E-06	12.9	3.74E-04	6.14E-05
S19	65	9	14	5	8.99E-02	1.65E-03	8.46E-05	7.04E-03	1.54E-03	8.47E-05	0.00E+00	2.29E-05	1.08E-05	3.16E-08	1.19E-06	13.1	3.80E-04	6.24E-05
S19	65	9	15	5	9.18E-02	1.71E-03	8.73E-05	7.28E-03	1.60E-03	8.75E-05	0.00E+00	2.37E-05	1.12E-05	3.27E-08	1.23E-06	13.5	3.93E-04	6.46E-05
S19	65	9	16	5	9.49E-02	1.85E-03	9.35E-05	7.90E-03	1.73E-03	9.45E-05	0.00E+00	2.56E-05	1.21E-05	3.55E-08	1.32E-06	14.5	4.23E-04	7.01E-05
S19	65	9	17	5	1.13E-01	2.29E-03	1.14E-04	9.75E-03	2.14E-03	1.16E-04	0.00E+00	3.15E-05	1.48E-05	4.38E-08	1.63E-06	17.7	5.19E-04	8.65E-05
S19	65	9	18	5	1.18E-01	2.46E-03	1.22E-04	1.05E-02	2.30E-03	1.25E-04	0.00E+00	3.38E-05	1.59E-05	4.71E-08	1.75E-06	18.9	5.56E-04	9.31E-05
S19	65	9	19	5	8.60E-02	1.84E-03	8.45E-05	6.84E-03	1.54E-03	8.13E-05	0.00E+00	2.21E-05	1.04E-05	3.24E-08	1.14E-06	13.1	3.61E-04	5.66E-05
S19	65	9	20	5	5.42E-02	1.22E-03	5.52E-05	4.52E-03	1.02E-03	5.35E-05	0.00E+00	1.46E-05	6.82E-06	2.14E-08	7.50E-07	8.5	2.37E-04	3.74E-05
S19	65	9	21	5	4.44E-02	1.03E-03	4.63E-05	3.82E-03	8.60E-04	4.51E-05	0.00E+00	1.23E-05	5.76E-06	1.81E-08	6.32E-07	7.2	1.99E-04	3.16E-05
S19	65	9	22	5	3.65E-02	8.75E-04	3.90E-05	3.25E-03	7.30E-04	3.82E-05	0.00E+00	1.04E-05	4.87E-06	1.54E-08	5.35E-07	6.0	1.68E-04	2.68E-05
S19	65	9	23	5	2.91E-02	7.19E-04	3.18E-05	2.67E-03	5.99E-04	3.13E-05	0.00E+00	8.52E-06	3.99E-06	1.26E-08	4.38E-07	4.9	1.37E-04	2.20E-05
S19	65	9	24	5	2.10E-02	5.32E-04	2.34E-05	1.97E-03	4.43E-04	2.31E-05	0.00E+00	6.28E-06	2.94E-06	9.34E-09	3.23E-07	3.6	1.01E-04	1.63E-05
S20	60	8	1	5	1.10E-02	2.51E-04	1.22E-05	1.07E-03	2.34E-04	1.26E-05	0.00E+00	3.42E-06	1.61E-06	4.80E-09	1.77E-07	1.9	5.59E-05	9.49E-06
S20	60	8	2	5	7.18E-03	1.67E-04	8.10E-06	7.13E-04	1.56E-04	8.39E-06	0.00E+00	2.28E-06	1.07E-06	3.20E-09	1.18E-07	1.3	3.72E-05	6.33E-06
S20	60	8	3	5	6.12E-03	1.46E-04	7.04E-06	6.24E-04	1.37E-04	7.33E-06	0.00E+00	1.99E-06	9.35E-07	2.80E-09	1.03E-07	1.1	3.24E-05	5.54E-06
S20	60	8	4	5	4.31E-03	1.04E-04	5.02E-06	4.46E-04	9.76E-05	5.23E-06	0.00E+00	1.42E-06	6.67E-07	2.00E-09	7.32E-08	0.8	2.31E-05	3.95E-06
S20	60	8	5	5	6.00E-03	1.46E-04	7.02E-06	6.24E-04	1.37E-04	7.32E-06	0.00E+00	1.99E-06	9.34E-07	2.80E-09	1.02E-07	1.1	3.23E-05	5.54E-06
S20	60	8	6	5	1.46E-02	3.55E-04	1.70E-05	1.52E-03	3.32E-04	1.78E-05	0.00E+00	4.82E-06	2.27E-06	6.80E-09	2.49E-07	2.6	7.85E-05	1.34E-05
S20	60	8	7	5	4.43E-02	1.07E-03	5.13E-05	4.55E-03	9.96E-04	5.34E-05	0.00E+00	1.45E-05	6.81E-06	2.04E-08	7.47E-07	7.9	2.36E-04	4.03E-05
S20	60	8	8	5	7.13E-02	1.63E-03	7.93E-05	6.95E-03	1.52E-03	8.19E-05	0.00E+00	2.22E-05	1.05E-05	3.12E-08	1.15E-06	12.3	3.63E-04	6.17E-05
S20	60	8	9	5	6.17E-02	1.32E-03	6.51E-05	5.61E-03	1.23E-03	6.65E-05	0.00E+00	1.81E-05	8.50E-06	2.52E-08	9.32E-07	10.1	2.96E-04	4.98E-05
S20	60	8	10	5	5.31E-02	1.09E-03	5.42E-05	4.63E-03	1.02E-03	5.51E-05	0.00E+00	1.50E-05	7.04E-06	2.08E-08	7.73E-07	8.4	2.46E-04	4.11E-05
S20	60	8	11	5	4.97E-02	9.82E-04	4.94E-05	4.19E-03	9.18E-04	5.00E-05	0.00E+00	1.36E-05	6.39E-06	1.88E-08	7.00E-07	7.6	2.24E-04	3.72E-05
S20	60	8	12	5	5.94E-02	1.11E-03	5.66E-05	4.72E-03	1.03E-03	5.67E-05	0.00E+00	1.54E-05	7.25E-06	2.12E-08	7.94E-07	8.7	2.55E-04	4.19E-05
S20	60	8	13	5	6.37E-02	1.17E-03	6.00E-05	4.99E-03	1.09E-03	6.00E-05	0.00E+00	1.63E-05	7.67E-06	2.24E-08	8.41E-07	9.3	2.70E-04	4.43E-05
S20	60	8	14	5	6.54E-02	1.19E-03	6.12E-05	5.08E-03	1.11E-03	6.12E-05	0.00E+00	1.66E-05	7.81E-06	2.28E-08	8.56E-07	9.5	2.75E-04	4.51E-05
S20	60	8	15	5	6.83E-02	1.23E-03	6.35E-05	5.26E-03	1.15E-03	6.34E-05	0.00E+00	1.72E-05	8.09E-06	2.36E-08	8.87E-07	9.8	2.85E-04	4.67E-05
S20	60	8	16	5	7.38E-02	1.34E-03	6.88E-05	5.70E-03	1.25E-03	6.88E-05	0.00E+00	1.86E-05	8.78E-06	2.56E-08	9.62E-07	10.6	3.09E-04	5.06E-05
S20	60	8	17	5	9.09E-02	1.65E-03	8.49E-05	7.04E-03	1.54E-03	8.49E-05	0.00E+00	2.30E-05	1.08E-05	3.16E-08	1.19E-06	13.1	3.81E-04	6.25E-05
S20	60	8	18	5	9.67E-02	1.78E-03	9.11E-05	7.58E-03	1.66E-03	9.12E-05	0.00E+00	2.47E-05	1.16E-05	3.40E-08	1.28E-06	14.1	4.09E-04	6.72E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S20	60	8	19	5	6.63E-02	1.23E-03	6.30E-05	5.26E-03	1.15E-03	6.32E-05	0.00E+00	1.71E-05	8.07E-06	2.36E-08	8.85E-07	9.7	2.84E-04	4.67E-05
S20	60	8	20	5	4.17E-02	8.15E-04	4.11E-05	3.48E-03	7.62E-04	4.16E-05	0.00E+00	1.13E-05	5.31E-06	1.56E-08	5.82E-07	6.4	1.86E-04	3.08E-05
S20	60	8	21	5	3.41E-02	6.89E-04	3.45E-05	2.94E-03	6.44E-04	3.50E-05	0.00E+00	9.50E-06	4.48E-06	1.32E-08	4.91E-07	5.3	1.56E-04	2.61E-05
S20	60	8	22	5	2.80E-02	5.85E-04	2.91E-05	2.50E-03	5.47E-04	2.96E-05	0.00E+00	8.04E-06	3.79E-06	1.12E-08	4.15E-07	4.5	1.32E-04	2.21E-05
S20	60	8	23	5	2.23E-02	4.80E-04	2.37E-05	2.05E-03	4.49E-04	2.43E-05	0.00E+00	6.59E-06	3.10E-06	9.20E-09	3.40E-07	3.7	1.08E-04	1.82E-05
S20	60	8	24	5	1.61E-02	3.55E-04	1.74E-05	1.52E-03	3.32E-04	1.79E-05	0.00E+00	4.86E-06	2.29E-06	6.80E-09	2.51E-07	2.7	7.95E-05	1.34E-05
S21	60	8	1	5	3.08E-02	7.02E-04	3.42E-05	3.00E-03	6.56E-04	3.53E-05	0.00E+00	9.58E-06	4.51E-06	1.34E-08	4.95E-07	5.3	1.57E-04	2.66E-05
S21	60	8	2	5	2.01E-02	4.68E-04	2.27E-05	2.00E-03	4.38E-04	2.35E-05	0.00E+00	6.38E-06	3.00E-06	8.96E-09	3.29E-07	3.5	1.04E-04	1.77E-05
S21	60	8	3	5	1.71E-02	4.10E-04	1.97E-05	1.75E-03	3.83E-04	2.05E-05	0.00E+00	5.57E-06	2.62E-06	7.84E-09	2.87E-07	3.0	9.07E-05	1.55E-05
S21	60	8	4	5	1.21E-02	2.93E-04	1.41E-05	1.25E-03	2.73E-04	1.46E-05	0.00E+00	3.97E-06	1.87E-06	5.60E-09	2.05E-07	2.2	6.47E-05	1.11E-05
S21	60	8	5	5	1.68E-02	4.10E-04	1.96E-05	1.75E-03	3.83E-04	2.05E-05	0.00E+00	5.56E-06	2.61E-06	7.84E-09	2.87E-07	3.0	9.05E-05	1.55E-05
S21	60	8	6	5	4.08E-02	9.95E-04	4.77E-05	4.24E-03	9.30E-04	4.98E-05	0.00E+00	1.35E-05	6.35E-06	1.90E-08	6.97E-07	7.4	2.20E-04	3.77E-05
S21	60	8	7	5	1.24E-01	2.98E-03	1.44E-04	1.27E-02	2.79E-03	1.49E-04	0.00E+00	4.06E-05	1.91E-05	5.71E-08	2.09E-06	22.2	6.60E-04	1.13E-04
S21	60	8	8	5	2.00E-01	4.56E-03	2.22E-04	1.95E-02	4.27E-03	2.29E-04	0.00E+00	6.23E-05	2.93E-05	8.74E-08	3.21E-06	34.3	1.02E-03	1.73E-04
S21	60	8	9	5	1.73E-01	3.69E-03	1.82E-04	1.57E-02	3.45E-03	1.86E-04	0.00E+00	5.06E-05	2.38E-05	7.06E-08	2.61E-06	28.2	8.30E-04	1.40E-04
S21	60	8	10	5	1.49E-01	3.04E-03	1.52E-04	1.30E-02	2.84E-03	1.54E-04	0.00E+00	4.19E-05	1.97E-05	5.83E-08	2.16E-06	23.5	6.89E-04	1.15E-04
S21	60	8	11	5	1.39E-01	2.75E-03	1.38E-04	1.17E-02	2.57E-03	1.40E-04	0.00E+00	3.80E-05	1.79E-05	5.27E-08	1.96E-06	21.4	6.26E-04	1.04E-04
S21	60	8	12	5	1.66E-01	3.10E-03	1.58E-04	1.32E-02	2.90E-03	1.59E-04	0.00E+00	4.30E-05	2.03E-05	5.94E-08	2.23E-06	24.5	7.13E-04	1.17E-04
S21	60	8	13	5	1.78E-01	3.28E-03	1.68E-04	1.40E-02	3.06E-03	1.68E-04	0.00E+00	4.55E-05	2.15E-05	6.27E-08	2.35E-06	26.0	7.56E-04	1.24E-04
S21	60	8	14	5	1.83E-01	3.34E-03	1.71E-04	1.42E-02	3.12E-03	1.71E-04	0.00E+00	4.64E-05	2.19E-05	6.39E-08	2.40E-06	26.5	7.70E-04	1.26E-04
S21	60	8	15	5	1.91E-01	3.45E-03	1.78E-04	1.47E-02	3.23E-03	1.78E-04	0.00E+00	4.80E-05	2.27E-05	6.61E-08	2.49E-06	27.5	7.98E-04	1.31E-04
S21	60	8	16	5	2.07E-01	3.74E-03	1.93E-04	1.60E-02	3.50E-03	1.93E-04	0.00E+00	5.21E-05	2.46E-05	7.17E-08	2.69E-06	29.8	8.65E-04	1.42E-04
S21	60	8	17	5	2.55E-01	4.62E-03	2.38E-04	1.97E-02	4.32E-03	2.38E-04	0.00E+00	6.43E-05	3.03E-05	8.85E-08	3.33E-06	36.8	1.07E-03	1.75E-04
S21	60	8	18	5	2.71E-01	4.97E-03	2.55E-04	2.12E-02	4.65E-03	2.55E-04	0.00E+00	6.91E-05	3.26E-05	9.52E-08	3.57E-06	39.4	1.15E-03	1.88E-04
S21	60	8	19	5	1.86E-01	3.45E-03	1.77E-04	1.47E-02	3.23E-03	1.77E-04	0.00E+00	4.79E-05	2.26E-05	6.61E-08	2.48E-06	27.3	7.94E-04	1.31E-04
S21	60	8	20	5	1.17E-01	2.28E-03	1.15E-04	9.74E-03	2.13E-03	1.16E-04	0.00E+00	3.15E-05	1.49E-05	4.37E-08	1.63E-06	17.8	5.21E-04	8.64E-05
S21	60	8	21	5	9.55E-02	1.93E-03	9.67E-05	8.24E-03	1.80E-03	9.81E-05	0.00E+00	2.66E-05	1.25E-05	3.70E-08	1.37E-06	14.9	4.38E-04	7.31E-05
S21	60	8	22	5	7.84E-02	1.64E-03	8.14E-05	6.99E-03	1.53E-03	8.30E-05	0.00E+00	2.25E-05	1.06E-05	3.14E-08	1.16E-06	12.6	3.70E-04	6.20E-05
S21	60	8	23	5	6.25E-02	1.35E-03	6.64E-05	5.74E-03	1.26E-03	6.80E-05	0.00E+00	1.84E-05	8.68E-06	2.58E-08	9.53E-07	10.3	3.03E-04	5.09E-05
S21	60	8	24	5	4.50E-02	9.95E-04	4.88E-05	4.24E-03	9.30E-04	5.01E-05	0.00E+00	1.36E-05	6.40E-06	1.90E-08	7.02E-07	7.5	2.23E-04	3.77E-05
S22	60	8	1	5	2.22E-02	5.06E-04	2.46E-05	2.16E-03	4.73E-04	2.54E-05	0.00E+00	6.90E-06	3.25E-06	9.68E-09	3.56E-07	3.8	1.13E-04	1.91E-05
S22	60	8	2	5	1.45E-02	3.37E-04	1.63E-05	1.44E-03	3.15E-04	1.69E-05	0.00E+00	4.59E-06	2.16E-06	6.45E-09	2.37E-07	2.5	7.49E-05	1.28E-05
S22	60	8	3	5	1.23E-02	2.95E-04	1.42E-05	1.26E-03	2.76E-04	1.48E-05	0.00E+00	4.01E-06	1.89E-06	5.65E-09	2.07E-07	2.2	6.53E-05	1.12E-05
S22	60	8	4	5	8.69E-03	2.11E-04	1.01E-05	8.99E-04	1.97E-04	1.05E-05	0.00E+00	2.86E-06	1.35E-06	4.03E-09	1.48E-07	1.6	4.66E-05	7.98E-06
S22	60	8	5	5	1.21E-02	2.95E-04	1.42E-05	1.26E-03	2.76E-04	1.48E-05	0.00E+00	4.01E-06	1.88E-06	5.65E-09	2.07E-07	2.2	6.52E-05	1.12E-05
S22	60	8	6	5	2.94E-02	7.16E-04	3.44E-05	3.06E-03	6.70E-04	3.58E-05	0.00E+00	9.73E-06	4.57E-06	1.37E-08	5.02E-07	5.3	1.58E-04	2.71E-05
S22	60	8	7	5	8.93E-02	2.15E-03	1.03E-04	9.17E-03	2.01E-03	1.08E-04	0.00E+00	2.92E-05	1.37E-05	4.11E-08	1.51E-06	16.0	4.76E-04	8.14E-05
S22	60	8	8	5	1.44E-01	3.29E-03	1.60E-04	1.40E-02	3.07E-03	1.65E-04	0.00E+00	4.48E-05	2.11E-05	6.29E-08	2.31E-06	24.7	7.33E-04	1.24E-04
S22	60	8	9	5	1.24E-01	2.65E-03	1.31E-04	1.13E-02	2.48E-03	1.34E-04	0.00E+00	3.64E-05	1.71E-05	5.08E-08	1.88E-06	20.3	5.98E-04	1.00E-04
S22	60	8	10	5	1.07E-01	2.19E-03	1.09E-04	9.35E-03	2.05E-03	1.11E-04	0.00E+00	3.02E-05	1.42E-05	4.20E-08	1.56E-06	16.9	4.97E-04	8.29E-05
S22	60	8	11	5	1.00E-01	1.98E-03	9.97E-05	8.45E-03	1.85E-03	1.01E-04	0.00E+00	2.73E-05	1.29E-05	3.79E-08	1.41E-06	15.4	4.51E-04	7.50E-05
S22	60	8	12	5	1.20E-01	2.23E-03	1.14E-04	9.53E-03	2.09E-03	1.14E-04	0.00E+00	3.10E-05	1.46E-05	4.28E-08	1.60E-06	17.6	5.14E-04	8.45E-05
S22	60	8	13	5	1.28E-01	2.36E-03	1.21E-04	1.01E-02	2.21E-03	1.21E-04	0.00E+00	3.28E-05	1.55E-05	4.52E-08	1.70E-06	18.7	5.44E-04	8.93E-05
S22	60	8	14	5	1.32E-01	2.40E-03	1.23E-04	1.02E-02	2.25E-03	1.23E-04	0.00E+00	3.34E-05	1.58E-05	4.60E-08	1.73E-06	19.1	5.55E-04	9.09E-05
S22	60	8	15	5	1.38E-01	2.49E-03	1.28E-04	1.06E-02	2.32E-03	1.28E-04	0.00E+00	3.46E-05	1.63E-05	4.76E-08	1.79E-06	19.8	5.75E-04	9.41E-05
S22	60	8	16	5	1.49E-01	2.70E-03	1.39E-04	1.15E-02	2.52E-03	1.39E-04	0.00E+00	3.75E-05	1.77E-05	5.16E-08	1.94E-06	21.5	6.23E-04	1.02E-04
S22	60	8	17	5	1.83E-01	3.33E-03	1.71E-04	1.42E-02	3.11E-03	1.71E-04	0.00E+00	4.63E-05	2.19E-05	6.37E-08	2.40E-06	26.5	7.69E-04	1.26E-04
S22	60	8	18	5	1.95E-01	3.58E-03	1.84E-04	1.53E-02	3.35E-03	1.84E-04	0.00E+00	4.98E-05	2.35E-05	6.86E-08	2.57E-06	28.4	8.26E-04	1.36E-04
S22	60	8	19	5	1.34E-01	2.49E-03	1.27E-04	1.06E-02	2.32E-03	1.27E-04	0.00E+00	3.45E-05	1.63E-05	4.76E-08	1.78E-06	19.6	5.72E-04	9.41E-05
S22	60	8	20	5	8.42E-02	1.64E-03	8.30E-05	7.01E-03	1.54E-03	8.38E-05	0.00E+00	2.27E-05	1.07E-05	3.15E-08	1.17E-06	12.8	3.75E-04	6.22E-05
S22	60	8	21	5	6.88E-02	1.39E-03	6.96E-05	5.93E-03	1.30E-03	7.07E-05	0.00E+00	1.92E-05	9.03E-06	2.66E-08	9.90E-07	10.8	3.16E-04	5.26E-05
S22	60	8	22	5	5.65E-02	1.18E-03	5.86E-05	5.03E-03	1.10E-03	5.98E-05	0.00E+00	1.62E-05	7.64E-06	2.26E-08	8.38E-07	9.1	2.66E-04	4.47E-05
S22	60	8	23	5	4.50E-02	9.69E-04	4.78E-05	4.13E-03	9.06E-04	4.90E-05	0.00E+00	1.33E-05	6.25E-06	1.86E-08	6.86E-07	7.4	2.18E-04	3.67E-05
S22	60	8	24	5	3.24E-02	7.16E-04	3.51E-05	3.06E-03	6.70E-04	3.61E-05	0.00E+00	9.80E-06	4.61E-06	1.37E-08	5.06E-07	5.4	1.60E-04	2.71E-05
S23	60	8	1	5	1.45E-02	3.30E-04	1.61E-05	3.89E-03	9.09E-04	1.66E-05	0.00E+00	4.51E-06	2.12E-06	6.32E-09	2.33E-07	2.5	7.36E-05	1.25E-05
S23	60	8	2	5	9.45E-03	2.20E-04	1.07E-05	2.59E-03	6.06E-04	1.10E-05	0.00E+00	3.00E-06	1.41E-06	4.21E-09	1.55E-07	1.6	4.89E-05	8.33E-06
S23	60	8	3	5	8.06E-03	1.93E-04	9.28E-06	2.27E-03	5.30E-04	9.65E-06	0.00E+00	2.62E-06	1.23E-06	3.69E-09	1.35E-07	1.4	4.27E-05	7.29E-06
S23	60	8	4	5	5.67E-03	1.38E-04	6.61E-06	1.62E-03	3.79E-04	6.88E-06	0.00E+00	1.87E-06	8.78E-07	2.63E-09	9.64E-08	1.0	3.04E-05	5.21E-06
S23	60	8	5	5	7.90E-03	1.93E-04	9.24E-06	2.27E-03	5.30E-04	9.63E-06	0.00E+00	2.62E-06	1.23E-06	3.69E-09	1.35E-07	1.4	4.25E-05	7.29E-06
S23	60	8	6	5	1.92E-02	4.68E-04	2.24E-05	5.51E-03	1.29E-03	2.34E-05	0.00E+00	6.35E-06	2.99E-06	8.95E-09	3.28E-07	3.5	1.03E-04	1.77E-05
S23	60	8	7	5	5.83E-02	1.40E-03	6.75E-05	1.65E-02	3.86E-03	7.03E-05	0.00E+00	1.91E-05	8.97E-06	2.69E-08	9.84E-07	10.4	3.10E-04	5.31E-05
S23	60	8	8	5	9.39E-02	2.15E-03	1.04E-04	2.53E-02	5.91E-03	1.08E-04	0.00E+00	2.93E-05	1.38E-05	4.11E-08	1.51E-06	16.1	4.78E-04	8.12E-05
S23	60	8	9	5	8.13E-02	1.73E-03	8.57E-05	2.04E-02	4.77E-03	8.76E-05	0.00E+00	2.38E-05	1.12E-05	3.32E-08	1.23E-06	13.2	3.90E-04	6.56E-05
S23	60	8	10	5	7.00E-02	1.43E-03	7.14E-05	1.69E-02	3.94E-03	7.26E-05	0.00E+00	1.97E-05	9.28E-06	2.74E-08	1.02E-06	11.0	3.24E-04	5.42E-05
S23	60	8	11	5	6.54E-02	1.29E-03	6.51E-05	1.52E-02	3.56E-03	6.58E-05	0.00E+00	1.78E-05	8.41E-06	2.48E-08	9.22E-07	10.1	2.95E-04	4.89E-05
S23	60	8	12	5	7.82E-02	1.46E-03	7.45E-05	1.72E-02	4.02E-03	7.47E-05	0.00E+00	2.02E-05	9.54E-06	2.79E-08	1.05E-06	11.5	3.35E-04	5.52E-05
S23	60	8	13	5	8.38E-02	1.54E-03	7.90E-05	1.82E-02	4.24E-03	7.90E-05	0.00E+00	2.14E-05	1.01E-05	2.95E-08	1.11E-06	12.2	3.55E-04	5.83E-05
S23	60	8	14	5	8.61E-02	1.57E-03	8.06E-05	1.85E-02	4.32E-03	8.06E-05	0.00E+00	2.18E-05	1.03E-05	3.00E-08	1.13E-06	12.5	3.62E-04	5.94E-05
S23	60	8	15	5	8.99E-02	1.62E-03	8.36E-05	1.91E-02	4.47E-03	8.35E-05	0.00E+00	2.26E-05	1.07E-05	3.11E-08	1.17E-06	12.9	3.75E-04	6.14E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	16	5	9.72E-02	1.76E-03	9.06E-05	2.07E-02	4.85E-03	9.05E-05	0.00E+00	2.45E-05	1.16E-05	3.37E-08	1.27E-06	14.0	4.07E-04	6.66E-05
S23	60	8	17	5	1.20E-01	2.17E-03	1.12E-04	2.56E-02	5.98E-03	1.12E-04	0.00E+00	3.02E-05	1.43E-05	4.16E-08	1.56E-06	17.3	5.02E-04	8.23E-05
S23	60	8	18	5	1.27E-01	2.34E-03	1.20E-04	2.76E-02	6.44E-03	1.20E-04	0.00E+00	3.25E-05	1.53E-05	4.48E-08	1.68E-06	18.5	5.39E-04	8.85E-05
S23	60	8	19	5	8.73E-02	1.62E-03	8.30E-05	1.91E-02	4.47E-03	8.32E-05	0.00E+00	2.25E-05	1.06E-05	3.11E-08	1.16E-06	12.8	3.73E-04	6.14E-05
S23	60	8	20	5	5.49E-02	1.07E-03	5.42E-05	1.26E-02	2.95E-03	5.47E-05	0.00E+00	1.48E-05	6.99E-06	2.05E-08	7.66E-07	8.4	2.45E-04	4.06E-05
S23	60	8	21	5	4.49E-02	9.08E-04	4.55E-05	1.07E-02	2.50E-03	4.61E-05	0.00E+00	1.25E-05	5.89E-06	1.74E-08	6.46E-07	7.0	2.06E-04	3.44E-05
S23	60	8	22	5	3.69E-02	7.70E-04	3.83E-05	9.08E-03	2.12E-03	3.90E-05	0.00E+00	1.06E-05	4.98E-06	1.47E-08	5.47E-07	5.9	1.74E-04	2.92E-05
S23	60	8	23	5	2.94E-02	6.33E-04	3.12E-05	7.46E-03	1.74E-03	3.20E-05	0.00E+00	8.67E-06	4.08E-06	1.21E-08	4.48E-07	4.8	1.42E-04	2.40E-05
S23	60	8	24	5	2.11E-02	4.68E-04	2.29E-05	5.51E-03	1.29E-03	2.36E-05	0.00E+00	6.40E-06	3.01E-06	8.95E-09	3.30E-07	3.5	1.05E-04	1.77E-05
S24	60	8	1	5	9.61E-03	2.19E-04	1.07E-05	2.58E-03	6.02E-04	1.10E-05	0.00E+00	2.99E-06	1.40E-06	4.19E-09	1.54E-07	1.6	4.88E-05	8.28E-06
S24	60	8	2	5	6.26E-03	1.46E-04	7.07E-06	1.72E-03	4.02E-04	7.32E-06	0.00E+00	1.99E-06	9.35E-07	2.79E-09	1.03E-07	1.1	3.24E-05	5.52E-06
S24	60	8	3	5	5.34E-03	1.28E-04	6.15E-06	1.50E-03	3.51E-04	6.39E-06	0.00E+00	1.74E-06	8.16E-07	2.44E-09	8.95E-08	1.0	2.83E-05	4.83E-06
S24	60	8	4	5	3.76E-03	9.12E-05	4.38E-06	1.07E-03	2.51E-04	4.56E-06	0.00E+00	1.24E-06	5.82E-07	1.74E-09	6.39E-08	0.7	2.02E-05	3.45E-06
S24	60	8	5	5	5.23E-03	1.28E-04	6.12E-06	1.50E-03	3.51E-04	6.39E-06	0.00E+00	1.73E-06	8.15E-07	2.44E-09	8.94E-08	0.9	2.82E-05	4.83E-06
S24	60	8	6	5	1.27E-02	3.10E-04	1.49E-05	3.65E-03	8.53E-04	1.55E-05	0.00E+00	4.21E-06	1.98E-06	5.93E-09	2.17E-07	2.3	6.85E-05	1.17E-05
S24	60	8	7	5	3.86E-02	9.30E-04	4.47E-05	1.10E-02	2.56E-03	4.66E-05	0.00E+00	1.26E-05	5.94E-06	1.78E-08	6.52E-07	6.9	2.06E-04	3.52E-05
S24	60	8	8	5	6.22E-02	1.42E-03	6.92E-05	1.68E-02	3.92E-03	7.15E-05	0.00E+00	1.94E-05	9.13E-06	2.72E-08	1.00E-06	10.7	3.17E-04	5.38E-05
S24	60	8	9	5	5.39E-02	1.15E-03	5.68E-05	1.35E-02	3.16E-03	5.81E-05	0.00E+00	1.58E-05	7.42E-06	2.20E-08	8.14E-07	8.8	2.59E-04	4.35E-05
S24	60	8	10	5	4.64E-02	9.48E-04	4.73E-05	1.12E-02	2.61E-03	4.81E-05	0.00E+00	1.30E-05	6.15E-06	1.81E-08	6.74E-07	7.3	2.15E-04	3.59E-05
S24	60	8	11	5	4.33E-02	8.57E-04	4.31E-05	1.01E-02	2.36E-03	4.36E-05	0.00E+00	1.18E-05	5.57E-06	1.64E-08	6.11E-07	6.7	1.95E-04	3.24E-05
S24	60	8	12	5	5.18E-02	9.66E-04	4.94E-05	1.14E-02	2.66E-03	4.95E-05	0.00E+00	1.34E-05	6.32E-06	1.85E-08	6.93E-07	7.6	2.22E-04	3.66E-05
S24	60	8	13	5	5.56E-02	1.02E-03	5.24E-05	1.20E-02	2.81E-03	5.24E-05	0.00E+00	1.42E-05	6.69E-06	1.95E-08	7.34E-07	8.1	2.35E-04	3.86E-05
S24	60	8	14	5	5.70E-02	1.04E-03	5.34E-05	1.22E-02	2.86E-03	5.34E-05	0.00E+00	1.44E-05	6.82E-06	1.99E-08	7.47E-07	8.3	2.40E-04	3.93E-05
S24	60	8	15	5	5.96E-02	1.08E-03	5.54E-05	1.27E-02	2.96E-03	5.53E-05	0.00E+00	1.50E-05	7.06E-06	2.06E-08	7.74E-07	8.6	2.49E-04	4.07E-05
S24	60	8	16	5	6.44E-02	1.17E-03	6.01E-05	1.38E-02	3.21E-03	6.00E-05	0.00E+00	1.62E-05	7.66E-06	2.23E-08	8.40E-07	9.3	2.70E-04	4.42E-05
S24	60	8	17	5	7.93E-02	1.44E-03	7.41E-05	1.70E-02	3.97E-03	7.40E-05	0.00E+00	2.00E-05	9.45E-06	2.76E-08	1.04E-06	11.5	3.33E-04	5.45E-05
S24	60	8	18	5	8.44E-02	1.55E-03	7.95E-05	1.83E-02	4.27E-03	7.96E-05	0.00E+00	2.15E-05	1.02E-05	2.97E-08	1.11E-06	12.3	3.57E-04	5.87E-05
S24	60	8	19	5	5.78E-02	1.08E-03	5.50E-05	1.27E-02	2.96E-03	5.51E-05	0.00E+00	1.49E-05	7.04E-06	2.06E-08	7.72E-07	8.5	2.47E-04	4.07E-05
S24	60	8	20	5	3.64E-02	7.11E-04	3.59E-05	8.38E-03	1.96E-03	3.63E-05	0.00E+00	9.82E-06	4.63E-06	1.36E-08	5.08E-07	5.5	1.62E-04	2.69E-05
S24	60	8	21	5	2.98E-02	6.02E-04	3.01E-05	7.09E-03	1.66E-03	3.06E-05	0.00E+00	8.29E-06	3.91E-06	1.15E-08	4.28E-07	4.7	1.37E-04	2.28E-05
S24	60	8	22	5	2.44E-02	5.10E-04	2.54E-05	6.02E-03	1.41E-03	2.59E-05	0.00E+00	7.01E-06	3.30E-06	9.77E-09	3.62E-07	3.9	1.15E-04	1.93E-05
S24	60	8	23	5	1.95E-02	4.19E-04	2.07E-05	4.94E-03	1.15E-03	2.12E-05	0.00E+00	5.75E-06	2.71E-06	8.03E-09	2.97E-07	3.2	9.43E-05	1.59E-05
S24	60	8	24	5	1.40E-02	3.10E-04	1.52E-05	3.65E-03	8.53E-04	1.56E-05	0.00E+00	4.24E-06	2.00E-06	5.93E-09	2.19E-07	2.3	6.94E-05	1.17E-05
S25	60	8	1	5	8.19E-03	1.86E-04	9.08E-06	2.20E-03	5.13E-04	9.37E-06	0.00E+00	2.54E-06	1.20E-06	3.57E-09	1.31E-07	1.4	4.16E-05	7.06E-06
S25	60	8	2	5	5.34E-03	1.24E-04	6.02E-06	1.46E-03	3.42E-04	6.24E-06	0.00E+00	1.69E-06	7.97E-07	2.38E-09	8.74E-08	0.9	2.76E-05	4.70E-06
S25	60	8	3	5	4.55E-03	1.09E-04	5.24E-06	1.28E-03	2.99E-04	5.45E-06	0.00E+00	1.48E-06	6.95E-07	2.08E-09	7.63E-08	0.8	2.41E-05	4.12E-06
S25	60	8	4	5	3.20E-03	7.77E-05	3.73E-06	9.16E-04	2.14E-04	3.89E-06	0.00E+00	1.06E-06	4.96E-07	1.49E-09	5.44E-08	0.6	1.72E-05	2.94E-06
S25	60	8	5	5	4.46E-03	1.09E-04	5.22E-06	1.28E-03	2.99E-04	5.44E-06	0.00E+00	1.48E-06	6.94E-07	2.08E-09	7.62E-08	0.8	2.40E-05	4.12E-06
S25	60	8	6	5	1.08E-02	2.64E-04	1.27E-05	3.11E-03	7.27E-04	1.32E-05	0.00E+00	3.59E-06	1.69E-06	5.06E-09	1.85E-07	2.0	5.83E-05	1.00E-05
S25	60	8	7	5	3.29E-02	7.92E-04	3.81E-05	9.34E-03	2.18E-03	3.97E-05	0.00E+00	1.08E-05	5.06E-06	1.52E-08	5.56E-07	5.9	1.75E-04	3.00E-05
S25	60	8	8	5	5.30E-02	1.21E-03	5.90E-05	1.43E-02	3.34E-03	6.09E-05	0.00E+00	1.65E-05	7.78E-06	2.32E-08	8.53E-07	9.1	2.70E-04	4.59E-05
S25	60	8	9	5	4.59E-02	9.79E-04	4.84E-05	1.15E-02	2.70E-03	4.95E-05	0.00E+00	1.34E-05	6.32E-06	1.87E-08	6.93E-07	7.5	2.20E-04	3.71E-05
S25	60	8	10	5	3.95E-02	8.08E-04	4.03E-05	9.52E-03	2.22E-03	4.10E-05	0.00E+00	1.11E-05	5.24E-06	1.55E-08	5.75E-07	6.2	1.83E-04	3.06E-05
S25	60	8	11	5	3.69E-02	7.30E-04	3.68E-05	8.61E-03	2.01E-03	3.72E-05	0.00E+00	1.01E-05	4.75E-06	1.40E-08	5.21E-07	5.7	1.66E-04	2.76E-05
S25	60	8	12	5	4.42E-02	8.23E-04	4.21E-05	9.70E-03	2.27E-03	4.22E-05	0.00E+00	1.14E-05	5.39E-06	1.58E-08	5.91E-07	6.5	1.89E-04	3.12E-05
S25	60	8	13	5	4.74E-02	8.70E-04	4.46E-05	1.03E-02	2.40E-03	4.46E-05	0.00E+00	1.21E-05	5.70E-06	1.67E-08	6.25E-07	6.9	2.01E-04	3.29E-05
S25	60	8	14	5	4.86E-02	8.86E-04	4.55E-05	1.04E-02	2.44E-03	4.55E-05	0.00E+00	1.23E-05	5.81E-06	1.70E-08	6.37E-07	7.0	2.04E-04	3.35E-05
S25	60	8	15	5	5.08E-02	9.17E-04	4.72E-05	1.08E-02	2.52E-03	4.72E-05	0.00E+00	1.28E-05	6.02E-06	1.76E-08	6.60E-07	7.3	2.12E-04	3.47E-05
S25	60	8	16	5	5.49E-02	9.94E-04	5.12E-05	1.17E-02	2.74E-03	5.11E-05	0.00E+00	1.38E-05	6.53E-06	1.90E-08	7.16E-07	7.9	2.30E-04	3.76E-05
S25	60	8	17	5	6.76E-02	1.23E-03	6.32E-05	1.45E-02	3.38E-03	6.31E-05	0.00E+00	1.71E-05	8.06E-06	2.35E-08	8.83E-07	9.8	2.84E-04	4.65E-05
S25	60	8	18	5	7.19E-02	1.32E-03	6.78E-05	1.56E-02	3.64E-03	6.78E-05	0.00E+00	1.83E-05	8.66E-06	2.53E-08	9.49E-07	10.5	3.05E-04	5.00E-05
S25	60	8	19	5	4.93E-02	9.17E-04	4.69E-05	1.08E-02	2.52E-03	4.70E-05	0.00E+00	1.27E-05	6.00E-06	1.76E-08	6.58E-07	7.2	2.11E-04	3.47E-05
S25	60	8	20	5	3.10E-02	6.06E-04	3.06E-05	7.14E-03	1.67E-03	3.09E-05	0.00E+00	8.37E-06	3.95E-06	1.16E-08	4.33E-07	4.7	1.38E-04	2.29E-05
S25	60	8	21	5	2.54E-02	5.13E-04	2.57E-05	6.04E-03	1.41E-03	2.60E-05	0.00E+00	7.06E-06	3.33E-06	9.82E-09	3.65E-07	4.0	1.16E-04	1.94E-05
S25	60	8	22	5	2.08E-02	4.35E-04	2.16E-05	5.13E-03	1.20E-03	2.20E-05	0.00E+00	5.98E-06	2.82E-06	8.33E-09	3.09E-07	3.3	9.82E-05	1.65E-05
S25	60	8	23	5	1.66E-02	3.57E-04	1.76E-05	4.21E-03	9.84E-04	1.80E-05	0.00E+00	4.90E-06	2.31E-06	6.84E-09	2.53E-07	2.7	8.03E-05	1.35E-05
S25	60	8	24	5	1.19E-02	2.64E-04	1.29E-05	3.11E-03	7.27E-04	1.33E-05	0.00E+00	3.61E-06	1.70E-06	5.06E-09	1.87E-07	2.0	5.91E-05	1.00E-05
S26	60	8	1	5	2.48E-02	5.64E-04	2.75E-05	6.65E-03	1.55E-03	2.84E-05	0.00E+00	7.70E-06	3.62E-06	1.08E-08	3.98E-07	4.2	1.26E-04	2.14E-05
S26	60	8	2	5	1.62E-02	3.76E-04	1.82E-05	4.44E-03	1.04E-03	1.89E-05	0.00E+00	5.13E-06	2.41E-06	7.20E-09	2.65E-07	2.8	8.37E-05	1.42E-05
S26	60	8	3	5	1.38E-02	3.29E-04	1.59E-05	3.88E-03	9.07E-04	1.65E-05	0.00E+00	4.48E-06	2.11E-06	6.30E-09	2.31E-07	2.5	7.29E-05	1.25E-05
S26	60	8	4	5	9.70E-03	2.35E-04	1.13E-05	2.77E-03	6.48E-04	1.18E-05	0.00E+00	3.20E-06	1.50E-06	4.50E-09	1.65E-07	1.7	5.20E-05	8.90E-06
S26	60	8	5	5	1.35E-02	3.29E-04	1.58E-05	3.88E-03	9.07E-04	1.65E-05	0.00E+00	4.47E-06	2.10E-06	6.30E-09	2.31E-07	2.4	7.27E-05	1.25E-05
S26	60	8	6	5	3.28E-02	8.00E-04	3.84E-05	9.42E-03	2.20E-03	4.00E-05	0.00E+00	1.09E-05	5.11E-06	1.53E-08	5.60E-07	5.9	1.77E-04	3.03E-05
S26	60	8	7	5	9.97E-02	2.40E-03	1.15E-04	2.83E-02	6.61E-03	1.20E-04	0.00E+00	3.26E-05	1.53E-05	4.59E-08	1.68E-06	17.8	5.31E-04	9.08E-05
S26	60	8	8	5	1.61E-01	3.67E-03	1.79E-04	4.32E-02	1.01E-02	1.84E-04	0.00E+00	5.01E-05	2.36E-05	7.02E-08	2.58E-06	27.6	8.18E-04	1.39E-04
S26	60	8	9	5	1.39E-01	2.96E-03	1.46E-04	3.49E-02	8.16E-03	1.50E-04	0.00E+00	4.07E-05	1.91E-05	5.67E-08	2.10E-06	22.6	6.67E-04	1.12E-04
S26	60	8	10	5	1.20E-01	2.45E-03	1.22E-04	2.88E-02	6.74E-03	1.24E-04	0.00E+00	3.37E-05	1.59E-05	4.68E-08	1.74E-06	18.9	5.54E-04	9.26E-05
S26	60	8	11	5	1.12E-01	2.21E-03	1.11E-04	2.61E-02	6.09E-03	1.13E-04	0.00E+00	3.05E-05	1.44E-05	4.23E-08	1.58E-06	17.2	5.04E-04	8.37E-05
S26	60	8	12	5	1.34E-01	2.49E-03	1.27E-04	2.94E-02	6.87E-03	1.28E-04	0.00E+00	3.46E-05	1.63E-05	4.77E-08	1.79E-06	19.7	5.73E-04	9.44E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	13	5	1.43E-01	2.63E-03	1.35E-04	3.10E-02	7.25E-03	1.35E-04	0.00E+00	3.66E-05	1.73E-05	5.04E-08	1.89E-06	20.9	6.07E-04	9.97E-05
S26	60	8	14	5	1.47E-01	2.68E-03	1.38E-04	3.16E-02	7.38E-03	1.38E-04	0.00E+00	3.73E-05	1.76E-05	5.13E-08	1.93E-06	21.3	6.19E-04	1.01E-04
S26	60	8	15	5	1.54E-01	2.78E-03	1.43E-04	3.27E-02	7.64E-03	1.43E-04	0.00E+00	3.86E-05	1.82E-05	5.31E-08	2.00E-06	22.1	6.42E-04	1.05E-04
S26	60	8	16	5	1.66E-01	3.01E-03	1.55E-04	3.55E-02	8.29E-03	1.55E-04	0.00E+00	4.19E-05	1.98E-05	5.76E-08	2.17E-06	24.0	6.96E-04	1.14E-04
S26	60	8	17	5	2.05E-01	3.72E-03	1.91E-04	4.38E-02	1.02E-02	1.91E-04	0.00E+00	5.17E-05	2.44E-05	7.12E-08	2.67E-06	29.6	8.59E-04	1.41E-04
S26	60	8	18	5	2.18E-01	4.00E-03	2.05E-04	4.71E-02	1.10E-02	2.05E-04	0.00E+00	5.56E-05	2.62E-05	7.66E-08	2.87E-06	31.7	9.22E-04	1.51E-04
S26	60	8	19	5	1.49E-01	2.78E-03	1.42E-04	3.27E-02	7.64E-03	1.42E-04	0.00E+00	3.85E-05	1.82E-05	5.31E-08	1.99E-06	21.9	6.39E-04	1.05E-04
S26	60	8	20	5	9.40E-02	1.83E-03	9.26E-05	2.16E-02	5.05E-03	9.36E-05	0.00E+00	2.54E-05	1.20E-05	3.51E-08	1.31E-06	14.3	4.19E-04	6.94E-05
S26	60	8	21	5	7.68E-02	1.55E-03	7.77E-05	1.83E-02	4.27E-03	7.89E-05	0.00E+00	2.14E-05	1.01E-05	2.97E-08	1.11E-06	12.0	3.52E-04	5.88E-05
S26	60	8	22	5	6.30E-02	1.32E-03	6.54E-05	1.55E-02	3.63E-03	6.67E-05	0.00E+00	1.81E-05	8.52E-06	2.52E-08	9.35E-07	10.1	2.97E-04	4.99E-05
S26	60	8	23	5	5.03E-02	1.08E-03	5.34E-05	1.28E-02	2.98E-03	5.46E-05	0.00E+00	1.48E-05	6.98E-06	2.07E-08	7.66E-07	8.2	2.43E-04	4.10E-05
S26	60	8	24	5	3.62E-02	8.00E-04	3.92E-05	9.42E-03	2.20E-03	4.03E-05	0.00E+00	1.09E-05	5.15E-06	1.53E-08	5.65E-07	6.1	1.79E-04	3.03E-05
S27	50	7	1	5	1.87E-02	3.68E-04	2.04E-05	4.83E-03	1.12E-03	2.19E-05	0.00E+00	5.93E-06	2.80E-06	7.83E-09	3.07E-07	3.2	9.84E-05	1.76E-05
S27	50	7	2	5	1.21E-02	2.46E-04	1.35E-05	3.22E-03	7.43E-04	1.46E-05	0.00E+00	3.94E-06	1.87E-06	5.22E-09	2.04E-07	2.1	6.54E-05	1.17E-05
S27	50	7	3	5	1.03E-02	2.15E-04	1.18E-05	2.82E-03	6.51E-04	1.28E-05	0.00E+00	3.44E-06	1.63E-06	4.57E-09	1.78E-07	1.8	5.70E-05	1.03E-05
S27	50	7	4	5	7.28E-03	1.54E-04	8.38E-06	2.01E-03	4.65E-04	9.10E-06	0.00E+00	2.46E-06	1.16E-06	3.26E-09	1.27E-07	1.3	4.06E-05	7.33E-06
S27	50	7	5	5	1.01E-02	2.15E-04	1.17E-05	2.82E-03	6.51E-04	1.27E-05	0.00E+00	3.44E-06	1.63E-06	4.57E-09	1.78E-07	1.8	5.68E-05	1.03E-05
S27	50	7	6	5	2.46E-02	5.22E-04	2.85E-05	6.85E-03	1.58E-03	3.09E-05	0.00E+00	8.35E-06	3.95E-06	1.11E-08	4.33E-07	4.4	1.38E-04	2.49E-05
S27	50	7	7	5	7.49E-02	1.57E-03	8.56E-05	2.05E-02	4.74E-03	9.29E-05	0.00E+00	2.51E-05	1.19E-05	3.33E-08	1.30E-06	13.2	4.15E-04	7.48E-05
S27	50	7	8	5	1.21E-01	2.39E-03	1.32E-04	3.14E-02	7.25E-03	1.43E-04	0.00E+00	3.85E-05	1.82E-05	5.09E-08	2.00E-06	20.5	6.39E-04	1.14E-04
S27	50	7	9	5	1.05E-01	1.93E-03	1.09E-04	2.54E-02	5.85E-03	1.16E-04	0.00E+00	3.13E-05	1.48E-05	4.11E-08	1.62E-06	16.8	5.21E-04	9.24E-05
S27	50	7	10	5	9.04E-02	1.60E-03	9.08E-05	2.09E-02	4.83E-03	9.60E-05	0.00E+00	2.59E-05	1.23E-05	3.39E-08	1.34E-06	14.0	4.33E-04	7.62E-05
S27	50	7	11	5	8.45E-02	1.44E-03	8.27E-05	1.89E-02	4.37E-03	8.70E-05	0.00E+00	2.35E-05	1.11E-05	3.07E-08	1.22E-06	12.8	3.94E-04	6.89E-05
S27	50	7	12	5	1.01E-01	1.63E-03	9.47E-05	2.13E-02	4.93E-03	9.87E-05	0.00E+00	2.66E-05	1.26E-05	3.46E-08	1.38E-06	14.6	4.48E-04	7.77E-05
S27	50	7	13	5	1.09E-01	1.72E-03	1.01E-04	2.25E-02	5.20E-03	1.05E-04	0.00E+00	2.82E-05	1.34E-05	3.66E-08	1.46E-06	15.5	4.75E-04	8.21E-05
S27	50	7	14	5	1.12E-01	1.75E-03	1.03E-04	2.30E-02	5.30E-03	1.07E-04	0.00E+00	2.87E-05	1.36E-05	3.72E-08	1.49E-06	15.9	4.84E-04	8.36E-05
S27	50	7	15	5	1.17E-01	1.81E-03	1.06E-04	2.38E-02	5.48E-03	1.10E-04	0.00E+00	2.97E-05	1.41E-05	3.85E-08	1.54E-06	16.4	5.02E-04	8.65E-05
S27	50	7	16	5	1.26E-01	1.96E-03	1.15E-04	2.58E-02	5.95E-03	1.20E-04	0.00E+00	3.22E-05	1.53E-05	4.18E-08	1.67E-06	17.8	5.44E-04	9.38E-05
S27	50	7	17	5	1.55E-01	2.43E-03	1.42E-04	3.18E-02	7.34E-03	1.48E-04	0.00E+00	3.98E-05	1.89E-05	5.16E-08	2.07E-06	22.0	6.71E-04	1.16E-04
S27	50	7	18	5	1.65E-01	2.61E-03	1.53E-04	3.42E-02	7.90E-03	1.59E-04	0.00E+00	4.27E-05	2.03E-05	5.55E-08	2.22E-06	23.6	7.20E-04	1.25E-04
S27	50	7	19	5	1.13E-01	1.81E-03	1.06E-04	2.38E-02	5.48E-03	1.10E-04	0.00E+00	2.96E-05	1.41E-05	3.85E-08	1.54E-06	16.3	4.99E-04	8.65E-05
S27	50	7	20	5	7.11E-02	1.20E-03	6.89E-05	1.57E-02	3.62E-03	7.23E-05	0.00E+00	1.95E-05	9.25E-06	2.55E-08	1.01E-06	10.6	3.27E-04	5.72E-05
S27	50	7	21	5	5.80E-02	1.01E-03	5.78E-05	1.33E-02	3.07E-03	6.10E-05	0.00E+00	1.65E-05	7.80E-06	2.15E-08	8.54E-07	8.9	2.75E-04	4.84E-05
S27	50	7	22	5	4.76E-02	8.60E-04	4.86E-05	1.13E-02	2.60E-03	5.16E-05	0.00E+00	1.39E-05	6.59E-06	1.83E-08	7.22E-07	7.5	2.32E-04	4.11E-05
S27	50	7	23	5	3.79E-02	7.06E-04	3.96E-05	9.26E-03	2.14E-03	4.22E-05	0.00E+00	1.14E-05	5.40E-06	1.50E-08	5.92E-07	6.1	1.90E-04	3.37E-05
S27	50	7	24	5	2.72E-02	5.22E-04	2.91E-05	6.85E-03	1.58E-03	3.11E-05	0.00E+00	8.41E-06	3.98E-06	1.11E-08	4.36E-07	4.5	1.40E-04	2.49E-05
S28	50	7	1	5	1.19E-02	2.35E-04	1.30E-05	1.17E-03	2.49E-04	1.40E-05	0.00E+00	3.78E-06	1.79E-06	4.99E-09	1.96E-07	2.0	6.27E-05	1.12E-05
S28	50	7	2	5	7.74E-03	1.57E-04	8.62E-06	7.80E-04	1.66E-04	9.30E-06	0.00E+00	2.51E-06	1.19E-06	3.33E-09	1.30E-07	1.3	4.17E-05	7.48E-06
S28	50	7	3	5	6.59E-03	1.37E-04	7.50E-06	6.83E-04	1.45E-04	8.13E-06	0.00E+00	2.19E-06	1.04E-06	2.91E-09	1.14E-07	1.2	3.63E-05	6.54E-06
S28	50	7	4	5	4.64E-03	9.78E-05	5.34E-06	4.88E-04	1.04E-04	5.80E-06	0.00E+00	1.57E-06	7.41E-07	2.08E-09	8.11E-08	0.8	2.59E-05	4.67E-06
S28	50	7	5	5	6.46E-03	1.37E-04	7.47E-06	6.83E-04	1.45E-04	8.12E-06	0.00E+00	2.19E-06	1.04E-06	2.91E-09	1.14E-07	1.2	3.62E-05	6.54E-06
S28	50	7	6	5	1.57E-02	3.33E-04	1.81E-05	1.66E-03	3.53E-04	1.97E-05	0.00E+00	5.32E-06	2.52E-06	7.07E-09	2.76E-07	2.8	8.80E-05	1.59E-05
S28	50	7	7	5	4.77E-02	9.98E-04	5.46E-05	4.97E-03	1.06E-03	5.92E-05	0.00E+00	1.60E-05	7.56E-06	2.12E-08	8.28E-07	8.4	2.64E-04	4.77E-05
S28	50	7	8	5	7.70E-02	1.53E-03	8.44E-05	7.61E-03	1.62E-03	9.09E-05	0.00E+00	2.45E-05	1.16E-05	3.25E-08	1.27E-06	13.1	4.07E-04	7.29E-05
S28	50	7	9	5	6.68E-02	1.23E-03	6.93E-05	6.14E-03	1.31E-03	7.38E-05	0.00E+00	1.99E-05	9.44E-06	2.62E-08	1.03E-06	10.7	3.32E-04	5.89E-05
S28	50	7	10	5	5.76E-02	1.02E-03	5.78E-05	5.07E-03	1.08E-03	6.12E-05	0.00E+00	1.65E-05	7.82E-06	2.16E-08	8.56E-07	8.9	2.76E-04	4.86E-05
S28	50	7	11	5	5.39E-02	9.20E-04	5.27E-05	4.58E-03	9.75E-04	5.55E-05	0.00E+00	1.50E-05	7.09E-06	1.96E-08	7.77E-07	8.1	2.51E-04	4.39E-05
S28	50	7	12	5	6.45E-02	1.04E-03	6.04E-05	5.17E-03	1.10E-03	6.29E-05	0.00E+00	1.70E-05	8.05E-06	2.21E-08	8.81E-07	9.3	2.86E-04	4.95E-05
S28	50	7	13	5	6.92E-02	1.10E-03	6.41E-05	5.46E-03	1.16E-03	6.66E-05	0.00E+00	1.79E-05	8.52E-06	2.33E-08	9.32E-07	9.9	3.02E-04	5.23E-05
S28	50	7	14	5	7.11E-02	1.12E-03	6.54E-05	5.56E-03	1.18E-03	6.79E-05	0.00E+00	1.83E-05	8.68E-06	2.37E-08	9.50E-07	10.1	3.08E-04	5.33E-05
S28	50	7	15	5	7.43E-02	1.15E-03	6.78E-05	5.75E-03	1.22E-03	7.04E-05	0.00E+00	1.89E-05	8.99E-06	2.46E-08	9.84E-07	10.5	3.20E-04	5.51E-05
S28	50	7	16	5	8.02E-02	1.25E-03	7.35E-05	6.24E-03	1.33E-03	7.63E-05	0.00E+00	2.05E-05	9.75E-06	2.66E-08	1.07E-06	11.4	3.47E-04	5.98E-05
S28	50	7	17	5	9.89E-02	1.55E-03	9.07E-05	7.71E-03	1.64E-03	9.42E-05	0.00E+00	2.53E-05	1.20E-05	3.29E-08	1.32E-06	14.0	4.28E-04	7.38E-05
S28	50	7	18	5	1.05E-01	1.66E-03	9.73E-05	8.29E-03	1.76E-03	1.01E-04	0.00E+00	2.72E-05	1.29E-05	3.54E-08	1.41E-06	15.0	4.59E-04	7.94E-05
S28	50	7	19	5	7.20E-02	1.15E-03	6.73E-05	5.75E-03	1.22E-03	7.01E-05	0.00E+00	1.89E-05	8.96E-06	2.46E-08	9.81E-07	10.4	3.18E-04	5.51E-05
S28	50	7	20	5	4.53E-02	7.63E-04	4.39E-05	3.80E-03	8.09E-04	4.61E-05	0.00E+00	1.24E-05	5.89E-06	1.62E-08	6.45E-07	6.8	2.09E-04	3.64E-05
S28	50	7	21	5	3.70E-02	6.46E-04	3.68E-05	3.22E-03	6.84E-04	3.89E-05	0.00E+00	1.05E-05	4.97E-06	1.37E-08	5.44E-07	5.7	1.75E-04	3.08E-05
S28	50	7	22	5	3.03E-02	5.48E-04	3.10E-05	2.73E-03	5.81E-04	3.29E-05	0.00E+00	8.87E-06	4.20E-06	1.17E-08	4.60E-07	4.8	1.48E-04	2.62E-05
S28	50	7	23	5	2.42E-02	4.50E-04	2.53E-05	2.24E-03	4.77E-04	2.69E-05	0.00E+00	7.27E-06	3.44E-06	9.57E-09	3.77E-07	3.9	1.21E-04	2.15E-05
S28	50	7	24	5	1.74E-02	3.33E-04	1.85E-05	1.66E-03	3.53E-04	1.99E-05	0.00E+00	5.36E-06	2.54E-06	7.07E-09	2.78E-07	2.9	8.92E-05	1.59E-05
S29	60	8	1	5	2.55E-02	5.81E-04	2.83E-05	2.48E-03	5.43E-04	2.92E-05	0.00E+00	7.93E-06	3.73E-06	1.11E-08	4.09E-07	4.4	1.30E-04	2.20E-05
S29	60	8	2	5	1.66E-02	3.87E-04	1.88E-05	1.65E-03	3.62E-04	1.94E-05	0.00E+00	5.28E-06	2.48E-06	7.41E-09	2.72E-07	2.9	8.61E-05	1.47E-05
S29	60	8	3	5	1.42E-02	3.39E-04	1.63E-05	1.45E-03	3.17E-04	1.70E-05	0.00E+00	4.61E-06	2.17E-06	6.49E-09	2.38E-07	2.5	7.50E-05	1.28E-05
S29	60	8	4	5	9.98E-03	2.42E-04	1.16E-05	1.03E-03	2.26E-04	1.21E-05	0.00E+00	3.29E-06	1.55E-06	4.63E-09	1.70E-07	1.8	5.35E-05	9.16E-06
S29	60	8	5	5	1.39E-02	3.39E-04	1.63E-05	1.45E-03	3.17E-04	1.70E-05	0.00E+00	4.60E-06	2.16E-06	6.49E-09	2.37E-07	2.5	7.48E-05	1.28E-05
S29	60	8	6	5	3.38E-02	8.23E-04	3.95E-05	3.51E-03	7.69E-04	4.12E-05	0.00E+00	1.12E-05	5.25E-06	1.58E-08	5.76E-07	6.1	1.82E-04	3.11E-05
S29	60	8	7	5	1.03E-01	2.47E-03	1.19E-04	1.05E-02	2.31E-03	1.24E-04	0.00E+00	3.36E-05	1.58E-05	4.73E-08	1.73E-06	18.4	5.46E-04	9.34E-05
S29	60	8	8	5	1.65E-01	3.78E-03	1.84E-04	1.61E-02	3.53E-03	1.90E-04	0.00E+00	5.15E-05	2.42E-05	7.23E-08	2.66E-06	28.4	8.41E-04	1.43E-04
S29	60	8	9	5	1.43E-01	3.05E-03	1.51E-04	1.30E-02	2.85E-03	1.54E-04	0.00E+00	4.18E-05	1.97E-05	5.84E-08	2.16E-06	23.3	6.87E-04	1.15E-04

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	10	5	1.23E-01	2.52E-03	1.26E-04	1.07E-02	2.35E-03	1.28E-04	0.00E+00	3.46E-05	1.63E-05	4.82E-08	1.79E-06	19.4	5.70E-04	9.53E-05
S29	60	8	11	5	1.15E-01	2.27E-03	1.15E-04	9.70E-03	2.13E-03	1.16E-04	0.00E+00	3.14E-05	1.48E-05	4.36E-08	1.62E-06	17.7	5.18E-04	8.61E-05
S29	60	8	12	5	1.38E-01	2.57E-03	1.31E-04	1.09E-02	2.40E-03	1.31E-04	0.00E+00	3.56E-05	1.68E-05	4.91E-08	1.84E-06	20.3	5.90E-04	9.71E-05
S29	60	8	13	5	1.48E-01	2.71E-03	1.39E-04	1.16E-02	2.53E-03	1.39E-04	0.00E+00	3.77E-05	1.78E-05	5.19E-08	1.95E-06	21.5	6.25E-04	1.03E-04
S29	60	8	14	5	1.51E-01	2.76E-03	1.42E-04	1.18E-02	2.58E-03	1.42E-04	0.00E+00	3.84E-05	1.81E-05	5.28E-08	1.98E-06	21.9	6.37E-04	1.04E-04
S29	60	8	15	5	1.58E-01	2.86E-03	1.47E-04	1.22E-02	2.67E-03	1.47E-04	0.00E+00	3.97E-05	1.88E-05	5.47E-08	2.06E-06	22.7	6.60E-04	1.08E-04
S29	60	8	16	5	1.71E-01	3.10E-03	1.59E-04	1.32E-02	2.90E-03	1.59E-04	0.00E+00	4.31E-05	2.03E-05	5.93E-08	2.23E-06	24.6	7.16E-04	1.17E-04
S29	60	8	17	5	2.11E-01	3.82E-03	1.97E-04	1.63E-02	3.57E-03	1.97E-04	0.00E+00	5.32E-05	2.51E-05	7.32E-08	2.75E-06	30.4	8.83E-04	1.45E-04
S29	60	8	18	5	2.24E-01	4.11E-03	2.11E-04	1.76E-02	3.85E-03	2.11E-04	0.00E+00	5.72E-05	2.70E-05	7.88E-08	2.96E-06	32.6	9.49E-04	1.56E-04
S29	60	8	19	5	1.54E-01	2.86E-03	1.46E-04	1.22E-02	2.67E-03	1.46E-04	0.00E+00	3.96E-05	1.87E-05	5.47E-08	2.05E-06	22.6	6.57E-04	1.08E-04
S29	60	8	20	5	9.67E-02	1.89E-03	9.53E-05	8.05E-03	1.76E-03	9.63E-05	0.00E+00	2.61E-05	1.23E-05	3.61E-08	1.35E-06	14.7	4.31E-04	7.15E-05
S29	60	8	21	5	7.90E-02	1.60E-03	8.00E-05	6.81E-03	1.49E-03	8.11E-05	0.00E+00	2.20E-05	1.04E-05	3.06E-08	1.14E-06	12.4	3.63E-04	6.05E-05
S29	60	8	22	5	6.49E-02	1.36E-03	6.73E-05	5.78E-03	1.27E-03	6.86E-05	0.00E+00	1.86E-05	8.77E-06	2.59E-08	9.62E-07	10.4	3.06E-04	5.13E-05
S29	60	8	23	5	5.17E-02	1.11E-03	5.49E-05	4.75E-03	1.04E-03	5.62E-05	0.00E+00	1.53E-05	7.18E-06	2.13E-08	7.88E-07	8.5	2.50E-04	4.21E-05
S29	60	8	24	5	3.72E-02	8.23E-04	4.03E-05	3.51E-03	7.69E-04	4.15E-05	0.00E+00	1.13E-05	5.30E-06	1.58E-08	5.81E-07	6.2	1.84E-04	3.11E-05
S30	60	8	1	5	2.84E-02	6.46E-04	3.15E-05	2.76E-03	6.04E-04	3.25E-05	0.00E+00	8.82E-06	4.15E-06	1.24E-08	4.55E-07	4.9	1.44E-04	2.45E-05
S30	60	8	2	5	1.85E-02	4.31E-04	2.09E-05	1.84E-03	4.03E-04	2.16E-05	0.00E+00	5.87E-06	2.76E-06	8.25E-09	3.03E-07	3.2	9.58E-05	1.63E-05
S30	60	8	3	5	1.58E-02	3.77E-04	1.82E-05	1.61E-03	3.52E-04	1.89E-05	0.00E+00	5.13E-06	2.41E-06	7.22E-09	2.65E-07	2.8	8.35E-05	1.43E-05
S30	60	8	4	5	1.11E-02	2.69E-04	1.29E-05	1.15E-03	2.52E-04	1.35E-05	0.00E+00	3.66E-06	1.72E-06	5.16E-09	1.89E-07	2.0	5.96E-05	1.02E-05
S30	60	8	5	5	1.55E-02	3.77E-04	1.81E-05	1.61E-03	3.52E-04	1.89E-05	0.00E+00	5.12E-06	2.41E-06	7.22E-09	2.64E-07	2.8	8.33E-05	1.43E-05
S30	60	8	6	5	3.76E-02	9.16E-04	4.39E-05	3.91E-03	8.56E-04	4.58E-05	0.00E+00	1.24E-05	5.85E-06	1.75E-08	6.42E-07	6.8	2.02E-04	3.47E-05
S30	60	8	7	5	1.14E-01	2.75E-03	1.32E-04	1.17E-02	2.57E-03	1.38E-04	0.00E+00	3.73E-05	1.76E-05	5.26E-08	1.93E-06	20.4	6.08E-04	1.04E-04
S30	60	8	8	5	1.84E-01	4.20E-03	2.04E-04	1.79E-02	3.93E-03	2.11E-04	0.00E+00	5.73E-05	2.70E-05	8.04E-08	2.96E-06	31.6	9.37E-04	1.59E-04
S30	60	8	9	5	1.59E-01	3.39E-03	1.68E-04	1.45E-02	3.17E-03	1.72E-04	0.00E+00	4.66E-05	2.19E-05	6.50E-08	2.40E-06	25.9	7.64E-04	1.28E-04
S30	60	8	10	5	1.37E-01	2.80E-03	1.40E-04	1.20E-02	2.62E-03	1.42E-04	0.00E+00	3.86E-05	1.82E-05	5.36E-08	1.99E-06	21.6	6.35E-04	1.06E-04
S30	60	8	11	5	1.28E-01	2.53E-03	1.27E-04	1.08E-02	2.37E-03	1.29E-04	0.00E+00	3.50E-05	1.65E-05	4.85E-08	1.81E-06	19.7	5.77E-04	9.59E-05
S30	60	8	12	5	1.53E-01	2.86E-03	1.46E-04	1.22E-02	2.67E-03	1.46E-04	0.00E+00	3.96E-05	1.87E-05	5.47E-08	2.05E-06	22.5	6.57E-04	1.08E-04
S30	60	8	13	5	1.64E-01	3.02E-03	1.55E-04	1.29E-02	2.82E-03	1.55E-04	0.00E+00	4.19E-05	1.98E-05	5.78E-08	2.17E-06	23.9	6.96E-04	1.14E-04
S30	60	8	14	5	1.69E-01	3.07E-03	1.58E-04	1.31E-02	2.87E-03	1.58E-04	0.00E+00	4.27E-05	2.01E-05	5.88E-08	2.21E-06	24.4	7.09E-04	1.16E-04
S30	60	8	15	5	1.76E-01	3.18E-03	1.64E-04	1.36E-02	2.97E-03	1.64E-04	0.00E+00	4.42E-05	2.09E-05	6.09E-08	2.29E-06	25.3	7.35E-04	1.20E-04
S30	60	8	16	5	1.90E-01	3.45E-03	1.78E-04	1.47E-02	3.22E-03	1.77E-04	0.00E+00	4.80E-05	2.26E-05	6.60E-08	2.48E-06	27.4	7.97E-04	1.31E-04
S30	60	8	17	5	2.34E-01	4.26E-03	2.19E-04	1.82E-02	3.98E-03	2.19E-04	0.00E+00	5.92E-05	2.79E-05	8.15E-08	3.06E-06	33.9	9.83E-04	1.61E-04
S30	60	8	18	5	2.49E-01	4.58E-03	2.35E-04	1.95E-02	4.28E-03	2.35E-04	0.00E+00	6.36E-05	3.00E-05	8.77E-08	3.29E-06	36.3	1.06E-03	1.73E-04
S30	60	8	19	5	1.71E-01	3.18E-03	1.63E-04	1.36E-02	2.97E-03	1.63E-04	0.00E+00	4.41E-05	2.08E-05	6.09E-08	2.28E-06	25.1	7.31E-04	1.20E-04
S30	60	8	20	5	1.08E-01	2.10E-03	1.06E-04	8.96E-03	1.96E-03	1.07E-04	0.00E+00	2.90E-05	1.37E-05	4.02E-08	1.50E-06	16.4	4.80E-04	7.95E-05
S30	60	8	21	5	8.79E-02	1.78E-03	8.90E-05	7.58E-03	1.66E-03	9.03E-05	0.00E+00	2.45E-05	1.15E-05	3.40E-08	1.27E-06	13.8	4.04E-04	6.73E-05
S30	60	8	22	5	7.22E-02	1.51E-03	7.49E-05	6.44E-03	1.41E-03	7.64E-05	0.00E+00	2.07E-05	9.76E-06	2.89E-08	1.07E-06	11.6	3.41E-04	5.71E-05
S30	60	8	23	5	5.76E-02	1.24E-03	6.11E-05	5.29E-03	1.16E-03	6.26E-05	0.00E+00	1.70E-05	8.00E-06	2.37E-08	8.77E-07	9.4	2.79E-04	4.69E-05
S30	60	8	24	5	4.14E-02	9.16E-04	4.49E-05	3.91E-03	8.56E-04	4.62E-05	0.00E+00	1.25E-05	5.90E-06	1.75E-08	6.47E-07	6.9	2.05E-04	3.47E-05
S31	60	8	1	5	5.87E-02	1.34E-03	6.51E-05	5.70E-03	1.25E-03	6.72E-05	0.00E+00	1.82E-05	8.58E-06	2.56E-08	9.42E-07	10.1	2.98E-04	5.06E-05
S31	60	8	2	5	3.83E-02	8.91E-04	4.32E-05	3.80E-03	8.33E-04	4.47E-05	0.00E+00	1.21E-05	5.71E-06	1.71E-08	6.27E-07	6.7	1.98E-04	3.37E-05
S31	60	8	3	5	3.26E-02	7.80E-04	3.76E-05	3.33E-03	7.29E-04	3.91E-05	0.00E+00	1.06E-05	4.99E-06	1.49E-08	5.47E-07	5.8	1.73E-04	2.95E-05
S31	60	8	4	5	2.30E-02	5.57E-04	2.67E-05	2.38E-03	5.21E-04	2.79E-05	0.00E+00	7.57E-06	3.56E-06	1.07E-08	3.90E-07	4.1	1.23E-04	2.11E-05
S31	60	8	5	5	3.20E-02	7.80E-04	3.74E-05	3.33E-03	7.29E-04	3.90E-05	0.00E+00	1.06E-05	4.98E-06	1.49E-08	5.46E-07	5.8	1.72E-04	2.95E-05
S31	60	8	6	5	7.77E-02	1.89E-03	9.08E-05	8.08E-03	1.77E-03	9.47E-05	0.00E+00	2.57E-05	1.21E-05	3.62E-08	1.33E-06	14.0	4.18E-04	7.17E-05
S31	60	8	7	5	2.36E-01	5.68E-03	2.73E-04	2.42E-02	5.31E-03	2.84E-04	0.00E+00	7.72E-05	3.63E-05	1.09E-07	3.98E-06	42.2	1.26E-03	2.15E-04
S31	60	8	8	5	3.80E-01	8.69E-03	4.23E-04	3.71E-02	8.12E-03	4.37E-04	0.00E+00	1.19E-04	5.58E-05	1.66E-07	6.12E-06	65.3	1.94E-03	3.29E-04
S31	60	8	9	5	3.29E-01	7.02E-03	3.47E-04	2.99E-02	6.56E-03	3.55E-04	0.00E+00	9.63E-05	4.53E-05	1.34E-07	4.97E-06	53.6	1.58E-03	2.66E-04
S31	60	8	10	5	2.83E-01	5.79E-03	2.89E-04	2.47E-02	5.41E-03	2.94E-04	0.00E+00	7.97E-05	3.76E-05	1.11E-07	4.12E-06	44.7	1.31E-03	2.19E-04
S31	60	8	11	5	2.65E-01	5.24E-03	2.64E-04	2.23E-02	4.89E-03	2.67E-04	0.00E+00	7.23E-05	3.41E-05	1.00E-07	3.74E-06	40.7	1.19E-03	1.98E-04
S31	60	8	12	5	3.17E-01	5.90E-03	3.02E-04	2.52E-02	5.52E-03	3.02E-04	0.00E+00	8.19E-05	3.86E-05	1.13E-07	4.24E-06	46.6	1.36E-03	2.23E-04
S31	60	8	13	5	3.40E-01	6.24E-03	3.20E-04	2.66E-02	5.83E-03	3.20E-04	0.00E+00	8.67E-05	4.09E-05	1.19E-07	4.48E-06	49.5	1.44E-03	2.36E-04
S31	60	8	14	5	3.49E-01	6.35E-03	3.26E-04	2.71E-02	5.93E-03	3.26E-04	0.00E+00	8.83E-05	4.17E-05	1.22E-07	4.57E-06	50.5	1.47E-03	2.40E-04
S31	60	8	15	5	3.64E-01	6.57E-03	3.39E-04	2.80E-02	6.14E-03	3.38E-04	0.00E+00	9.15E-05	4.32E-05	1.26E-07	4.73E-06	52.3	1.52E-03	2.49E-04
S31	60	8	16	5	3.93E-01	7.13E-03	3.67E-04	3.04E-02	6.66E-03	3.67E-04	0.00E+00	9.92E-05	4.68E-05	1.37E-07	5.13E-06	56.7	1.65E-03	2.70E-04
S31	60	8	17	5	4.85E-01	8.80E-03	4.53E-04	3.75E-02	8.22E-03	4.52E-04	0.00E+00	1.22E-04	5.78E-05	1.68E-07	6.33E-06	70.0	2.03E-03	3.33E-04
S31	60	8	18	5	5.16E-01	9.47E-03	4.86E-04	4.04E-02	8.85E-03	4.86E-04	0.00E+00	1.32E-04	6.21E-05	1.81E-07	6.80E-06	75.1	2.18E-03	3.58E-04
S31	60	8	19	5	3.53E-01	6.57E-03	3.36E-04	2.80E-02	6.14E-03	3.37E-04	0.00E+00	9.12E-05	4.30E-05	1.26E-07	4.72E-06	51.9	1.51E-03	2.49E-04
S31	60	8	20	5	2.22E-01	4.34E-03	2.19E-04	1.85E-02	4.06E-03	2.22E-04	0.00E+00	6.00E-05	2.83E-05	8.32E-08	3.10E-06	33.9	9.92E-04	1.64E-04
S31	60	8	21	5	1.82E-01	3.68E-03	1.84E-04	1.57E-02	3.44E-03	1.87E-04	0.00E+00	5.06E-05	2.39E-05	7.04E-08	2.62E-06	28.4	8.34E-04	1.39E-04
S31	60	8	22	5	1.49E-01	3.12E-03	1.55E-04	1.33E-02	2.92E-03	1.58E-04	0.00E+00	4.29E-05	2.02E-05	5.97E-08	2.21E-06	23.9	7.04E-04	1.18E-04
S31	60	8	23	5	1.19E-01	2.56E-03	1.26E-04	1.09E-02	2.39E-03	1.29E-04	0.00E+00	3.51E-05	1.65E-05	4.90E-08	1.81E-06	19.5	5.76E-04	9.70E-05
S31	60	8	24	5	8.56E-02	1.89E-03	9.28E-05	8.08E-03	1.77E-03	9.54E-05	0.00E+00	2.59E-05	1.22E-05	3.63E-08	1.34E-06	14.3	4.24E-04	7.17E-05
S32	50	7	1	5	3.17E-02	6.26E-04	3.47E-05	3.12E-03	6.63E-04	3.73E-05	0.00E+00	1.01E-05	4.76E-06	1.33E-08	5.22E-07	5.4	1.67E-04	2.99E-05
S32	50	7	2	5	2.06E-02	4.17E-04	2.30E-05	2.08E-03	4.42E-04	2.48E-05	0.00E+00	6.70E-06	3.17E-06	8.87E-09	3.47E-07	3.6	1.11E-04	1.99E-05
S32	50	7	3	5	1.76E-02	3.65E-04	2.00E-05	1.82E-03	3.87E-04	2.17E-05	0.00E+00	5.85E-06	2.77E-06	7.76E-09	3.03E-07	3.1	9.68E-05	1.74E-05
S32	50	7	4	5	1.24E-02	2.61E-04	1.42E-05	1.30E-03	2.76E-04	1.55E-05	0.00E+00	4.17E-06	1.97E-06	5.54E-09	2.16E-07	2.2	6.90E-05	1.25E-05
S32	50	7	5	5	1.72E-02	3.65E-04	1.99E-05	1.82E-03	3.87E-04	2.16E-05	0.00E+00	5.84E-06	2.76E-06	7.76E-09	3.03E-07	3.1	9.66E-05	1.74E-05
S32	50	7	6	5	4.18E-02	8.87E-04	4.83E-05	4.42E-03	9.40E-04	5.25E-05	0.00E+00	1.42E-05	6.71E-06	1.89E-08	7.35E-07	7.5	2.34E-04	4.23E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	50	7	7	5	1.27E-01	2.66E-03	1.45E-04	1.33E-02	2.82E-03	1.58E-04	0.00E+00	4.26E-05	2.01E-05	5.66E-08	2.21E-06	22.5	7.05E-04	1.27E-04
S32	50	7	8	5	2.05E-01	4.07E-03	2.25E-04	2.03E-02	4.31E-03	2.42E-04	0.00E+00	6.54E-05	3.10E-05	8.65E-08	3.39E-06	34.8	1.09E-03	1.94E-04
S32	50	7	9	5	1.78E-01	3.29E-03	1.85E-04	1.64E-02	3.48E-03	1.97E-04	0.00E+00	5.31E-05	2.52E-05	6.99E-08	2.75E-06	28.6	8.86E-04	1.57E-04
S32	50	7	10	5	1.54E-01	2.71E-03	1.54E-04	1.35E-02	2.87E-03	1.63E-04	0.00E+00	4.40E-05	2.09E-05	5.77E-08	2.28E-06	23.8	7.36E-04	1.30E-04
S32	50	7	11	5	1.44E-01	2.45E-03	1.41E-04	1.22E-02	2.60E-03	1.48E-04	0.00E+00	3.99E-05	1.89E-05	5.21E-08	2.07E-06	21.7	6.69E-04	1.17E-04
S32	50	7	12	5	1.72E-01	2.76E-03	1.61E-04	1.38E-02	2.93E-03	1.68E-04	0.00E+00	4.52E-05	2.15E-05	5.88E-08	2.35E-06	24.9	7.61E-04	1.32E-04
S32	50	7	13	5	1.85E-01	2.92E-03	1.71E-04	1.46E-02	3.10E-03	1.78E-04	0.00E+00	4.78E-05	2.27E-05	6.21E-08	2.48E-06	26.4	8.06E-04	1.39E-04
S32	50	7	14	5	1.89E-01	2.97E-03	1.74E-04	1.48E-02	3.15E-03	1.81E-04	0.00E+00	4.87E-05	2.31E-05	6.32E-08	2.53E-06	26.9	8.22E-04	1.42E-04
S32	50	7	15	5	1.98E-01	3.08E-03	1.81E-04	1.53E-02	3.26E-03	1.88E-04	0.00E+00	5.05E-05	2.40E-05	6.54E-08	2.62E-06	27.9	8.52E-04	1.47E-04
S32	50	7	16	5	2.14E-01	3.34E-03	1.96E-04	1.66E-02	3.54E-03	2.03E-04	0.00E+00	5.47E-05	2.60E-05	7.10E-08	2.84E-06	30.3	9.24E-04	1.59E-04
S32	50	7	17	5	2.64E-01	4.12E-03	2.42E-04	2.05E-02	4.37E-03	2.51E-04	0.00E+00	6.76E-05	3.21E-05	8.76E-08	3.51E-06	37.4	1.14E-03	1.97E-04
S32	50	7	18	5	2.80E-01	4.43E-03	2.59E-04	2.21E-02	4.70E-03	2.70E-04	0.00E+00	7.26E-05	3.45E-05	9.43E-08	3.77E-06	40.1	1.22E-03	2.12E-04
S32	50	7	19	5	1.92E-01	3.08E-03	1.79E-04	1.53E-02	3.26E-03	1.87E-04	0.00E+00	5.03E-05	2.39E-05	6.54E-08	2.61E-06	27.7	8.48E-04	1.47E-04
S32	50	7	20	5	1.21E-01	2.03E-03	1.17E-04	1.01E-02	2.16E-03	1.23E-04	0.00E+00	3.31E-05	1.57E-05	4.33E-08	1.72E-06	18.1	5.56E-04	9.71E-05
S32	50	7	21	5	9.85E-02	1.72E-03	9.81E-05	8.58E-03	1.82E-03	1.04E-04	0.00E+00	2.80E-05	1.32E-05	3.66E-08	1.45E-06	15.2	4.68E-04	8.22E-05
S32	50	7	22	5	8.08E-02	1.46E-03	8.26E-05	7.28E-03	1.55E-03	8.76E-05	0.00E+00	2.37E-05	1.12E-05	3.11E-08	1.23E-06	12.8	3.95E-04	6.97E-05
S32	50	7	23	5	6.44E-02	1.20E-03	6.73E-05	5.98E-03	1.27E-03	7.18E-05	0.00E+00	1.94E-05	9.18E-06	2.55E-08	1.00E-06	10.4	3.23E-04	5.73E-05
S32	50	7	24	5	4.63E-02	8.87E-04	4.94E-05	4.42E-03	9.40E-04	5.29E-05	0.00E+00	1.43E-05	6.77E-06	1.89E-08	7.41E-07	7.6	2.38E-04	4.23E-05
S33	50	7	1	5	2.73E-02	5.38E-04	2.98E-05	2.68E-03	5.70E-04	3.20E-05	0.00E+00	8.66E-06	4.10E-06	1.14E-08	4.49E-07	4.6	1.44E-04	2.57E-05
S33	50	7	2	5	1.77E-02	3.59E-04	1.98E-05	1.79E-03	3.80E-04	2.13E-05	0.00E+00	5.76E-06	2.73E-06	7.63E-09	2.99E-07	3.1	9.55E-05	1.71E-05
S33	50	7	3	5	1.51E-02	3.14E-04	1.72E-05	1.57E-03	3.33E-04	1.86E-05	0.00E+00	5.03E-06	2.38E-06	6.68E-09	2.61E-07	2.7	8.33E-05	1.50E-05
S33	50	7	4	5	1.06E-02	2.24E-04	1.22E-05	1.12E-03	2.38E-04	1.33E-05	0.00E+00	3.59E-06	1.70E-06	4.77E-09	1.86E-07	1.9	5.94E-05	1.07E-05
S33	50	7	5	5	1.48E-02	3.14E-04	1.71E-05	1.57E-03	3.33E-04	1.86E-05	0.00E+00	5.02E-06	2.38E-06	6.68E-09	2.60E-07	2.6	8.30E-05	1.50E-05
S33	50	7	6	5	3.60E-02	7.63E-04	4.16E-05	3.80E-03	8.08E-04	4.52E-05	0.00E+00	1.22E-05	5.77E-06	1.62E-08	6.32E-07	6.4	2.02E-04	3.64E-05
S33	50	7	7	5	1.09E-01	2.29E-03	1.25E-04	1.14E-02	2.42E-03	1.36E-04	0.00E+00	3.66E-05	1.73E-05	4.86E-08	1.90E-06	19.3	6.06E-04	1.09E-04
S33	50	7	8	5	1.77E-01	3.50E-03	1.94E-04	1.74E-02	3.71E-03	2.08E-04	0.00E+00	5.63E-05	2.66E-05	7.44E-08	2.92E-06	29.9	9.34E-04	1.67E-04
S33	50	7	9	5	1.53E-01	2.83E-03	1.59E-04	1.41E-02	2.99E-03	1.69E-04	0.00E+00	4.57E-05	2.16E-05	6.01E-08	2.37E-06	24.6	7.62E-04	1.35E-04
S33	50	7	10	5	1.32E-01	2.33E-03	1.33E-04	1.16E-02	2.47E-03	1.40E-04	0.00E+00	3.78E-05	1.79E-05	4.96E-08	1.96E-06	20.5	6.33E-04	1.11E-04
S33	50	7	11	5	1.24E-01	2.11E-03	1.21E-04	1.05E-02	2.23E-03	1.27E-04	0.00E+00	3.43E-05	1.63E-05	4.48E-08	1.78E-06	18.7	5.75E-04	1.01E-04
S33	50	7	12	5	1.48E-01	2.38E-03	1.38E-04	1.18E-02	2.52E-03	1.44E-04	0.00E+00	3.89E-05	1.84E-05	5.06E-08	2.02E-06	21.4	6.55E-04	1.14E-04
S33	50	7	13	5	1.59E-01	2.51E-03	1.47E-04	1.25E-02	2.66E-03	1.53E-04	0.00E+00	4.11E-05	1.95E-05	5.34E-08	2.14E-06	22.7	6.93E-04	1.20E-04
S33	50	7	14	5	1.63E-01	2.56E-03	1.50E-04	1.27E-02	2.71E-03	1.56E-04	0.00E+00	4.19E-05	1.99E-05	5.44E-08	2.18E-06	23.2	7.07E-04	1.22E-04
S33	50	7	15	5	1.70E-01	2.65E-03	1.55E-04	1.32E-02	2.80E-03	1.61E-04	0.00E+00	4.34E-05	2.06E-05	5.63E-08	2.26E-06	24.0	7.33E-04	1.26E-04
S33	50	7	16	5	1.84E-01	2.87E-03	1.68E-04	1.43E-02	3.04E-03	1.75E-04	0.00E+00	4.71E-05	2.23E-05	6.11E-08	2.45E-06	26.0	7.94E-04	1.37E-04
S33	50	7	17	5	2.27E-01	3.54E-03	2.08E-04	1.77E-02	3.76E-03	2.16E-04	0.00E+00	5.81E-05	2.76E-05	7.54E-08	3.02E-06	32.1	9.80E-04	1.69E-04
S33	50	7	18	5	2.41E-01	3.81E-03	2.23E-04	1.90E-02	4.04E-03	2.32E-04	0.00E+00	6.25E-05	2.96E-05	8.11E-08	3.24E-06	34.5	1.05E-03	1.82E-04
S33	50	7	19	5	1.65E-01	2.65E-03	1.54E-04	1.32E-02	2.80E-03	1.61E-04	0.00E+00	4.33E-05	2.05E-05	5.63E-08	2.25E-06	23.8	7.29E-04	1.26E-04
S33	50	7	20	5	1.04E-01	1.75E-03	1.01E-04	8.72E-03	1.85E-03	1.06E-04	0.00E+00	2.85E-05	1.35E-05	3.72E-08	1.48E-06	15.6	4.78E-04	8.35E-05
S33	50	7	21	5	8.47E-02	1.48E-03	8.44E-05	7.38E-03	1.57E-03	8.91E-05	0.00E+00	2.40E-05	1.14E-05	3.15E-08	1.25E-06	13.0	4.02E-04	7.07E-05
S33	50	7	22	5	6.95E-02	1.26E-03	7.10E-05	6.26E-03	1.33E-03	7.53E-05	0.00E+00	2.03E-05	9.64E-06	2.67E-08	1.05E-06	11.0	3.40E-04	6.00E-05
S33	50	7	23	5	5.54E-02	1.03E-03	5.79E-05	5.14E-03	1.09E-03	6.17E-05	0.00E+00	1.67E-05	7.89E-06	2.19E-08	8.64E-07	8.9	2.78E-04	4.93E-05
S33	50	7	24	5	3.98E-02	7.63E-04	4.25E-05	3.80E-03	8.08E-04	4.55E-05	0.00E+00	1.23E-05	5.82E-06	1.62E-08	6.37E-07	6.6	2.04E-04	3.64E-05
S34	60	8	1	5	1.62E-02	3.70E-04	1.80E-05	1.58E-03	3.46E-04	1.86E-05	0.00E+00	5.05E-06	2.37E-06	7.08E-09	2.61E-07	2.8	8.25E-05	1.40E-05
S34	60	8	2	5	1.06E-02	2.47E-04	1.19E-05	1.05E-03	2.30E-04	1.24E-05	0.00E+00	3.36E-06	1.58E-06	4.72E-09	1.73E-07	1.8	5.48E-05	9.33E-06
S34	60	8	3	5	9.02E-03	2.16E-04	1.04E-05	9.20E-04	2.02E-04	1.08E-05	0.00E+00	2.93E-06	1.38E-06	4.13E-09	1.51E-07	1.6	4.78E-05	8.17E-06
S34	60	8	4	5	6.35E-03	1.54E-04	7.40E-06	6.57E-04	1.44E-04	7.71E-06	0.00E+00	2.09E-06	9.84E-07	2.95E-09	1.08E-07	1.1	3.41E-05	5.83E-06
S34	60	8	5	5	8.85E-03	2.16E-04	1.03E-05	9.20E-04	2.02E-04	1.08E-05	0.00E+00	2.93E-06	1.38E-06	4.13E-09	1.51E-07	1.6	4.77E-05	8.17E-06
S34	60	8	6	5	2.15E-02	5.24E-04	2.51E-05	2.23E-03	4.90E-04	2.62E-05	0.00E+00	7.11E-06	3.34E-06	1.00E-08	3.67E-07	3.9	1.16E-04	1.98E-05
S34	60	8	7	5	6.53E-02	1.57E-03	7.56E-05	6.70E-03	1.47E-03	7.87E-05	0.00E+00	2.14E-05	1.00E-05	3.01E-08	1.10E-06	11.7	3.48E-04	5.95E-05
S34	60	8	8	5	1.05E-01	2.40E-03	1.17E-04	1.03E-02	2.25E-03	1.21E-04	0.00E+00	3.28E-05	1.54E-05	4.60E-08	1.69E-06	18.1	5.36E-04	9.10E-05
S34	60	8	9	5	9.10E-02	1.94E-03	9.60E-05	8.28E-03	1.81E-03	9.81E-05	0.00E+00	2.66E-05	1.25E-05	3.72E-08	1.38E-06	14.8	4.37E-04	7.35E-05
S34	60	8	10	5	7.84E-02	1.60E-03	8.00E-05	6.84E-03	1.50E-03	8.13E-05	0.00E+00	2.21E-05	1.04E-05	3.07E-08	1.14E-06	12.4	3.63E-04	6.07E-05
S34	60	8	11	5	7.33E-02	1.45E-03	7.29E-05	6.18E-03	1.35E-03	7.37E-05	0.00E+00	2.00E-05	9.42E-06	2.77E-08	1.03E-06	11.3	3.30E-04	5.48E-05
S34	60	8	12	5	8.76E-02	1.63E-03	8.35E-05	6.97E-03	1.53E-03	8.36E-05	0.00E+00	2.27E-05	1.07E-05	3.13E-08	1.17E-06	12.9	3.76E-04	6.18E-05
S34	60	8	13	5	9.39E-02	1.73E-03	8.85E-05	7.36E-03	1.61E-03	8.85E-05	0.00E+00	2.40E-05	1.13E-05	3.30E-08	1.24E-06	13.7	3.98E-04	6.53E-05
S34	60	8	14	5	9.64E-02	1.76E-03	9.03E-05	7.49E-03	1.64E-03	9.02E-05	0.00E+00	2.44E-05	1.15E-05	3.36E-08	1.26E-06	14.0	4.06E-04	6.65E-05
S34	60	8	15	5	1.01E-01	1.82E-03	9.37E-05	7.76E-03	1.70E-03	9.35E-05	0.00E+00	2.53E-05	1.19E-05	3.48E-08	1.31E-06	14.5	4.20E-04	6.88E-05
S34	60	8	16	5	1.09E-01	1.97E-03	1.02E-04	8.41E-03	1.84E-03	1.01E-04	0.00E+00	2.74E-05	1.29E-05	3.78E-08	1.42E-06	15.7	4.56E-04	7.47E-05
S34	60	8	17	5	1.34E-01	2.43E-03	1.25E-04	1.04E-02	2.28E-03	1.25E-04	0.00E+00	3.39E-05	1.60E-05	4.66E-08	1.75E-06	19.4	5.62E-04	9.22E-05
S34	60	8	18	5	1.43E-01	2.62E-03	1.34E-04	1.12E-02	2.45E-03	1.34E-04	0.00E+00	3.64E-05	1.72E-05	5.02E-08	1.88E-06	20.8	6.04E-04	9.92E-05
S34	60	8	19	5	9.77E-02	1.82E-03	9.30E-05	7.76E-03	1.70E-03	9.32E-05	0.00E+00	2.52E-05	1.19E-05	3.48E-08	1.30E-06	14.4	4.18E-04	6.88E-05
S34	60	8	20	5	6.15E-02	1.20E-03	6.07E-05	5.13E-03	1.12E-03	6.13E-05	0.00E+00	1.66E-05	7.83E-06	2.30E-08	8.58E-07	9.4	2.74E-04	4.55E-05
S34	60	8	21	5	5.03E-02	1.02E-03	5.09E-05	4.34E-03	9.50E-04	5.17E-05	0.00E+00	1.40E-05	6.60E-06	1.95E-08	7.24E-07	7.9	2.31E-04	3.85E-05
S34	60	8	22	5	4.13E-02	8.63E-04	4.29E-05	3.68E-03	8.06E-04	4.37E-05	0.00E+00	1.19E-05	5.58E-06	1.65E-08	6.12E-07	6.6	1.95E-04	3.27E-05
S34	60	8	23	5	3.29E-02	7.09E-04	3.50E-05	3.02E-03	6.62E-04	3.58E-05	0.00E+00	9.72E-06	4.57E-06	1.36E-08	5.02E-07	5.4	1.59E-04	2.68E-05
S34	60	8	24	5	2.37E-02	5.24E-04	2.57E-05	2.23E-03	4.90E-04	2.64E-05	0.00E+00	7.17E-06	3.37E-06	1.00E-08	3.70E-07	4.0	1.17E-04	1.98E-05
S35	60	8	1	5	1.86E-02	4.24E-04	2.06E-05	1.81E-03	3.96E-04	2.13E-05	0.00E+00	5.78E-06	2.72E-06	8.11E-09	2.99E-07	3.2	9.45E-05	1.60E-05
S35	60	8	2	5	1.21E-02	2.83E-04	1.37E-05	1.21E-03	2.64E-04	1.42E-05	0.00E+00	3.85E-06	1.81E-06	5.41E-09	1.99E-07	2.1	6.28E-05	1.07E-05
S35	60	8	3	5	1.03E-02	2.47E-04	1.19E-05	1.05E-03	2.31E-04	1.24E-05	0.00E+00	3.36E-06	1.58E-06	4.73E-09	1.73E-07	1.8	5.48E-05	9.36E-06

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	4	5	7.28E-03	1.77E-04	8.48E-06	7.53E-04	1.65E-04	8.84E-06	0.00E+00	2.40E-06	1.13E-06	3.38E-09	1.24E-07	1.3	3.90E-05	6.69E-06
S35	60	8	5	5	1.01E-02	2.47E-04	1.19E-05	1.05E-03	2.31E-04	1.24E-05	0.00E+00	3.36E-06	1.58E-06	4.73E-09	1.73E-07	1.8	5.46E-05	9.36E-06
S35	60	8	6	5	2.46E-02	6.00E-04	2.88E-05	2.56E-03	5.61E-04	3.00E-05	0.00E+00	8.15E-06	3.83E-06	1.15E-08	4.21E-07	4.5	1.33E-04	2.27E-05
S35	60	8	7	5	7.49E-02	1.80E-03	8.67E-05	7.69E-03	1.68E-03	9.02E-05	0.00E+00	2.45E-05	1.15E-05	3.45E-08	1.26E-06	13.4	3.99E-04	6.82E-05
S35	60	8	8	5	1.21E-01	2.76E-03	1.34E-04	1.18E-02	2.58E-03	1.38E-04	0.00E+00	3.76E-05	1.77E-05	5.27E-08	1.94E-06	20.7	6.14E-04	1.04E-04
S35	60	8	9	5	1.04E-01	2.23E-03	1.10E-04	9.49E-03	2.08E-03	1.12E-04	0.00E+00	3.05E-05	1.44E-05	4.26E-08	1.58E-06	17.0	5.01E-04	8.42E-05
S35	60	8	10	5	8.99E-02	1.84E-03	9.17E-05	7.84E-03	1.72E-03	9.32E-05	0.00E+00	2.53E-05	1.19E-05	3.52E-08	1.31E-06	14.2	4.16E-04	6.95E-05
S35	60	8	11	5	8.40E-02	1.66E-03	8.36E-05	7.08E-03	1.55E-03	8.45E-05	0.00E+00	2.29E-05	1.08E-05	3.18E-08	1.18E-06	12.9	3.78E-04	6.28E-05
S35	60	8	12	5	1.00E-01	1.87E-03	9.57E-05	7.99E-03	1.75E-03	9.59E-05	0.00E+00	2.60E-05	1.23E-05	3.58E-08	1.34E-06	14.8	4.31E-04	7.09E-05
S35	60	8	13	5	1.08E-01	1.98E-03	1.01E-04	8.44E-03	1.85E-03	1.01E-04	0.00E+00	2.75E-05	1.30E-05	3.79E-08	1.42E-06	15.7	4.56E-04	7.49E-05
S35	60	8	14	5	1.11E-01	2.01E-03	1.04E-04	8.59E-03	1.88E-03	1.03E-04	0.00E+00	2.80E-05	1.32E-05	3.86E-08	1.45E-06	16.0	4.65E-04	7.62E-05
S35	60	8	15	5	1.15E-01	2.08E-03	1.07E-04	8.89E-03	1.95E-03	1.07E-04	0.00E+00	2.90E-05	1.37E-05	3.99E-08	1.50E-06	16.6	4.82E-04	7.89E-05
S35	60	8	16	5	1.25E-01	2.26E-03	1.16E-04	9.64E-03	2.11E-03	1.16E-04	0.00E+00	3.14E-05	1.48E-05	4.33E-08	1.63E-06	18.0	5.22E-04	8.56E-05
S35	60	8	17	5	1.54E-01	2.79E-03	1.44E-04	1.19E-02	2.61E-03	1.43E-04	0.00E+00	3.88E-05	1.83E-05	5.34E-08	2.01E-06	22.2	6.45E-04	1.06E-04
S35	60	8	18	5	1.64E-01	3.00E-03	1.54E-04	1.28E-02	2.81E-03	1.54E-04	0.00E+00	4.17E-05	1.97E-05	5.75E-08	2.16E-06	23.8	6.92E-04	1.14E-04
S35	60	8	19	5	1.12E-01	2.08E-03	1.07E-04	8.89E-03	1.95E-03	1.07E-04	0.00E+00	2.89E-05	1.36E-05	3.99E-08	1.50E-06	16.5	4.80E-04	7.89E-05
S35	60	8	20	5	7.05E-02	1.38E-03	6.96E-05	5.88E-03	1.29E-03	7.03E-05	0.00E+00	1.90E-05	8.97E-06	2.64E-08	9.84E-07	10.8	3.14E-04	5.21E-05
S35	60	8	21	5	5.77E-02	1.17E-03	5.84E-05	4.97E-03	1.09E-03	5.92E-05	0.00E+00	1.61E-05	7.57E-06	2.23E-08	8.30E-07	9.0	2.65E-04	4.41E-05
S35	60	8	22	5	4.73E-02	9.89E-04	4.91E-05	4.22E-03	9.24E-04	5.01E-05	0.00E+00	1.36E-05	6.40E-06	1.89E-08	7.02E-07	7.6	2.23E-04	3.74E-05
S35	60	8	23	5	3.77E-02	8.12E-04	4.01E-05	3.47E-03	7.59E-04	4.10E-05	0.00E+00	1.11E-05	5.24E-06	1.56E-08	5.75E-07	6.2	1.83E-04	3.08E-05
S35	60	8	24	5	2.71E-02	6.00E-04	2.94E-05	2.56E-03	5.61E-04	3.03E-05	0.00E+00	8.21E-06	3.87E-06	1.15E-08	4.24E-07	4.5	1.34E-04	2.27E-05
S36	60	8	1	5	2.05E-02	4.68E-04	2.28E-05	2.00E-03	4.37E-04	2.35E-05	0.00E+00	6.39E-06	3.00E-06	8.96E-09	3.30E-07	3.5	1.04E-04	1.77E-05
S36	60	8	2	5	1.34E-02	3.12E-04	1.51E-05	1.33E-03	2.92E-04	1.57E-05	0.00E+00	4.25E-06	2.00E-06	5.97E-09	2.19E-07	2.3	6.93E-05	1.18E-05
S36	60	8	3	5	1.14E-02	2.73E-04	1.31E-05	1.16E-03	2.55E-04	1.37E-05	0.00E+00	3.71E-06	1.75E-06	5.22E-09	1.91E-07	2.0	6.05E-05	1.03E-05
S36	60	8	4	5	8.04E-03	1.95E-04	9.36E-06	8.32E-04	1.82E-04	9.76E-06	0.00E+00	2.65E-06	1.25E-06	3.73E-09	1.37E-07	1.4	4.31E-05	7.38E-06
S36	60	8	5	5	1.12E-02	2.73E-04	1.31E-05	1.16E-03	2.55E-04	1.37E-05	0.00E+00	3.71E-06	1.74E-06	5.22E-09	1.91E-07	2.0	6.03E-05	1.03E-05
S36	60	8	6	5	2.72E-02	6.63E-04	3.18E-05	2.83E-03	6.19E-04	3.32E-05	0.00E+00	9.00E-06	4.23E-06	1.27E-08	4.64E-07	4.9	1.46E-04	2.51E-05
S36	60	8	7	5	8.26E-02	1.99E-03	9.57E-05	8.48E-03	1.86E-03	9.96E-05	0.00E+00	2.70E-05	1.27E-05	3.81E-08	1.39E-06	14.8	4.40E-04	7.53E-05
S36	60	8	8	5	1.33E-01	3.04E-03	1.48E-04	1.30E-02	2.84E-03	1.53E-04	0.00E+00	4.15E-05	1.95E-05	5.82E-08	2.14E-06	22.9	6.78E-04	1.15E-04
S36	60	8	9	5	1.15E-01	2.46E-03	1.21E-04	1.05E-02	2.30E-03	1.24E-04	0.00E+00	3.37E-05	1.59E-05	4.70E-08	1.74E-06	18.8	5.53E-04	9.30E-05
S36	60	8	10	5	9.92E-02	2.03E-03	1.01E-04	8.65E-03	1.89E-03	1.03E-04	0.00E+00	2.79E-05	1.31E-05	3.88E-08	1.44E-06	15.6	4.59E-04	7.67E-05
S36	60	8	11	5	9.27E-02	1.83E-03	9.23E-05	7.82E-03	1.71E-03	9.33E-05	0.00E+00	2.53E-05	1.19E-05	3.51E-08	1.31E-06	14.3	4.17E-04	6.94E-05
S36	60	8	12	5	1.11E-01	2.07E-03	1.06E-04	8.82E-03	1.93E-03	1.06E-04	0.00E+00	2.87E-05	1.35E-05	3.96E-08	1.48E-06	16.3	4.75E-04	7.82E-05
S36	60	8	13	5	1.19E-01	2.18E-03	1.12E-04	9.31E-03	2.04E-03	1.12E-04	0.00E+00	3.03E-05	1.43E-05	4.18E-08	1.57E-06	17.3	5.03E-04	8.26E-05
S36	60	8	14	5	1.22E-01	2.22E-03	1.14E-04	9.48E-03	2.08E-03	1.14E-04	0.00E+00	3.09E-05	1.46E-05	4.26E-08	1.60E-06	17.7	5.13E-04	8.41E-05
S36	60	8	15	5	1.27E-01	2.30E-03	1.19E-04	9.81E-03	2.15E-03	1.18E-04	0.00E+00	3.20E-05	1.51E-05	4.40E-08	1.66E-06	18.3	5.32E-04	8.71E-05
S36	60	8	16	5	1.38E-01	2.50E-03	1.28E-04	1.06E-02	2.33E-03	1.28E-04	0.00E+00	3.47E-05	1.64E-05	4.78E-08	1.80E-06	19.9	5.77E-04	9.45E-05
S36	60	8	17	5	1.70E-01	3.08E-03	1.58E-04	1.31E-02	2.88E-03	1.58E-04	0.00E+00	4.28E-05	2.02E-05	5.90E-08	2.22E-06	24.5	7.12E-04	1.17E-04
S36	60	8	18	5	1.81E-01	3.31E-03	1.70E-04	1.41E-02	3.10E-03	1.70E-04	0.00E+00	4.60E-05	2.17E-05	6.35E-08	2.38E-06	26.3	7.64E-04	1.25E-04
S36	60	8	19	5	1.24E-01	2.30E-03	1.18E-04	9.81E-03	2.15E-03	1.18E-04	0.00E+00	3.19E-05	1.51E-05	4.40E-08	1.65E-06	18.2	5.29E-04	8.71E-05
S36	60	8	20	5	7.79E-02	1.52E-03	7.68E-05	6.49E-03	1.42E-03	7.75E-05	0.00E+00	2.10E-05	9.90E-06	2.91E-08	1.09E-06	11.9	3.47E-04	5.76E-05
S36	60	8	21	5	6.36E-02	1.29E-03	6.44E-05	5.49E-03	1.20E-03	6.54E-05	0.00E+00	1.77E-05	8.35E-06	2.46E-08	9.16E-07	10.0	2.92E-04	4.87E-05
S36	60	8	22	5	5.23E-02	1.09E-03	5.42E-05	4.66E-03	1.02E-03	5.53E-05	0.00E+00	1.50E-05	7.06E-06	2.09E-08	7.75E-07	8.4	2.47E-04	4.13E-05
S36	60	8	23	5	4.17E-02	8.97E-04	4.42E-05	3.83E-03	8.38E-04	4.53E-05	0.00E+00	1.23E-05	5.79E-06	1.72E-08	6.35E-07	6.8	2.02E-04	3.39E-05
S36	60	8	24	5	3.00E-02	6.63E-04	3.25E-05	2.83E-03	6.19E-04	3.34E-05	0.00E+00	9.07E-06	4.27E-06	1.27E-08	4.68E-07	5.0	1.48E-04	2.51E-05
S37	60	8	1	5	7.95E-03	1.81E-04	8.82E-06	7.72E-04	1.69E-04	9.10E-06	0.00E+00	2.47E-06	1.16E-06	3.47E-09	1.28E-07	1.4	4.04E-05	6.85E-06
S37	60	8	2	5	5.18E-03	1.21E-04	5.85E-06	5.15E-04	1.13E-04	6.06E-06	0.00E+00	1.64E-06	7.74E-07	2.31E-09	8.49E-08	0.9	2.68E-05	4.57E-06
S37	60	8	3	5	4.42E-03	1.06E-04	5.09E-06	4.51E-04	9.87E-05	5.29E-06	0.00E+00	1.44E-06	6.75E-07	2.02E-09	7.41E-08	0.8	2.34E-05	4.00E-06
S37	60	8	4	5	3.11E-03	7.54E-05	3.62E-06	3.22E-04	7.05E-05	3.78E-06	0.00E+00	1.02E-06	4.82E-07	1.44E-09	5.29E-08	0.6	1.67E-05	2.86E-06
S37	60	8	5	5	4.33E-03	1.06E-04	5.07E-06	4.51E-04	9.87E-05	5.28E-06	0.00E+00	1.43E-06	6.74E-07	2.02E-09	7.40E-08	0.8	2.33E-05	4.00E-06
S37	60	8	6	5	1.05E-02	2.56E-04	1.23E-05	1.09E-03	2.40E-04	1.28E-05	0.00E+00	3.48E-06	1.64E-06	4.91E-09	1.80E-07	1.9	5.67E-05	9.71E-06
S37	60	8	7	5	3.20E-02	7.69E-04	3.70E-05	3.28E-03	7.19E-04	3.85E-05	0.00E+00	1.05E-05	4.92E-06	1.47E-08	5.40E-07	5.7	1.70E-04	2.91E-05
S37	60	8	8	5	5.15E-02	1.18E-03	5.73E-05	5.02E-03	1.10E-03	5.92E-05	0.00E+00	1.61E-05	7.55E-06	2.25E-08	8.29E-07	8.8	2.62E-04	4.45E-05
S37	60	8	9	5	4.46E-02	9.51E-04	4.70E-05	4.06E-03	8.88E-04	4.80E-05	0.00E+00	1.30E-05	6.14E-06	1.82E-08	6.73E-07	7.3	2.14E-04	3.60E-05
S37	60	8	10	5	3.84E-02	7.85E-04	3.92E-05	3.35E-03	7.33E-04	3.98E-05	0.00E+00	1.08E-05	5.09E-06	1.50E-08	5.58E-07	6.1	1.78E-04	2.97E-05
S37	60	8	11	5	3.59E-02	7.09E-04	3.57E-05	3.03E-03	6.63E-04	3.61E-05	0.00E+00	9.79E-06	4.61E-06	1.36E-08	5.06E-07	5.5	1.62E-04	2.68E-05
S37	60	8	12	5	4.29E-02	8.00E-04	4.09E-05	3.41E-03	7.47E-04	4.09E-05	0.00E+00	1.11E-05	5.23E-06	1.53E-08	5.74E-07	6.3	1.84E-04	3.03E-05
S37	60	8	13	5	4.60E-02	8.45E-04	4.33E-05	3.60E-03	7.90E-04	4.33E-05	0.00E+00	1.17E-05	5.54E-06	1.62E-08	6.07E-07	6.7	1.95E-04	3.20E-05
S37	60	8	14	5	4.72E-02	8.60E-04	4.42E-05	3.67E-03	8.04E-04	4.42E-05	0.00E+00	1.20E-05	5.64E-06	1.65E-08	6.19E-07	6.8	1.99E-04	3.26E-05
S37	60	8	15	5	4.93E-02	8.90E-04	4.59E-05	3.80E-03	8.32E-04	4.58E-05	0.00E+00	1.24E-05	5.85E-06	1.70E-08	6.41E-07	7.1	2.06E-04	3.37E-05
S37	60	8	16	5	5.33E-02	9.66E-04	4.97E-05	4.12E-03	9.03E-04	4.97E-05	0.00E+00	1.34E-05	6.34E-06	1.85E-08	6.95E-07	7.7	2.23E-04	3.66E-05
S37	60	8	17	5	6.57E-02	1.19E-03	6.13E-05	5.09E-03	1.11E-03	6.13E-05	0.00E+00	1.66E-05	7.82E-06	2.28E-08	8.58E-07	9.5	2.75E-04	4.51E-05
S37	60	8	18	5	6.99E-02	1.28E-03	6.58E-05	5.47E-03	1.20E-03	6.58E-05	0.00E+00	1.78E-05	8.41E-06	2.46E-08	9.22E-07	10.2	2.96E-04	4.85E-05
S37	60	8	19	5	4.79E-02	8.90E-04	4.55E-05	3.80E-03	8.32E-04	4.56E-05	0.00E+00	1.24E-05	5.83E-06	1.70E-08	6.39E-07	7.0	2.05E-04	3.37E-05
S37	60	8	20	5	3.01E-02	5.88E-04	2.97E-05	2.51E-03	5.50E-04	3.00E-05	0.00E+00	8.13E-06	3.83E-06	1.13E-08	4.20E-07	4.6	1.34E-04	2.23E-05
S37	60	8	21	5	2.46E-02	4.98E-04	2.49E-05	2.12E-03	4.65E-04	2.53E-05	0.00E+00	6.86E-06	3.23E-06	9.53E-09	3.54E-07	3.9	1.13E-04	1.88E-05
S37	60	8	22	5	2.02E-02	4.22E-04	2.10E-05	1.80E-03	3.95E-04	2.14E-05	0.00E+00	5.80E-06	2.73E-06	8.09E-09	3.00E-07	3.2	9.54E-05	1.60E-05
S37	60	8	23	5	1.61E-02	3.47E-04	1.71E-05	1.48E-03	3.24E-04	1.75E-05	0.00E+00	4.76E-06	2.24E-06	6.64E-09	2.46E-07	2.6	7.80E-05	1.31E-05
S37	60	8	24	5	1.16E-02	2.56E-04	1.26E-05	1.09E-03	2.40E-04	1.29E-05	0.00E+00	3.51E-06	1.65E-06	4.91E-09	1.81E-07	1.9	5.74E-05	9.71E-06

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	1	5	1.03E-02	2.34E-04	1.14E-05	1.00E-03	2.19E-04	1.18E-05	0.00E+00	3.20E-06	1.50E-06	4.49E-09	1.65E-07	1.8	5.23E-05	8.87E-06
S38	60	8	2	5	6.71E-03	1.56E-04	7.57E-06	6.66E-04	1.46E-04	7.84E-06	0.00E+00	2.13E-06	1.00E-06	2.99E-09	1.10E-07	1.2	3.47E-05	5.91E-06
S38	60	8	3	5	5.72E-03	1.37E-04	6.58E-06	5.83E-04	1.28E-04	6.85E-06	0.00E+00	1.86E-06	8.74E-07	2.62E-09	9.59E-08	1.0	3.03E-05	5.17E-06
S38	60	8	4	5	4.03E-03	9.76E-05	4.69E-06	4.17E-04	9.13E-05	4.89E-06	0.00E+00	1.33E-06	6.24E-07	1.87E-09	6.84E-08	0.7	2.16E-05	3.70E-06
S38	60	8	5	5	5.61E-03	1.37E-04	6.56E-06	5.83E-04	1.28E-04	6.84E-06	0.00E+00	1.86E-06	8.73E-07	2.62E-09	9.58E-08	1.0	3.02E-05	5.17E-06
S38	60	8	6	5	1.36E-02	3.32E-04	1.59E-05	1.42E-03	3.10E-04	1.66E-05	0.00E+00	4.51E-06	2.12E-06	6.35E-09	2.33E-07	2.5	7.33E-05	1.26E-05
S38	60	8	7	5	4.14E-02	9.96E-04	4.79E-05	4.25E-03	9.31E-04	4.99E-05	0.00E+00	1.35E-05	6.36E-06	1.91E-08	6.98E-07	7.4	2.20E-04	3.77E-05
S38	60	8	8	5	6.67E-02	1.52E-03	7.41E-05	6.50E-03	1.42E-03	7.66E-05	0.00E+00	2.08E-05	9.78E-06	2.92E-08	1.07E-06	11.5	3.39E-04	5.77E-05
S38	60	8	9	5	5.77E-02	1.23E-03	6.08E-05	5.25E-03	1.15E-03	6.22E-05	0.00E+00	1.69E-05	7.95E-06	2.36E-08	8.72E-07	9.4	2.77E-04	4.66E-05
S38	60	8	10	5	4.97E-02	1.02E-03	5.07E-05	4.33E-03	9.49E-04	5.15E-05	0.00E+00	1.40E-05	6.58E-06	1.94E-08	7.22E-07	7.8	2.30E-04	3.84E-05
S38	60	8	11	5	4.64E-02	9.18E-04	4.62E-05	3.92E-03	8.58E-04	4.67E-05	0.00E+00	1.27E-05	5.97E-06	1.76E-08	6.55E-07	7.1	2.09E-04	3.47E-05
S38	60	8	12	5	5.55E-02	1.03E-03	5.29E-05	4.42E-03	9.67E-04	5.30E-05	0.00E+00	1.44E-05	6.77E-06	1.98E-08	7.43E-07	8.2	2.38E-04	3.92E-05
S38	60	8	13	5	5.95E-02	1.09E-03	5.61E-05	4.67E-03	1.02E-03	5.61E-05	0.00E+00	1.52E-05	7.17E-06	2.09E-08	7.86E-07	8.7	2.52E-04	4.14E-05
S38	60	8	14	5	6.11E-02	1.11E-03	5.72E-05	4.75E-03	1.04E-03	5.72E-05	0.00E+00	1.55E-05	7.30E-06	2.13E-08	8.01E-07	8.8	2.57E-04	4.21E-05
S38	60	8	15	5	6.38E-02	1.15E-03	5.94E-05	4.92E-03	1.08E-03	5.93E-05	0.00E+00	1.60E-05	7.57E-06	2.21E-08	8.29E-07	9.2	2.66E-04	4.36E-05
S38	60	8	16	5	6.90E-02	1.25E-03	6.43E-05	5.33E-03	1.17E-03	6.43E-05	0.00E+00	1.74E-05	8.20E-06	2.39E-08	8.99E-07	9.9	2.89E-04	4.73E-05
S38	60	8	17	5	8.50E-02	1.54E-03	7.94E-05	6.58E-03	1.44E-03	7.93E-05	0.00E+00	2.15E-05	1.01E-05	2.95E-08	1.11E-06	12.3	3.56E-04	5.84E-05
S38	60	8	18	5	9.04E-02	1.66E-03	8.52E-05	7.08E-03	1.55E-03	8.52E-05	0.00E+00	2.31E-05	1.09E-05	3.18E-08	1.19E-06	13.2	3.83E-04	6.28E-05
S38	60	8	19	5	6.19E-02	1.15E-03	5.89E-05	4.92E-03	1.08E-03	5.90E-05	0.00E+00	1.60E-05	7.54E-06	2.21E-08	8.27E-07	9.1	2.65E-04	4.36E-05
S38	60	8	20	5	3.90E-02	7.62E-04	3.85E-05	3.25E-03	7.12E-04	3.88E-05	0.00E+00	1.05E-05	4.96E-06	1.46E-08	5.44E-07	5.9	1.74E-04	2.88E-05
S38	60	8	21	5	3.19E-02	6.44E-04	3.23E-05	2.75E-03	6.02E-04	3.27E-05	0.00E+00	8.88E-06	4.18E-06	1.23E-08	4.59E-07	5.0	1.46E-04	2.44E-05
S38	60	8	22	5	2.62E-02	5.47E-04	2.72E-05	2.33E-03	5.11E-04	2.77E-05	0.00E+00	7.51E-06	3.54E-06	1.05E-08	3.88E-07	4.2	1.23E-04	2.07E-05
S38	60	8	23	5	2.09E-02	4.49E-04	2.22E-05	1.92E-03	4.20E-04	2.27E-05	0.00E+00	6.16E-06	2.90E-06	8.60E-09	3.18E-07	3.4	1.01E-04	1.70E-05
S38	60	8	24	5	1.50E-02	3.32E-04	1.63E-05	1.42E-03	3.10E-04	1.67E-05	0.00E+00	4.54E-06	2.14E-06	6.35E-09	2.34E-07	2.5	7.43E-05	1.26E-05
S39	60	8	1	5	1.32E-02	3.01E-04	1.47E-05	1.29E-03	2.82E-04	1.52E-05	0.00E+00	4.11E-06	1.94E-06	5.77E-09	2.12E-07	2.3	6.72E-05	1.14E-05
S39	60	8	2	5	8.63E-03	2.01E-04	9.74E-06	8.57E-04	1.88E-04	1.01E-05	0.00E+00	2.74E-06	1.29E-06	3.85E-09	1.41E-07	1.5	4.47E-05	7.61E-06
S39	60	8	3	5	7.36E-03	1.76E-04	8.47E-06	7.50E-04	1.64E-04	8.81E-06	0.00E+00	2.39E-06	1.12E-06	3.37E-09	1.23E-07	1.3	3.89E-05	6.66E-06
S39	60	8	4	5	5.18E-03	1.26E-04	6.03E-06	5.36E-04	1.17E-04	6.29E-06	0.00E+00	1.71E-06	8.02E-07	2.40E-09	8.80E-08	0.9	2.78E-05	4.75E-06
S39	60	8	5	5	7.21E-03	1.76E-04	8.43E-06	7.50E-04	1.64E-04	8.80E-06	0.00E+00	2.39E-06	1.12E-06	3.37E-09	1.23E-07	1.3	3.88E-05	6.66E-06
S39	60	8	6	5	1.75E-02	4.27E-04	2.05E-05	1.82E-03	3.99E-04	2.14E-05	0.00E+00	5.80E-06	2.73E-06	8.17E-09	2.99E-07	3.2	9.43E-05	1.62E-05
S39	60	8	7	5	5.32E-02	1.28E-03	6.16E-05	5.47E-03	1.20E-03	6.42E-05	0.00E+00	1.74E-05	8.19E-06	2.45E-08	8.98E-07	9.5	2.83E-04	4.85E-05
S39	60	8	8	5	8.58E-02	1.96E-03	9.53E-05	8.36E-03	1.83E-03	9.85E-05	0.00E+00	2.67E-05	1.26E-05	3.75E-08	1.38E-06	14.7	4.37E-04	7.42E-05
S39	60	8	9	5	7.42E-02	1.58E-03	7.82E-05	6.75E-03	1.48E-03	8.00E-05	0.00E+00	2.17E-05	1.02E-05	3.03E-08	1.12E-06	12.1	3.56E-04	5.99E-05
S39	60	8	10	5	6.39E-02	1.31E-03	6.52E-05	5.57E-03	1.22E-03	6.63E-05	0.00E+00	1.80E-05	8.47E-06	2.50E-08	9.29E-07	10.1	2.96E-04	4.94E-05
S39	60	8	11	5	5.97E-02	1.18E-03	5.94E-05	5.04E-03	1.10E-03	6.01E-05	0.00E+00	1.63E-05	7.68E-06	2.26E-08	8.42E-07	9.2	2.69E-04	4.47E-05
S39	60	8	12	5	7.14E-02	1.33E-03	6.80E-05	5.68E-03	1.24E-03	6.82E-05	0.00E+00	1.85E-05	8.71E-06	2.55E-08	9.55E-07	10.5	3.06E-04	5.04E-05
S39	60	8	13	5	7.66E-02	1.41E-03	7.22E-05	6.00E-03	1.31E-03	7.22E-05	0.00E+00	1.95E-05	9.22E-06	2.69E-08	1.01E-06	11.2	3.24E-04	5.32E-05
S39	60	8	14	5	7.86E-02	1.43E-03	7.36E-05	6.11E-03	1.34E-03	7.36E-05	0.00E+00	1.99E-05	9.39E-06	2.74E-08	1.03E-06	11.4	3.31E-04	5.42E-05
S39	60	8	15	5	8.21E-02	1.48E-03	7.64E-05	6.32E-03	1.39E-03	7.62E-05	0.00E+00	2.06E-05	9.73E-06	2.84E-08	1.07E-06	11.8	3.43E-04	5.61E-05
S39	60	8	16	5	8.87E-02	1.61E-03	8.28E-05	6.86E-03	1.50E-03	8.27E-05	0.00E+00	2.24E-05	1.06E-05	3.08E-08	1.16E-06	12.8	3.72E-04	6.09E-05
S39	60	8	17	5	1.09E-01	1.98E-03	1.02E-04	8.47E-03	1.85E-03	1.02E-04	0.00E+00	2.76E-05	1.30E-05	3.80E-08	1.43E-06	15.8	4.58E-04	7.51E-05
S39	60	8	18	5	1.16E-01	2.14E-03	1.10E-04	9.11E-03	2.00E-03	1.10E-04	0.00E+00	2.97E-05	1.40E-05	4.09E-08	1.53E-06	16.9	4.92E-04	8.08E-05
S39	60	8	19	5	7.97E-02	1.48E-03	7.58E-05	6.32E-03	1.39E-03	7.59E-05	0.00E+00	2.06E-05	9.70E-06	2.84E-08	1.06E-06	11.7	3.41E-04	5.61E-05
S39	60	8	20	5	5.02E-02	9.80E-04	4.95E-05	4.18E-03	9.16E-04	5.00E-05	0.00E+00	1.35E-05	6.38E-06	1.88E-08	7.00E-07	7.6	2.24E-04	3.71E-05
S39	60	8	21	5	4.10E-02	8.29E-04	4.15E-05	3.54E-03	7.75E-04	4.21E-05	0.00E+00	1.14E-05	5.38E-06	1.59E-08	5.90E-07	6.4	1.88E-04	3.14E-05
S39	60	8	22	5	3.37E-02	7.03E-04	3.49E-05	3.00E-03	6.57E-04	3.56E-05	0.00E+00	9.66E-06	4.55E-06	1.35E-08	4.99E-07	5.4	1.59E-04	2.66E-05
S39	60	8	23	5	2.68E-02	5.78E-04	2.85E-05	2.46E-03	5.40E-04	2.92E-05	0.00E+00	7.92E-06	3.73E-06	1.11E-08	4.09E-07	4.4	1.30E-04	2.19E-05
S39	60	8	24	5	1.93E-02	4.27E-04	2.09E-05	1.82E-03	3.99E-04	2.15E-05	0.00E+00	5.84E-06	2.75E-06	8.17E-09	3.02E-07	3.2	9.56E-05	1.62E-05
S40	80	11	1	5	1.19E-02	3.60E-04	1.38E-05	1.09E-03	2.58E-04	1.28E-05	0.00E+00	3.51E-06	1.63E-06	5.78E-09	1.80E-07	2.1	5.55E-05	8.05E-06
S40	80	11	2	5	7.80E-03	2.40E-04	9.14E-06	7.28E-04	1.72E-04	8.51E-06	0.00E+00	2.34E-06	1.08E-06	3.85E-09	1.19E-07	1.4	3.69E-05	5.37E-06
S40	80	11	3	5	6.66E-03	2.10E-04	7.96E-06	6.37E-04	1.50E-04	7.43E-06	0.00E+00	2.04E-06	9.47E-07	3.37E-09	1.04E-07	1.2	3.22E-05	4.70E-06
S40	80	11	4	5	4.70E-03	1.50E-04	5.67E-06	4.55E-04	1.07E-04	5.30E-06	0.00E+00	1.46E-06	6.75E-07	2.41E-09	7.44E-08	0.9	2.29E-05	3.35E-06
S40	80	11	5	5	6.55E-03	2.10E-04	7.93E-06	6.37E-04	1.50E-04	7.42E-06	0.00E+00	2.04E-06	9.45E-07	3.37E-09	1.04E-07	1.2	3.21E-05	4.70E-06
S40	80	11	6	5	1.59E-02	5.10E-04	1.93E-05	1.55E-03	3.65E-04	1.80E-05	0.00E+00	4.95E-06	2.30E-06	8.19E-09	2.53E-07	3.0	7.79E-05	1.14E-05
S40	80	11	7	5	4.83E-02	1.53E-03	5.79E-05	4.64E-03	1.09E-03	5.41E-05	0.00E+00	1.49E-05	6.89E-06	2.46E-08	7.60E-07	8.9	2.34E-04	3.42E-05
S40	80	11	8	5	7.74E-02	2.34E-03	8.95E-05	7.10E-03	1.67E-03	8.31E-05	0.00E+00	2.28E-05	1.06E-05	3.76E-08	1.17E-06	13.8	3.61E-04	5.23E-05
S40	80	11	9	5	6.65E-02	1.89E-03	7.33E-05	5.73E-03	1.35E-03	6.74E-05	0.00E+00	1.85E-05	8.60E-06	3.03E-08	9.47E-07	11.3	2.94E-04	4.23E-05
S40	80	11	10	5	5.71E-02	1.56E-03	6.10E-05	4.73E-03	1.12E-03	5.59E-05	0.00E+00	1.53E-05	7.12E-06	2.50E-08	7.85E-07	9.4	2.44E-04	3.49E-05
S40	80	11	11	5	5.32E-02	1.41E-03	5.56E-05	4.28E-03	1.01E-03	5.07E-05	0.00E+00	1.39E-05	6.46E-06	2.26E-08	7.11E-07	8.6	2.22E-04	3.15E-05
S40	80	11	12	5	6.33E-02	1.59E-03	6.35E-05	4.82E-03	1.14E-03	5.74E-05	0.00E+00	1.57E-05	7.32E-06	2.55E-08	8.06E-07	9.8	2.53E-04	3.56E-05
S40	80	11	13	5	6.78E-02	1.68E-03	6.73E-05	5.10E-03	1.20E-03	6.08E-05	0.00E+00	1.67E-05	7.75E-06	2.70E-08	8.53E-07	10.4	2.68E-04	3.76E-05
S40	80	11	14	5	6.96E-02	1.71E-03	6.87E-05	5.19E-03	1.22E-03	6.19E-05	0.00E+00	1.70E-05	7.89E-06	2.75E-08	8.69E-07	10.6	2.73E-04	3.82E-05
S40	80	11	15	5	7.26E-02	1.77E-03	7.12E-05	5.37E-03	1.27E-03	6.42E-05	0.00E+00	1.76E-05	8.18E-06	2.84E-08	9.00E-07	11.0	2.83E-04	3.96E-05
S40	80	11	16	5	7.85E-02	1.92E-03	7.72E-05	5.82E-03	1.37E-03	6.96E-05	0.00E+00	1.91E-05	8.87E-06	3.08E-08	9.76E-07	11.9	3.07E-04	4.29E-05
S40	80	11	17	5	9.68E-02	2.37E-03	9.53E-05	7.19E-03	1.70E-03	8.59E-05	0.00E+00	2.35E-05	1.09E-05	3.80E-08	1.21E-06	14.7	3.78E-04	5.30E-05
S40	80	11	18	5	1.03E-01	2.55E-03	1.02E-04	7.74E-03	1.82E-03	9.23E-05	0.00E+00	2.53E-05	1.18E-05	4.09E-08	1.30E-06	15.8	4.06E-04	5.70E-05
S40	80	11	19	5	7.06E-02	1.77E-03	7.07E-05	5.37E-03	1.27E-03	6.40E-05	0.00E+00	1.75E-05	8.15E-06	2.84E-08	8.98E-07	10.9	2.81E-04	3.96E-05
S40	80	11	20	5	4.47E-02	1.17E-03	4.62E-05	3.55E-03	8.37E-04	4.21E-05	0.00E+00	1.15E-05	5.37E-06	1.88E-08	5.91E-07	7.1	1.85E-04	2.62E-05
S40	80	11	21	5	3.66E-02	9.89E-04	3.88E-05	3.00E-03	7.08E-04	3.55E-05	0.00E+00	9.74E-06	4.53E-06	1.59E-08	4.98E-07	6.0	1.55E-04	2.21E-05

Table F-1: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S40	80	11	22	5	3.01E-02	8.40E-04	3.27E-05	2.55E-03	6.01E-04	3.00E-05	0.00E+00	8.24E-06	3.83E-06	1.35E-08	4.22E-07	5.1	1.31E-04	1.88E-05
S40	80	11	23	5	2.41E-02	6.90E-04	2.67E-05	2.09E-03	4.94E-04	2.46E-05	0.00E+00	6.76E-06	3.14E-06	1.11E-08	3.46E-07	4.1	1.07E-04	1.54E-05
S40	80	11	24	5	1.74E-02	5.10E-04	1.96E-05	1.55E-03	3.65E-04	1.81E-05	0.00E+00	4.98E-06	2.31E-06	8.19E-09	2.55E-07	3.0	7.89E-05	1.14E-05

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	111	0	1	1.69E-02	2.08E-03	2.87E-04	2.15E-04	1.91E-04	3.91E-05	0.00E+00	1.58E-05	1.12E-05	4.28E-08	1.10E-06	44.3	4.61E-04	7.85E-04
SI1_E	0.59	74	0	1	1.12E-02	1.24E-03	1.89E-04	1.43E-04	1.27E-04	2.60E-05	0.00E+00	1.05E-05	7.45E-06	2.86E-08	7.34E-07	29.2	3.07E-04	5.24E-04
SI1_E	0.59	65	0	1	9.77E-03	9.66E-04	1.64E-04	1.26E-04	1.11E-04	2.27E-05	0.00E+00	9.18E-06	6.50E-06	2.50E-08	6.41E-07	25.2	2.68E-04	4.58E-04
SI1_E	0.59	46	0	1	6.96E-03	6.90E-04	1.16E-04	8.96E-05	7.94E-05	1.62E-05	0.00E+00	6.55E-06	4.64E-06	1.79E-08	4.57E-07	17.9	1.91E-04	3.27E-04
SI1_E	0.59	65	0	1	9.74E-03	9.66E-04	1.62E-04	1.26E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.50E-08	6.39E-07	25.0	2.67E-04	4.58E-04
SI1_E	0.59	157	0	1	2.36E-02	2.35E-03	3.94E-04	3.05E-04	2.70E-04	5.51E-05	0.00E+00	2.22E-05	1.58E-05	6.07E-08	1.55E-06	60.8	6.49E-04	1.11E-03
SI1_E	0.59	471	0	1	7.11E-02	7.04E-03	1.19E-03	9.14E-04	8.10E-04	1.65E-04	0.00E+00	6.68E-05	4.74E-05	1.82E-07	4.66E-06	183.4	1.95E-03	3.34E-03
SI1_E	0.59	720	0	1	1.10E-01	1.32E-02	1.86E-03	1.40E-03	1.24E-03	2.54E-04	0.00E+00	1.03E-04	7.28E-05	2.79E-07	7.17E-06	287.4	3.00E-03	5.10E-03
SI1_E	0.59	582	0	1	8.97E-02	1.42E-02	1.55E-03	1.13E-03	1.00E-03	2.07E-04	0.00E+00	8.36E-05	5.92E-05	2.25E-07	5.84E-06	240.0	2.44E-03	4.12E-03
SI1_E	0.59	480	0	1	7.46E-02	1.36E-02	1.31E-03	9.32E-04	8.26E-04	1.72E-04	0.00E+00	6.94E-05	4.91E-05	1.86E-07	4.84E-06	202.3	2.02E-03	3.40E-03
SI1_E	0.59	434	0	1	6.79E-02	1.37E-02	1.20E-03	8.43E-04	7.46E-04	1.56E-04	0.00E+00	6.29E-05	4.46E-05	1.68E-07	4.39E-06	186.0	1.84E-03	3.08E-03
SI1_E	0.59	490	0	1	7.75E-02	1.84E-02	1.40E-03	9.50E-04	8.42E-04	1.77E-04	0.00E+00	7.15E-05	5.06E-05	1.89E-07	4.99E-06	216.1	2.09E-03	3.47E-03
SI1_E	0.59	517	0	1	8.21E-02	2.02E-02	1.49E-03	1.00E-03	8.89E-04	1.87E-04	0.00E+00	7.57E-05	5.36E-05	2.00E-07	5.28E-06	230.1	2.21E-03	3.67E-03
SI1_E	0.59	526	0	1	8.37E-02	2.11E-02	1.52E-03	1.02E-03	9.05E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.04E-07	5.38E-06	235.3	2.25E-03	3.73E-03
SI1_E	0.59	545	0	1	8.68E-02	2.24E-02	1.58E-03	1.06E-03	9.37E-04	1.98E-04	0.00E+00	7.99E-05	5.66E-05	2.11E-07	5.58E-06	244.7	2.33E-03	3.86E-03
SI1_E	0.59	591	0	1	9.41E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.29E-07	6.04E-06	265.0	2.53E-03	4.19E-03
SI1_E	0.59	730	0	1	1.16E-01	2.97E-02	2.12E-03	1.42E-03	1.25E-03	2.65E-04	0.00E+00	1.07E-04	7.57E-05	2.82E-07	7.46E-06	326.8	3.12E-03	5.17E-03
SI1_E	0.59	785	0	1	1.25E-01	3.11E-02	2.26E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.14E-05	3.04E-07	8.01E-06	349.5	3.35E-03	5.56E-03
SI1_E	0.59	545	0	1	8.63E-02	2.09E-02	1.56E-03	1.06E-03	9.37E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.11E-07	5.55E-06	240.9	2.32E-03	3.86E-03
SI1_E	0.59	360	0	1	5.65E-02	1.20E-02	1.01E-03	6.99E-04	6.19E-04	1.29E-04	0.00E+00	5.23E-05	3.71E-05	1.39E-07	3.65E-06	155.3	1.53E-03	2.55E-03
SI1_E	0.59	305	0	1	4.75E-02	9.09E-03	8.36E-04	5.92E-04	5.24E-04	1.09E-04	0.00E+00	4.41E-05	3.12E-05	1.18E-07	3.08E-06	129.1	1.29E-03	2.16E-03
SI1_E	0.59	259	0	1	4.00E-02	6.90E-03	6.98E-04	5.02E-04	4.45E-04	9.22E-05	0.00E+00	3.73E-05	2.64E-05	1.00E-07	2.60E-06	107.7	1.09E-03	1.83E-03
SI1_E	0.59	212	0	1	3.27E-02	5.07E-03	5.65E-04	4.12E-04	3.65E-04	7.55E-05	0.00E+00	3.05E-05	2.16E-05	8.21E-08	2.13E-06	87.2	8.90E-04	1.51E-03
SI1_E	0.59	157	0	1	2.40E-02	3.34E-03	4.12E-04	3.05E-04	2.70E-04	5.56E-05	0.00E+00	2.25E-05	1.59E-05	6.07E-08	1.57E-06	63.6	6.56E-04	1.11E-03
SI1_W	0.59	111	0	1	1.69E-02	2.08E-03	2.87E-04	2.15E-04	1.91E-04	3.91E-05	0.00E+00	1.58E-05	1.12E-05	4.28E-08	1.10E-06	44.3	4.61E-04	7.85E-04
SI1_W	0.59	74	0	1	1.12E-02	1.24E-03	1.89E-04	1.43E-04	1.27E-04	2.60E-05	0.00E+00	1.05E-05	7.45E-06	2.86E-08	7.34E-07	29.2	3.07E-04	5.24E-04
SI1_W	0.59	65	0	1	9.77E-03	9.66E-04	1.64E-04	1.26E-04	1.11E-04	2.27E-05	0.00E+00	9.18E-06	6.50E-06	2.50E-08	6.41E-07	25.2	2.68E-04	4.58E-04
SI1_W	0.59	46	0	1	6.96E-03	6.90E-04	1.16E-04	8.96E-05	7.94E-05	1.62E-05	0.00E+00	6.55E-06	4.64E-06	1.79E-08	4.57E-07	17.9	1.91E-04	3.27E-04
SI1_W	0.59	65	0	1	9.74E-03	9.66E-04	1.62E-04	1.26E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.50E-08	6.39E-07	25.0	2.67E-04	4.58E-04
SI1_W	0.59	157	0	1	2.36E-02	2.35E-03	3.94E-04	3.05E-04	2.70E-04	5.51E-05	0.00E+00	2.22E-05	1.58E-05	6.07E-08	1.55E-06	60.8	6.49E-04	1.11E-03
SI1_W	0.59	471	0	1	7.11E-02	7.04E-03	1.19E-03	9.14E-04	8.10E-04	1.65E-04	0.00E+00	6.68E-05	4.74E-05	1.82E-07	4.66E-06	183.4	1.95E-03	3.34E-03
SI1_W	0.59	720	0	1	1.10E-01	1.32E-02	1.86E-03	1.40E-03	1.24E-03	2.54E-04	0.00E+00	1.03E-04	7.28E-05	2.79E-07	7.17E-06	287.4	3.00E-03	5.10E-03
SI1_W	0.59	582	0	1	8.97E-02	1.42E-02	1.55E-03	1.13E-03	1.00E-03	2.07E-04	0.00E+00	8.36E-05	5.92E-05	2.25E-07	5.84E-06	240.0	2.44E-03	4.12E-03
SI1_W	0.59	480	0	1	7.46E-02	1.36E-02	1.31E-03	9.32E-04	8.26E-04	1.72E-04	0.00E+00	6.94E-05	4.91E-05	1.86E-07	4.84E-06	202.3	2.02E-03	3.40E-03
SI1_W	0.59	434	0	1	6.79E-02	1.37E-02	1.20E-03	8.43E-04	7.46E-04	1.56E-04	0.00E+00	6.29E-05	4.46E-05	1.68E-07	4.39E-06	186.0	1.84E-03	3.08E-03
SI1_W	0.59	490	0	1	7.75E-02	1.84E-02	1.40E-03	9.50E-04	8.42E-04	1.77E-04	0.00E+00	7.15E-05	5.06E-05	1.89E-07	4.99E-06	216.1	2.09E-03	3.47E-03
SI1_W	0.59	517	0	1	8.21E-02	2.02E-02	1.49E-03	1.00E-03	8.89E-04	1.87E-04	0.00E+00	7.57E-05	5.36E-05	2.00E-07	5.28E-06	230.1	2.21E-03	3.67E-03
SI1_W	0.59	526	0	1	8.37E-02	2.11E-02	1.52E-03	1.02E-03	9.05E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.04E-07	5.38E-06	235.3	2.25E-03	3.73E-03
SI1_W	0.59	545	0	1	8.68E-02	2.24E-02	1.58E-03	1.06E-03	9.37E-04	1.98E-04	0.00E+00	7.99E-05	5.66E-05	2.11E-07	5.58E-06	244.7	2.33E-03	3.86E-03
SI1_W	0.59	591	0	1	9.41E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.29E-07	6.04E-06	265.0	2.53E-03	4.19E-03
SI1_W	0.59	730	0	1	1.16E-01	2.97E-02	2.12E-03	1.42E-03	1.25E-03	2.65E-04	0.00E+00	1.07E-04	7.57E-05	2.82E-07	7.46E-06	326.8	3.12E-03	5.17E-03
SI1_W	0.59	785	0	1	1.25E-01	3.11E-02	2.26E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.14E-05	3.04E-07	8.01E-06	349.5	3.35E-03	5.56E-03
SI1_W	0.59	545	0	1	8.63E-02	2.09E-02	1.56E-03	1.06E-03	9.37E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.11E-07	5.55E-06	240.9	2.32E-03	3.86E-03
SI1_W	0.59	360	0	1	5.65E-02	1.20E-02	1.01E-03	6.99E-04	6.19E-04	1.29E-04	0.00E+00	5.23E-05	3.71E-05	1.39E-07	3.65E-06	155.3	1.53E-03	2.55E-03
SI1_W	0.59	305	0	1	4.75E-02	9.09E-03	8.36E-04	5.92E-04	5.24E-04	1.09E-04	0.00E+00	4.41E-05	3.12E-05	1.18E-07	3.08E-06	129.1	1.29E-03	2.16E-03
SI1_W	0.59	259	0	1	4.00E-02	6.90E-03	6.98E-04	5.02E-04	4.45E-04	9.22E-05	0.00E+00	3.73E-05	2.64E-05	1.00E-07	2.60E-06	107.7	1.09E-03	1.83E-03
SI1_W	0.59	212	0	1	3.27E-02	5.07E-03	5.65E-04	4.12E-04	3.65E-04	7.55E-05	0.00E+00	3.05E-05	2.16E-05	8.21E-08	2.13E-06	87.2	8.90E-04	1.51E-03
SI1_W	0.59	157	0	1	2.40E-02	3.34E-03	4.12E-04	3.05E-04	2.70E-04	5.56E-05	0.00E+00	2.25E-05	1.59E-05	6.07E-08	1.57E-06	63.6	6.56E-04	1.11E-03
SI2_E	0.51	58	0	1	8.91E-03	1.10E-03	1.51E-04	1.14E-04	1.01E-04	2.07E-05	0.00E+00	8.35E-06	5.91E-06	2.26E-08	5.82E-07	23.4	2.43E-04	4.14E-04
SI2_E	0.51	39	0	1	5.92E-03	6.54E-04	9.98E-05	7.57E-05	6.70E-05	1.37E-05	0.00E+00	5.55E-06	3.93E-06	1.51E-08	3.87E-07	15.4	1.62E-04	2.76E-04
SI2_E	0.51	34	0	1	5.16E-03	5.10E-04	8.63E-05	6.62E-05	5.87E-05	1.20E-05	0.00E+00	4.84E-06	3.43E-06	1.32E-08	3.38E-07	13.3	1.41E-04	2.42E-04
SI2_E	0.51	24	0	1	3.67E-03	3.64E-04	6.12E-05	4.73E-05	4.19E-05	8.55E-06	0.00E+00	3.46E-06	2.45E-06	9.42E-09	2.41E-07	9.5	1.01E-04	1.73E-04
SI2_E	0.51	34	0	1	5.14E-03	5.10E-04	8.55E-05	6.62E-05	5.87E-05	1.20E-05	0.00E+00	4.83E-06	3.43E-06	1.32E-08	3.37E-07	13.2	1.41E-04	2.42E-04
SI2_E	0.51	83	0	1	1.25E-02	1.24E-03	2.08E-04	1.61E-04	1.42E-04	2.91E-05	0.00E+00	1.17E-05	8.32E-06	3.20E-08	8.19E-07	32.1	3.43E-04	5.87E-04
SI2_E	0.51	249	0	1	3.75E-02	3.71E-03	6.27E-04	4.83E-04	4.27E-04	8.73E-05	0.00E+00	3.53E-05	2.50E-05	9.61E-08	2.46E-06	96.8	1.03E-03	1.76E-03
SI2_E	0.51	380	0	1	5.79E-02	6.94E-03	9.82E-04	7.38E-04	6.54E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.47E-07	3.78E-06	151.7	1.58E-03	2.69E-03
SI2_E	0.51	307	0	1	4.73E-02	7.48E-03	8.20E-04	5.96E-04	5.28E-04	1.09E-04	0.00E+00	4.41E-05	3.13E-05	1.19E-07	3.08E-06	126.6	1.29E-03	2.18E-03
SI2_E	0.51	253	0	1	3.94E-02	7.17E-03	6.91E-04	4.92E-04	4.36E-04	9.06E-05	0.00E+00	3.66E-05	2.59E-05	9.80E-08	2.55E-06	106.8	1.07E-03	1.80E-03
SI2_E	0.51	229	0	1	3.58E-02	7.21E-03	6.36E-04	4.45E-04	3.94E-04	8.22E-05	0.00E+00	3.32E-05	2.35E-05	8.86E-08	2.32E-06	98.1	9.69E-04	1.62E-03
SI2_E	0.51	258	0	1	4.09E-02	9.69E-03	7.39E-04	5.01E-04	4.44E-04	9.33E-05	0.00E+00	3.77E-05	2.67E-05	9.99E-08	2.63E-06	114.1	1.10E-03	1.83E-03
SI2_E	0.51	273	0	1	4.33E-02	1.06E-02	7.87E-04	5.30E-04	4.69E-04	9.88E-05	0.00E+00	3.99E-05	2.83E-05	1.06E-07	2.79E-06	121.5	1.16E-03	1.93E-03
SI2_E	0.51	278	0	1	4.42E-02	1.11E-02	8.04E-04	5.39E-04	4.78E-04	1.01E-04	0.00E+00	4.07E-05	2.88E-05	1.07E-07	2.84E-06	124.2	1.19E-03	1.97E-03
SI2_E	0.51	288	0	1	4.58E-02	1.18E-02	8.36E-04	5.58E-04	4.94E-04	1.04E-04	0.00E+00	4.22E-05	2.99E-05	1.11E-07	2.94E-06	129.2	1.23E-03	2.04E-03
SI2_E	0.51	312	0	1	4.97E-02	1.27E-02	9.06E-04	6.06E-04	5.36E-04	1.13E-04	0.00E+00	4.57E-05	3.24E-05	1.21E-07	3.19E-06	139.8	1.33E-03	2.21E-03
SI2_E	0.51	385	0	1	6.13E-02	1.57E-02	1.12E-03	7.47E-04	6.62E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	172.4	1.65E-03	2.73E-03
SI2_E	0.51	414	0	1	6.58E-02	1.64E-02	1.19E-03	8.04E-04	7.12E-04	1.50E-04	0.00E+00	6.06E-05	4.29E-05	1.60E-07	4.23E-06	184.4	1.77E-03	2.94E-03
SI2_E	0.51	288	0	1	4.55E-02	1.10E-02	8.23E-04	5.58E-04	4.94E-04	1.04E-04	0.00E+00	4.20E-05	2.98E-05	1.11E-07	2.93E-06	127.1	1.23E-03	2.04E-03
SI2_E	0.51	190	0	1	2.98E-02	6.34E-03	5.31E-04	3.69E-04	3.27E-04	6.83E-05	0.00E+00	2.76E-05	1.96E-05	7.35E-08	1.93E-06	81.9	8.05E-04	1.35E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	161	0	1	2.51E-02	4.80E-03	4.41E-04	3.12E-04	2.77E-04	5.76E-05	0.00E+00	2.33E-05	1.65E-05	6.22E-08	1.62E-06	68.1	6.78E-04	1.14E-03
SI2_E	0.51	136	0	1	2.11E-02	3.64E-03	3.68E-04	2.65E-04	2.35E-04	4.86E-05	0.00E+00	1.97E-05	1.39E-05	5.28E-08	1.37E-06	56.9	5.73E-04	9.67E-04
SI2_E	0.51	112	0	1	1.73E-02	2.68E-03	2.98E-04	2.18E-04	1.93E-04	3.98E-05	0.00E+00	1.61E-05	1.14E-05	4.33E-08	1.12E-06	46.0	4.69E-04	7.94E-04
SI2_E	0.51	83	0	1	1.27E-02	1.76E-03	2.17E-04	1.61E-04	1.42E-04	2.93E-05	0.00E+00	1.19E-05	8.40E-06	3.20E-08	8.28E-07	33.6	3.46E-04	5.87E-04
SI2_W	0.42	56	0	1	8.49E-03	1.04E-03	1.44E-04	1.08E-04	9.57E-05	1.97E-05	0.00E+00	7.95E-06	5.63E-06	2.15E-08	5.54E-07	22.3	2.32E-04	3.95E-04
SI2_W	0.42	37	0	1	5.63E-03	6.23E-04	9.50E-05	7.21E-05	6.38E-05	1.31E-05	0.00E+00	5.28E-06	3.74E-06	1.44E-08	3.69E-07	14.7	1.54E-04	2.63E-04
SI2_W	0.42	32	0	1	4.91E-03	4.85E-04	8.22E-05	6.31E-05	5.58E-05	1.14E-05	0.00E+00	4.61E-06	3.27E-06	1.26E-08	3.22E-07	12.7	1.35E-04	2.30E-04
SI2_W	0.42	23	0	1	3.50E-03	3.47E-04	5.83E-05	4.50E-05	3.99E-05	8.14E-06	0.00E+00	3.29E-06	2.33E-06	8.97E-09	2.30E-07	9.0	9.60E-05	1.64E-04
SI2_W	0.42	32	0	1	4.89E-03	4.85E-04	8.14E-05	6.31E-05	5.58E-05	1.14E-05	0.00E+00	4.60E-06	3.26E-06	1.26E-08	3.21E-07	12.6	1.34E-04	2.30E-04
SI2_W	0.42	79	0	1	1.19E-02	1.18E-03	1.98E-04	1.53E-04	1.36E-04	2.77E-05	0.00E+00	1.12E-05	7.92E-06	3.05E-08	7.80E-07	30.5	3.26E-04	5.59E-04
SI2_W	0.42	237	0	1	3.57E-02	3.54E-03	5.97E-04	4.59E-04	4.07E-04	8.31E-05	0.00E+00	3.36E-05	2.38E-05	9.15E-08	2.34E-06	92.1	9.80E-04	1.68E-03
SI2_W	0.42	362	0	1	5.51E-02	6.61E-03	9.35E-04	7.03E-04	6.22E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.40E-07	3.60E-06	144.4	1.51E-03	2.56E-03
SI2_W	0.42	292	0	1	4.51E-02	7.12E-03	7.81E-04	5.68E-04	5.03E-04	1.04E-04	0.00E+00	4.20E-05	2.98E-05	1.13E-07	2.93E-06	120.6	1.23E-03	2.07E-03
SI2_W	0.42	241	0	1	3.75E-02	6.82E-03	6.58E-04	4.68E-04	4.15E-04	8.62E-05	0.00E+00	3.48E-05	2.47E-05	9.33E-08	2.43E-06	101.6	1.02E-03	1.71E-03
SI2_W	0.42	218	0	1	3.41E-02	6.87E-03	6.05E-04	4.23E-04	3.75E-04	7.82E-05	0.00E+00	3.16E-05	2.24E-05	8.43E-08	2.21E-06	93.4	9.22E-04	1.55E-03
SI2_W	0.42	246	0	1	3.89E-02	9.23E-03	7.03E-04	4.77E-04	4.23E-04	8.89E-05	0.00E+00	3.59E-05	2.54E-05	9.51E-08	2.51E-06	108.6	1.05E-03	1.74E-03
SI2_W	0.42	260	0	1	4.13E-02	1.01E-02	7.49E-04	5.04E-04	4.47E-04	9.41E-05	0.00E+00	3.80E-05	2.69E-05	1.00E-07	2.65E-06	115.6	1.11E-03	1.84E-03
SI2_W	0.42	265	0	1	4.21E-02	1.06E-02	7.66E-04	5.13E-04	4.55E-04	9.59E-05	0.00E+00	3.87E-05	2.74E-05	1.02E-07	2.70E-06	118.2	1.13E-03	1.87E-03
SI2_W	0.42	274	0	1	4.36E-02	1.13E-02	7.96E-04	5.31E-04	4.71E-04	9.93E-05	0.00E+00	4.01E-05	2.84E-05	1.06E-07	2.80E-06	123.0	1.17E-03	1.94E-03
SI2_W	0.42	297	0	1	4.73E-02	1.21E-02	8.62E-04	5.77E-04	5.11E-04	1.08E-04	0.00E+00	4.35E-05	3.08E-05	1.15E-07	3.04E-06	133.1	1.27E-03	2.10E-03
SI2_W	0.42	367	0	1	5.84E-02	1.49E-02	1.06E-03	7.12E-04	6.30E-04	1.33E-04	0.00E+00	5.37E-05	3.81E-05	1.42E-07	3.75E-06	164.2	1.57E-03	2.60E-03
SI2_W	0.42	394	0	1	6.26E-02	1.56E-02	1.14E-03	7.66E-04	6.78E-04	1.43E-04	0.00E+00	5.77E-05	4.09E-05	1.53E-07	4.03E-06	175.6	1.68E-03	2.80E-03
SI2_W	0.42	274	0	1	4.34E-02	1.05E-02	7.84E-04	5.31E-04	4.71E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.06E-07	2.79E-06	121.0	1.17E-03	1.94E-03
SI2_W	0.42	181	0	1	2.84E-02	6.04E-03	5.05E-04	3.51E-04	3.11E-04	6.50E-05	0.00E+00	2.63E-05	1.86E-05	7.00E-08	1.83E-06	78.0	7.67E-04	1.28E-03
SI2_W	0.42	153	0	1	2.39E-02	4.57E-03	4.20E-04	2.97E-04	2.63E-04	5.48E-05	0.00E+00	2.21E-05	1.57E-05	5.92E-08	1.55E-06	64.9	6.46E-04	1.09E-03
SI2_W	0.42	130	0	1	2.01E-02	3.47E-03	3.51E-04	2.52E-04	2.23E-04	4.63E-05	0.00E+00	1.87E-05	1.33E-05	5.02E-08	1.31E-06	54.1	5.46E-04	9.21E-04
SI2_W	0.42	107	0	1	1.64E-02	2.55E-03	2.84E-04	2.07E-04	1.83E-04	3.79E-05	0.00E+00	1.53E-05	1.09E-05	4.13E-08	1.07E-06	43.8	4.47E-04	7.56E-04
SI2_W	0.42	79	0	1	1.21E-02	1.68E-03	2.07E-04	1.53E-04	1.36E-04	2.79E-05	0.00E+00	1.13E-05	8.00E-06	3.05E-08	7.88E-07	32.0	3.29E-04	5.59E-04
SI3_E	0.50	67	0	1	1.02E-02	1.25E-03	1.73E-04	1.30E-04	1.15E-04	2.36E-05	0.00E+00	9.53E-06	6.76E-06	2.58E-08	6.65E-07	26.7	2.78E-04	4.74E-04
SI3_E	0.50	45	0	1	6.76E-03	7.47E-04	1.14E-04	8.65E-05	7.66E-05	1.57E-05	0.00E+00	6.34E-06	4.49E-06	1.72E-08	4.43E-07	17.6	1.85E-04	3.16E-04
SI3_E	0.50	39	0	1	5.89E-03	5.82E-04	9.86E-05	7.57E-05	6.70E-05	1.37E-05	0.00E+00	5.53E-06	3.92E-06	1.51E-08	3.86E-07	15.2	1.61E-04	2.76E-04
SI3_E	0.50	28	0	1	4.20E-03	4.16E-04	7.00E-05	5.40E-05	4.79E-05	9.77E-06	0.00E+00	3.95E-06	2.80E-06	1.08E-08	2.75E-07	10.8	1.15E-04	1.97E-04
SI3_E	0.50	39	0	1	5.87E-03	5.82E-04	9.77E-05	7.57E-05	6.70E-05	1.37E-05	0.00E+00	5.52E-06	3.91E-06	1.51E-08	3.85E-07	15.1	1.61E-04	2.76E-04
SI3_E	0.50	95	0	1	1.43E-02	1.41E-03	2.37E-04	1.84E-04	1.63E-04	3.32E-05	0.00E+00	1.34E-05	9.50E-06	3.66E-08	9.36E-07	36.6	3.91E-04	6.71E-04
SI3_E	0.50	284	0	1	4.29E-02	4.24E-03	7.16E-04	5.51E-04	4.88E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.10E-07	2.81E-06	110.6	1.18E-03	2.01E-03
SI3_E	0.50	434	0	1	6.61E-02	7.93E-03	1.12E-03	8.43E-04	7.47E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.68E-07	4.32E-06	173.3	1.81E-03	3.08E-03
SI3_E	0.50	351	0	1	5.41E-02	8.54E-03	9.37E-04	6.81E-04	6.03E-04	1.25E-04	0.00E+00	5.04E-05	3.57E-05	1.36E-07	3.52E-06	144.7	1.47E-03	2.49E-03
SI3_E	0.50	290	0	1	4.50E-02	8.19E-03	7.90E-04	5.62E-04	4.98E-04	1.03E-04	0.00E+00	4.18E-05	2.96E-05	1.12E-07	2.92E-06	122.0	1.22E-03	2.05E-03
SI3_E	0.50	262	0	1	4.09E-02	8.24E-03	7.26E-04	5.08E-04	4.50E-04	9.39E-05	0.00E+00	3.79E-05	2.69E-05	1.01E-07	2.65E-06	112.1	1.11E-03	1.85E-03
SI3_E	0.50	295	0	1	4.67E-02	1.11E-02	8.44E-04	5.73E-04	5.07E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.14E-07	3.01E-06	130.3	1.26E-03	2.09E-03
SI3_E	0.50	312	0	1	4.95E-02	1.22E-02	8.99E-04	6.05E-04	5.36E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.21E-07	3.18E-06	138.8	1.33E-03	2.21E-03
SI3_E	0.50	317	0	1	5.05E-02	1.27E-02	9.19E-04	6.16E-04	5.46E-04	1.15E-04	0.00E+00	4.65E-05	3.29E-05	1.23E-07	3.24E-06	141.9	1.36E-03	2.25E-03
SI3_E	0.50	329	0	1	5.24E-02	1.35E-02	9.56E-04	6.38E-04	5.65E-04	1.19E-04	0.00E+00	4.82E-05	3.41E-05	1.27E-07	3.36E-06	147.6	1.41E-03	2.33E-03
SI3_E	0.50	356	0	1	5.68E-02	1.45E-02	1.03E-03	6.92E-04	6.13E-04	1.29E-04	0.00E+00	5.22E-05	3.70E-05	1.38E-07	3.64E-06	159.7	1.52E-03	2.53E-03
SI3_E	0.50	440	0	1	7.00E-02	1.79E-02	1.28E-03	8.54E-04	7.56E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.70E-07	4.50E-06	197.0	1.88E-03	3.12E-03
SI3_E	0.50	473	0	1	7.52E-02	1.87E-02	1.36E-03	9.19E-04	8.14E-04	1.71E-04	0.00E+00	6.92E-05	4.91E-05	1.83E-07	4.83E-06	210.7	2.02E-03	3.35E-03
SI3_E	0.50	329	0	1	5.20E-02	1.26E-02	9.41E-04	6.38E-04	5.65E-04	1.19E-04	0.00E+00	4.80E-05	3.40E-05	1.27E-07	3.35E-06	145.2	1.40E-03	2.33E-03
SI3_E	0.50	217	0	1	3.41E-02	7.25E-03	6.06E-04	4.22E-04	3.73E-04	7.80E-05	0.00E+00	3.15E-05	2.23E-05	8.40E-08	2.20E-06	93.6	9.20E-04	1.54E-03
SI3_E	0.50	184	0	1	2.86E-02	5.48E-03	5.04E-04	3.57E-04	3.16E-04	6.58E-05	0.00E+00	2.66E-05	1.88E-05	7.10E-08	1.85E-06	77.8	7.75E-04	1.30E-03
SI3_E	0.50	156	0	1	2.41E-02	4.16E-03	4.21E-04	3.03E-04	2.68E-04	5.56E-05	0.00E+00	2.25E-05	1.59E-05	6.03E-08	1.57E-06	65.0	6.55E-04	1.10E-03
SI3_E	0.50	128	0	1	1.97E-02	3.06E-03	3.41E-04	2.49E-04	2.20E-04	4.55E-05	0.00E+00	1.84E-05	1.30E-05	4.95E-08	1.28E-06	52.6	5.36E-04	9.08E-04
SI3_E	0.50	95	0	1	1.45E-02	2.01E-03	2.48E-04	1.84E-04	1.63E-04	3.35E-05	0.00E+00	1.35E-05	9.60E-06	3.66E-08	9.46E-07	38.4	3.95E-04	6.71E-04
SI3_W	0.38	46	0	1	6.95E-03	8.55E-04	1.18E-04	8.85E-05	7.84E-05	1.61E-05	0.00E+00	6.51E-06	4.61E-06	1.76E-08	4.54E-07	18.2	1.90E-04	3.23E-04
SI3_W	0.38	30	0	1	4.61E-03	5.10E-04	7.78E-05	5.90E-05	5.23E-05	1.07E-05	0.00E+00	4.33E-06	3.07E-06	1.18E-08	3.02E-07	12.0	1.26E-04	2.15E-04
SI3_W	0.38	27	0	1	4.02E-03	3.97E-04	6.73E-05	5.16E-05	4.57E-05	9.35E-06	0.00E+00	3.78E-06	2.68E-06	1.03E-08	2.64E-07	10.4	1.10E-04	1.88E-04
SI3_W	0.38	19	0	1	2.86E-03	2.84E-04	4.77E-05	3.69E-05	3.27E-05	6.67E-06	0.00E+00	2.69E-06	1.91E-06	7.34E-09	1.88E-07	7.4	7.86E-05	1.35E-04
SI3_W	0.38	27	0	1	4.01E-03	3.97E-04	6.67E-05	5.16E-05	4.57E-05	9.33E-06	0.00E+00	3.77E-06	2.67E-06	1.03E-08	2.63E-07	10.3	1.10E-04	1.88E-04
SI3_W	0.38	65	0	1	9.73E-03	9.65E-04	1.62E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.15E-06	6.49E-06	2.50E-08	6.39E-07	25.0	2.67E-04	4.58E-04
SI3_W	0.38	194	0	1	2.93E-02	2.89E-03	4.89E-04	3.76E-04	3.33E-04	6.80E-05	0.00E+00	2.75E-05	1.95E-05	7.49E-08	1.92E-06	75.5	8.02E-04	1.37E-03
SI3_W	0.38	296	0	1	4.51E-02	5.41E-03	7.66E-04	5.75E-04	5.10E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.15E-07	2.95E-06	118.2	1.23E-03	2.10E-03
SI3_W	0.38	239	0	1	3.69E-02	5.83E-03	6.39E-04	4.65E-04	4.12E-04	8.51E-05	0.00E+00	3.44E-05	2.44E-05	9.26E-08	2.40E-06	98.7	1.00E-03	1.70E-03
SI3_W	0.38	198	0	1	3.07E-02	5.59E-03	5.39E-04	3.84E-04	3.40E-04	7.06E-05	0.00E+00	2.85E-05	2.02E-05	7.64E-08	1.99E-06	83.2	8.32E-04	1.40E-03
SI3_W	0.38	179	0	1	2.79E-02	5.62E-03	4.95E-04	3.47E-04	3.07E-04	6.41E-05	0.00E+00	2.59E-05	1.83E-05	6.91E-08	1.81E-06	76.5	7.55E-04	1.27E-03
SI3_W	0.38	201	0	1	3.19E-02	7.55E-03	5.76E-04	3.91E-04	3.46E-04	7.28E-05	0.00E+00	2.94E-05	2.08E-05	7.79E-08	2.05E-06	88.9	8.58E-04	1.43E-03
SI3_W	0.38	213	0	1	3.38E-02	8.30E-03	6.13E-04	4.13E-04	3.66E-04	7.70E-05	0.00E+00	3.11E-05	2.21E-05	8.23E-08	2.17E-06	94.7	9.08E-04	1.51E-03
SI3_W	0.38	217	0	1	3.45E-02	8.68E-03	6.27E-04	4.20E-04	3.72E-04	7.85E-05	0.00E+00	3.17E-05	2.25E-05	8.37E-08	2.21E-06	96.8	9.25E-04	1.53E-03
SI3_W	0.38	224	0	1	3.57E-02	9.23E-03	6.52E-04	4.35E-04	3.85E-04	8.13E-05	0.00E+00	3.29E-05	2.33E-05	8.67E-08	2.29E-06	100.7	9.59E-04	1.59E-03
SI3_W	0.38	243	0	1	3.87E-02	9.92E-03	7.06E-04	4.72E-04	4.18E-04	8.82E-05	0.00E+00	3.56E-05	2.53E-05	9.40E-08	2.49E-06	109.0	1.04E-03	1.72E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	300	0	1	4.78E-02	1.22E-02	8.71E-04	5.83E-04	5.16E-04	1.09E-04	0.00E+00	4.40E-05	3.12E-05	1.16E-07	3.07E-06	134.4	1.28E-03	2.13E-03
SI3_W	0.38	323	0	1	5.13E-02	1.28E-02	9.31E-04	6.27E-04	5.55E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.25E-07	3.30E-06	143.8	1.38E-03	2.29E-03
SI3_W	0.38	224	0	1	3.55E-02	8.59E-03	6.42E-04	4.35E-04	3.85E-04	8.10E-05	0.00E+00	3.27E-05	2.32E-05	8.67E-08	2.29E-06	99.1	9.55E-04	1.59E-03
SI3_W	0.38	148	0	1	2.32E-02	4.94E-03	4.14E-04	2.88E-04	2.55E-04	5.32E-05	0.00E+00	2.15E-05	1.52E-05	5.73E-08	1.50E-06	63.9	6.28E-04	1.05E-03
SI3_W	0.38	125	0	1	1.95E-02	3.74E-03	3.44E-04	2.43E-04	2.16E-04	4.49E-05	0.00E+00	1.81E-05	1.28E-05	4.85E-08	1.27E-06	53.1	5.29E-04	8.89E-04
SI3_W	0.38	106	0	1	1.65E-02	2.84E-03	2.87E-04	2.07E-04	1.83E-04	3.79E-05	0.00E+00	1.53E-05	1.09E-05	4.11E-08	1.07E-06	44.3	4.47E-04	7.54E-04
SI3_W	0.38	87	0	1	1.35E-02	2.09E-03	2.32E-04	1.70E-04	1.50E-04	3.10E-05	0.00E+00	1.25E-05	8.89E-06	3.38E-08	8.76E-07	35.9	3.66E-04	6.19E-04
SI3_W	0.38	65	0	1	9.89E-03	1.37E-03	1.69E-04	1.25E-04	1.11E-04	2.29E-05	0.00E+00	9.25E-06	6.55E-06	2.50E-08	6.45E-07	26.2	2.70E-04	4.58E-04
SI4_E	0.32	39	0	1	5.87E-03	7.22E-04	9.96E-05	7.47E-05	6.62E-05	1.36E-05	0.00E+00	5.49E-06	3.89E-06	1.49E-08	3.83E-07	15.4	1.60E-04	2.73E-04
SI4_E	0.32	26	0	1	3.90E-03	4.31E-04	6.57E-05	4.98E-05	4.41E-05	9.04E-06	0.00E+00	3.65E-06	2.59E-06	9.92E-09	2.55E-07	10.1	1.07E-04	1.82E-04
SI4_E	0.32	22	0	1	3.39E-03	3.36E-04	5.68E-05	4.36E-05	3.86E-05	7.89E-06	0.00E+00	3.19E-06	2.26E-06	8.68E-09	2.23E-07	8.8	9.30E-05	1.59E-04
SI4_E	0.32	16	0	1	2.42E-03	2.40E-04	4.03E-05	3.11E-05	2.76E-05	5.63E-06	0.00E+00	2.27E-06	1.61E-06	6.20E-09	1.59E-07	6.2	6.64E-05	1.14E-04
SI4_E	0.32	22	0	1	3.38E-03	3.36E-04	5.63E-05	4.36E-05	3.86E-05	7.88E-06	0.00E+00	3.18E-06	2.26E-06	8.68E-09	2.22E-07	8.7	9.28E-05	1.59E-04
SI4_E	0.32	55	0	1	8.22E-03	8.15E-04	1.37E-04	1.06E-04	9.38E-05	1.91E-05	0.00E+00	7.73E-06	5.48E-06	2.11E-08	5.39E-07	21.1	2.25E-04	3.87E-04
SI4_E	0.32	164	0	1	2.47E-02	2.44E-03	4.13E-04	3.18E-04	2.81E-04	5.75E-05	0.00E+00	2.32E-05	1.65E-05	6.33E-08	1.62E-06	63.7	6.77E-04	1.16E-03
SI4_E	0.32	250	0	1	3.81E-02	4.57E-03	6.47E-04	4.86E-04	4.30E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.68E-08	2.49E-06	99.8	1.04E-03	1.77E-03
SI4_E	0.32	202	0	1	3.12E-02	4.92E-03	5.40E-04	3.92E-04	3.48E-04	7.19E-05	0.00E+00	2.91E-05	2.06E-05	7.82E-08	2.03E-06	83.4	8.47E-04	1.43E-03
SI4_E	0.32	167	0	1	2.59E-02	4.72E-03	4.55E-04	3.24E-04	2.87E-04	5.96E-05	0.00E+00	2.41E-05	1.71E-05	6.45E-08	1.68E-06	70.3	7.03E-04	1.18E-03
SI4_E	0.32	151	0	1	2.36E-02	4.75E-03	4.18E-04	2.93E-04	2.59E-04	5.41E-05	0.00E+00	2.19E-05	1.55E-05	5.83E-08	1.53E-06	64.6	6.38E-04	1.07E-03
SI4_E	0.32	170	0	1	2.69E-02	6.38E-03	4.86E-04	3.30E-04	2.92E-04	6.15E-05	0.00E+00	2.48E-05	1.76E-05	6.58E-08	1.73E-06	75.1	7.24E-04	1.21E-03
SI4_E	0.32	180	0	1	2.85E-02	7.01E-03	5.18E-04	3.49E-04	3.09E-04	6.51E-05	0.00E+00	2.63E-05	1.86E-05	6.95E-08	1.83E-06	80.0	7.67E-04	1.27E-03
SI4_E	0.32	183	0	1	2.91E-02	7.33E-03	5.29E-04	3.55E-04	3.14E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.07E-08	1.87E-06	81.8	7.81E-04	1.30E-03
SI4_E	0.32	189	0	1	3.02E-02	7.79E-03	5.51E-04	3.68E-04	3.25E-04	6.87E-05	0.00E+00	2.78E-05	1.97E-05	7.32E-08	1.94E-06	85.0	8.10E-04	1.34E-03
SI4_E	0.32	205	0	1	3.27E-02	8.38E-03	5.96E-04	3.99E-04	3.53E-04	7.45E-05	0.00E+00	3.01E-05	2.13E-05	7.94E-08	2.10E-06	92.1	8.78E-04	1.46E-03
SI4_E	0.32	253	0	1	4.04E-02	1.03E-02	7.35E-04	4.92E-04	4.36E-04	9.19E-05	0.00E+00	3.71E-05	2.63E-05	9.80E-08	2.59E-06	113.5	1.08E-03	1.80E-03
SI4_E	0.32	273	0	1	4.33E-02	1.08E-02	7.86E-04	5.29E-04	4.69E-04	9.88E-05	0.00E+00	3.99E-05	2.83E-05	1.05E-07	2.78E-06	121.4	1.16E-03	1.93E-03
SI4_E	0.32	189	0	1	3.00E-02	7.26E-03	5.42E-04	3.68E-04	3.25E-04	6.84E-05	0.00E+00	2.77E-05	1.96E-05	7.32E-08	1.93E-06	83.7	8.07E-04	1.34E-03
SI4_E	0.32	125	0	1	1.96E-02	4.18E-03	3.49E-04	2.43E-04	2.15E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.84E-08	1.27E-06	53.9	5.30E-04	8.87E-04
SI4_E	0.32	106	0	1	1.65E-02	3.16E-03	2.90E-04	2.06E-04	1.82E-04	3.79E-05	0.00E+00	1.53E-05	1.08E-05	4.09E-08	1.07E-06	44.8	4.47E-04	7.50E-04
SI4_E	0.32	90	0	1	1.39E-02	2.40E-03	2.42E-04	1.74E-04	1.54E-04	3.20E-05	0.00E+00	1.29E-05	9.17E-06	3.47E-08	9.03E-07	37.4	3.78E-04	6.37E-04
SI4_E	0.32	74	0	1	1.14E-02	1.76E-03	1.96E-04	1.43E-04	1.27E-04	2.62E-05	0.00E+00	1.06E-05	7.51E-06	2.85E-08	7.39E-07	30.3	3.09E-04	5.23E-04
SI4_E	0.32	55	0	1	8.36E-03	1.16E-03	1.43E-04	1.06E-04	9.38E-05	1.93E-05	0.00E+00	7.81E-06	5.53E-06	2.11E-08	5.45E-07	22.1	2.28E-04	3.87E-04
SI4_W	0.32	36	0	1	5.54E-03	6.82E-04	9.41E-05	7.06E-05	6.25E-05	1.28E-05	0.00E+00	5.19E-06	3.68E-06	1.41E-08	3.62E-07	14.5	1.51E-04	2.58E-04
SI4_W	0.32	24	0	1	3.68E-03	4.07E-04	6.21E-05	4.71E-05	4.17E-05	8.54E-06	0.00E+00	3.45E-06	2.44E-06	9.37E-09	2.41E-07	9.6	1.01E-04	1.72E-04
SI4_W	0.32	21	0	1	3.20E-03	3.17E-04	5.36E-05	4.12E-05	3.65E-05	7.45E-06	0.00E+00	3.01E-06	2.13E-06	8.20E-09	2.10E-07	8.3	8.78E-05	1.50E-04
SI4_W	0.32	15	0	1	2.28E-03	2.26E-04	3.81E-05	2.94E-05	2.60E-05	5.32E-06	0.00E+00	2.15E-06	1.52E-06	5.86E-09	1.50E-07	5.9	6.27E-05	1.07E-04
SI4_W	0.32	21	0	1	3.19E-03	3.17E-04	5.32E-05	4.12E-05	3.65E-05	7.44E-06	0.00E+00	3.01E-06	2.13E-06	8.20E-09	2.10E-07	8.2	8.77E-05	1.50E-04
SI4_W	0.32	52	0	1	7.76E-03	7.69E-04	1.29E-04	1.00E-04	8.86E-05	1.81E-05	0.00E+00	7.30E-06	5.17E-06	1.99E-08	5.09E-07	19.9	2.13E-04	3.65E-04
SI4_W	0.32	155	0	1	2.33E-02	2.31E-03	3.90E-04	3.00E-04	2.66E-04	5.43E-05	0.00E+00	2.19E-05	1.55E-05	5.97E-08	1.53E-06	60.2	6.40E-04	1.10E-03
SI4_W	0.32	236	0	1	3.60E-02	4.31E-03	6.11E-04	4.59E-04	4.06E-04	8.34E-05	0.00E+00	3.37E-05	2.39E-05	9.14E-08	2.35E-06	94.3	9.83E-04	1.67E-03
SI4_W	0.32	191	0	1	2.94E-02	4.65E-03	5.10E-04	3.71E-04	3.28E-04	6.79E-05	0.00E+00	2.74E-05	1.94E-05	7.38E-08	1.91E-06	78.7	8.00E-04	1.35E-03
SI4_W	0.32	158	0	1	2.45E-02	4.45E-03	4.30E-04	3.06E-04	2.71E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.09E-08	1.59E-06	66.4	6.64E-04	1.12E-03
SI4_W	0.32	142	0	1	2.23E-02	4.48E-03	3.95E-04	2.76E-04	2.45E-04	5.11E-05	0.00E+00	2.06E-05	1.46E-05	5.51E-08	1.44E-06	61.0	6.02E-04	1.01E-03
SI4_W	0.32	161	0	1	2.54E-02	6.02E-03	4.59E-04	3.12E-04	2.76E-04	5.80E-05	0.00E+00	2.34E-05	1.66E-05	6.21E-08	1.64E-06	70.9	6.84E-04	1.14E-03
SI4_W	0.32	170	0	1	2.69E-02	6.62E-03	4.89E-04	3.29E-04	2.92E-04	6.14E-05	0.00E+00	2.48E-05	1.76E-05	6.56E-08	1.73E-06	75.5	7.24E-04	1.20E-03
SI4_W	0.32	173	0	1	2.75E-02	6.92E-03	5.00E-04	3.35E-04	2.97E-04	6.26E-05	0.00E+00	2.53E-05	1.79E-05	6.68E-08	1.76E-06	77.2	7.38E-04	1.22E-03
SI4_W	0.32	179	0	1	2.85E-02	7.36E-03	5.20E-04	3.47E-04	3.07E-04	6.49E-05	0.00E+00	2.62E-05	1.86E-05	6.91E-08	1.83E-06	80.3	7.65E-04	1.27E-03
SI4_W	0.32	194	0	1	3.09E-02	7.91E-03	5.63E-04	3.76E-04	3.33E-04	7.03E-05	0.00E+00	2.84E-05	2.01E-05	7.50E-08	1.98E-06	86.9	8.29E-04	1.37E-03
SI4_W	0.32	239	0	1	3.81E-02	9.74E-03	6.94E-04	4.65E-04	4.12E-04	8.68E-05	0.00E+00	3.51E-05	2.48E-05	9.26E-08	2.45E-06	107.2	1.02E-03	1.70E-03
SI4_W	0.32	258	0	1	4.09E-02	1.02E-02	7.43E-04	5.00E-04	4.43E-04	9.32E-05	0.00E+00	3.77E-05	2.67E-05	9.96E-08	2.63E-06	114.7	1.10E-03	1.83E-03
SI4_W	0.32	179	0	1	2.83E-02	6.85E-03	5.12E-04	3.47E-04	3.07E-04	6.46E-05	0.00E+00	2.61E-05	1.85E-05	6.91E-08	1.82E-06	79.0	7.62E-04	1.27E-03
SI4_W	0.32	118	0	1	1.85E-02	3.94E-03	3.30E-04	2.29E-04	2.03E-04	4.25E-05	0.00E+00	1.72E-05	1.22E-05	4.57E-08	1.20E-06	50.9	5.01E-04	8.37E-04
SI4_W	0.32	100	0	1	1.56E-02	2.98E-03	2.74E-04	1.94E-04	1.72E-04	3.58E-05	0.00E+00	1.45E-05	1.02E-05	3.87E-08	1.01E-06	42.3	4.22E-04	7.09E-04
SI4_W	0.32	85	0	1	1.31E-02	2.26E-03	2.29E-04	1.65E-04	1.46E-04	3.02E-05	0.00E+00	1.22E-05	8.66E-06	3.28E-08	8.53E-07	35.3	3.57E-04	6.01E-04
SI4_W	0.32	70	0	1	1.07E-02	1.66E-03	1.85E-04	1.35E-04	1.20E-04	2.48E-05	0.00E+00	1.00E-05	7.09E-06	2.69E-08	6.98E-07	28.6	2.92E-04	4.94E-04
SI4_W	0.32	52	0	1	7.89E-03	1.10E-03	1.35E-04	1.00E-04	8.86E-05	1.82E-05	0.00E+00	7.37E-06	5.22E-06	1.99E-08	5.14E-07	20.9	2.15E-04	3.65E-04
SI5_E	0.58	67	0	1	1.02E-02	1.26E-03	1.73E-04	1.30E-04	1.15E-04	2.37E-05	0.00E+00	9.56E-06	6.77E-06	2.59E-08	6.67E-07	26.8	2.79E-04	4.75E-04
SI5_E	0.58	45	0	1	6.78E-03	7.49E-04	1.14E-04	8.67E-05	7.68E-05	1.57E-05	0.00E+00	6.36E-06	4.50E-06	1.73E-08	4.44E-07	17.7	1.85E-04	3.16E-04
SI5_E	0.58	39	0	1	5.90E-03	5.84E-04	9.88E-05	7.58E-05	6.72E-05	1.37E-05	0.00E+00	5.55E-06	3.93E-06	1.51E-08	3.87E-07	15.3	1.62E-04	2.77E-04
SI5_E	0.58	28	0	1	4.21E-03	4.17E-04	7.01E-05	5.42E-05	4.80E-05	9.79E-06	0.00E+00	3.96E-06	2.80E-06	1.08E-08	2.76E-07	10.8	1.15E-04	1.98E-04
SI5_E	0.58	39	0	1	5.88E-03	5.84E-04	9.79E-05	7.58E-05	6.72E-05	1.37E-05	0.00E+00	5.54E-06	3.92E-06	1.51E-08	3.86E-07	15.1	1.62E-04	2.77E-04
SI5_E	0.58	95	0	1	1.43E-02	1.42E-03	2.38E-04	1.84E-04	1.63E-04	3.33E-05	0.00E+00	1.34E-05	9.53E-06	3.67E-08	9.38E-07	36.7	3.92E-04	6.72E-04
SI5_E	0.58	285	0	1	4.30E-02	4.25E-03	7.18E-04	5.53E-04	4.89E-04	9.99E-05	0.00E+00	4.04E-05	2.86E-05	1.10E-07	2.82E-06	110.8	1.18E-03	2.02E-03
SI5_E	0.58	435	0	1	6.63E-02	7.95E-03	1.12E-03	8.45E-04	7.48E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.68E-07	4.33E-06	173.7	1.81E-03	3.09E-03
SI5_E	0.58	352	0	1	5.42E-02	8.56E-03	9.39E-04	6.83E-04	6.05E-04	1.25E-04	0.00E+00	5.05E-05	3.58E-05	1.36E-07	3.53E-06	145.0	1.47E-03	2.49E-03
SI5_E	0.58	290	0	1	4.51E-02	8.21E-03	7.92E-04	5.63E-04	4.99E-04	1.04E-04	0.00E+00	4.19E-05	2.97E-05	1.12E-07	2.92E-06	122.2	1.22E-03	2.06E-03
SI5_E	0.58	262	0	1	4.10E-02	8.26E-03	7.28E-04	5.09E-04	4.51E-04	9.41E-05	0.00E+00	3.80E-05	2.69E-05	1.01E-07	2.65E-06	112.4	1.11E-03	1.86E-03
SI5_E	0.58	296	0	1	4.68E-02	1.11E-02	8.46E-04	5.74E-04	5.09E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.14E-07	3.01E-06	130.6	1.26E-03	2.10E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	313	0	1	4.96E-02	1.22E-02	9.01E-04	6.07E-04	5.37E-04	1.13E-04	0.00E+00	4.57E-05	3.24E-05	1.21E-07	3.19E-06	139.1	1.33E-03	2.21E-03
SI5_E	0.58	318	0	1	5.06E-02	1.27E-02	9.21E-04	6.18E-04	5.47E-04	1.15E-04	0.00E+00	4.66E-05	3.30E-05	1.23E-07	3.25E-06	142.2	1.36E-03	2.25E-03
SI5_E	0.58	329	0	1	5.25E-02	1.36E-02	9.58E-04	6.39E-04	5.66E-04	1.19E-04	0.00E+00	4.83E-05	3.42E-05	1.27E-07	3.37E-06	147.9	1.41E-03	2.33E-03
SI5_E	0.58	357	0	1	5.69E-02	1.46E-02	1.04E-03	6.93E-04	6.14E-04	1.30E-04	0.00E+00	5.23E-05	3.71E-05	1.38E-07	3.65E-06	160.1	1.53E-03	2.53E-03
SI5_E	0.58	441	0	1	7.02E-02	1.79E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.46E-05	4.58E-05	1.70E-07	4.51E-06	197.5	1.88E-03	3.12E-03
SI5_E	0.58	474	0	1	7.53E-02	1.88E-02	1.37E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.94E-05	4.92E-05	1.83E-07	4.84E-06	211.2	2.02E-03	3.36E-03
SI5_E	0.58	329	0	1	5.22E-02	1.26E-02	9.43E-04	6.39E-04	5.66E-04	1.19E-04	0.00E+00	4.81E-05	3.41E-05	1.27E-07	3.36E-06	145.6	1.40E-03	2.33E-03
SI5_E	0.58	218	0	1	3.41E-02	7.26E-03	6.08E-04	4.23E-04	3.74E-04	7.82E-05	0.00E+00	3.16E-05	2.24E-05	8.42E-08	2.21E-06	93.8	9.22E-04	1.54E-03
SI5_E	0.58	184	0	1	2.87E-02	5.49E-03	5.05E-04	3.58E-04	3.17E-04	6.59E-05	0.00E+00	2.66E-05	1.89E-05	7.12E-08	1.86E-06	78.0	7.77E-04	1.31E-03
SI5_E	0.58	156	0	1	2.42E-02	4.17E-03	4.22E-04	3.03E-04	2.69E-04	5.57E-05	0.00E+00	2.25E-05	1.59E-05	6.04E-08	1.57E-06	65.1	6.57E-04	1.11E-03
SI5_E	0.58	128	0	1	1.98E-02	3.07E-03	3.41E-04	2.49E-04	2.21E-04	4.56E-05	0.00E+00	1.84E-05	1.31E-05	4.96E-08	1.29E-06	52.7	5.38E-04	9.10E-04
SI5_E	0.58	95	0	1	1.45E-02	2.02E-03	2.49E-04	1.84E-04	1.63E-04	3.36E-05	0.00E+00	1.36E-05	9.62E-06	3.67E-08	9.48E-07	38.4	3.96E-04	6.72E-04
SI5_W	0.59	62	0	1	9.48E-03	1.17E-03	1.61E-04	1.21E-04	1.07E-04	2.20E-05	0.00E+00	8.88E-06	6.29E-06	2.40E-08	6.19E-07	24.9	2.59E-04	4.41E-04
SI5_W	0.59	41	0	1	6.29E-03	6.96E-04	1.06E-04	8.05E-05	7.13E-05	1.46E-05	0.00E+00	5.90E-06	4.18E-06	1.60E-08	4.12E-07	16.4	1.72E-04	2.94E-04
SI5_W	0.59	36	0	1	5.48E-03	5.42E-04	9.18E-05	7.04E-05	6.24E-05	1.27E-05	0.00E+00	5.15E-06	3.65E-06	1.40E-08	3.60E-07	14.2	1.50E-04	2.57E-04
SI5_W	0.59	26	0	1	3.91E-03	3.87E-04	6.51E-05	5.03E-05	4.46E-05	9.09E-06	0.00E+00	3.67E-06	2.60E-06	1.00E-08	2.56E-07	10.1	1.07E-04	1.84E-04
SI5_W	0.59	36	0	1	5.47E-03	5.42E-04	9.10E-05	7.04E-05	6.24E-05	1.27E-05	0.00E+00	5.14E-06	3.64E-06	1.40E-08	3.59E-07	14.0	1.50E-04	2.57E-04
SI5_W	0.59	88	0	1	1.33E-02	1.32E-03	2.21E-04	1.71E-04	1.52E-04	3.09E-05	0.00E+00	1.25E-05	8.85E-06	3.41E-08	8.71E-07	34.1	3.64E-04	6.25E-04
SI5_W	0.59	264	0	1	3.99E-02	3.95E-03	6.67E-04	5.13E-04	4.55E-04	9.28E-05	0.00E+00	3.75E-05	2.66E-05	1.02E-07	2.62E-06	102.9	1.09E-03	1.87E-03
SI5_W	0.59	404	0	1	6.16E-02	7.38E-03	1.04E-03	7.85E-04	6.95E-04	1.43E-04	0.00E+00	5.77E-05	4.09E-05	1.56E-07	4.02E-06	161.3	1.68E-03	2.87E-03
SI5_W	0.59	327	0	1	5.04E-02	7.95E-03	8.72E-04	6.34E-04	5.61E-04	1.16E-04	0.00E+00	4.69E-05	3.33E-05	1.26E-07	3.28E-06	134.7	1.37E-03	2.31E-03
SI5_W	0.59	270	0	1	4.19E-02	7.62E-03	7.35E-04	5.23E-04	4.63E-04	9.63E-05	0.00E+00	3.89E-05	2.76E-05	1.04E-07	2.72E-06	113.5	1.14E-03	1.91E-03
SI5_W	0.59	244	0	1	3.81E-02	7.67E-03	6.76E-04	4.73E-04	4.19E-04	8.74E-05	0.00E+00	3.53E-05	2.50E-05	9.42E-08	2.46E-06	104.4	1.03E-03	1.73E-03
SI5_W	0.59	275	0	1	4.35E-02	1.03E-02	7.86E-04	5.33E-04	4.72E-04	9.93E-05	0.00E+00	4.01E-05	2.84E-05	1.06E-07	2.80E-06	121.3	1.17E-03	1.95E-03
SI5_W	0.59	290	0	1	4.61E-02	1.13E-02	8.37E-04	5.64E-04	4.99E-04	1.05E-04	0.00E+00	4.25E-05	3.01E-05	1.12E-07	2.96E-06	129.2	1.24E-03	2.06E-03
SI5_W	0.59	295	0	1	4.70E-02	1.18E-02	8.55E-04	5.74E-04	5.08E-04	1.07E-04	0.00E+00	4.33E-05	3.07E-05	1.14E-07	3.02E-06	132.1	1.26E-03	2.09E-03
SI5_W	0.59	306	0	1	4.87E-02	1.26E-02	8.90E-04	5.94E-04	5.26E-04	1.11E-04	0.00E+00	4.48E-05	3.18E-05	1.18E-07	3.13E-06	137.4	1.31E-03	2.17E-03
SI5_W	0.59	332	0	1	5.28E-02	1.35E-02	9.63E-04	6.44E-04	5.70E-04	1.20E-04	0.00E+00	4.86E-05	3.44E-05	1.28E-07	3.39E-06	148.7	1.42E-03	2.35E-03
SI5_W	0.59	410	0	1	6.52E-02	1.67E-02	1.19E-03	7.95E-04	7.04E-04	1.48E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.19E-06	183.4	1.75E-03	2.90E-03
SI5_W	0.59	441	0	1	7.00E-02	1.74E-02	1.27E-03	8.55E-04	7.58E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.70E-07	4.50E-06	196.2	1.88E-03	3.12E-03
SI5_W	0.59	306	0	1	4.84E-02	1.17E-02	8.76E-04	5.94E-04	5.26E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.18E-07	3.12E-06	135.2	1.30E-03	2.17E-03
SI5_W	0.59	202	0	1	3.17E-02	6.75E-03	5.64E-04	3.92E-04	3.48E-04	7.26E-05	0.00E+00	2.94E-05	2.08E-05	7.82E-08	2.05E-06	87.2	8.56E-04	1.43E-03
SI5_W	0.59	171	0	1	2.66E-02	5.10E-03	4.69E-04	3.32E-04	2.94E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.61E-08	1.73E-06	72.5	7.22E-04	1.21E-03
SI5_W	0.59	145	0	1	2.25E-02	3.87E-03	3.92E-04	2.82E-04	2.50E-04	5.17E-05	0.00E+00	2.09E-05	1.48E-05	5.61E-08	1.46E-06	60.5	6.10E-04	1.03E-03
SI5_W	0.59	119	0	1	1.84E-02	2.85E-03	3.17E-04	2.31E-04	2.05E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.61E-08	1.19E-06	49.0	4.99E-04	8.45E-04
SI5_W	0.59	88	0	1	1.35E-02	1.88E-03	2.31E-04	1.71E-04	1.52E-04	3.12E-05	0.00E+00	1.26E-05	8.94E-06	3.41E-08	8.80E-07	35.7	3.68E-04	6.25E-04
SI6_E	0.43	46	0	1	6.94E-03	8.54E-04	1.18E-04	8.84E-05	7.83E-05	1.61E-05	0.00E+00	6.50E-06	4.61E-06	1.76E-08	4.54E-07	18.2	1.90E-04	3.23E-04
SI6_E	0.43	30	0	1	4.61E-03	5.09E-04	7.78E-05	5.90E-05	5.22E-05	1.07E-05	0.00E+00	4.32E-06	3.06E-06	1.17E-08	3.02E-07	12.0	1.26E-04	2.15E-04
SI6_E	0.43	27	0	1	4.02E-03	3.97E-04	6.72E-05	5.16E-05	4.57E-05	9.34E-06	0.00E+00	3.77E-06	2.67E-06	1.03E-08	2.63E-07	10.4	1.10E-04	1.88E-04
SI6_E	0.43	19	0	1	2.86E-03	2.84E-04	4.77E-05	3.69E-05	3.26E-05	6.66E-06	0.00E+00	2.69E-06	1.91E-06	7.34E-09	1.88E-07	7.4	7.85E-05	1.35E-04
SI6_E	0.43	27	0	1	4.00E-03	3.97E-04	6.66E-05	5.16E-05	4.57E-05	9.32E-06	0.00E+00	3.77E-06	2.67E-06	1.03E-08	2.63E-07	10.3	1.10E-04	1.88E-04
SI6_E	0.43	65	0	1	9.72E-03	9.64E-04	1.62E-04	1.25E-04	1.11E-04	2.26E-05	0.00E+00	9.15E-06	6.48E-06	2.50E-08	6.38E-07	25.0	2.67E-04	4.57E-04
SI6_E	0.43	194	0	1	2.92E-02	2.89E-03	4.88E-04	3.76E-04	3.33E-04	6.80E-05	0.00E+00	2.75E-05	1.95E-05	7.49E-08	1.92E-06	75.4	8.01E-04	1.37E-03
SI6_E	0.43	296	0	1	4.51E-02	5.41E-03	7.65E-04	5.75E-04	5.09E-04	1.05E-04	0.00E+00	4.22E-05	2.99E-05	1.14E-07	2.95E-06	118.1	1.23E-03	2.10E-03
SI6_E	0.43	239	0	1	3.69E-02	5.82E-03	6.39E-04	4.64E-04	4.11E-04	8.51E-05	0.00E+00	3.44E-05	2.44E-05	9.25E-08	2.40E-06	98.6	1.00E-03	1.70E-03
SI6_E	0.43	197	0	1	3.07E-02	5.58E-03	5.39E-04	3.83E-04	3.39E-04	7.06E-05	0.00E+00	2.85E-05	2.02E-05	7.63E-08	1.99E-06	83.2	8.32E-04	1.40E-03
SI6_E	0.43	178	0	1	2.79E-02	5.62E-03	4.95E-04	3.46E-04	3.07E-04	6.40E-05	0.00E+00	2.59E-05	1.83E-05	6.90E-08	1.81E-06	76.4	7.55E-04	1.26E-03
SI6_E	0.43	201	0	1	3.19E-02	7.55E-03	5.75E-04	3.91E-04	3.46E-04	7.27E-05	0.00E+00	2.94E-05	2.08E-05	7.78E-08	2.05E-06	88.8	8.57E-04	1.43E-03
SI6_E	0.43	213	0	1	3.38E-02	8.29E-03	6.13E-04	4.13E-04	3.66E-04	7.70E-05	0.00E+00	3.11E-05	2.20E-05	8.22E-08	2.17E-06	94.6	9.07E-04	1.51E-03
SI6_E	0.43	216	0	1	3.44E-02	8.67E-03	6.26E-04	4.20E-04	3.72E-04	7.84E-05	0.00E+00	3.17E-05	2.25E-05	8.37E-08	2.21E-06	96.7	9.25E-04	1.53E-03
SI6_E	0.43	224	0	1	3.57E-02	9.22E-03	6.52E-04	4.35E-04	3.85E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.66E-08	2.29E-06	100.6	9.58E-04	1.59E-03
SI6_E	0.43	243	0	1	3.87E-02	9.91E-03	7.05E-04	4.72E-04	4.18E-04	8.81E-05	0.00E+00	3.56E-05	2.52E-05	9.40E-08	2.48E-06	108.9	1.04E-03	1.72E-03
SI6_E	0.43	300	0	1	4.77E-02	1.22E-02	8.70E-04	5.82E-04	5.16E-04	1.09E-04	0.00E+00	4.39E-05	3.11E-05	1.16E-07	3.07E-06	134.3	1.28E-03	2.13E-03
SI6_E	0.43	323	0	1	5.13E-02	1.28E-02	9.30E-04	6.26E-04	5.55E-04	1.17E-04	0.00E+00	4.72E-05	3.35E-05	1.25E-07	3.29E-06	143.7	1.38E-03	2.29E-03
SI6_E	0.43	224	0	1	3.55E-02	8.59E-03	6.41E-04	4.35E-04	3.85E-04	8.10E-05	0.00E+00	3.27E-05	2.32E-05	8.66E-08	2.28E-06	99.0	9.54E-04	1.59E-03
SI6_E	0.43	148	0	1	2.32E-02	4.94E-03	4.13E-04	2.87E-04	2.55E-04	5.32E-05	0.00E+00	2.15E-05	1.52E-05	5.73E-08	1.50E-06	63.8	6.27E-04	1.05E-03
SI6_E	0.43	125	0	1	1.95E-02	3.74E-03	3.44E-04	2.43E-04	2.15E-04	4.48E-05	0.00E+00	1.81E-05	1.28E-05	4.84E-08	1.26E-06	53.1	5.28E-04	8.88E-04
SI6_E	0.43	106	0	1	1.65E-02	2.84E-03	2.87E-04	2.06E-04	1.83E-04	3.79E-05	0.00E+00	1.53E-05	1.08E-05	4.11E-08	1.07E-06	44.3	4.47E-04	7.53E-04
SI6_E	0.43	87	0	1	1.34E-02	2.08E-03	2.32E-04	1.70E-04	1.50E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.38E-08	8.75E-07	35.9	3.66E-04	6.19E-04
SI6_E	0.43	65	0	1	9.89E-03	1.37E-03	1.69E-04	1.25E-04	1.11E-04	2.29E-05	0.00E+00	9.24E-06	6.55E-06	2.50E-08	6.45E-07	26.1	2.70E-04	4.57E-04
SI6_W	0.43	44	0	1	6.77E-03	8.32E-04	1.15E-04	8.62E-05	7.63E-05	1.57E-05	0.00E+00	6.34E-06	4.49E-06	1.72E-08	4.42E-07	17.7	1.85E-04	3.15E-04
SI6_W	0.43	30	0	1	4.49E-03	4.97E-04	7.58E-05	5.75E-05	5.09E-05	1.04E-05	0.00E+00	4.21E-06	2.99E-06	1.14E-08	2.94E-07	11.7	1.23E-04	2.10E-04
SI6_W	0.43	26	0	1	3.91E-03	3.87E-04	6.55E-05	5.03E-05	4.45E-05	9.10E-06	0.00E+00	3.68E-06	2.61E-06	1.00E-08	2.57E-07	10.1	1.07E-04	1.84E-04
SI6_W	0.43	19	0	1	2.79E-03	2.76E-04	4.65E-05	3.59E-05	3.18E-05	6.49E-06	0.00E+00	2.62E-06	1.86E-06	7.15E-09	1.83E-07	7.2	7.65E-05	1.31E-04
SI6_W	0.43	26	0	1	3.90E-03	3.87E-04	6.49E-05	5.03E-05	4.45E-05	9.08E-06	0.00E+00	3.67E-06	2.60E-06	1.00E-08	2.56E-07	10.0	1.07E-04	1.84E-04
SI6_W	0.43	63	0	1	9.47E-03	9.40E-04	1.58E-04	1.22E-04	1.08E-04	2.21E-05	0.00E+00	8.91E-06	6.32E-06	2.43E-08	6.22E-07	24.3	2.60E-04	4.46E-04
SI6_W	0.43	189	0	1	2.85E-02	2.82E-03	4.76E-04	3.66E-04	3.24E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.30E-08	1.87E-06	73.5	7.81E-04	1.34E-03
SI6_W	0.43	289	0	1	4.40E-02	5.27E-03	7.46E-04	5.60E-04	4.96E-04	1.02E-04	0.00E+00	4.12E-05	2.92E-05	1.12E-07	2.87E-06	115.1	1.20E-03	2.05E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	233	0	1	3.59E-02	5.68E-03	6.23E-04	4.53E-04	4.01E-04	8.29E-05	0.00E+00	3.35E-05	2.37E-05	9.01E-08	2.34E-06	96.1	9.77E-04	1.65E-03
SI6_W	0.43	192	0	1	2.99E-02	5.44E-03	5.25E-04	3.73E-04	3.31E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.44E-08	1.94E-06	81.0	8.11E-04	1.36E-03
SI6_W	0.43	174	0	1	2.72E-02	5.48E-03	4.82E-04	3.38E-04	2.99E-04	6.24E-05	0.00E+00	2.52E-05	1.79E-05	6.72E-08	1.76E-06	74.5	7.35E-04	1.23E-03
SI6_W	0.43	196	0	1	3.10E-02	7.36E-03	5.61E-04	3.81E-04	3.37E-04	7.09E-05	0.00E+00	2.86E-05	2.03E-05	7.58E-08	2.00E-06	86.6	8.35E-04	1.39E-03
SI6_W	0.43	207	0	1	3.29E-02	8.08E-03	5.97E-04	4.02E-04	3.56E-04	7.50E-05	0.00E+00	3.03E-05	2.15E-05	8.01E-08	2.12E-06	92.2	8.84E-04	1.47E-03
SI6_W	0.43	211	0	1	3.35E-02	8.45E-03	6.11E-04	4.09E-04	3.63E-04	7.64E-05	0.00E+00	3.09E-05	2.19E-05	8.15E-08	2.16E-06	94.3	9.01E-04	1.49E-03
SI6_W	0.43	218	0	1	3.48E-02	8.99E-03	6.35E-04	4.24E-04	3.75E-04	7.92E-05	0.00E+00	3.20E-05	2.27E-05	8.44E-08	2.23E-06	98.0	9.34E-04	1.55E-03
SI6_W	0.43	237	0	1	3.77E-02	9.66E-03	6.87E-04	4.60E-04	4.07E-04	8.59E-05	0.00E+00	3.47E-05	2.46E-05	9.16E-08	2.42E-06	106.1	1.01E-03	1.68E-03
SI6_W	0.43	292	0	1	4.65E-02	1.19E-02	8.48E-04	5.67E-04	5.03E-04	1.06E-04	0.00E+00	4.28E-05	3.03E-05	1.13E-07	2.99E-06	130.9	1.25E-03	2.07E-03
SI6_W	0.43	315	0	1	4.99E-02	1.25E-02	9.07E-04	6.11E-04	5.41E-04	1.14E-04	0.00E+00	4.60E-05	3.26E-05	1.22E-07	3.21E-06	140.0	1.34E-03	2.23E-03
SI6_W	0.43	218	0	1	3.46E-02	8.37E-03	6.25E-04	4.24E-04	3.75E-04	7.89E-05	0.00E+00	3.19E-05	2.26E-05	8.44E-08	2.23E-06	96.5	9.30E-04	1.55E-03
SI6_W	0.43	144	0	1	2.26E-02	4.81E-03	4.03E-04	2.80E-04	2.48E-04	5.18E-05	0.00E+00	2.10E-05	1.48E-05	5.58E-08	1.46E-06	62.2	6.11E-04	1.02E-03
SI6_W	0.43	122	0	1	1.90E-02	3.64E-03	3.35E-04	2.37E-04	2.10E-04	4.37E-05	0.00E+00	1.77E-05	1.25E-05	4.72E-08	1.23E-06	51.7	5.15E-04	8.65E-04
SI6_W	0.43	104	0	1	1.60E-02	2.77E-03	2.80E-04	2.01E-04	1.78E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.01E-08	1.04E-06	43.2	4.35E-04	7.34E-04
SI6_W	0.43	85	0	1	1.31E-02	2.03E-03	2.26E-04	1.65E-04	1.46E-04	3.02E-05	0.00E+00	1.22E-05	8.66E-06	3.29E-08	8.53E-07	34.9	3.56E-04	6.03E-04
SI6_W	0.43	63	0	1	9.63E-03	1.34E-03	1.65E-04	1.22E-04	1.08E-04	2.23E-05	0.00E+00	9.00E-06	6.38E-06	2.43E-08	6.28E-07	25.5	2.63E-04	4.46E-04
SI7_E	0.47	48	0	1	7.29E-03	8.96E-04	1.24E-04	9.28E-05	8.22E-05	1.69E-05	0.00E+00	6.82E-06	4.83E-06	1.85E-08	4.76E-07	19.1	1.99E-04	3.39E-04
SI7_E	0.47	32	0	1	4.84E-03	5.35E-04	8.16E-05	6.19E-05	5.48E-05	1.12E-05	0.00E+00	4.54E-06	3.22E-06	1.23E-08	3.17E-07	12.6	1.32E-04	2.26E-04
SI7_E	0.47	28	0	1	4.21E-03	4.17E-04	7.05E-05	5.41E-05	4.80E-05	9.80E-06	0.00E+00	3.96E-06	2.81E-06	1.08E-08	2.76E-07	10.9	1.16E-04	1.98E-04
SI7_E	0.47	20	0	1	3.00E-03	2.98E-04	5.01E-05	3.87E-05	3.43E-05	6.99E-06	0.00E+00	2.82E-06	2.00E-06	7.70E-09	1.97E-07	7.7	8.24E-05	1.41E-04
SI7_E	0.47	28	0	1	4.20E-03	4.17E-04	6.99E-05	5.41E-05	4.80E-05	9.78E-06	0.00E+00	3.95E-06	2.80E-06	1.08E-08	2.76E-07	10.8	1.15E-04	1.98E-04
SI7_E	0.47	68	0	1	1.02E-02	1.01E-03	1.70E-04	1.31E-04	1.16E-04	2.38E-05	0.00E+00	9.60E-06	6.80E-06	2.62E-08	6.70E-07	26.2	2.80E-04	4.80E-04
SI7_E	0.47	203	0	1	3.07E-02	3.04E-03	5.12E-04	3.94E-04	3.49E-04	7.14E-05	0.00E+00	2.88E-05	2.04E-05	7.86E-08	2.01E-06	79.1	8.41E-04	1.44E-03
SI7_E	0.47	311	0	1	4.73E-02	5.67E-03	8.03E-04	6.03E-04	5.34E-04	1.10E-04	0.00E+00	4.43E-05	3.14E-05	1.20E-07	3.09E-06	124.0	1.29E-03	2.20E-03
SI7_E	0.47	251	0	1	3.87E-02	6.11E-03	6.70E-04	4.87E-04	4.32E-04	8.93E-05	0.00E+00	3.61E-05	2.56E-05	9.71E-08	2.52E-06	103.5	1.05E-03	1.78E-03
SI7_E	0.47	207	0	1	3.22E-02	5.86E-03	5.65E-04	4.02E-04	3.56E-04	7.40E-05	0.00E+00	2.99E-05	2.12E-05	8.01E-08	2.09E-06	87.3	8.73E-04	1.47E-03
SI7_E	0.47	187	0	1	2.93E-02	5.90E-03	5.20E-04	3.64E-04	3.22E-04	6.72E-05	0.00E+00	2.72E-05	1.92E-05	7.24E-08	1.89E-06	80.2	7.92E-04	1.33E-03
SI7_E	0.47	211	0	1	3.34E-02	7.92E-03	6.04E-04	4.10E-04	3.63E-04	7.63E-05	0.00E+00	3.08E-05	2.18E-05	8.17E-08	2.15E-06	93.2	9.00E-04	1.50E-03
SI7_E	0.47	223	0	1	3.54E-02	8.70E-03	6.43E-04	4.33E-04	3.84E-04	8.08E-05	0.00E+00	3.26E-05	2.31E-05	8.63E-08	2.28E-06	99.3	9.52E-04	1.58E-03
SI7_E	0.47	227	0	1	3.61E-02	9.10E-03	6.57E-04	4.41E-04	3.90E-04	8.23E-05	0.00E+00	3.33E-05	2.36E-05	8.78E-08	2.32E-06	101.5	9.70E-04	1.61E-03
SI7_E	0.47	235	0	1	3.75E-02	9.68E-03	6.84E-04	4.56E-04	4.04E-04	8.53E-05	0.00E+00	3.45E-05	2.44E-05	9.09E-08	2.41E-06	105.6	1.01E-03	1.67E-03
SI7_E	0.47	255	0	1	4.06E-02	1.04E-02	7.40E-04	4.95E-04	4.38E-04	9.25E-05	0.00E+00	3.74E-05	2.65E-05	9.86E-08	2.61E-06	114.3	1.09E-03	1.81E-03
SI7_E	0.47	315	0	1	5.01E-02	1.28E-02	9.13E-04	6.11E-04	5.41E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.22E-07	3.22E-06	141.0	1.35E-03	2.23E-03
SI7_E	0.47	339	0	1	5.38E-02	1.34E-02	9.76E-04	6.57E-04	5.82E-04	1.23E-04	0.00E+00	4.96E-05	3.51E-05	1.31E-07	3.46E-06	150.8	1.45E-03	2.40E-03
SI7_E	0.47	235	0	1	3.72E-02	9.01E-03	6.73E-04	4.56E-04	4.04E-04	8.50E-05	0.00E+00	3.43E-05	2.43E-05	9.09E-08	2.40E-06	103.9	1.00E-03	1.67E-03
SI7_E	0.47	155	0	1	2.44E-02	5.18E-03	4.34E-04	3.02E-04	2.67E-04	5.58E-05	0.00E+00	2.26E-05	1.60E-05	6.01E-08	1.57E-06	67.0	6.58E-04	1.10E-03
SI7_E	0.47	131	0	1	2.05E-02	3.92E-03	3.61E-04	2.55E-04	2.26E-04	4.71E-05	0.00E+00	1.90E-05	1.35E-05	5.08E-08	1.33E-06	55.7	5.55E-04	9.32E-04
SI7_E	0.47	112	0	1	1.73E-02	2.98E-03	3.01E-04	2.17E-04	1.92E-04	3.98E-05	0.00E+00	1.61E-05	1.14E-05	4.31E-08	1.12E-06	46.5	4.69E-04	7.91E-04
SI7_E	0.47	92	0	1	1.41E-02	2.19E-03	2.44E-04	1.78E-04	1.58E-04	3.26E-05	0.00E+00	1.32E-05	9.32E-06	3.54E-08	9.18E-07	37.6	3.84E-04	6.49E-04
SI7_E	0.47	68	0	1	1.04E-02	1.44E-03	1.78E-04	1.31E-04	1.16E-04	2.40E-05	0.00E+00	9.70E-06	6.87E-06	2.62E-08	6.77E-07	27.4	2.83E-04	4.80E-04
SI7_W	0.47	64	0	1	9.78E-03	1.20E-03	1.66E-04	1.25E-04	1.10E-04	2.27E-05	0.00E+00	9.15E-06	6.49E-06	2.48E-08	6.39E-07	25.6	2.67E-04	4.55E-04
SI7_W	0.47	43	0	1	6.49E-03	7.17E-04	1.09E-04	8.30E-05	7.35E-05	1.51E-05	0.00E+00	6.09E-06	4.31E-06	1.65E-08	4.25E-07	16.9	1.78E-04	3.03E-04
SI7_W	0.47	37	0	1	5.65E-03	5.59E-04	9.46E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.31E-06	3.76E-06	1.45E-08	3.71E-07	14.6	1.55E-04	2.65E-04
SI7_W	0.47	27	0	1	4.03E-03	3.99E-04	6.72E-05	5.19E-05	4.59E-05	9.38E-06	0.00E+00	3.79E-06	2.68E-06	1.03E-08	2.64E-07	10.4	1.11E-04	1.89E-04
SI7_W	0.47	37	0	1	5.64E-03	5.59E-04	9.38E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI7_W	0.47	91	0	1	1.37E-02	1.36E-03	2.28E-04	1.76E-04	1.56E-04	3.19E-05	0.00E+00	1.29E-05	9.12E-06	3.51E-08	8.99E-07	35.2	3.76E-04	6.44E-04
SI7_W	0.47	273	0	1	4.12E-02	4.07E-03	6.87E-04	5.29E-04	4.69E-04	9.57E-05	0.00E+00	3.87E-05	2.74E-05	1.05E-07	2.70E-06	106.1	1.13E-03	1.93E-03
SI7_W	0.47	417	0	1	6.35E-02	7.61E-03	1.08E-03	8.09E-04	7.17E-04	1.47E-04	0.00E+00	5.95E-05	4.21E-05	1.61E-07	4.15E-06	166.3	1.74E-03	2.95E-03
SI7_W	0.47	337	0	1	5.19E-02	8.20E-03	8.99E-04	6.54E-04	5.79E-04	1.20E-04	0.00E+00	4.84E-05	3.43E-05	1.30E-07	3.38E-06	138.9	1.41E-03	2.39E-03
SI7_W	0.47	278	0	1	4.32E-02	7.86E-03	7.58E-04	5.40E-04	4.78E-04	9.93E-05	0.00E+00	4.01E-05	2.84E-05	1.07E-07	2.80E-06	117.1	1.17E-03	1.97E-03
SI7_W	0.47	251	0	1	3.93E-02	7.91E-03	6.97E-04	4.88E-04	4.32E-04	9.01E-05	0.00E+00	3.64E-05	2.58E-05	9.71E-08	2.54E-06	107.6	1.06E-03	1.78E-03
SI7_W	0.47	283	0	1	4.49E-02	1.06E-02	8.10E-04	5.50E-04	4.87E-04	1.02E-04	0.00E+00	4.14E-05	2.93E-05	1.10E-07	2.89E-06	125.1	1.21E-03	2.01E-03
SI7_W	0.47	299	0	1	4.75E-02	1.17E-02	8.63E-04	5.81E-04	5.15E-04	1.08E-04	0.00E+00	4.38E-05	3.10E-05	1.16E-07	3.06E-06	133.2	1.28E-03	2.12E-03
SI7_W	0.47	305	0	1	4.85E-02	1.22E-02	8.82E-04	5.91E-04	5.24E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.18E-07	3.11E-06	136.2	1.30E-03	2.16E-03
SI7_W	0.47	315	0	1	5.03E-02	1.30E-02	9.17E-04	6.12E-04	5.42E-04	1.14E-04	0.00E+00	4.62E-05	3.28E-05	1.22E-07	3.23E-06	141.7	1.35E-03	2.23E-03
SI7_W	0.47	342	0	1	5.45E-02	1.40E-02	9.93E-04	6.64E-04	5.88E-04	1.24E-04	0.00E+00	5.01E-05	3.55E-05	1.32E-07	3.50E-06	153.4	1.46E-03	2.42E-03
SI7_W	0.47	422	0	1	6.72E-02	1.72E-02	1.22E-03	8.20E-04	7.26E-04	1.53E-04	0.00E+00	6.19E-05	4.38E-05	1.63E-07	4.32E-06	189.1	1.81E-03	2.99E-03
SI7_W	0.47	454	0	1	7.22E-02	1.80E-02	1.31E-03	8.82E-04	7.81E-04	1.65E-04	0.00E+00	6.65E-05	4.71E-05	1.76E-07	4.64E-06	202.3	1.94E-03	3.22E-03
SI7_W	0.47	315	0	1	5.00E-02	1.21E-02	9.03E-04	6.12E-04	5.42E-04	1.14E-04	0.00E+00	4.61E-05	3.26E-05	1.22E-07	3.21E-06	139.4	1.34E-03	2.23E-03
SI7_W	0.47	208	0	1	3.27E-02	6.96E-03	5.82E-04	4.05E-04	3.58E-04	7.49E-05	0.00E+00	3.03E-05	2.14E-05	8.06E-08	2.11E-06	89.9	8.83E-04	1.48E-03
SI7_W	0.47	176	0	1	2.75E-02	5.26E-03	4.84E-04	3.42E-04	3.03E-04	6.31E-05	0.00E+00	2.55E-05	1.81E-05	6.82E-08	1.78E-06	74.7	7.44E-04	1.25E-03
SI7_W	0.47	150	0	1	2.32E-02	4.00E-03	4.04E-04	2.91E-04	2.57E-04	5.34E-05	0.00E+00	2.16E-05	1.53E-05	5.79E-08	1.50E-06	62.4	6.29E-04	1.06E-03
SI7_W	0.47	123	0	1	1.89E-02	2.94E-03	3.27E-04	2.39E-04	2.11E-04	4.37E-05	0.00E+00	1.77E-05	1.25E-05	4.75E-08	1.23E-06	50.5	5.15E-04	8.71E-04
SI7_W	0.47	91	0	1	1.39E-02	1.93E-03	2.38E-04	1.76E-04	1.56E-04	3.22E-05	0.00E+00	1.30E-05	9.22E-06	3.51E-08	9.08E-07	36.8	3.79E-04	6.44E-04
SI8_E	0.55	76	0	1	1.15E-02	1.42E-03	1.96E-04	1.47E-04	1.30E-04	2.67E-05	0.00E+00	1.08E-05	7.64E-06	2.92E-08	7.53E-07	30.2	3.15E-04	5.36E-04
SI8_E	0.55	50	0	1	7.65E-03	8.45E-04	1.29E-04	9.78E-05	8.66E-05	1.78E-05	0.00E+00	7.17E-06	5.08E-06	1.95E-08	5.01E-07	19.9	2.09E-04	3.57E-04
SI8_E	0.55	44	0	1	6.66E-03	6.59E-04	1.12E-04	8.56E-05	7.58E-05	1.55E-05	0.00E+00	6.26E-06	4.44E-06	1.70E-08	4.37E-07	17.2	1.83E-04	3.13E-04
SI8_E	0.55	32	0	1	4.75E-03	4.71E-04	7.91E-05	6.12E-05	5.42E-05	1.11E-05	0.00E+00	4.47E-06	3.16E-06	1.22E-08	3.12E-07	12.2	1.30E-04	2.23E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	44	0	1	6.64E-03	6.59E-04	1.11E-04	8.56E-05	7.58E-05	1.55E-05	0.00E+00	6.25E-06	4.43E-06	1.70E-08	4.36E-07	17.1	1.82E-04	3.13E-04
SI8_E	0.55	107	0	1	1.61E-02	1.60E-03	2.68E-04	2.08E-04	1.84E-04	3.76E-05	0.00E+00	1.52E-05	1.08E-05	4.14E-08	1.06E-06	41.5	4.43E-04	7.59E-04
SI8_E	0.55	321	0	1	4.85E-02	4.80E-03	8.10E-04	6.24E-04	5.52E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.24E-07	3.18E-06	125.1	1.33E-03	2.28E-03
SI8_E	0.55	491	0	1	7.48E-02	8.97E-03	1.27E-03	9.54E-04	8.45E-04	1.73E-04	0.00E+00	7.01E-05	4.97E-05	1.90E-07	4.89E-06	196.0	2.04E-03	3.48E-03
SI8_E	0.55	397	0	1	6.12E-02	9.67E-03	1.06E-03	7.71E-04	6.82E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.53E-07	3.98E-06	163.7	1.66E-03	2.81E-03
SI8_E	0.55	328	0	1	5.09E-02	9.26E-03	8.94E-04	6.36E-04	5.63E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.27E-07	3.30E-06	138.0	1.38E-03	2.32E-03
SI8_E	0.55	296	0	1	4.63E-02	9.33E-03	8.22E-04	5.75E-04	5.09E-04	1.06E-04	0.00E+00	4.29E-05	3.04E-05	1.14E-07	3.00E-06	126.9	1.25E-03	2.10E-03
SI8_E	0.55	334	0	1	5.29E-02	1.25E-02	9.55E-04	6.48E-04	5.74E-04	1.21E-04	0.00E+00	4.88E-05	3.45E-05	1.29E-07	3.40E-06	147.4	1.42E-03	2.37E-03
SI8_E	0.55	353	0	1	5.60E-02	1.38E-02	1.02E-03	6.85E-04	6.07E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.0	1.51E-03	2.50E-03
SI8_E	0.55	359	0	1	5.71E-02	1.44E-02	1.04E-03	6.97E-04	6.17E-04	1.30E-04	0.00E+00	5.26E-05	3.73E-05	1.39E-07	3.67E-06	160.5	1.53E-03	2.54E-03
SI8_E	0.55	372	0	1	5.92E-02	1.53E-02	1.08E-03	7.22E-04	6.39E-04	1.35E-04	0.00E+00	5.45E-05	3.86E-05	1.44E-07	3.80E-06	166.9	1.59E-03	2.63E-03
SI8_E	0.55	403	0	1	6.42E-02	1.64E-02	1.17E-03	7.83E-04	6.93E-04	1.46E-04	0.00E+00	5.91E-05	4.19E-05	1.56E-07	4.12E-06	180.7	1.72E-03	2.86E-03
SI8_E	0.55	498	0	1	7.92E-02	2.03E-02	1.44E-03	9.66E-04	8.56E-04	1.80E-04	0.00E+00	7.29E-05	5.17E-05	1.92E-07	5.09E-06	222.9	2.13E-03	3.53E-03
SI8_E	0.55	536	0	1	8.50E-02	2.12E-02	1.54E-03	1.04E-03	9.21E-04	1.94E-04	0.00E+00	7.83E-05	5.55E-05	2.07E-07	5.47E-06	238.4	2.29E-03	3.79E-03
SI8_E	0.55	372	0	1	5.89E-02	1.42E-02	1.06E-03	7.22E-04	6.39E-04	1.34E-04	0.00E+00	5.43E-05	3.85E-05	1.44E-07	3.79E-06	164.3	1.58E-03	2.63E-03
SI8_E	0.55	246	0	1	3.85E-02	8.20E-03	6.86E-04	4.77E-04	4.22E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.50E-08	2.49E-06	105.9	1.04E-03	1.74E-03
SI8_E	0.55	208	0	1	3.24E-02	6.20E-03	5.70E-04	4.04E-04	3.57E-04	7.44E-05	0.00E+00	3.01E-05	2.13E-05	8.04E-08	2.10E-06	88.1	8.77E-04	1.47E-03
SI8_E	0.55	176	0	1	2.73E-02	4.71E-03	4.76E-04	3.42E-04	3.03E-04	6.29E-05	0.00E+00	2.54E-05	1.80E-05	6.82E-08	1.77E-06	73.5	7.41E-04	1.25E-03
SI8_E	0.55	145	0	1	2.23E-02	3.46E-03	3.85E-04	2.81E-04	2.49E-04	5.15E-05	0.00E+00	2.08E-05	1.47E-05	5.60E-08	1.45E-06	59.5	6.07E-04	1.03E-03
SI8_E	0.55	107	0	1	1.64E-02	2.28E-03	2.81E-04	2.08E-04	1.84E-04	3.79E-05	0.00E+00	1.53E-05	1.09E-05	4.14E-08	1.07E-06	43.4	4.47E-04	7.59E-04
SI8_W	0.48	59	0	1	8.97E-03	1.10E-03	1.52E-04	1.14E-04	1.01E-04	2.08E-05	0.00E+00	8.40E-06	5.95E-06	2.27E-08	5.86E-07	23.5	2.45E-04	4.17E-04
SI8_W	0.48	39	0	1	5.95E-03	6.58E-04	1.00E-04	7.62E-05	6.74E-05	1.38E-05	0.00E+00	5.58E-06	3.96E-06	1.52E-08	3.90E-07	15.5	1.63E-04	2.78E-04
SI8_W	0.48	34	0	1	5.19E-03	5.13E-04	8.68E-05	6.66E-05	5.90E-05	1.21E-05	0.00E+00	4.87E-06	3.45E-06	1.33E-08	3.40E-07	13.4	1.42E-04	2.43E-04
SI8_W	0.48	25	0	1	3.70E-03	3.66E-04	6.16E-05	4.76E-05	4.22E-05	8.60E-06	0.00E+00	3.48E-06	2.46E-06	9.48E-09	2.43E-07	9.5	1.01E-04	1.74E-04
SI8_W	0.48	34	0	1	5.17E-03	5.13E-04	8.60E-05	6.66E-05	5.90E-05	1.20E-05	0.00E+00	4.86E-06	3.45E-06	1.33E-08	3.39E-07	13.3	1.42E-04	2.43E-04
SI8_W	0.48	83	0	1	1.26E-02	1.25E-03	2.09E-04	1.62E-04	1.43E-04	2.92E-05	0.00E+00	1.18E-05	8.37E-06	3.22E-08	8.24E-07	32.3	3.45E-04	5.91E-04
SI8_W	0.48	250	0	1	3.77E-02	3.74E-03	6.31E-04	4.85E-04	4.30E-04	8.78E-05	0.00E+00	3.55E-05	2.51E-05	9.67E-08	2.48E-06	97.4	1.04E-03	1.77E-03
SI8_W	0.48	383	0	1	5.83E-02	6.98E-03	9.88E-04	7.43E-04	6.58E-04	1.35E-04	0.00E+00	5.46E-05	3.87E-05	1.48E-07	3.81E-06	152.6	1.59E-03	2.71E-03
SI8_W	0.48	309	0	1	4.76E-02	7.52E-03	8.25E-04	6.00E-04	5.31E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	127.4	1.30E-03	2.19E-03
SI8_W	0.48	255	0	1	3.96E-02	7.21E-03	6.96E-04	4.95E-04	4.38E-04	9.11E-05	0.00E+00	3.68E-05	2.61E-05	9.86E-08	2.57E-06	107.4	1.07E-03	1.81E-03
SI8_W	0.48	230	0	1	3.61E-02	7.26E-03	6.39E-04	4.47E-04	3.96E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	8.91E-08	2.33E-06	98.7	9.75E-04	1.63E-03
SI8_W	0.48	260	0	1	4.11E-02	9.75E-03	7.43E-04	5.05E-04	4.47E-04	9.39E-05	0.00E+00	3.79E-05	2.69E-05	1.00E-07	2.65E-06	114.8	1.11E-03	1.84E-03
SI8_W	0.48	275	0	1	4.36E-02	1.07E-02	7.91E-04	5.33E-04	4.72E-04	9.94E-05	0.00E+00	4.02E-05	2.85E-05	1.06E-07	2.80E-06	122.2	1.17E-03	1.95E-03
SI8_W	0.48	280	0	1	4.45E-02	1.12E-02	8.09E-04	5.43E-04	4.81E-04	1.01E-04	0.00E+00	4.09E-05	2.90E-05	1.08E-07	2.86E-06	124.9	1.19E-03	1.98E-03
SI8_W	0.48	289	0	1	4.61E-02	1.19E-02	8.42E-04	5.62E-04	4.97E-04	1.05E-04	0.00E+00	4.24E-05	3.01E-05	1.12E-07	2.96E-06	129.9	1.24E-03	2.05E-03
SI8_W	0.48	314	0	1	5.00E-02	1.28E-02	9.11E-04	6.09E-04	5.40E-04	1.14E-04	0.00E+00	4.60E-05	3.26E-05	1.21E-07	3.21E-06	140.7	1.34E-03	2.22E-03
SI8_W	0.48	387	0	1	6.17E-02	1.58E-02	1.12E-03	7.52E-04	6.66E-04	1.40E-04	0.00E+00	5.68E-05	4.02E-05	1.50E-07	3.96E-06	173.5	1.66E-03	2.75E-03
SI8_W	0.48	417	0	1	6.62E-02	1.65E-02	1.20E-03	8.09E-04	7.17E-04	1.51E-04	0.00E+00	6.10E-05	4.32E-05	1.61E-07	4.26E-06	185.6	1.78E-03	2.95E-03
SI8_W	0.48	289	0	1	4.58E-02	1.11E-02	8.28E-04	5.62E-04	4.97E-04	1.05E-04	0.00E+00	4.23E-05	2.99E-05	1.12E-07	2.95E-06	127.9	1.23E-03	2.05E-03
SI8_W	0.48	191	0	1	3.00E-02	6.38E-03	5.34E-04	3.71E-04	3.29E-04	6.87E-05	0.00E+00	2.78E-05	1.97E-05	7.39E-08	1.94E-06	82.4	8.10E-04	1.36E-03
SI8_W	0.48	162	0	1	2.52E-02	4.83E-03	4.44E-04	3.14E-04	2.78E-04	5.79E-05	0.00E+00	2.34E-05	1.66E-05	6.26E-08	1.63E-06	68.5	6.83E-04	1.15E-03
SI8_W	0.48	137	0	1	2.13E-02	3.67E-03	3.70E-04	2.67E-04	2.36E-04	4.89E-05	0.00E+00	1.98E-05	1.40E-05	5.31E-08	1.38E-06	57.2	5.77E-04	9.73E-04
SI8_W	0.48	113	0	1	1.74E-02	2.69E-03	3.00E-04	2.19E-04	1.94E-04	4.01E-05	0.00E+00	1.62E-05	1.15E-05	4.36E-08	1.13E-06	46.3	4.72E-04	7.99E-04
SI8_W	0.48	83	0	1	1.28E-02	1.77E-03	2.19E-04	1.62E-04	1.43E-04	2.95E-05	0.00E+00	1.19E-05	8.45E-06	3.22E-08	8.33E-07	33.8	3.48E-04	5.91E-04
SI9_E	0.75	91	0	1	1.39E-02	1.71E-03	2.36E-04	1.77E-04	1.57E-04	3.22E-05	0.00E+00	1.30E-05	9.23E-06	3.53E-08	9.09E-07	36.5	3.80E-04	6.47E-04
SI9_E	0.75	61	0	1	9.24E-03	1.02E-03	1.56E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.67E-06	6.14E-06	2.35E-08	6.05E-07	24.1	2.53E-04	4.31E-04
SI9_E	0.75	53	0	1	8.05E-03	7.96E-04	1.35E-04	1.03E-04	9.16E-05	1.87E-05	0.00E+00	7.56E-06	5.36E-06	2.06E-08	5.28E-07	20.8	2.21E-04	3.77E-04
SI9_E	0.75	38	0	1	5.74E-03	5.68E-04	9.56E-05	7.39E-05	6.54E-05	1.33E-05	0.00E+00	5.39E-06	3.82E-06	1.47E-08	3.76E-07	14.8	1.57E-04	2.70E-04
SI9_E	0.75	53	0	1	8.02E-03	7.96E-04	1.34E-04	1.03E-04	9.16E-05	1.87E-05	0.00E+00	7.55E-06	5.35E-06	2.06E-08	5.27E-07	20.6	2.20E-04	3.77E-04
SI9_E	0.75	129	0	1	1.95E-02	1.93E-03	3.24E-04	2.51E-04	2.22E-04	4.54E-05	0.00E+00	1.83E-05	1.30E-05	5.00E-08	1.28E-06	50.1	5.35E-04	9.17E-04
SI9_E	0.75	388	0	1	5.86E-02	5.80E-03	9.79E-04	7.53E-04	6.67E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.50E-07	3.84E-06	151.1	1.61E-03	2.75E-03
SI9_E	0.75	594	0	1	9.04E-02	1.08E-02	1.53E-03	1.15E-03	1.02E-03	2.10E-04	0.00E+00	8.47E-05	6.00E-05	2.29E-07	5.91E-06	236.8	2.47E-03	4.21E-03
SI9_E	0.75	479	0	1	7.39E-02	1.17E-02	1.28E-03	9.31E-04	8.24E-04	1.70E-04	0.00E+00	6.89E-05	4.88E-05	1.85E-07	4.81E-06	197.7	2.01E-03	3.40E-03
SI9_E	0.75	396	0	1	6.15E-02	1.12E-02	1.08E-03	7.68E-04	6.80E-04	1.41E-04	0.00E+00	5.71E-05	4.05E-05	1.53E-07	3.99E-06	166.7	1.67E-03	2.80E-03
SI9_E	0.75	358	0	1	5.60E-02	1.13E-02	9.92E-04	6.94E-04	6.15E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.62E-06	153.2	1.51E-03	2.53E-03
SI9_E	0.75	403	0	1	6.38E-02	1.51E-02	1.15E-03	7.83E-04	6.93E-04	1.46E-04	0.00E+00	5.89E-05	4.17E-05	1.56E-07	4.11E-06	178.1	1.72E-03	2.86E-03
SI9_E	0.75	426	0	1	6.77E-02	1.66E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.65E-07	4.35E-06	189.6	1.82E-03	3.02E-03
SI9_E	0.75	434	0	1	6.90E-02	1.74E-02	1.26E-03	8.42E-04	7.46E-04	1.57E-04	0.00E+00	6.35E-05	4.50E-05	1.68E-07	4.43E-06	193.9	1.85E-03	3.07E-03
SI9_E	0.75	449	0	1	7.16E-02	1.85E-02	1.31E-03	8.72E-04	7.72E-04	1.63E-04	0.00E+00	6.58E-05	4.66E-05	1.74E-07	4.59E-06	201.6	1.92E-03	3.18E-03
SI9_E	0.75	487	0	1	7.76E-02	1.99E-02	1.41E-03	9.45E-04	8.37E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.88E-07	4.98E-06	218.3	2.08E-03	3.45E-03
SI9_E	0.75	601	0	1	9.57E-02	2.45E-02	1.74E-03	1.17E-03	1.03E-03	2.18E-04	0.00E+00	8.81E-05	6.24E-05	2.32E-07	6.15E-06	269.2	2.57E-03	4.26E-03
SI9_E	0.75	647	0	1	1.03E-01	2.56E-02	1.86E-03	1.26E-03	1.11E-03	2.34E-04	0.00E+00	9.46E-05	6.70E-05	2.50E-07	6.60E-06	287.9	2.76E-03	4.58E-03
SI9_E	0.75	449	0	1	7.11E-02	1.72E-02	1.29E-03	8.72E-04	7.72E-04	1.62E-04	0.00E+00	6.56E-05	4.65E-05	1.74E-07	4.58E-06	198.5	1.91E-03	3.18E-03
SI9_E	0.75	297	0	1	4.65E-02	9.90E-03	8.29E-04	5.76E-04	5.10E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.15E-07	3.01E-06	127.9	1.26E-03	2.10E-03
SI9_E	0.75	251	0	1	3.91E-02	7.49E-03	6.89E-04	4.87E-04	4.32E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.71E-08	2.53E-06	106.4	1.06E-03	1.78E-03
SI9_E	0.75	213	0	1	3.30E-02	5.69E-03	5.75E-04	4.14E-04	3.66E-04	7.59E-05	0.00E+00	3.07E-05	2.17E-05	8.24E-08	2.14E-06	88.8	8.95E-04	1.51E-03
SI9_E	0.75	175	0	1	2.69E-02	4.18E-03	4.65E-04	3.40E-04	3.01E-04	6.22E-05	0.00E+00	2.51E-05	1.78E-05	6.77E-08	1.75E-06	71.9	7.33E-04	1.24E-03
SI9_E	0.75	129	0	1	1.98E-02	2.75E-03	3.39E-04	2.51E-04	2.22E-04	4.58E-05	0.00E+00	1.85E-05	1.31E-05	5.00E-08	1.29E-06	52.4	5.40E-04	9.17E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI9_W	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI9_W	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI9_W	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI9_W	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI9_W	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI9_W	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI9_W	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI9_W	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI9_W	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI9_W	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI9_W	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI9_W	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI9_W	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI9_W	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI9_W	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03
SI9_W	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI9_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI9_W	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI9_W	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03
SI9_W	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI9_W	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI9_W	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI9_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI10_E	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI10_E	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI10_E	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI10_E	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI10_E	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI10_E	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI10_E	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI10_E	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI10_E	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI10_E	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI10_E	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI10_E	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI10_E	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI10_E	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI10_E	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI10_E	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03
SI10_E	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI10_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI10_E	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI10_E	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03
SI10_E	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI10_E	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI10_E	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI10_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI10_W	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI10_W	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI10_W	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI10_W	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI10_W	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI10_W	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI10_W	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI10_W	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI10_W	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI10_W	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI10_W	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI10_W	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI10_W	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI10_W	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI10_W	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI10_W	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03
SI10_W	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI10_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI10_W	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI10_W	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI10_W	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI10_W	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI10_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI11_E	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI11_E	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI11_E	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI11_E	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI11_E	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI11_E	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI11_E	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI11_E	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI11_E	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI11_E	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI11_E	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI11_E	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI11_E	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI11_E	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI11_E	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI11_E	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03
SI11_E	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI11_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI11_E	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI11_E	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03
SI11_E	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI11_E	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI11_E	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI11_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI11_W	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI11_W	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI11_W	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI11_W	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI11_W	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI11_W	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI11_W	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI11_W	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI11_W	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI11_W	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI11_W	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI11_W	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI11_W	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI11_W	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI11_W	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI11_W	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03
SI11_W	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI11_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI11_W	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI11_W	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03
SI11_W	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI11_W	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI11_W	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI11_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI12_E	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI12_E	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.6	2.48E-04	4.24E-04
SI12_E	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI12_E	0.75	37	0	1	5.64E-03	5.58E-04	9.39E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI12_E	0.75	52	0	1	7.88E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI12_E	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.91E-08	1.26E-06	49.2	5.25E-04	9.01E-04
SI12_E	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI12_E	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.89E-05	2.25E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI12_E	0.75	471	0	1	7.26E-02	1.15E-02	1.26E-03	9.14E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.72E-06	194.3	1.97E-03	3.34E-03
SI12_E	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.68E-04	1.39E-04	0.00E+00	5.61E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI12_E	0.75	351	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI12_E	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI12_E	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.27E-06	186.3	1.79E-03	2.97E-03
SI12_E	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.5	1.82E-03	3.02E-03
SI12_E	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.1	1.89E-03	3.13E-03
SI12_E	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.5	2.05E-03	3.39E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	591	0	1	9.40E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.52E-03	4.19E-03
SI12_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	282.9	2.71E-03	4.50E-03
SI12_E	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.56E-04	7.58E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.71E-07	4.50E-06	195.0	1.88E-03	3.13E-03
SI12_E	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	125.7	1.24E-03	2.07E-03
SI12_E	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI12_E	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.06E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.09E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI12_E	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI12_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.91E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI12_W	0.75	79	0	1	1.21E-02	1.49E-03	2.06E-04	1.54E-04	1.37E-04	2.80E-05	0.00E+00	1.13E-05	8.03E-06	3.07E-08	7.91E-07	31.7	3.31E-04	5.63E-04
SI12_W	0.75	53	0	1	8.04E-03	8.88E-04	1.36E-04	1.03E-04	9.10E-05	1.87E-05	0.00E+00	7.54E-06	5.34E-06	2.05E-08	5.26E-07	20.9	2.20E-04	3.75E-04
SI12_W	0.75	46	0	1	7.00E-03	6.92E-04	1.17E-04	8.99E-05	7.97E-05	1.63E-05	0.00E+00	6.58E-06	4.66E-06	1.79E-08	4.59E-07	18.1	1.92E-04	3.28E-04
SI12_W	0.75	33	0	1	4.99E-03	4.94E-04	8.32E-05	6.42E-05	5.69E-05	1.16E-05	0.00E+00	4.69E-06	3.32E-06	1.28E-08	3.27E-07	12.8	1.37E-04	2.35E-04
SI12_W	0.75	46	0	1	6.98E-03	6.92E-04	1.16E-04	8.99E-05	7.97E-05	1.62E-05	0.00E+00	6.57E-06	4.65E-06	1.79E-08	4.58E-07	17.9	1.92E-04	3.28E-04
SI12_W	0.75	113	0	1	1.69E-02	1.68E-03	2.82E-04	2.18E-04	1.93E-04	3.95E-05	0.00E+00	1.59E-05	1.13E-05	4.35E-08	1.11E-06	43.6	4.65E-04	7.97E-04
SI12_W	0.75	338	0	1	5.10E-02	5.04E-03	8.51E-04	6.55E-04	5.80E-04	1.19E-04	0.00E+00	4.79E-05	3.39E-05	1.31E-07	3.34E-06	131.4	1.40E-03	2.39E-03
SI12_W	0.75	516	0	1	7.86E-02	9.42E-03	1.33E-03	1.00E-03	8.88E-04	1.82E-04	0.00E+00	7.36E-05	5.22E-05	2.00E-07	5.14E-06	206.0	2.15E-03	3.66E-03
SI12_W	0.75	417	0	1	6.43E-02	1.02E-02	1.11E-03	8.09E-04	7.17E-04	1.48E-04	0.00E+00	5.99E-05	4.25E-05	1.61E-07	4.18E-06	172.0	1.75E-03	2.96E-03
SI12_W	0.75	344	0	1	5.35E-02	9.73E-03	9.39E-04	6.68E-04	5.92E-04	1.23E-04	0.00E+00	4.97E-05	3.52E-05	1.33E-07	3.47E-06	145.0	1.45E-03	2.44E-03
SI12_W	0.75	311	0	1	4.87E-02	9.80E-03	8.63E-04	6.04E-04	5.35E-04	1.12E-04	0.00E+00	4.51E-05	3.20E-05	1.20E-07	3.15E-06	133.3	1.32E-03	2.20E-03
SI12_W	0.75	351	0	1	5.55E-02	1.32E-02	1.00E-03	6.81E-04	6.03E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	154.9	1.49E-03	2.49E-03
SI12_W	0.75	371	0	1	5.89E-02	1.45E-02	1.07E-03	7.20E-04	6.37E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.43E-07	3.78E-06	164.9	1.58E-03	2.63E-03
SI12_W	0.75	377	0	1	6.00E-02	1.51E-02	1.09E-03	7.32E-04	6.49E-04	1.37E-04	0.00E+00	5.53E-05	3.91E-05	1.46E-07	3.86E-06	168.6	1.61E-03	2.67E-03
SI12_W	0.75	391	0	1	6.22E-02	1.61E-02	1.14E-03	7.58E-04	6.71E-04	1.42E-04	0.00E+00	5.73E-05	4.06E-05	1.51E-07	4.00E-06	175.4	1.67E-03	2.77E-03
SI12_W	0.75	424	0	1	6.75E-02	1.73E-02	1.23E-03	8.22E-04	7.28E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.64E-07	4.33E-06	189.9	1.81E-03	3.00E-03
SI12_W	0.75	523	0	1	8.32E-02	2.13E-02	1.52E-03	1.02E-03	8.99E-04	1.90E-04	0.00E+00	7.66E-05	5.43E-05	2.02E-07	5.35E-06	234.2	2.24E-03	3.71E-03
SI12_W	0.75	563	0	1	8.94E-02	2.23E-02	1.62E-03	1.09E-03	9.67E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.18E-07	5.74E-06	250.5	2.40E-03	3.99E-03
SI12_W	0.75	391	0	1	6.19E-02	1.50E-02	1.12E-03	7.58E-04	6.71E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.51E-07	3.98E-06	172.6	1.66E-03	2.77E-03
SI12_W	0.75	258	0	1	4.05E-02	8.61E-03	7.21E-04	5.01E-04	4.44E-04	9.28E-05	0.00E+00	3.75E-05	2.66E-05	9.98E-08	2.62E-06	111.3	1.09E-03	1.83E-03
SI12_W	0.75	218	0	1	3.40E-02	6.51E-03	5.99E-04	4.24E-04	3.76E-04	7.82E-05	0.00E+00	3.16E-05	2.24E-05	8.45E-08	2.20E-06	92.5	9.21E-04	1.55E-03
SI12_W	0.75	185	0	1	2.87E-02	4.95E-03	5.00E-04	3.60E-04	3.19E-04	6.61E-05	0.00E+00	2.67E-05	1.89E-05	7.17E-08	1.86E-06	77.2	7.79E-04	1.31E-03
SI12_W	0.75	152	0	1	2.34E-02	3.63E-03	4.05E-04	2.96E-04	2.62E-04	5.41E-05	0.00E+00	2.19E-05	1.55E-05	5.89E-08	1.53E-06	62.5	6.38E-04	1.08E-03
SI12_W	0.75	113	0	1	1.72E-02	2.40E-03	2.95E-04	2.18E-04	1.93E-04	3.99E-05	0.00E+00	1.61E-05	1.14E-05	4.35E-08	1.12E-06	45.6	4.70E-04	7.97E-04
SI13_E	0.75	94	0	1	1.43E-02	1.75E-03	2.42E-04	1.82E-04	1.61E-04	3.30E-05	0.00E+00	1.33E-05	9.46E-06	3.62E-08	9.31E-07	37.4	3.89E-04	6.63E-04
SI13_E	0.75	62	0	1	9.46E-03	1.05E-03	1.60E-04	1.21E-04	1.07E-04	2.20E-05	0.00E+00	8.88E-06	6.29E-06	2.41E-08	6.19E-07	24.6	2.59E-04	4.42E-04
SI13_E	0.75	55	0	1	8.24E-03	8.15E-04	1.38E-04	1.06E-04	9.38E-05	1.92E-05	0.00E+00	7.75E-06	5.49E-06	2.11E-08	5.41E-07	21.3	2.26E-04	3.87E-04
SI13_E	0.75	39	0	1	5.87E-03	5.82E-04	9.79E-05	7.56E-05	6.70E-05	1.37E-05	0.00E+00	5.52E-06	3.91E-06	1.51E-08	3.86E-07	15.1	1.61E-04	2.76E-04
SI13_E	0.75	55	0	1	8.22E-03	8.15E-04	1.37E-04	1.06E-04	9.38E-05	1.91E-05	0.00E+00	7.73E-06	5.48E-06	2.11E-08	5.39E-07	21.1	2.26E-04	3.87E-04
SI13_E	0.75	132	0	1	2.00E-02	1.98E-03	3.32E-04	2.57E-04	2.28E-04	4.65E-05	0.00E+00	1.88E-05	1.33E-05	5.12E-08	1.31E-06	51.3	5.48E-04	9.39E-04
SI13_E	0.75	397	0	1	6.00E-02	5.94E-03	1.00E-03	7.72E-04	6.83E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.54E-07	3.94E-06	154.8	1.65E-03	2.82E-03
SI13_E	0.75	608	0	1	9.26E-02	1.11E-02	1.57E-03	1.18E-03	1.05E-03	2.15E-04	0.00E+00	8.67E-05	6.14E-05	2.35E-07	6.05E-06	242.5	2.53E-03	4.31E-03
SI13_E	0.75	491	0	1	7.57E-02	1.20E-02	1.31E-03	9.53E-04	8.44E-04	1.75E-04	0.00E+00	7.06E-05	5.00E-05	1.90E-07	4.92E-06	202.5	2.06E-03	3.48E-03
SI13_E	0.75	405	0	1	6.30E-02	1.15E-02	1.11E-03	7.87E-04	6.97E-04	1.45E-04	0.00E+00	5.85E-05	4.15E-05	1.57E-07	4.08E-06	170.7	1.71E-03	2.87E-03
SI13_E	0.75	366	0	1	5.73E-02	1.15E-02	1.02E-03	7.11E-04	6.30E-04	1.31E-04	0.00E+00	5.31E-05	3.76E-05	1.42E-07	3.71E-06	156.9	1.55E-03	2.60E-03
SI13_E	0.75	413	0	1	6.54E-02	1.55E-02	1.18E-03	8.02E-04	7.10E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.60E-07	4.21E-06	182.4	1.76E-03	2.93E-03
SI13_E	0.75	436	0	1	6.93E-02	1.70E-02	1.26E-03	8.47E-04	7.50E-04	1.58E-04	0.00E+00	6.38E-05	4.52E-05	1.69E-07	4.46E-06	194.2	1.86E-03	3.09E-03
SI13_E	0.75	444	0	1	7.07E-02	1.78E-02	1.29E-03	8.62E-04	7.64E-04	1.61E-04	0.00E+00	6.51E-05	4.61E-05	1.72E-07	4.54E-06	198.6	1.90E-03	3.15E-03
SI13_E	0.75	460	0	1	7.33E-02	1.89E-02	1.34E-03	8.93E-04	7.90E-04	1.67E-04	0.00E+00	6.74E-05	4.78E-05	1.78E-07	4.70E-06	206.5	1.97E-03	3.26E-03
SI13_E	0.75	499	0	1	7.94E-02	2.03E-02	1.45E-03	9.68E-04	8.57E-04	1.81E-04	0.00E+00	7.31E-05	5.18E-05	1.93E-07	5.10E-06	223.6	2.13E-03	3.53E-03
SI13_E	0.75	616	0	1	9.80E-02	2.51E-02	1.79E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	275.7	2.63E-03	4.36E-03
SI13_E	0.75	662	0	1	1.05E-01	2.62E-02	1.91E-03	1.29E-03	1.14E-03	2.40E-04	0.00E+00	9.69E-05	6.87E-05	2.56E-07	6.76E-06	294.9	2.83E-03	4.69E-03
SI13_E	0.75	460	0	1	7.28E-02	1.76E-02	1.32E-03	8.93E-04	7.90E-04	1.66E-04	0.00E+00	6.72E-05	4.76E-05	1.78E-07	4.69E-06	203.3	1.96E-03	3.26E-03
SI13_E	0.75	304	0	1	4.77E-02	1.01E-02	8.49E-04	5.90E-04	5.23E-04	1.09E-04	0.00E+00	4.41E-05	3.13E-05	1.18E-07	3.08E-06	131.0	1.29E-03	2.15E-03
SI13_E	0.75	257	0	1	4.01E-02	7.67E-03	7.05E-04	4.99E-04	4.42E-04	9.20E-05	0.00E+00	3.72E-05	2.63E-05	9.94E-08	2.59E-06	108.9	1.08E-03	1.82E-03
SI13_E	0.75	218	0	1	3.38E-02	5.82E-03	5.89E-04	4.24E-04	3.75E-04	7.78E-05	0.00E+00	3.14E-05	2.23E-05	8.44E-08	2.19E-06	90.9	9.17E-04	1.55E-03
SI13_E	0.75	179	0	1	2.76E-02	4.28E-03	4.77E-04	3.48E-04	3.08E-04	6.37E-05	0.00E+00	2.57E-05	1.82E-05	6.93E-08	1.80E-06	73.6	7.51E-04	1.27E-03
SI13_E	0.75	132	0	1	2.03E-02	2.82E-03	3.48E-04	2.57E-04	2.28E-04	4.69E-05	0.00E+00	1.90E-05	1.34E-05	5.12E-08	1.32E-06	53.7	5.53E-04	9.39E-04
SI13_W	0.75	88	0	1	1.35E-02	1.66E-03	2.29E-04	1.72E-04	1.52E-04	3.12E-05	0.00E+00	1.26E-05	8.93E-06	3.42E-08	8.80E-07	35.3	3.68E-04	6.26E-04
SI13_W	0.75	59	0	1	8.94E-03	9.88E-04	1.51E-04	1.14E-04	1.01E-04	2.08E-05	0.00E+00	8.39E-06	5.94E-06	2.28E-08	5.85E-07	23.3	2.45E-04	4.17E-04
SI13_W	0.75	52	0	1	7.79E-03	7.70E-04	1.30E-04	1.00E-04	8.86E-05	1.81E-05	0.00E+00	7.32E-06	5.19E-06	1.99E-08	5.11E-07	20.1	2.14E-04	3.65E-04
SI13_W	0.75	37	0	1	5.55E-03	5.50E-04	9.25E-05	7.15E-05	6.33E-05	1.29E-05	0.00E+00	5.22E-06	3.70E-06	1.42E-08	3.64E-07	14.3	1.52E-04	2.61E-04
SI13_W	0.75	52	0	1	7.76E-03	7.70E-04	1.29E-04	1.00E-04	8.86E-05	1.81E-05	0.00E+00	7.30E-06	5.18E-06	1.99E-08	5.10E-07	20.0	2.13E-04	3.65E-04
SI13_W	0.75	125	0	1	1.89E-02	1.87E-03	3.14E-04	2.43E-04	2.15E-04	4.39E-05	0.00E+00	1.77E-05	1.26E-05	4.84E-08	1.24E-06	48.5	5.17E-04	8.87E-04
SI13_W	0.75	376	0	1	5.67E-02	5.61E-03	9.47E-04	7.29E-04	6.46E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.45E-07	3.72E-06	146.2	1.55E-03	2.66E-03
SI13_W	0.75	574	0	1	8.75E-02	1.05E-02	1.48E-03	1.12E-03	9.87E-04	2.03E-04	0.00E+00	8.19E-05	5.81E-05	2.22E-07	5.72E-06	229.1	2.39E-03	4.07E-03
SI13_W	0.75	464	0	1	7.15E-02	1.13E-02	1.24E-03	9.01E-04	7.98E-04	1.65E-04	0.00E+00	6.67E-05	4.72E-05	1.79E-07	4.65E-06	191.3	1.94E-03	3.29E-03
SI13_W	0.75	383	0	1	5.95E-02	1.08E-02	1.04E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.53E-05	3.92E-05	1.48E-07	3.86E-06	161.3	1.61E-03	2.71E-03
SI13_W	0.75	346	0	1	5.41E-02	1.09E-02	9.60E-04	6.72E-04	5.95E-04	1.24E-04	0.00E+00	5.02E-05	3.56E-05	1.34E-07	3.50E-06	148.3	1.46E-03	2.45E-03
SI13_W	0.75	390	0	1	6.18E-02	1.46E-02	1.12E-03	7.58E-04	6.71E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.51E-07	3.98E-06	172.3	1.66E-03	2.77E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	412	0	1	6.55E-02	1.61E-02	1.19E-03	8.01E-04	7.09E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.59E-07	4.21E-06	183.5	1.76E-03	2.92E-03
SI13_W	0.75	420	0	1	6.68E-02	1.68E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	187.6	1.79E-03	2.97E-03
SI13_W	0.75	434	0	1	6.92E-02	1.79E-02	1.26E-03	8.43E-04	7.47E-04	1.58E-04	0.00E+00	6.37E-05	4.51E-05	1.68E-07	4.45E-06	195.1	1.86E-03	3.08E-03
SI13_W	0.75	471	0	1	7.51E-02	1.92E-02	1.37E-03	9.15E-04	8.10E-04	1.71E-04	0.00E+00	6.91E-05	4.89E-05	1.82E-07	4.82E-06	211.3	2.01E-03	3.34E-03
SI13_W	0.75	582	0	1	9.26E-02	2.37E-02	1.69E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.04E-05	2.25E-07	5.95E-06	260.5	2.49E-03	4.12E-03
SI13_W	0.75	626	0	1	9.94E-02	2.48E-02	1.80E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.16E-05	6.49E-05	2.42E-07	6.39E-06	278.7	2.67E-03	4.44E-03
SI13_W	0.75	434	0	1	6.88E-02	1.67E-02	1.24E-03	8.43E-04	7.47E-04	1.57E-04	0.00E+00	6.35E-05	4.50E-05	1.68E-07	4.43E-06	192.1	1.85E-03	3.08E-03
SI13_W	0.75	287	0	1	4.50E-02	9.58E-03	8.02E-04	5.58E-04	4.94E-04	1.03E-04	0.00E+00	4.17E-05	2.95E-05	1.11E-07	2.91E-06	123.8	1.22E-03	2.04E-03
SI13_W	0.75	243	0	1	3.79E-02	7.25E-03	6.67E-04	4.72E-04	4.18E-04	8.70E-05	0.00E+00	3.51E-05	2.49E-05	9.40E-08	2.45E-06	102.9	1.03E-03	1.72E-03
SI13_W	0.75	206	0	1	3.19E-02	5.50E-03	5.56E-04	4.00E-04	3.54E-04	7.35E-05	0.00E+00	2.97E-05	2.10E-05	7.97E-08	2.07E-06	85.9	8.66E-04	1.46E-03
SI13_W	0.75	169	0	1	2.61E-02	4.04E-03	4.50E-04	3.29E-04	2.91E-04	6.02E-05	0.00E+00	2.43E-05	1.72E-05	6.55E-08	1.70E-06	69.5	7.09E-04	1.20E-03
SI13_W	0.75	125	0	1	1.92E-02	2.66E-03	3.28E-04	2.43E-04	2.15E-04	4.43E-05	0.00E+00	1.79E-05	1.27E-05	4.84E-08	1.25E-06	50.7	5.23E-04	8.87E-04
SI14_E	0.75	97	0	1	1.48E-02	1.82E-03	2.52E-04	1.89E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.84E-06	3.76E-08	9.69E-07	38.9	4.05E-04	6.90E-04
SI14_E	0.75	65	0	1	9.85E-03	1.09E-03	1.66E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.23E-06	6.54E-06	2.51E-08	6.44E-07	25.6	2.69E-04	4.60E-04
SI14_E	0.75	57	0	1	8.58E-03	8.48E-04	1.44E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.06E-06	5.71E-06	2.19E-08	5.62E-07	22.2	2.35E-04	4.02E-04
SI14_E	0.75	41	0	1	6.11E-03	6.06E-04	1.02E-04	7.87E-05	6.97E-05	1.42E-05	0.00E+00	5.75E-06	4.07E-06	1.57E-08	4.01E-07	15.7	1.68E-04	2.87E-04
SI14_E	0.75	57	0	1	8.55E-03	8.48E-04	1.42E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.04E-06	5.70E-06	2.19E-08	5.61E-07	22.0	2.35E-04	4.02E-04
SI14_E	0.75	138	0	1	2.08E-02	2.06E-03	3.46E-04	2.68E-04	2.37E-04	4.83E-05	0.00E+00	1.95E-05	1.38E-05	5.33E-08	1.36E-06	53.4	5.70E-04	9.77E-04
SI14_E	0.75	414	0	1	6.24E-02	6.18E-03	1.04E-03	8.03E-04	7.11E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.60E-07	4.09E-06	161.0	1.71E-03	2.93E-03
SI14_E	0.75	633	0	1	9.63E-02	1.15E-02	1.63E-03	1.23E-03	1.09E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.45E-07	6.30E-06	252.3	2.63E-03	4.48E-03
SI14_E	0.75	511	0	1	7.88E-02	1.24E-02	1.36E-03	9.92E-04	8.78E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	1.98E-07	5.12E-06	210.7	2.14E-03	3.62E-03
SI14_E	0.75	422	0	1	6.55E-02	1.19E-02	1.15E-03	8.19E-04	7.25E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.63E-07	4.25E-06	177.6	1.78E-03	2.99E-03
SI14_E	0.75	381	0	1	5.96E-02	1.20E-02	1.06E-03	7.40E-04	6.55E-04	1.37E-04	0.00E+00	5.53E-05	3.91E-05	1.47E-07	3.86E-06	163.3	1.61E-03	2.70E-03
SI14_E	0.75	430	0	1	6.80E-02	1.61E-02	1.23E-03	8.34E-04	7.39E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	189.8	1.83E-03	3.05E-03
SI14_E	0.75	454	0	1	7.21E-02	1.77E-02	1.31E-03	8.82E-04	7.81E-04	1.64E-04	0.00E+00	6.64E-05	4.71E-05	1.76E-07	4.64E-06	202.1	1.94E-03	3.22E-03
SI14_E	0.75	462	0	1	7.35E-02	1.85E-02	1.34E-03	8.97E-04	7.95E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	206.6	1.97E-03	3.28E-03
SI14_E	0.75	478	0	1	7.63E-02	1.97E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.90E-06	214.9	2.05E-03	3.39E-03
SI14_E	0.75	519	0	1	8.27E-02	2.12E-02	1.51E-03	1.01E-03	8.92E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.6	2.22E-03	3.68E-03
SI14_E	0.75	641	0	1	1.02E-01	2.61E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.39E-05	6.65E-05	2.48E-07	6.55E-06	286.9	2.74E-03	4.54E-03
SI14_E	0.75	689	0	1	1.09E-01	2.73E-02	1.99E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.14E-05	2.67E-07	7.04E-06	306.8	2.94E-03	4.88E-03
SI14_E	0.75	478	0	1	7.58E-02	1.83E-02	1.37E-03	9.29E-04	8.23E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.85E-07	4.88E-06	211.5	2.04E-03	3.39E-03
SI14_E	0.75	316	0	1	4.96E-02	1.06E-02	8.83E-04	6.14E-04	5.44E-04	1.14E-04	0.00E+00	4.59E-05	3.25E-05	1.22E-07	3.20E-06	136.3	1.34E-03	2.24E-03
SI14_E	0.75	268	0	1	4.17E-02	7.98E-03	7.34E-04	5.19E-04	4.60E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.03E-07	2.70E-06	113.3	1.13E-03	1.90E-03
SI14_E	0.75	227	0	1	3.51E-02	6.06E-03	6.13E-04	4.41E-04	3.90E-04	8.09E-05	0.00E+00	3.27E-05	2.32E-05	8.78E-08	2.28E-06	94.6	9.54E-04	1.61E-03
SI14_E	0.75	187	0	1	2.87E-02	4.45E-03	4.96E-04	3.62E-04	3.21E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.21E-08	1.87E-06	76.6	7.81E-04	1.32E-03
SI14_E	0.75	138	0	1	2.11E-02	2.93E-03	3.62E-04	2.68E-04	2.37E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.33E-08	1.38E-06	55.8	5.76E-04	9.77E-04
SI14_W	0.75	97	0	1	1.48E-02	1.82E-03	2.52E-04	1.89E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.84E-06	3.76E-08	9.69E-07	38.9	4.05E-04	6.90E-04
SI14_W	0.75	65	0	1	9.85E-03	1.09E-03	1.66E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.23E-06	6.54E-06	2.51E-08	6.44E-07	25.6	2.69E-04	4.60E-04
SI14_W	0.75	57	0	1	8.58E-03	8.48E-04	1.44E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.06E-06	5.71E-06	2.19E-08	5.62E-07	22.2	2.35E-04	4.02E-04
SI14_W	0.75	41	0	1	6.11E-03	6.06E-04	1.02E-04	7.87E-05	6.97E-05	1.42E-05	0.00E+00	5.75E-06	4.07E-06	1.57E-08	4.01E-07	15.7	1.68E-04	2.87E-04
SI14_W	0.75	57	0	1	8.55E-03	8.48E-04	1.42E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.04E-06	5.70E-06	2.19E-08	5.61E-07	22.0	2.35E-04	4.02E-04
SI14_W	0.75	138	0	1	2.08E-02	2.06E-03	3.46E-04	2.68E-04	2.37E-04	4.83E-05	0.00E+00	1.95E-05	1.38E-05	5.33E-08	1.36E-06	53.4	5.70E-04	9.77E-04
SI14_W	0.75	414	0	1	6.24E-02	6.18E-03	1.04E-03	8.03E-04	7.11E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.60E-07	4.09E-06	161.0	1.71E-03	2.93E-03
SI14_W	0.75	633	0	1	9.63E-02	1.15E-02	1.63E-03	1.23E-03	1.09E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.45E-07	6.30E-06	252.3	2.63E-03	4.48E-03
SI14_W	0.75	511	0	1	7.88E-02	1.24E-02	1.36E-03	9.92E-04	8.78E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	1.98E-07	5.12E-06	210.7	2.14E-03	3.62E-03
SI14_W	0.75	422	0	1	6.55E-02	1.19E-02	1.15E-03	8.19E-04	7.25E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.63E-07	4.25E-06	177.6	1.78E-03	2.99E-03
SI14_W	0.75	381	0	1	5.96E-02	1.20E-02	1.06E-03	7.40E-04	6.55E-04	1.37E-04	0.00E+00	5.53E-05	3.91E-05	1.47E-07	3.86E-06	163.3	1.61E-03	2.70E-03
SI14_W	0.75	430	0	1	6.80E-02	1.61E-02	1.23E-03	8.34E-04	7.39E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	189.8	1.83E-03	3.05E-03
SI14_W	0.75	454	0	1	7.21E-02	1.77E-02	1.31E-03	8.82E-04	7.81E-04	1.64E-04	0.00E+00	6.64E-05	4.71E-05	1.76E-07	4.64E-06	202.1	1.94E-03	3.22E-03
SI14_W	0.75	462	0	1	7.35E-02	1.85E-02	1.34E-03	8.97E-04	7.95E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	206.6	1.97E-03	3.28E-03
SI14_W	0.75	478	0	1	7.63E-02	1.97E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.90E-06	214.9	2.05E-03	3.39E-03
SI14_W	0.75	519	0	1	8.27E-02	2.12E-02	1.51E-03	1.01E-03	8.92E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.6	2.22E-03	3.68E-03
SI14_W	0.75	641	0	1	1.02E-01	2.61E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.39E-05	6.65E-05	2.48E-07	6.55E-06	286.9	2.74E-03	4.54E-03
SI14_W	0.75	689	0	1	1.09E-01	2.73E-02	1.99E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.14E-05	2.67E-07	7.04E-06	306.8	2.94E-03	4.88E-03
SI14_W	0.75	478	0	1	7.58E-02	1.83E-02	1.37E-03	9.29E-04	8.23E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.85E-07	4.88E-06	211.5	2.04E-03	3.39E-03
SI14_W	0.75	316	0	1	4.96E-02	1.06E-02	8.83E-04	6.14E-04	5.44E-04	1.14E-04	0.00E+00	4.59E-05	3.25E-05	1.22E-07	3.20E-06	136.3	1.34E-03	2.24E-03
SI14_W	0.75	268	0	1	4.17E-02	7.98E-03	7.34E-04	5.19E-04	4.60E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.03E-07	2.70E-06	113.3	1.13E-03	1.90E-03
SI14_W	0.75	227	0	1	3.51E-02	6.06E-03	6.13E-04	4.41E-04	3.90E-04	8.09E-05	0.00E+00	3.27E-05	2.32E-05	8.78E-08	2.28E-06	94.6	9.54E-04	1.61E-03
SI14_W	0.75	187	0	1	2.87E-02	4.45E-03	4.96E-04	3.62E-04	3.21E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.21E-08	1.87E-06	76.6	7.81E-04	1.32E-03
SI14_W	0.75	138	0	1	2.11E-02	2.93E-03	3.62E-04	2.68E-04	2.37E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.33E-08	1.38E-06	55.8	5.76E-04	9.77E-04
SI15_E	0.75	97	0	1	1.48E-02	1.82E-03	2.52E-04	1.89E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.84E-06	3.76E-08	9.69E-07	38.9	4.05E-04	6.90E-04
SI15_E	0.75	65	0	1	9.85E-03	1.09E-03	1.66E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.23E-06	6.54E-06	2.51E-08	6.44E-07	25.6	2.69E-04	4.60E-04
SI15_E	0.75	57	0	1	8.58E-03	8.48E-04	1.44E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.06E-06	5.71E-06	2.19E-08	5.62E-07	22.2	2.35E-04	4.02E-04
SI15_E	0.75	41	0	1	6.11E-03	6.06E-04	1.02E-04	7.87E-05	6.97E-05	1.42E-05	0.00E+00	5.75E-06	4.07E-06	1.57E-08	4.01E-07	15.7	1.68E-04	2.87E-04
SI15_E	0.75	57	0	1	8.55E-03	8.48E-04	1.42E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.04E-06	5.70E-06	2.19E-08	5.61E-07	22.0	2.35E-04	4.02E-04
SI15_E	0.75	138	0	1	2.08E-02	2.06E-03	3.46E-04	2.68E-04	2.37E-04	4.83E-05	0.00E+00	1.95E-05	1.38E-05	5.33E-08	1.36E-06	53.4	5.70E-04	9.77E-04
SI15_E	0.75	414	0	1	6.24E-02	6.18E-03	1.04E-03	8.03E-04	7.11E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.60E-07	4.09E-06	161.0	1.71E-03	2.93E-03
SI15_E	0.75	633	0	1	9.63E-02	1.15E-02	1.63E-03	1.23E-03	1.09E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.45E-07	6.30E-06	252.3	2.63E-03	4.48E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	511	0	1	7.88E-02	1.24E-02	1.36E-03	9.92E-04	8.78E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	1.98E-07	5.12E-06	210.7	2.14E-03	3.62E-03
SI15_E	0.75	422	0	1	6.55E-02	1.19E-02	1.15E-03	8.19E-04	7.25E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.63E-07	4.25E-06	177.6	1.78E-03	2.99E-03
SI15_E	0.75	381	0	1	5.96E-02	1.20E-02	1.06E-03	7.40E-04	6.55E-04	1.37E-04	0.00E+00	5.53E-05	3.91E-05	1.47E-07	3.86E-06	163.3	1.61E-03	2.70E-03
SI15_E	0.75	430	0	1	6.80E-02	1.61E-02	1.23E-03	8.34E-04	7.39E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	189.8	1.83E-03	3.05E-03
SI15_E	0.75	454	0	1	7.21E-02	1.77E-02	1.31E-03	8.82E-04	7.81E-04	1.64E-04	0.00E+00	6.64E-05	4.71E-05	1.76E-07	4.64E-06	202.1	1.94E-03	3.22E-03
SI15_E	0.75	462	0	1	7.35E-02	1.85E-02	1.34E-03	8.97E-04	7.95E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	206.6	1.97E-03	3.28E-03
SI15_E	0.75	478	0	1	7.63E-02	1.97E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.90E-06	214.9	2.05E-03	3.39E-03
SI15_E	0.75	519	0	1	8.27E-02	2.12E-02	1.51E-03	1.01E-03	8.92E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.6	2.22E-03	3.68E-03
SI15_E	0.75	641	0	1	1.02E-01	2.61E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.39E-05	6.65E-05	2.48E-07	6.55E-06	286.9	2.74E-03	4.54E-03
SI15_E	0.75	689	0	1	1.09E-01	2.73E-02	1.99E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.14E-05	2.67E-07	7.04E-06	306.8	2.94E-03	4.88E-03
SI15_E	0.75	478	0	1	7.58E-02	1.83E-02	1.37E-03	9.29E-04	8.23E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.85E-07	4.88E-06	211.5	2.04E-03	3.39E-03
SI15_E	0.75	316	0	1	4.96E-02	1.06E-02	8.83E-04	6.14E-04	5.44E-04	1.14E-04	0.00E+00	4.59E-05	3.25E-05	1.22E-07	3.20E-06	136.3	1.34E-03	2.24E-03
SI15_E	0.75	268	0	1	4.17E-02	7.98E-03	7.34E-04	5.19E-04	4.60E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.03E-07	2.70E-06	113.3	1.13E-03	1.90E-03
SI15_E	0.75	227	0	1	3.51E-02	6.06E-03	6.13E-04	4.41E-04	3.90E-04	8.09E-05	0.00E+00	3.27E-05	2.32E-05	8.78E-08	2.28E-06	94.6	9.54E-04	1.61E-03
SI15_E	0.75	187	0	1	2.87E-02	4.45E-03	4.96E-04	3.62E-04	3.21E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.21E-08	1.87E-06	76.6	7.81E-04	1.32E-03
SI15_E	0.75	138	0	1	2.11E-02	2.93E-03	3.62E-04	2.68E-04	2.37E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.33E-08	1.38E-06	55.8	5.76E-04	9.77E-04
SI15_W	0.75	110	0	1	1.68E-02	2.06E-03	2.85E-04	2.14E-04	1.89E-04	3.89E-05	0.00E+00	1.57E-05	1.11E-05	4.26E-08	1.10E-06	44.0	4.58E-04	7.80E-04
SI15_W	0.75	73	0	1	1.11E-02	1.23E-03	1.88E-04	1.42E-04	1.26E-04	2.59E-05	0.00E+00	1.04E-05	7.40E-06	2.84E-08	7.29E-07	29.0	3.05E-04	5.20E-04
SI15_W	0.75	64	0	1	9.70E-03	9.59E-04	1.62E-04	1.25E-04	1.10E-04	2.26E-05	0.00E+00	9.12E-06	6.46E-06	2.48E-08	6.36E-07	25.1	2.66E-04	4.55E-04
SI15_W	0.75	46	0	1	6.91E-03	6.85E-04	1.15E-04	8.90E-05	7.89E-05	1.61E-05	0.00E+00	6.50E-06	4.61E-06	1.77E-08	4.54E-07	17.8	1.90E-04	3.25E-04
SI15_W	0.75	64	0	1	9.67E-03	9.59E-04	1.61E-04	1.25E-04	1.10E-04	2.25E-05	0.00E+00	9.10E-06	6.45E-06	2.48E-08	6.35E-07	24.9	2.65E-04	4.55E-04
SI15_W	0.75	156	0	1	2.35E-02	2.33E-03	3.91E-04	3.03E-04	2.68E-04	5.47E-05	0.00E+00	2.21E-05	1.57E-05	6.03E-08	1.54E-06	60.4	6.45E-04	1.11E-03
SI15_W	0.75	468	0	1	7.06E-02	6.99E-03	1.18E-03	9.08E-04	8.04E-04	1.64E-04	0.00E+00	6.64E-05	4.70E-05	1.81E-07	4.63E-06	182.2	1.94E-03	3.32E-03
SI15_W	0.75	716	0	1	1.09E-01	1.31E-02	1.85E-03	1.39E-03	1.23E-03	2.53E-04	0.00E+00	1.02E-04	7.23E-05	2.77E-07	7.12E-06	285.5	2.98E-03	5.07E-03
SI15_W	0.75	578	0	1	8.91E-02	1.41E-02	1.54E-03	1.12E-03	9.94E-04	2.06E-04	0.00E+00	8.31E-05	5.88E-05	2.23E-07	5.80E-06	238.4	2.42E-03	4.10E-03
SI15_W	0.75	477	0	1	7.42E-02	1.35E-02	1.30E-03	9.26E-04	8.20E-04	1.70E-04	0.00E+00	6.89E-05	4.88E-05	1.84E-07	4.81E-06	200.9	2.01E-03	3.38E-03
SI15_W	0.75	431	0	1	6.75E-02	1.36E-02	1.20E-03	8.37E-04	7.41E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.67E-07	4.36E-06	184.7	1.82E-03	3.06E-03
SI15_W	0.75	486	0	1	7.70E-02	1.82E-02	1.39E-03	9.44E-04	8.36E-04	1.76E-04	0.00E+00	7.10E-05	5.03E-05	1.88E-07	4.95E-06	214.7	2.07E-03	3.45E-03
SI15_W	0.75	514	0	1	8.16E-02	2.00E-02	1.48E-03	9.97E-04	8.83E-04	1.86E-04	0.00E+00	7.52E-05	5.32E-05	1.99E-07	5.24E-06	228.6	2.19E-03	3.64E-03
SI15_W	0.75	523	0	1	8.32E-02	2.09E-02	1.51E-03	1.02E-03	8.99E-04	1.90E-04	0.00E+00	7.66E-05	5.43E-05	2.02E-07	5.34E-06	233.7	2.23E-03	3.71E-03
SI15_W	0.75	541	0	1	8.63E-02	2.23E-02	1.57E-03	1.05E-03	9.31E-04	1.96E-04	0.00E+00	7.94E-05	5.62E-05	2.09E-07	5.54E-06	243.1	2.32E-03	3.84E-03
SI15_W	0.75	587	0	1	9.35E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.60E-05	6.10E-05	2.27E-07	6.00E-06	263.2	2.51E-03	4.16E-03
SI15_W	0.75	725	0	1	1.15E-01	2.95E-02	2.10E-03	1.41E-03	1.25E-03	2.63E-04	0.00E+00	1.06E-04	7.52E-05	2.80E-07	7.41E-06	324.6	3.10E-03	5.14E-03
SI15_W	0.75	780	0	1	1.24E-01	3.09E-02	2.25E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.02E-07	7.96E-06	347.1	3.33E-03	5.53E-03
SI15_W	0.75	541	0	1	8.57E-02	2.07E-02	1.55E-03	1.05E-03	9.31E-04	1.96E-04	0.00E+00	7.91E-05	5.60E-05	2.09E-07	5.52E-06	239.3	2.31E-03	3.84E-03
SI15_W	0.75	358	0	1	5.61E-02	1.19E-02	9.99E-04	6.95E-04	6.15E-04	1.29E-04	0.00E+00	5.19E-05	3.68E-05	1.38E-07	3.63E-06	154.2	1.52E-03	2.54E-03
SI15_W	0.75	303	0	1	4.72E-02	9.03E-03	8.30E-04	5.88E-04	5.20E-04	1.08E-04	0.00E+00	4.38E-05	3.10E-05	1.17E-07	3.05E-06	128.2	1.28E-03	2.15E-03
SI15_W	0.75	257	0	1	3.98E-02	6.86E-03	6.93E-04	4.99E-04	4.42E-04	9.16E-05	0.00E+00	3.70E-05	2.62E-05	9.93E-08	2.58E-06	107.0	1.08E-03	1.82E-03
SI15_W	0.75	211	0	1	3.25E-02	5.04E-03	5.61E-04	4.10E-04	3.63E-04	7.50E-05	0.00E+00	3.03E-05	2.15E-05	8.16E-08	2.11E-06	86.6	8.84E-04	1.50E-03
SI15_W	0.75	156	0	1	2.39E-02	3.32E-03	4.09E-04	3.03E-04	2.68E-04	5.52E-05	0.00E+00	2.23E-05	1.58E-05	6.03E-08	1.56E-06	63.2	6.51E-04	1.11E-03
SI16_E	0.75	110	0	1	1.68E-02	2.06E-03	2.85E-04	2.14E-04	1.89E-04	3.89E-05	0.00E+00	1.57E-05	1.11E-05	4.26E-08	1.10E-06	44.0	4.58E-04	7.80E-04
SI16_E	0.75	73	0	1	1.11E-02	1.23E-03	1.88E-04	1.42E-04	1.26E-04	2.59E-05	0.00E+00	1.04E-05	7.40E-06	2.84E-08	7.29E-07	29.0	3.05E-04	5.20E-04
SI16_E	0.75	64	0	1	9.70E-03	9.59E-04	1.62E-04	1.25E-04	1.10E-04	2.26E-05	0.00E+00	9.12E-06	6.46E-06	2.48E-08	6.36E-07	25.1	2.66E-04	4.55E-04
SI16_E	0.75	46	0	1	6.91E-03	6.85E-04	1.15E-04	8.90E-05	7.89E-05	1.61E-05	0.00E+00	6.50E-06	4.61E-06	1.77E-08	4.54E-07	17.8	1.90E-04	3.25E-04
SI16_E	0.75	64	0	1	9.67E-03	9.59E-04	1.61E-04	1.25E-04	1.10E-04	2.25E-05	0.00E+00	9.10E-06	6.45E-06	2.48E-08	6.35E-07	24.9	2.65E-04	4.55E-04
SI16_E	0.75	156	0	1	2.35E-02	2.33E-03	3.91E-04	3.03E-04	2.68E-04	5.47E-05	0.00E+00	2.21E-05	1.57E-05	6.03E-08	1.54E-06	60.4	6.45E-04	1.11E-03
SI16_E	0.75	468	0	1	7.06E-02	6.99E-03	1.18E-03	9.08E-04	8.04E-04	1.64E-04	0.00E+00	6.64E-05	4.70E-05	1.81E-07	4.63E-06	182.2	1.94E-03	3.32E-03
SI16_E	0.75	716	0	1	1.09E-01	1.31E-02	1.85E-03	1.39E-03	1.23E-03	2.53E-04	0.00E+00	1.02E-04	7.23E-05	2.77E-07	7.12E-06	285.5	2.98E-03	5.07E-03
SI16_E	0.75	578	0	1	8.91E-02	1.41E-02	1.54E-03	1.12E-03	9.94E-04	2.06E-04	0.00E+00	8.31E-05	5.88E-05	2.23E-07	5.80E-06	238.4	2.42E-03	4.10E-03
SI16_E	0.75	477	0	1	7.42E-02	1.35E-02	1.30E-03	9.26E-04	8.20E-04	1.70E-04	0.00E+00	6.89E-05	4.88E-05	1.84E-07	4.81E-06	200.9	2.01E-03	3.38E-03
SI16_E	0.75	431	0	1	6.75E-02	1.36E-02	1.20E-03	8.37E-04	7.41E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.67E-07	4.36E-06	184.7	1.82E-03	3.06E-03
SI16_E	0.75	486	0	1	7.70E-02	1.82E-02	1.39E-03	9.44E-04	8.36E-04	1.76E-04	0.00E+00	7.10E-05	5.03E-05	1.88E-07	4.95E-06	214.7	2.07E-03	3.45E-03
SI16_E	0.75	514	0	1	8.16E-02	2.00E-02	1.48E-03	9.97E-04	8.83E-04	1.86E-04	0.00E+00	7.52E-05	5.32E-05	1.99E-07	5.24E-06	228.6	2.19E-03	3.64E-03
SI16_E	0.75	523	0	1	8.32E-02	2.09E-02	1.51E-03	1.02E-03	8.99E-04	1.90E-04	0.00E+00	7.66E-05	5.43E-05	2.02E-07	5.34E-06	233.7	2.23E-03	3.71E-03
SI16_E	0.75	541	0	1	8.63E-02	2.23E-02	1.57E-03	1.05E-03	9.31E-04	1.96E-04	0.00E+00	7.94E-05	5.62E-05	2.09E-07	5.54E-06	243.1	2.32E-03	3.84E-03
SI16_E	0.75	587	0	1	9.35E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.60E-05	6.10E-05	2.27E-07	6.00E-06	263.2	2.51E-03	4.16E-03
SI16_E	0.75	725	0	1	1.15E-01	2.95E-02	2.10E-03	1.41E-03	1.25E-03	2.63E-04	0.00E+00	1.06E-04	7.52E-05	2.80E-07	7.41E-06	324.6	3.10E-03	5.14E-03
SI16_E	0.75	780	0	1	1.24E-01	3.09E-02	2.25E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.02E-07	7.96E-06	347.1	3.33E-03	5.53E-03
SI16_E	0.75	541	0	1	8.57E-02	2.07E-02	1.55E-03	1.05E-03	9.31E-04	1.96E-04	0.00E+00	7.91E-05	5.60E-05	2.09E-07	5.52E-06	239.3	2.31E-03	3.84E-03
SI16_E	0.75	358	0	1	5.61E-02	1.19E-02	9.99E-04	6.95E-04	6.15E-04	1.29E-04	0.00E+00	5.19E-05	3.68E-05	1.38E-07	3.63E-06	154.2	1.52E-03	2.54E-03
SI16_E	0.75	303	0	1	4.72E-02	9.03E-03	8.30E-04	5.88E-04	5.20E-04	1.08E-04	0.00E+00	4.38E-05	3.10E-05	1.17E-07	3.05E-06	128.2	1.28E-03	2.15E-03
SI16_E	0.75	257	0	1	3.98E-02	6.86E-03	6.93E-04	4.99E-04	4.42E-04	9.16E-05	0.00E+00	3.70E-05	2.62E-05	9.93E-08	2.58E-06	107.0	1.08E-03	1.82E-03
SI16_E	0.75	211	0	1	3.25E-02	5.04E-03	5.61E-04	4.10E-04	3.63E-04	7.50E-05	0.00E+00	3.03E-05	2.15E-05	8.16E-08	2.11E-06	86.6	8.84E-04	1.50E-03
SI16_E	0.75	156	0	1	2.39E-02	3.32E-03	4.09E-04	3.03E-04	2.68E-04	5.52E-05	0.00E+00	2.23E-05	1.58E-05	6.03E-08	1.56E-06	63.2	6.51E-04	1.11E-03
SI16_W	0.75	99	0	1	1.51E-02	1.86E-03	2.56E-04	1.92E-04	1.70E-04	3.50E-05	0.00E+00	1.41E-05	1.00E-05	3.83E-08	9.87E-07	39.6	4.12E-04	7.02E-04
SI16_W	0.75	66	0	1	1.00E-02	1.11E-03	1.69E-04	1.28E-04	1.14E-04	2.33E-05	0.00E+00	9.40E-06	6.66E-06	2.55E-08	6.56E-07	26.1	2.74E-04	4.68E-04
SI16_W	0.75	58	0	1	8.73E-03	8.63E-04	1.46E-04	1.12E-04	9.94E-05	2.03E-05	0.00E+00	8.21E-06	5.81E-06	2.23E-08	5.73E-07	22.6	2.39E-04	4.10E-04
SI16_W	0.75	41	0	1	6.22E-03	6.17E-04	1.04E-04	8.01E-05	7.10E-05	1.45E-05	0.00E+00	5.85E-06	4.15E-06	1.60E-08	4.08E-07	16.0	1.71E-04	2.93E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	58	0	1	8.70E-03	8.63E-04	1.45E-04	1.12E-04	9.94E-05	2.03E-05	0.00E+00	8.19E-06	5.80E-06	2.23E-08	5.71E-07	22.4	2.39E-04	4.10E-04
SI16_W	0.75	140	0	1	2.11E-02	2.10E-03	3.52E-04	2.72E-04	2.41E-04	4.92E-05	0.00E+00	1.99E-05	1.41E-05	5.43E-08	1.39E-06	54.3	5.80E-04	9.95E-04
SI16_W	0.75	421	0	1	6.36E-02	6.29E-03	1.06E-03	8.17E-04	7.24E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.63E-07	4.17E-06	163.9	1.74E-03	2.98E-03
SI16_W	0.75	644	0	1	9.81E-02	1.18E-02	1.66E-03	1.25E-03	1.11E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.49E-07	6.41E-06	256.9	2.68E-03	4.56E-03
SI16_W	0.75	520	0	1	8.02E-02	1.27E-02	1.39E-03	1.01E-03	8.94E-04	1.85E-04	0.00E+00	7.47E-05	5.30E-05	2.01E-07	5.22E-06	214.5	2.18E-03	3.69E-03
SI16_W	0.75	429	0	1	6.67E-02	1.21E-02	1.17E-03	8.33E-04	7.38E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.66E-07	4.33E-06	180.8	1.81E-03	3.04E-03
SI16_W	0.75	388	0	1	6.07E-02	1.22E-02	1.08E-03	7.53E-04	6.67E-04	1.39E-04	0.00E+00	5.63E-05	3.99E-05	1.50E-07	3.93E-06	166.2	1.64E-03	2.75E-03
SI16_W	0.75	438	0	1	6.93E-02	1.64E-02	1.25E-03	8.49E-04	7.52E-04	1.58E-04	0.00E+00	6.39E-05	4.53E-05	1.69E-07	4.46E-06	193.2	1.86E-03	3.10E-03
SI16_W	0.75	462	0	1	7.34E-02	1.80E-02	1.33E-03	8.98E-04	7.95E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.79E-07	4.72E-06	205.7	1.97E-03	3.28E-03
SI16_W	0.75	471	0	1	7.49E-02	1.89E-02	1.36E-03	9.14E-04	8.09E-04	1.71E-04	0.00E+00	6.89E-05	4.88E-05	1.82E-07	4.81E-06	210.4	2.01E-03	3.33E-03
SI16_W	0.75	487	0	1	7.76E-02	2.00E-02	1.42E-03	9.46E-04	8.37E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.88E-07	4.98E-06	218.8	2.08E-03	3.45E-03
SI16_W	0.75	528	0	1	8.42E-02	2.16E-02	1.53E-03	1.03E-03	9.08E-04	1.92E-04	0.00E+00	7.74E-05	5.49E-05	2.04E-07	5.40E-06	236.9	2.26E-03	3.74E-03
SI16_W	0.75	652	0	1	1.04E-01	2.65E-02	1.89E-03	1.27E-03	1.12E-03	2.37E-04	0.00E+00	9.56E-05	6.77E-05	2.52E-07	6.67E-06	292.1	2.79E-03	4.62E-03
SI16_W	0.75	702	0	1	1.11E-01	2.78E-02	2.02E-03	1.36E-03	1.21E-03	2.54E-04	0.00E+00	1.03E-04	7.27E-05	2.71E-07	7.16E-06	312.4	3.00E-03	4.97E-03
SI16_W	0.75	487	0	1	7.72E-02	1.87E-02	1.39E-03	9.46E-04	8.37E-04	1.76E-04	0.00E+00	7.11E-05	5.04E-05	1.88E-07	4.96E-06	215.4	2.08E-03	3.45E-03
SI16_W	0.75	322	0	1	5.05E-02	1.07E-02	8.99E-04	6.25E-04	5.54E-04	1.16E-04	0.00E+00	4.68E-05	3.31E-05	1.24E-07	3.26E-06	138.8	1.36E-03	2.28E-03
SI16_W	0.75	272	0	1	4.24E-02	8.13E-03	7.47E-04	5.29E-04	4.68E-04	9.75E-05	0.00E+00	3.94E-05	2.79E-05	1.05E-07	2.75E-06	115.4	1.15E-03	1.93E-03
SI16_W	0.75	231	0	1	3.58E-02	6.17E-03	6.24E-04	4.49E-04	3.97E-04	8.24E-05	0.00E+00	3.33E-05	2.36E-05	8.94E-08	2.32E-06	96.3	9.71E-04	1.64E-03
SI16_W	0.75	190	0	1	2.92E-02	4.53E-03	5.05E-04	3.69E-04	3.26E-04	6.75E-05	0.00E+00	2.73E-05	1.93E-05	7.34E-08	1.90E-06	78.0	7.95E-04	1.35E-03
SI16_W	0.75	140	0	1	2.15E-02	2.99E-03	3.68E-04	2.72E-04	2.41E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.43E-08	1.40E-06	56.9	5.86E-04	9.95E-04
SI17_E	0.75	99	0	1	1.51E-02	1.86E-03	2.56E-04	1.92E-04	1.70E-04	3.50E-05	0.00E+00	1.41E-05	1.00E-05	3.83E-08	9.87E-07	39.6	4.12E-04	7.02E-04
SI17_E	0.75	66	0	1	1.00E-02	1.11E-03	1.69E-04	1.28E-04	1.14E-04	2.33E-05	0.00E+00	9.40E-06	6.66E-06	2.55E-08	6.56E-07	26.1	2.74E-04	4.68E-04
SI17_E	0.75	58	0	1	8.73E-03	8.63E-04	1.46E-04	1.12E-04	9.94E-05	2.03E-05	0.00E+00	8.21E-06	5.81E-06	2.23E-08	5.73E-07	22.6	2.39E-04	4.10E-04
SI17_E	0.75	41	0	1	6.22E-03	6.17E-04	1.04E-04	8.01E-05	7.10E-05	1.45E-05	0.00E+00	5.85E-06	4.15E-06	1.60E-08	4.08E-07	16.0	1.71E-04	2.93E-04
SI17_E	0.75	58	0	1	8.70E-03	8.63E-04	1.45E-04	1.12E-04	9.94E-05	2.03E-05	0.00E+00	8.19E-06	5.80E-06	2.23E-08	5.71E-07	22.4	2.39E-04	4.10E-04
SI17_E	0.75	140	0	1	2.11E-02	2.10E-03	3.52E-04	2.72E-04	2.41E-04	4.92E-05	0.00E+00	1.99E-05	1.41E-05	5.43E-08	1.39E-06	54.3	5.80E-04	9.95E-04
SI17_E	0.75	421	0	1	6.36E-02	6.29E-03	1.06E-03	8.17E-04	7.24E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.63E-07	4.17E-06	163.9	1.74E-03	2.98E-03
SI17_E	0.75	644	0	1	9.81E-02	1.18E-02	1.66E-03	1.25E-03	1.11E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.49E-07	6.41E-06	256.9	2.68E-03	4.56E-03
SI17_E	0.75	520	0	1	8.02E-02	1.27E-02	1.39E-03	1.01E-03	8.94E-04	1.85E-04	0.00E+00	7.47E-05	5.30E-05	2.01E-07	5.22E-06	214.5	2.18E-03	3.69E-03
SI17_E	0.75	429	0	1	6.67E-02	1.21E-02	1.17E-03	8.33E-04	7.38E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.66E-07	4.33E-06	180.8	1.81E-03	3.04E-03
SI17_E	0.75	388	0	1	6.07E-02	1.22E-02	1.08E-03	7.53E-04	6.67E-04	1.39E-04	0.00E+00	5.63E-05	3.99E-05	1.50E-07	3.93E-06	166.2	1.64E-03	2.75E-03
SI17_E	0.75	438	0	1	6.93E-02	1.64E-02	1.25E-03	8.49E-04	7.52E-04	1.58E-04	0.00E+00	6.39E-05	4.53E-05	1.69E-07	4.46E-06	193.2	1.86E-03	3.10E-03
SI17_E	0.75	462	0	1	7.34E-02	1.80E-02	1.33E-03	8.98E-04	7.95E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.79E-07	4.72E-06	205.7	1.97E-03	3.28E-03
SI17_E	0.75	471	0	1	7.49E-02	1.89E-02	1.36E-03	9.14E-04	8.09E-04	1.71E-04	0.00E+00	6.89E-05	4.88E-05	1.82E-07	4.81E-06	210.4	2.01E-03	3.33E-03
SI17_E	0.75	487	0	1	7.76E-02	2.00E-02	1.42E-03	9.46E-04	8.37E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.88E-07	4.98E-06	218.8	2.08E-03	3.45E-03
SI17_E	0.75	528	0	1	8.42E-02	2.16E-02	1.53E-03	1.03E-03	9.08E-04	1.92E-04	0.00E+00	7.74E-05	5.49E-05	2.04E-07	5.40E-06	236.9	2.26E-03	3.74E-03
SI17_E	0.75	652	0	1	1.04E-01	2.65E-02	1.89E-03	1.27E-03	1.12E-03	2.37E-04	0.00E+00	9.56E-05	6.77E-05	2.52E-07	6.67E-06	292.1	2.79E-03	4.62E-03
SI17_E	0.75	702	0	1	1.11E-01	2.78E-02	2.02E-03	1.36E-03	1.21E-03	2.54E-04	0.00E+00	1.03E-04	7.27E-05	2.71E-07	7.16E-06	312.4	3.00E-03	4.97E-03
SI17_E	0.75	487	0	1	7.72E-02	1.87E-02	1.39E-03	9.46E-04	8.37E-04	1.76E-04	0.00E+00	7.11E-05	5.04E-05	1.88E-07	4.96E-06	215.4	2.08E-03	3.45E-03
SI17_E	0.75	322	0	1	5.05E-02	1.07E-02	8.99E-04	6.25E-04	5.54E-04	1.16E-04	0.00E+00	4.68E-05	3.31E-05	1.24E-07	3.26E-06	138.8	1.36E-03	2.28E-03
SI17_E	0.75	272	0	1	4.24E-02	8.13E-03	7.47E-04	5.29E-04	4.68E-04	9.75E-05	0.00E+00	3.94E-05	2.79E-05	1.05E-07	2.75E-06	115.4	1.15E-03	1.93E-03
SI17_E	0.75	231	0	1	3.58E-02	6.17E-03	6.24E-04	4.49E-04	3.97E-04	8.24E-05	0.00E+00	3.33E-05	2.36E-05	8.94E-08	2.32E-06	96.3	9.71E-04	1.64E-03
SI17_E	0.75	190	0	1	2.92E-02	4.53E-03	5.05E-04	3.69E-04	3.26E-04	6.75E-05	0.00E+00	2.73E-05	1.93E-05	7.34E-08	1.90E-06	78.0	7.95E-04	1.35E-03
SI17_E	0.75	140	0	1	2.15E-02	2.99E-03	3.68E-04	2.72E-04	2.41E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.43E-08	1.40E-06	56.9	5.86E-04	9.95E-04
SI17_W	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI17_W	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI17_W	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI17_W	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI17_W	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI17_W	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI17_W	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI17_W	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI17_W	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI17_W	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI17_W	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI17_W	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI17_W	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI17_W	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI17_W	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI17_W	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI17_W	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI17_W	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI17_W	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI17_W	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI17_W	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI17_W	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI17_W	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI17_W	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI18_E	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI18_E	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI18_E	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI18_E	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI18_E	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI18_E	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI18_E	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI18_E	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI18_E	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI18_E	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI18_E	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI18_E	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI18_E	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI18_E	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI18_E	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI18_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI18_E	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI18_E	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI18_E	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI18_E	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI18_E	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI18_E	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI18_E	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI18_W	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI18_W	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI18_W	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI18_W	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI18_W	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI18_W	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI18_W	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI18_W	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI18_W	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI18_W	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI18_W	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI18_W	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI18_W	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI18_W	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI18_W	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI18_W	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI18_W	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI18_W	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI18_W	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI18_W	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI18_W	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI18_W	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI18_W	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI18_W	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI19_E	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI19_E	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI19_E	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI19_E	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI19_E	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI19_E	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI19_E	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI19_E	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI19_E	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI19_E	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI19_E	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI19_E	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI19_E	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI19_E	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI19_E	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI19_E	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI19_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI19_E	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI19_E	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI19_E	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_E	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI19_E	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI19_E	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI19_E	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI19_W	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI19_W	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI19_W	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI19_W	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI19_W	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI19_W	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI19_W	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI19_W	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI19_W	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI19_W	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI19_W	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI19_W	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI19_W	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI19_W	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI19_W	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI19_W	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI19_W	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI19_W	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI19_W	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI19_W	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI19_W	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI19_W	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI19_W	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI19_W	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI20_E	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI20_E	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI20_E	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI20_E	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI20_E	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI20_E	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI20_E	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI20_E	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI20_E	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI20_E	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI20_E	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI20_E	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI20_E	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI20_E	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI20_E	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI20_E	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI20_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI20_E	0.75	683	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.08E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI20_E	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI20_E	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI20_E	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.49E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI20_E	0.75	225	0	1	3.49E-02	6.01E-03	6.07E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI20_E	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI20_E	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI20_W	0.75	87	0	1	1.33E-02	1.64E-03	2.26E-04	1.70E-04	1.50E-04	3.09E-05	0.00E+00	1.25E-05	8.85E-06	3.38E-08	8.71E-07	35.0	3.64E-04	6.20E-04
SI20_W	0.75	58	0	1	8.85E-03	9.78E-04	1.49E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.30E-06	5.88E-06	2.26E-08	5.79E-07	23.1	2.42E-04	4.13E-04
SI20_W	0.75	51	0	1	7.71E-03	7.62E-04	1.29E-04	9.91E-05	8.77E-05	1.79E-05	0.00E+00	7.25E-06	5.13E-06	1.97E-08	5.06E-07	19.9	2.11E-04	3.62E-04
SI20_W	0.75	36	0	1	5.50E-03	5.45E-04	9.16E-05	7.08E-05	6.27E-05	1.28E-05	0.00E+00	5.17E-06	3.66E-06	1.41E-08	3.61E-07	14.1	1.51E-04	2.58E-04
SI20_W	0.75	51	0	1	7.69E-03	7.62E-04	1.28E-04	9.91E-05	8.77E-05	1.79E-05	0.00E+00	7.23E-06	5.12E-06	1.97E-08	5.05E-07	19.8	2.11E-04	3.62E-04
SI20_W	0.75	124	0	1	1.87E-02	1.85E-03	3.11E-04	2.41E-04	2.13E-04	4.35E-05	0.00E+00	1.76E-05	1.24E-05	4.79E-08	1.23E-06	48.0	5.12E-04	8.78E-04
SI20_W	0.75	372	0	1	5.61E-02	5.55E-03	9.38E-04	7.22E-04	6.39E-04	1.31E-04	0.00E+00	5.28E-05	3.74E-05	1.44E-07	3.68E-06	144.8	1.54E-03	2.64E-03
SI20_W	0.75	569	0	1	8.66E-02	1.04E-02	1.47E-03	1.10E-03	9.78E-04	2.01E-04	0.00E+00	8.11E-05	5.75E-05	2.20E-07	5.66E-06	226.9	2.37E-03	4.03E-03
SI20_W	0.75	459	0	1	7.08E-02	1.12E-02	1.23E-03	8.92E-04	7.90E-04	1.63E-04	0.00E+00	6.60E-05	4.68E-05	1.78E-07	4.61E-06	189.4	1.93E-03	3.26E-03
SI20_W	0.75	379	0	1	5.89E-02	1.07E-02	1.03E-03	7.36E-04	6.52E-04	1.35E-04	0.00E+00	5.48E-05	3.88E-05	1.47E-07	3.82E-06	159.7	1.60E-03	2.69E-03
SI20_W	0.75	343	0	1	5.36E-02	1.08E-02	9.51E-04	6.65E-04	5.89E-04	1.23E-04	0.00E+00	4.97E-05	3.52E-05	1.32E-07	3.47E-06	146.8	1.45E-03	2.43E-03
SI20_W	0.75	386	0	1	6.12E-02	1.45E-02	1.10E-03	7.50E-04	6.64E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	170.6	1.65E-03	2.74E-03
SI20_W	0.75	408	0	1	6.48E-02	1.59E-02	1.18E-03	7.93E-04	7.02E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.58E-07	4.17E-06	181.7	1.74E-03	2.89E-03
SI20_W	0.75	416	0	1	6.61E-02	1.66E-02	1.20E-03	8.07E-04	7.14E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.61E-07	4.25E-06	185.8	1.78E-03	2.95E-03
SI20_W	0.75	430	0	1	6.86E-02	1.77E-02	1.25E-03	8.35E-04	7.40E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.66E-07	4.40E-06	193.2	1.84E-03	3.05E-03
SI20_W	0.75	467	0	1	7.43E-02	1.90E-02	1.35E-03	9.06E-04	8.02E-04	1.69E-04	0.00E+00	6.84E-05	4.85E-05	1.80E-07	4.77E-06	209.2	2.00E-03	3.31E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI20_W	0.75	576	0	1	9.17E-02	2.34E-02	1.67E-03	1.12E-03	9.90E-04	2.09E-04	0.00E+00	8.44E-05	5.98E-05	2.23E-07	5.89E-06	258.0	2.46E-03	4.08E-03
SI20_W	0.75	620	0	1	9.84E-02	2.45E-02	1.79E-03	1.20E-03	1.07E-03	2.24E-04	0.00E+00	9.07E-05	6.42E-05	2.40E-07	6.33E-06	275.9	2.65E-03	4.39E-03
SI20_W	0.75	430	0	1	6.81E-02	1.65E-02	1.23E-03	8.35E-04	7.40E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	190.2	1.83E-03	3.05E-03
SI20_W	0.75	284	0	1	4.46E-02	9.49E-03	7.94E-04	5.52E-04	4.89E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.10E-07	2.88E-06	122.6	1.20E-03	2.02E-03
SI20_W	0.75	241	0	1	3.75E-02	7.18E-03	6.60E-04	4.67E-04	4.14E-04	8.61E-05	0.00E+00	3.48E-05	2.46E-05	9.30E-08	2.43E-06	101.9	1.01E-03	1.71E-03
SI20_W	0.75	204	0	1	3.16E-02	5.45E-03	5.51E-04	3.96E-04	3.51E-04	7.28E-05	0.00E+00	2.94E-05	2.08E-05	7.89E-08	2.05E-06	85.1	8.58E-04	1.45E-03
SI20_W	0.75	168	0	1	2.58E-02	4.00E-03	4.46E-04	3.26E-04	2.88E-04	5.96E-05	0.00E+00	2.41E-05	1.71E-05	6.48E-08	1.68E-06	68.8	7.02E-04	1.19E-03
SI20_W	0.75	124	0	1	1.90E-02	2.64E-03	3.25E-04	2.41E-04	2.13E-04	4.39E-05	0.00E+00	1.77E-05	1.26E-05	4.79E-08	1.24E-06	50.2	5.18E-04	8.78E-04
SI21_E	0.75	87	0	1	1.33E-02	1.64E-03	2.26E-04	1.70E-04	1.50E-04	3.09E-05	0.00E+00	1.25E-05	8.85E-06	3.38E-08	8.71E-07	35.0	3.64E-04	6.20E-04
SI21_E	0.75	58	0	1	8.85E-03	9.78E-04	1.49E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.30E-06	5.88E-06	2.26E-08	5.79E-07	23.1	2.42E-04	4.13E-04
SI21_E	0.75	51	0	1	7.71E-03	7.62E-04	1.29E-04	9.91E-05	8.77E-05	1.79E-05	0.00E+00	7.25E-06	5.13E-06	1.97E-08	5.06E-07	19.9	2.11E-04	3.62E-04
SI21_E	0.75	36	0	1	5.50E-03	5.45E-04	9.16E-05	7.08E-05	6.27E-05	1.28E-05	0.00E+00	5.17E-06	3.66E-06	1.41E-08	3.61E-07	14.1	1.51E-04	2.58E-04
SI21_E	0.75	51	0	1	7.69E-03	7.62E-04	1.28E-04	9.91E-05	8.77E-05	1.79E-05	0.00E+00	7.23E-06	5.12E-06	1.97E-08	5.05E-07	19.8	2.11E-04	3.62E-04
SI21_E	0.75	124	0	1	1.87E-02	1.85E-03	3.11E-04	2.41E-04	2.13E-04	4.35E-05	0.00E+00	1.76E-05	1.24E-05	4.79E-08	1.23E-06	48.0	5.12E-04	8.78E-04
SI21_E	0.75	372	0	1	5.61E-02	5.55E-03	9.38E-04	7.22E-04	6.39E-04	1.31E-04	0.00E+00	5.28E-05	3.74E-05	1.44E-07	3.68E-06	144.8	1.54E-03	2.64E-03
SI21_E	0.75	569	0	1	8.66E-02	1.04E-02	1.47E-03	1.10E-03	9.78E-04	2.01E-04	0.00E+00	8.11E-05	5.75E-05	2.20E-07	5.66E-06	226.9	2.37E-03	4.03E-03
SI21_E	0.75	459	0	1	7.08E-02	1.12E-02	1.23E-03	8.92E-04	7.90E-04	1.63E-04	0.00E+00	6.60E-05	4.68E-05	1.78E-07	4.61E-06	189.4	1.93E-03	3.26E-03
SI21_E	0.75	379	0	1	5.89E-02	1.07E-02	1.03E-03	7.36E-04	6.52E-04	1.35E-04	0.00E+00	5.48E-05	3.88E-05	1.47E-07	3.82E-06	159.7	1.60E-03	2.69E-03
SI21_E	0.75	343	0	1	5.36E-02	1.08E-02	9.51E-04	6.65E-04	5.89E-04	1.23E-04	0.00E+00	4.97E-05	3.52E-05	1.32E-07	3.47E-06	146.8	1.45E-03	2.43E-03
SI21_E	0.75	386	0	1	6.12E-02	1.45E-02	1.10E-03	7.50E-04	6.64E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	170.6	1.65E-03	2.74E-03
SI21_E	0.75	408	0	1	6.48E-02	1.59E-02	1.18E-03	7.93E-04	7.02E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.58E-07	4.17E-06	181.7	1.74E-03	2.89E-03
SI21_E	0.75	416	0	1	6.61E-02	1.66E-02	1.20E-03	8.07E-04	7.14E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.61E-07	4.25E-06	185.8	1.78E-03	2.95E-03
SI21_E	0.75	430	0	1	6.86E-02	1.77E-02	1.25E-03	8.35E-04	7.40E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.66E-07	4.40E-06	193.2	1.84E-03	3.05E-03
SI21_E	0.75	467	0	1	7.43E-02	1.90E-02	1.35E-03	9.06E-04	8.02E-04	1.69E-04	0.00E+00	6.84E-05	4.85E-05	1.80E-07	4.77E-06	209.2	2.00E-03	3.31E-03
SI21_E	0.75	576	0	1	9.17E-02	2.34E-02	1.67E-03	1.12E-03	9.90E-04	2.09E-04	0.00E+00	8.44E-05	5.98E-05	2.23E-07	5.89E-06	258.0	2.46E-03	4.08E-03
SI21_E	0.75	620	0	1	9.84E-02	2.45E-02	1.79E-03	1.20E-03	1.07E-03	2.24E-04	0.00E+00	9.07E-05	6.42E-05	2.40E-07	6.33E-06	275.9	2.65E-03	4.39E-03
SI21_E	0.75	430	0	1	6.81E-02	1.65E-02	1.23E-03	8.35E-04	7.40E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	190.2	1.83E-03	3.05E-03
SI21_E	0.75	284	0	1	4.46E-02	9.49E-03	7.94E-04	5.52E-04	4.89E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.10E-07	2.88E-06	122.6	1.20E-03	2.02E-03
SI21_E	0.75	241	0	1	3.75E-02	7.18E-03	6.60E-04	4.67E-04	4.14E-04	8.61E-05	0.00E+00	3.48E-05	2.46E-05	9.30E-08	2.43E-06	101.9	1.01E-03	1.71E-03
SI21_E	0.75	204	0	1	3.16E-02	5.45E-03	5.51E-04	3.96E-04	3.51E-04	7.28E-05	0.00E+00	2.94E-05	2.08E-05	7.89E-08	2.05E-06	85.1	8.58E-04	1.45E-03
SI21_E	0.75	168	0	1	2.58E-02	4.00E-03	4.46E-04	3.26E-04	2.88E-04	5.96E-05	0.00E+00	2.41E-05	1.71E-05	6.48E-08	1.68E-06	68.8	7.02E-04	1.19E-03
SI21_E	0.75	124	0	1	1.90E-02	2.64E-03	3.25E-04	2.41E-04	2.13E-04	4.39E-05	0.00E+00	1.77E-05	1.26E-05	4.79E-08	1.24E-06	50.2	5.18E-04	8.78E-04
SI21_W	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI21_W	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI21_W	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI21_W	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI21_W	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI21_W	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI21_W	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI21_W	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03
SI21_W	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI21_W	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI21_W	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI21_W	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03
SI21_W	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI21_W	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI21_W	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI21_W	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI21_W	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI21_W	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI21_W	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI21_W	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI21_W	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI21_W	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI21_W	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI21_W	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI22_E	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI22_E	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI22_E	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI22_E	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI22_E	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI22_E	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI22_E	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI22_E	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03
SI22_E	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI22_E	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI22_E	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI22_E	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI22_E	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI22_E	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI22_E	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI22_E	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI22_E	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI22_E	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI22_E	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI22_E	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI22_E	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI22_E	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI22_E	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI22_W	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI22_W	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI22_W	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI22_W	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI22_W	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI22_W	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI22_W	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI22_W	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03
SI22_W	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI22_W	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI22_W	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI22_W	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03
SI22_W	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI22_W	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI22_W	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI22_W	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI22_W	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI22_W	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI22_W	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI22_W	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI22_W	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI22_W	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI22_W	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI22_W	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI23_E	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI23_E	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI23_E	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI23_E	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI23_E	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI23_E	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI23_E	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI23_E	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03
SI23_E	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI23_E	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI23_E	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI23_E	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03
SI23_E	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI23_E	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI23_E	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI23_E	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI23_E	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI23_E	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI23_E	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI23_E	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI23_E	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI23_E	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI23_E	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI23_E	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI23_W	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI23_W	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI23_W	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI23_W	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI23_W	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI23_W	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI23_W	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI23_W	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI23_W	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI23_W	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI23_W	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03
SI23_W	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI23_W	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI23_W	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI23_W	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI23_W	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI23_W	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI23_W	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI23_W	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI23_W	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI23_W	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI23_W	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI23_W	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI24_E	0.75	98	0	1	1.49E-02	1.83E-03	2.53E-04	1.90E-04	1.68E-04	3.45E-05	0.00E+00	1.39E-05	9.88E-06	3.78E-08	9.73E-07	39.0	4.07E-04	6.93E-04
SI24_E	0.75	65	0	1	9.89E-03	1.09E-03	1.67E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.52E-08	6.47E-07	25.8	2.71E-04	4.62E-04
SI24_E	0.75	57	0	1	8.61E-03	8.52E-04	1.44E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.09E-06	5.73E-06	2.20E-08	5.65E-07	22.3	2.36E-04	4.04E-04
SI24_E	0.75	41	0	1	6.14E-03	6.08E-04	1.02E-04	7.90E-05	7.00E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.57E-08	4.03E-07	15.8	1.68E-04	2.89E-04
SI24_E	0.75	57	0	1	8.59E-03	8.52E-04	1.43E-04	1.11E-04	9.80E-05	2.00E-05	0.00E+00	8.08E-06	5.72E-06	2.20E-08	5.64E-07	22.1	2.36E-04	4.04E-04
SI24_E	0.75	138	0	1	2.09E-02	2.07E-03	3.47E-04	2.69E-04	2.38E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.35E-08	1.37E-06	53.6	5.72E-04	9.81E-04
SI24_E	0.75	415	0	1	6.27E-02	6.20E-03	1.05E-03	8.06E-04	7.14E-04	1.46E-04	0.00E+00	5.89E-05	4.18E-05	1.61E-07	4.11E-06	161.7	1.72E-03	2.94E-03
SI24_E	0.75	635	0	1	9.67E-02	1.16E-02	1.64E-03	1.23E-03	1.09E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.46E-07	6.32E-06	253.4	2.64E-03	4.50E-03
SI24_E	0.75	513	0	1	7.91E-02	1.25E-02	1.37E-03	9.96E-04	8.82E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.98E-07	5.15E-06	211.6	2.15E-03	3.64E-03
SI24_E	0.75	423	0	1	6.58E-02	1.20E-02	1.16E-03	8.22E-04	7.28E-04	1.51E-04	0.00E+00	6.12E-05	4.33E-05	1.64E-07	4.27E-06	178.4	1.78E-03	3.00E-03
SI24_E	0.75	383	0	1	5.99E-02	1.21E-02	1.06E-03	7.43E-04	6.58E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.48E-07	3.87E-06	164.0	1.62E-03	2.71E-03
SI24_E	0.75	432	0	1	6.83E-02	1.62E-02	1.23E-03	8.38E-04	7.42E-04	1.56E-04	0.00E+00	6.30E-05	4.47E-05	1.67E-07	4.40E-06	190.6	1.84E-03	3.06E-03
SI24_E	0.75	456	0	1	7.24E-02	1.78E-02	1.31E-03	8.85E-04	7.84E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	202.9	1.95E-03	3.23E-03
SI24_E	0.75	464	0	1	7.38E-02	1.86E-02	1.34E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.74E-06	207.5	1.98E-03	3.29E-03
SI24_E	0.75	480	0	1	7.66E-02	1.98E-02	1.40E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.92E-06	215.8	2.06E-03	3.40E-03
SI24_E	0.75	521	0	1	8.30E-02	2.13E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.6	2.23E-03	3.69E-03
SI24_E	0.75	643	0	1	1.02E-01	2.62E-02	1.87E-03	1.25E-03	1.11E-03	2.33E-04	0.00E+00	9.43E-05	6.68E-05	2.49E-07	6.58E-06	288.1	2.75E-03	4.56E-03
SI24_E	0.75	692	0	1	1.10E-01	2.74E-02	2.00E-03	1.34E-03	1.19E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.68E-07	7.07E-06	308.2	2.95E-03	4.91E-03
SI24_E	0.75	480	0	1	7.61E-02	1.84E-02	1.38E-03	9.33E-04	8.26E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.86E-07	4.90E-06	212.4	2.05E-03	3.40E-03
SI24_E	0.75	318	0	1	4.98E-02	1.06E-02	8.87E-04	6.17E-04	5.46E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.23E-07	3.22E-06	136.9	1.35E-03	2.25E-03
SI24_E	0.75	269	0	1	4.19E-02	8.01E-03	7.37E-04	5.22E-04	4.62E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.04E-07	2.71E-06	113.8	1.13E-03	1.90E-03
SI24_E	0.75	228	0	1	3.53E-02	6.09E-03	6.15E-04	4.43E-04	3.92E-04	8.13E-05	0.00E+00	3.28E-05	2.33E-05	8.82E-08	2.29E-06	95.0	9.58E-04	1.62E-03
SI24_E	0.75	187	0	1	2.88E-02	4.47E-03	4.98E-04	3.64E-04	3.22E-04	6.65E-05	0.00E+00	2.69E-05	1.91E-05	7.24E-08	1.88E-06	76.9	7.84E-04	1.33E-03
SI24_E	0.75	138	0	1	2.12E-02	2.95E-03	3.63E-04	2.69E-04	2.38E-04	4.90E-05	0.00E+00	1.98E-05	1.40E-05	5.35E-08	1.38E-06	56.1	5.78E-04	9.81E-04
SI24_W	0.75	77	0	1	1.17E-02	1.44E-03	1.99E-04	1.49E-04	1.32E-04	2.71E-05	0.00E+00	1.10E-05	7.77E-06	2.97E-08	7.65E-07	30.7	3.20E-04	5.44E-04
SI24_W	0.75	51	0	1	7.77E-03	8.59E-04	1.31E-04	9.94E-05	8.80E-05	1.80E-05	0.00E+00	7.29E-06	5.17E-06	1.98E-08	5.09E-07	20.2	2.13E-04	3.63E-04
SI24_W	0.75	45	0	1	6.77E-03	6.69E-04	1.13E-04	8.70E-05	7.70E-05	1.57E-05	0.00E+00	6.36E-06	4.51E-06	1.73E-08	4.44E-07	17.5	1.86E-04	3.18E-04
SI24_W	0.75	32	0	1	4.83E-03	4.78E-04	8.04E-05	6.21E-05	5.50E-05	1.12E-05	0.00E+00	4.54E-06	3.22E-06	1.24E-08	3.17E-07	12.4	1.32E-04	2.27E-04
SI24_W	0.75	45	0	1	6.75E-03	6.69E-04	1.12E-04	8.70E-05	7.70E-05	1.57E-05	0.00E+00	6.35E-06	4.50E-06	1.73E-08	4.43E-07	17.3	1.85E-04	3.18E-04
SI24_W	0.75	109	0	1	1.64E-02	1.63E-03	2.73E-04	2.11E-04	1.87E-04	3.82E-05	0.00E+00	1.54E-05	1.09E-05	4.21E-08	1.08E-06	42.1	4.50E-04	7.71E-04
SI24_W	0.75	326	0	1	4.93E-02	4.88E-03	8.23E-04	6.34E-04	5.61E-04	1.15E-04	0.00E+00	4.63E-05	3.28E-05	1.26E-07	3.23E-06	127.1	1.35E-03	2.31E-03
SI24_W	0.75	499	0	1	7.60E-02	9.12E-03	1.29E-03	9.69E-04	8.58E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.93E-07	4.97E-06	199.2	2.08E-03	3.54E-03
SI24_W	0.75	403	0	1	6.22E-02	9.82E-03	1.08E-03	7.83E-04	6.93E-04	1.43E-04	0.00E+00	5.80E-05	4.11E-05	1.56E-07	4.04E-06	166.3	1.69E-03	2.86E-03
SI24_W	0.75	333	0	1	5.17E-02	9.41E-03	9.08E-04	6.46E-04	5.72E-04	1.19E-04	0.00E+00	4.81E-05	3.41E-05	1.29E-07	3.35E-06	140.2	1.40E-03	2.36E-03
SI24_W	0.75	301	0	1	4.71E-02	9.48E-03	8.35E-04	5.84E-04	5.17E-04	1.08E-04	0.00E+00	4.36E-05	3.09E-05	1.16E-07	3.04E-06	128.9	1.27E-03	2.13E-03
SI24_W	0.75	339	0	1	5.37E-02	1.27E-02	9.70E-04	6.59E-04	5.83E-04	1.23E-04	0.00E+00	4.95E-05	3.51E-05	1.31E-07	3.46E-06	149.8	1.45E-03	2.40E-03
SI24_W	0.75	358	0	1	5.69E-02	1.40E-02	1.03E-03	6.96E-04	6.16E-04	1.30E-04	0.00E+00	5.24E-05	3.72E-05	1.39E-07	3.66E-06	159.5	1.53E-03	2.54E-03
SI24_W	0.75	365	0	1	5.80E-02	1.46E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.34E-05	3.79E-05	1.41E-07	3.73E-06	163.1	1.56E-03	2.59E-03
SI24_W	0.75	378	0	1	6.02E-02	1.55E-02	1.10E-03	7.33E-04	6.49E-04	1.37E-04	0.00E+00	5.54E-05	3.92E-05	1.46E-07	3.86E-06	169.6	1.62E-03	2.68E-03
SI24_W	0.75	410	0	1	6.52E-02	1.67E-02	1.19E-03	7.95E-04	7.04E-04	1.49E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.19E-06	183.6	1.75E-03	2.90E-03
SI24_W	0.75	506	0	1	8.05E-02	2.06E-02	1.47E-03	9.82E-04	8.69E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	226.5	2.16E-03	3.58E-03
SI24_W	0.75	544	0	1	8.64E-02	2.15E-02	1.57E-03	1.06E-03	9.35E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.10E-07	5.56E-06	242.2	2.32E-03	3.86E-03
SI24_W	0.75	378	0	1	5.98E-02	1.45E-02	1.08E-03	7.33E-04	6.49E-04	1.37E-04	0.00E+00	5.52E-05	3.91E-05	1.46E-07	3.85E-06	167.0	1.61E-03	2.68E-03
SI24_W	0.75	250	0	1	3.92E-02	8.33E-03	6.97E-04	4.85E-04	4.29E-04	8.97E-05	0.00E+00	3.62E-05	2.57E-05	9.65E-08	2.53E-06	107.6	1.06E-03	1.77E-03
SI24_W	0.75	211	0	1	3.29E-02	6.30E-03	5.79E-04	4.10E-04	3.63E-04	7.56E-05	0.00E+00	3.05E-05	2.16E-05	8.17E-08	2.13E-06	89.5	8.91E-04	1.50E-03
SI24_W	0.75	179	0	1	2.77E-02	4.78E-03	4.84E-04	3.48E-04	3.08E-04	6.39E-05	0.00E+00	2.58E-05	1.83E-05	6.93E-08	1.80E-06	74.7	7.53E-04	1.27E-03
SI24_W	0.75	147	0	1	2.27E-02	3.52E-03	3.91E-04	2.86E-04	2.53E-04	5.23E-05	0.00E+00	2.11E-05	1.50E-05	5.69E-08	1.48E-06	60.4	6.17E-04	1.04E-03
SI24_W	0.75	109	0	1	1.67E-02	2.32E-03	2.86E-04	2.11E-04	1.87E-04	3.85E-05	0.00E+00	1.56E-05	1.10E-05	4.21E-08	1.09E-06	44.1	4.54E-04	7.71E-04
SI25_E	0.75	77	0	1	1.17E-02	1.44E-03	1.99E-04	1.49E-04	1.32E-04	2.71E-05	0.00E+00	1.10E-05	7.77E-06	2.97E-08	7.65E-07	30.7	3.20E-04	5.44E-04
SI25_E	0.75	51	0	1	7.77E-03	8.59E-04	1.31E-04	9.94E-05	8.80E-05	1.80E-05	0.00E+00	7.29E-06	5.17E-06	1.98E-08	5.09E-07	20.2	2.13E-04	3.63E-04
SI25_E	0.75	45	0	1	6.77E-03	6.69E-04	1.13E-04	8.70E-05	7.70E-05	1.57E-05	0.00E+00	6.36E-06	4.51E-06	1.73E-08	4.44E-07	17.5	1.86E-04	3.18E-04
SI25_E	0.75	32	0	1	4.83E-03	4.78E-04	8.04E-05	6.21E-05	5.50E-05	1.12E-05	0.00E+00	4.54E-06	3.22E-06	1.24E-08	3.17E-07	12.4	1.32E-04	2.27E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	45	0	1	6.75E-03	6.69E-04	1.12E-04	8.70E-05	7.70E-05	1.57E-05	0.00E+00	6.35E-06	4.50E-06	1.73E-08	4.43E-07	17.3	1.85E-04	3.18E-04
SI25_E	0.75	109	0	1	1.64E-02	1.63E-03	2.73E-04	2.11E-04	1.87E-04	3.82E-05	0.00E+00	1.54E-05	1.09E-05	4.21E-08	1.08E-06	42.1	4.50E-04	7.71E-04
SI25_E	0.75	326	0	1	4.93E-02	4.88E-03	8.23E-04	6.34E-04	5.61E-04	1.15E-04	0.00E+00	4.63E-05	3.28E-05	1.26E-07	3.23E-06	127.1	1.35E-03	2.31E-03
SI25_E	0.75	499	0	1	7.60E-02	9.12E-03	1.29E-03	9.69E-04	8.58E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.93E-07	4.97E-06	199.2	2.08E-03	3.54E-03
SI25_E	0.75	403	0	1	6.22E-02	9.82E-03	1.08E-03	7.83E-04	6.93E-04	1.43E-04	0.00E+00	5.80E-05	4.11E-05	1.56E-07	4.04E-06	166.3	1.69E-03	2.86E-03
SI25_E	0.75	333	0	1	5.17E-02	9.41E-03	9.08E-04	6.46E-04	5.72E-04	1.19E-04	0.00E+00	4.81E-05	3.41E-05	1.29E-07	3.35E-06	140.2	1.40E-03	2.36E-03
SI25_E	0.75	301	0	1	4.71E-02	9.48E-03	8.35E-04	5.84E-04	5.17E-04	1.08E-04	0.00E+00	4.36E-05	3.09E-05	1.16E-07	3.04E-06	128.9	1.27E-03	2.13E-03
SI25_E	0.75	339	0	1	5.37E-02	1.27E-02	9.70E-04	6.59E-04	5.83E-04	1.23E-04	0.00E+00	4.95E-05	3.51E-05	1.31E-07	3.46E-06	149.8	1.45E-03	2.40E-03
SI25_E	0.75	358	0	1	5.69E-02	1.40E-02	1.03E-03	6.96E-04	6.16E-04	1.30E-04	0.00E+00	5.24E-05	3.72E-05	1.39E-07	3.66E-06	159.5	1.53E-03	2.54E-03
SI25_E	0.75	365	0	1	5.80E-02	1.46E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.34E-05	3.79E-05	1.41E-07	3.73E-06	163.1	1.56E-03	2.59E-03
SI25_E	0.75	378	0	1	6.02E-02	1.55E-02	1.10E-03	7.33E-04	6.49E-04	1.37E-04	0.00E+00	5.54E-05	3.92E-05	1.46E-07	3.86E-06	169.6	1.62E-03	2.68E-03
SI25_E	0.75	410	0	1	6.52E-02	1.67E-02	1.19E-03	7.95E-04	7.04E-04	1.49E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.19E-06	183.6	1.75E-03	2.90E-03
SI25_E	0.75	506	0	1	8.05E-02	2.06E-02	1.47E-03	9.82E-04	8.69E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	226.5	2.16E-03	3.58E-03
SI25_E	0.75	544	0	1	8.64E-02	2.15E-02	1.57E-03	1.06E-03	9.35E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.10E-07	5.56E-06	242.2	2.32E-03	3.86E-03
SI25_E	0.75	378	0	1	5.98E-02	1.45E-02	1.08E-03	7.33E-04	6.49E-04	1.37E-04	0.00E+00	5.52E-05	3.91E-05	1.46E-07	3.85E-06	167.0	1.61E-03	2.68E-03
SI25_E	0.75	250	0	1	3.92E-02	8.33E-03	6.97E-04	4.85E-04	4.29E-04	8.97E-05	0.00E+00	3.62E-05	2.57E-05	9.65E-08	2.53E-06	107.6	1.06E-03	1.77E-03
SI25_E	0.75	211	0	1	3.29E-02	6.30E-03	5.79E-04	4.10E-04	3.63E-04	7.56E-05	0.00E+00	3.05E-05	2.16E-05	8.17E-08	2.13E-06	89.5	8.91E-04	1.50E-03
SI25_E	0.75	179	0	1	2.77E-02	4.78E-03	4.84E-04	3.48E-04	3.08E-04	6.39E-05	0.00E+00	2.58E-05	1.83E-05	6.93E-08	1.80E-06	74.7	7.53E-04	1.27E-03
SI25_E	0.75	147	0	1	2.27E-02	3.52E-03	3.91E-04	2.86E-04	2.53E-04	5.23E-05	0.00E+00	2.11E-05	1.50E-05	5.69E-08	1.48E-06	60.4	6.17E-04	1.04E-03
SI25_E	0.75	109	0	1	1.67E-02	2.32E-03	2.86E-04	2.11E-04	1.87E-04	3.85E-05	0.00E+00	1.56E-05	1.10E-05	4.21E-08	1.09E-06	44.1	4.54E-04	7.71E-04
SI25_W	0.75	77	0	1	1.17E-02	1.44E-03	1.99E-04	1.49E-04	1.32E-04	2.72E-05	0.00E+00	1.10E-05	7.77E-06	2.97E-08	7.66E-07	30.7	3.20E-04	5.45E-04
SI25_W	0.75	51	0	1	7.78E-03	8.60E-04	1.31E-04	9.95E-05	8.81E-05	1.81E-05	0.00E+00	7.30E-06	5.17E-06	1.98E-08	5.09E-07	20.3	2.13E-04	3.63E-04
SI25_W	0.75	45	0	1	6.78E-03	6.70E-04	1.13E-04	8.71E-05	7.71E-05	1.58E-05	0.00E+00	6.37E-06	4.51E-06	1.73E-08	4.44E-07	17.5	1.86E-04	3.18E-04
SI25_W	0.75	32	0	1	4.83E-03	4.79E-04	8.05E-05	6.22E-05	5.51E-05	1.12E-05	0.00E+00	4.54E-06	3.22E-06	1.24E-08	3.17E-07	12.4	1.33E-04	2.27E-04
SI25_W	0.75	45	0	1	6.76E-03	6.70E-04	1.12E-04	8.71E-05	7.71E-05	1.57E-05	0.00E+00	6.36E-06	4.50E-06	1.73E-08	4.44E-07	17.4	1.85E-04	3.18E-04
SI25_W	0.75	109	0	1	1.64E-02	1.63E-03	2.73E-04	2.11E-04	1.87E-04	3.82E-05	0.00E+00	1.54E-05	1.09E-05	4.21E-08	1.08E-06	42.2	4.50E-04	7.72E-04
SI25_W	0.75	327	0	1	4.93E-02	4.88E-03	8.24E-04	6.34E-04	5.62E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.26E-07	3.24E-06	127.3	1.35E-03	2.32E-03
SI25_W	0.75	500	0	1	7.61E-02	9.12E-03	1.29E-03	9.70E-04	8.59E-04	1.76E-04	0.00E+00	7.13E-05	5.05E-05	1.93E-07	4.98E-06	199.4	2.08E-03	3.54E-03
SI25_W	0.75	404	0	1	6.23E-02	9.83E-03	1.08E-03	7.84E-04	6.94E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.56E-07	4.05E-06	166.5	1.69E-03	2.86E-03
SI25_W	0.75	333	0	1	5.18E-02	9.42E-03	9.09E-04	6.47E-04	5.73E-04	1.19E-04	0.00E+00	4.81E-05	3.41E-05	1.29E-07	3.36E-06	140.4	1.40E-03	2.36E-03
SI25_W	0.75	301	0	1	4.71E-02	9.49E-03	8.36E-04	5.85E-04	5.18E-04	1.08E-04	0.00E+00	4.37E-05	3.09E-05	1.16E-07	3.05E-06	129.0	1.27E-03	2.13E-03
SI25_W	0.75	340	0	1	5.38E-02	1.27E-02	9.71E-04	6.59E-04	5.84E-04	1.23E-04	0.00E+00	4.96E-05	3.51E-05	1.31E-07	3.46E-06	150.0	1.45E-03	2.41E-03
SI25_W	0.75	359	0	1	5.70E-02	1.40E-02	1.03E-03	6.97E-04	6.17E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.39E-07	3.66E-06	159.7	1.53E-03	2.54E-03
SI25_W	0.75	365	0	1	5.81E-02	1.46E-02	1.06E-03	7.09E-04	6.28E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.3	1.56E-03	2.59E-03
SI25_W	0.75	378	0	1	6.03E-02	1.56E-02	1.10E-03	7.34E-04	6.50E-04	1.37E-04	0.00E+00	5.54E-05	3.93E-05	1.46E-07	3.87E-06	169.8	1.62E-03	2.68E-03
SI25_W	0.75	410	0	1	6.53E-02	1.67E-02	1.19E-03	7.96E-04	7.05E-04	1.49E-04	0.00E+00	6.01E-05	4.26E-05	1.59E-07	4.19E-06	183.8	1.75E-03	2.91E-03
SI25_W	0.75	506	0	1	8.06E-02	2.06E-02	1.47E-03	9.83E-04	8.70E-04	1.84E-04	0.00E+00	7.42E-05	5.26E-05	1.96E-07	5.18E-06	226.7	2.16E-03	3.59E-03
SI25_W	0.75	545	0	1	8.65E-02	2.16E-02	1.57E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.97E-05	5.65E-05	2.11E-07	5.56E-06	242.5	2.32E-03	3.86E-03
SI25_W	0.75	378	0	1	5.99E-02	1.45E-02	1.08E-03	7.34E-04	6.50E-04	1.37E-04	0.00E+00	5.52E-05	3.91E-05	1.46E-07	3.85E-06	167.2	1.61E-03	2.68E-03
SI25_W	0.75	250	0	1	3.92E-02	8.34E-03	6.98E-04	4.85E-04	4.30E-04	8.98E-05	0.00E+00	3.63E-05	2.57E-05	9.66E-08	2.53E-06	107.7	1.06E-03	1.77E-03
SI25_W	0.75	211	0	1	3.29E-02	6.31E-03	5.80E-04	4.11E-04	3.64E-04	7.57E-05	0.00E+00	3.06E-05	2.17E-05	8.18E-08	2.13E-06	89.6	8.92E-04	1.50E-03
SI25_W	0.75	179	0	1	2.78E-02	4.79E-03	4.84E-04	3.48E-04	3.08E-04	6.40E-05	0.00E+00	2.58E-05	1.83E-05	6.94E-08	1.80E-06	74.8	7.54E-04	1.27E-03
SI25_W	0.75	147	0	1	2.27E-02	3.52E-03	3.92E-04	2.86E-04	2.53E-04	5.24E-05	0.00E+00	2.12E-05	1.50E-05	5.70E-08	1.48E-06	60.5	6.17E-04	1.04E-03
SI25_W	0.75	109	0	1	1.67E-02	2.32E-03	2.86E-04	2.11E-04	1.87E-04	3.86E-05	0.00E+00	1.56E-05	1.10E-05	4.21E-08	1.09E-06	44.1	4.55E-04	7.72E-04
SI26_E	0.52	53	0	1	8.15E-03	1.00E-03	1.38E-04	1.04E-04	9.19E-05	1.89E-05	0.00E+00	7.63E-06	5.41E-06	2.07E-08	5.32E-07	21.4	2.23E-04	3.79E-04
SI26_E	0.52	36	0	1	5.41E-03	5.98E-04	9.12E-05	6.92E-05	6.13E-05	1.26E-05	0.00E+00	5.07E-06	3.60E-06	1.38E-08	3.54E-07	14.1	1.48E-04	2.53E-04
SI26_E	0.52	31	0	1	4.71E-03	4.66E-04	7.89E-05	6.05E-05	5.36E-05	1.10E-05	0.00E+00	4.43E-06	3.14E-06	1.21E-08	3.09E-07	12.2	1.29E-04	2.21E-04
SI26_E	0.52	22	0	1	3.36E-03	3.33E-04	5.60E-05	4.32E-05	3.83E-05	7.82E-06	0.00E+00	3.16E-06	2.24E-06	8.61E-09	2.20E-07	8.6	9.21E-05	1.58E-04
SI26_E	0.52	31	0	1	4.70E-03	4.66E-04	7.82E-05	6.05E-05	5.36E-05	1.09E-05	0.00E+00	4.42E-06	3.13E-06	1.21E-08	3.08E-07	12.1	1.29E-04	2.21E-04
SI26_E	0.52	76	0	1	1.14E-02	1.13E-03	1.90E-04	1.47E-04	1.30E-04	2.66E-05	0.00E+00	1.07E-05	7.60E-06	2.93E-08	7.49E-07	29.3	3.13E-04	5.37E-04
SI26_E	0.52	227	0	1	3.43E-02	3.39E-03	5.73E-04	4.41E-04	3.91E-04	7.98E-05	0.00E+00	3.22E-05	2.28E-05	8.78E-08	2.25E-06	88.5	9.40E-04	1.61E-03
SI26_E	0.52	348	0	1	5.29E-02	6.34E-03	8.98E-04	6.75E-04	5.97E-04	1.23E-04	0.00E+00	4.96E-05	3.51E-05	1.34E-07	3.46E-06	138.6	1.45E-03	2.46E-03
SI26_E	0.52	281	0	1	4.33E-02	6.83E-03	7.50E-04	5.45E-04	4.83E-04	9.98E-05	0.00E+00	4.03E-05	2.86E-05	1.09E-07	2.81E-06	115.8	1.18E-03	1.99E-03
SI26_E	0.52	232	0	1	3.60E-02	6.55E-03	6.32E-04	4.50E-04	3.98E-04	8.28E-05	0.00E+00	3.35E-05	2.37E-05	8.96E-08	2.33E-06	97.6	9.76E-04	1.64E-03
SI26_E	0.52	209	0	1	3.28E-02	6.59E-03	5.81E-04	4.07E-04	3.60E-04	7.51E-05	0.00E+00	3.04E-05	2.15E-05	8.10E-08	2.12E-06	89.7	8.86E-04	1.48E-03
SI26_E	0.52	236	0	1	3.74E-02	8.86E-03	6.75E-04	4.58E-04	4.06E-04	8.53E-05	0.00E+00	3.45E-05	2.44E-05	9.13E-08	2.41E-06	104.3	1.01E-03	1.67E-03
SI26_E	0.52	250	0	1	3.96E-02	9.73E-03	7.19E-04	4.84E-04	4.29E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.65E-08	2.55E-06	111.0	1.06E-03	1.77E-03
SI26_E	0.52	254	0	1	4.04E-02	1.02E-02	7.35E-04	4.93E-04	4.37E-04	9.20E-05	0.00E+00	3.72E-05	2.64E-05	9.82E-08	2.60E-06	113.5	1.08E-03	1.80E-03
SI26_E	0.52	263	0	1	4.19E-02	1.08E-02	7.65E-04	5.10E-04	4.52E-04	9.54E-05	0.00E+00	3.85E-05	2.73E-05	1.02E-07	2.69E-06	118.1	1.12E-03	1.86E-03
SI26_E	0.52	285	0	1	4.54E-02	1.16E-02	8.28E-04	5.54E-04	4.90E-04	1.03E-04	0.00E+00	4.18E-05	2.96E-05	1.10E-07	2.92E-06	127.8	1.22E-03	2.02E-03
SI26_E	0.52	352	0	1	5.60E-02	1.43E-02	1.02E-03	6.83E-04	6.05E-04	1.28E-04	0.00E+00	5.16E-05	3.65E-05	1.36E-07	3.60E-06	157.6	1.50E-03	2.49E-03
SI26_E	0.52	379	0	1	6.01E-02	1.50E-02	1.09E-03	7.35E-04	6.51E-04	1.37E-04	0.00E+00	5.54E-05	3.93E-05	1.46E-07	3.87E-06	168.6	1.62E-03	2.68E-03
SI26_E	0.52	263	0	1	4.16E-02	1.01E-02	7.53E-04	5.10E-04	4.52E-04	9.50E-05	0.00E+00	3.84E-05	2.72E-05	1.02E-07	2.68E-06	116.2	1.12E-03	1.86E-03
SI26_E	0.52	174	0	1	2.73E-02	5.80E-03	4.85E-04	3.37E-04	2.99E-04	6.24E-05	0.00E+00	2.52E-05	1.79E-05	6.72E-08	1.76E-06	74.9	7.36E-04	1.23E-03
SI26_E	0.52	147	0	1	2.29E-02	4.38E-03	4.03E-04	2.85E-04	2.53E-04	5.26E-05	0.00E+00	2.13E-05	1.51E-05	5.68E-08	1.48E-06	62.3	6.20E-04	1.04E-03
SI26_E	0.52	125	0	1	1.93E-02	3.33E-03	3.37E-04	2.42E-04	2.14E-04	4.45E-05	0.00E+00	1.80E-05	1.27E-05	4.82E-08	1.25E-06	52.0	5.24E-04	8.84E-04
SI26_E	0.52	102	0	1	1.58E-02	2.45E-03	2.72E-04	1.99E-04	1.76E-04	3.64E-05	0.00E+00	1.47E-05	1.04E-05	3.96E-08	1.03E-06	42.1	4.29E-04	7.26E-04
SI26_E	0.52	76	0	1	1.16E-02	1.61E-03	1.99E-04	1.47E-04	1.30E-04	2.68E-05	0.00E+00	1.08E-05	7.68E-06	2.93E-08	7.57E-07	30.7	3.16E-04	5.37E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	42	0	1	6.35E-03	7.81E-04	1.08E-04	8.09E-05	7.16E-05	1.47E-05	0.00E+00	5.95E-06	4.21E-06	1.61E-08	4.15E-07	16.6	1.73E-04	2.95E-04
SI26_W	0.49	28	0	1	4.22E-03	4.66E-04	7.11E-05	5.39E-05	4.78E-05	9.79E-06	0.00E+00	3.95E-06	2.80E-06	1.07E-08	2.76E-07	11.0	1.15E-04	1.97E-04
SI26_W	0.49	24	0	1	3.67E-03	3.63E-04	6.15E-05	4.72E-05	4.18E-05	8.54E-06	0.00E+00	3.45E-06	2.45E-06	9.40E-09	2.41E-07	9.5	1.01E-04	1.72E-04
SI26_W	0.49	17	0	1	2.62E-03	2.59E-04	4.36E-05	3.37E-05	2.98E-05	6.09E-06	0.00E+00	2.46E-06	1.74E-06	6.71E-09	1.72E-07	6.7	7.18E-05	1.23E-04
SI26_W	0.49	24	0	1	3.66E-03	3.63E-04	6.09E-05	4.72E-05	4.18E-05	8.52E-06	0.00E+00	3.44E-06	2.44E-06	9.40E-09	2.40E-07	9.4	1.00E-04	1.72E-04
SI26_W	0.49	59	0	1	8.89E-03	8.82E-04	1.48E-04	1.15E-04	1.01E-04	2.07E-05	0.00E+00	8.36E-06	5.93E-06	2.28E-08	5.84E-07	22.8	2.44E-04	4.18E-04
SI26_W	0.49	177	0	1	2.67E-02	2.65E-03	4.47E-04	3.44E-04	3.04E-04	6.22E-05	0.00E+00	2.51E-05	1.78E-05	6.85E-08	1.75E-06	69.0	7.33E-04	1.25E-03
SI26_W	0.49	271	0	1	4.12E-02	4.94E-03	7.00E-04	5.26E-04	4.66E-04	9.56E-05	0.00E+00	3.86E-05	2.74E-05	1.05E-07	2.70E-06	108.0	1.13E-03	1.92E-03
SI26_W	0.49	219	0	1	3.37E-02	5.33E-03	5.84E-04	4.25E-04	3.76E-04	7.78E-05	0.00E+00	3.14E-05	2.23E-05	8.46E-08	2.19E-06	90.2	9.17E-04	1.55E-03
SI26_W	0.49	181	0	1	2.81E-02	5.10E-03	4.93E-04	3.51E-04	3.10E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	6.98E-08	1.82E-06	76.1	7.61E-04	1.28E-03
SI26_W	0.49	163	0	1	2.55E-02	5.14E-03	4.53E-04	3.17E-04	2.81E-04	5.86E-05	0.00E+00	2.37E-05	1.68E-05	6.31E-08	1.65E-06	69.9	6.90E-04	1.16E-03
SI26_W	0.49	184	0	1	2.91E-02	6.90E-03	5.26E-04	3.57E-04	3.16E-04	6.65E-05	0.00E+00	2.69E-05	1.90E-05	7.12E-08	1.88E-06	81.3	7.84E-04	1.30E-03
SI26_W	0.49	194	0	1	3.09E-02	7.59E-03	5.60E-04	3.77E-04	3.34E-04	7.04E-05	0.00E+00	2.84E-05	2.02E-05	7.52E-08	1.99E-06	86.5	8.30E-04	1.38E-03
SI26_W	0.49	198	0	1	3.15E-02	7.93E-03	5.73E-04	3.84E-04	3.40E-04	7.17E-05	0.00E+00	2.90E-05	2.05E-05	7.65E-08	2.02E-06	88.5	8.46E-04	1.40E-03
SI26_W	0.49	205	0	1	3.27E-02	8.43E-03	5.96E-04	3.98E-04	3.52E-04	7.43E-05	0.00E+00	3.00E-05	2.13E-05	7.92E-08	2.10E-06	92.0	8.76E-04	1.45E-03
SI26_W	0.49	222	0	1	3.54E-02	9.06E-03	6.45E-04	4.31E-04	3.82E-04	8.06E-05	0.00E+00	3.26E-05	2.31E-05	8.59E-08	2.27E-06	99.6	9.50E-04	1.57E-03
SI26_W	0.49	274	0	1	4.37E-02	1.12E-02	7.96E-04	5.33E-04	4.72E-04	9.95E-05	0.00E+00	4.02E-05	2.85E-05	1.06E-07	2.80E-06	122.9	1.17E-03	1.94E-03
SI26_W	0.49	295	0	1	4.69E-02	1.17E-02	8.51E-04	5.73E-04	5.07E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.14E-07	3.01E-06	131.4	1.26E-03	2.09E-03
SI26_W	0.49	205	0	1	3.24E-02	7.85E-03	5.87E-04	3.98E-04	3.52E-04	7.41E-05	0.00E+00	2.99E-05	2.12E-05	7.92E-08	2.09E-06	90.6	8.73E-04	1.45E-03
SI26_W	0.49	135	0	1	2.12E-02	4.52E-03	3.78E-04	2.63E-04	2.33E-04	4.87E-05	0.00E+00	1.97E-05	1.39E-05	5.24E-08	1.37E-06	58.4	5.74E-04	9.60E-04
SI26_W	0.49	115	0	1	1.78E-02	3.42E-03	3.14E-04	2.22E-04	1.97E-04	4.10E-05	0.00E+00	1.66E-05	1.17E-05	4.43E-08	1.16E-06	48.5	4.83E-04	8.12E-04
SI26_W	0.49	97	0	1	1.50E-02	2.60E-03	2.62E-04	1.89E-04	1.67E-04	3.47E-05	0.00E+00	1.40E-05	9.92E-06	3.76E-08	9.77E-07	40.5	4.09E-04	6.89E-04
SI26_W	0.49	80	0	1	1.23E-02	1.91E-03	2.12E-04	1.55E-04	1.37E-04	2.84E-05	0.00E+00	1.15E-05	8.12E-06	3.09E-08	8.00E-07	32.8	3.34E-04	5.66E-04
SI26_W	0.49	59	0	1	9.04E-03	1.26E-03	1.55E-04	1.15E-04	1.01E-04	2.09E-05	0.00E+00	8.45E-06	5.99E-06	2.28E-08	5.90E-07	23.9	2.46E-04	4.18E-04
SI27_E	0.61	53	0	1	8.03E-03	9.88E-04	1.36E-04	1.02E-04	9.06E-05	1.86E-05	0.00E+00	7.52E-06	5.33E-06	2.04E-08	5.25E-07	21.1	2.19E-04	3.73E-04
SI27_E	0.61	35	0	1	5.33E-03	5.89E-04	8.99E-05	6.82E-05	6.04E-05	1.24E-05	0.00E+00	5.00E-06	3.54E-06	1.36E-08	3.49E-07	13.9	1.46E-04	2.49E-04
SI27_E	0.61	31	0	1	4.65E-03	4.59E-04	7.77E-05	5.97E-05	5.28E-05	1.08E-05	0.00E+00	4.36E-06	3.09E-06	1.19E-08	3.05E-07	12.0	1.27E-04	2.18E-04
SI27_E	0.61	22	0	1	3.31E-03	3.28E-04	5.52E-05	4.26E-05	3.77E-05	7.70E-06	0.00E+00	3.11E-06	2.21E-06	8.49E-09	2.17E-07	8.5	9.08E-05	1.56E-04
SI27_E	0.61	31	0	1	4.63E-03	4.59E-04	7.70E-05	5.97E-05	5.28E-05	1.08E-05	0.00E+00	4.36E-06	3.09E-06	1.19E-08	3.04E-07	11.9	1.27E-04	2.18E-04
SI27_E	0.61	75	0	1	1.12E-02	1.12E-03	1.87E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.89E-08	7.38E-07	28.9	3.09E-04	5.29E-04
SI27_E	0.61	224	0	1	3.38E-02	3.35E-03	5.65E-04	4.35E-04	3.85E-04	7.86E-05	0.00E+00	3.18E-05	2.25E-05	8.66E-08	2.22E-06	87.2	9.27E-04	1.59E-03
SI27_E	0.61	343	0	1	5.22E-02	6.25E-03	8.85E-04	6.65E-04	5.89E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.32E-07	3.41E-06	136.6	1.43E-03	2.43E-03
SI27_E	0.61	277	0	1	4.27E-02	6.74E-03	7.39E-04	5.37E-04	4.76E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.07E-07	2.77E-06	114.1	1.16E-03	1.96E-03
SI27_E	0.61	228	0	1	3.55E-02	6.46E-03	6.23E-04	4.43E-04	3.93E-04	8.16E-05	0.00E+00	3.30E-05	2.34E-05	8.83E-08	2.30E-06	96.2	9.62E-04	1.62E-03
SI27_E	0.61	206	0	1	3.23E-02	6.50E-03	5.73E-04	4.01E-04	3.55E-04	7.41E-05	0.00E+00	2.99E-05	2.12E-05	7.98E-08	2.09E-06	88.4	8.73E-04	1.46E-03
SI27_E	0.61	233	0	1	3.68E-02	8.73E-03	6.66E-04	4.52E-04	4.00E-04	8.41E-05	0.00E+00	3.40E-05	2.41E-05	9.00E-08	2.37E-06	102.8	9.91E-04	1.65E-03
SI27_E	0.61	246	0	1	3.91E-02	9.59E-03	7.09E-04	4.77E-04	4.23E-04	8.90E-05	0.00E+00	3.60E-05	2.55E-05	9.51E-08	2.51E-06	109.4	1.05E-03	1.74E-03
SI27_E	0.61	250	0	1	3.98E-02	1.00E-02	7.25E-04	4.86E-04	4.30E-04	9.07E-05	0.00E+00	3.67E-05	2.60E-05	9.68E-08	2.56E-06	111.9	1.07E-03	1.77E-03
SI27_E	0.61	259	0	1	4.13E-02	1.07E-02	7.54E-04	5.03E-04	4.45E-04	9.40E-05	0.00E+00	3.80E-05	2.69E-05	1.00E-07	2.65E-06	116.4	1.11E-03	1.84E-03
SI27_E	0.61	281	0	1	4.48E-02	1.15E-02	8.16E-04	5.46E-04	4.83E-04	1.02E-04	0.00E+00	4.12E-05	2.92E-05	1.09E-07	2.87E-06	126.0	1.20E-03	1.99E-03
SI27_E	0.61	347	0	1	5.52E-02	1.41E-02	1.01E-03	6.73E-04	5.96E-04	1.26E-04	0.00E+00	5.08E-05	3.60E-05	1.34E-07	3.55E-06	155.4	1.48E-03	2.46E-03
SI27_E	0.61	373	0	1	5.93E-02	1.48E-02	1.08E-03	7.25E-04	6.42E-04	1.35E-04	0.00E+00	5.46E-05	3.87E-05	1.44E-07	3.81E-06	166.2	1.59E-03	2.65E-03
SI27_E	0.61	259	0	1	4.10E-02	9.93E-03	7.42E-04	5.03E-04	4.45E-04	9.37E-05	0.00E+00	3.78E-05	2.68E-05	1.00E-07	2.64E-06	114.5	1.10E-03	1.84E-03
SI27_E	0.61	171	0	1	2.69E-02	5.71E-03	4.78E-04	3.32E-04	2.94E-04	6.15E-05	0.00E+00	2.49E-05	1.76E-05	6.62E-08	1.74E-06	73.8	7.25E-04	1.21E-03
SI27_E	0.61	145	0	1	2.26E-02	4.32E-03	3.97E-04	2.81E-04	2.49E-04	5.19E-05	0.00E+00	2.10E-05	1.48E-05	5.60E-08	1.46E-06	61.4	6.11E-04	1.03E-03
SI27_E	0.61	123	0	1	1.90E-02	3.28E-03	3.32E-04	2.39E-04	2.11E-04	4.38E-05	0.00E+00	1.77E-05	1.25E-05	4.75E-08	1.24E-06	51.2	5.17E-04	8.71E-04
SI27_E	0.61	101	0	1	1.55E-02	2.41E-03	2.69E-04	1.96E-04	1.74E-04	3.59E-05	0.00E+00	1.45E-05	1.03E-05	3.90E-08	1.01E-06	41.5	4.23E-04	7.16E-04
SI27_E	0.61	75	0	1	1.14E-02	1.59E-03	1.96E-04	1.45E-04	1.28E-04	2.64E-05	0.00E+00	1.07E-05	7.57E-06	2.89E-08	7.46E-07	30.2	3.12E-04	5.29E-04
SI27_W	0.66	62	0	1	9.40E-03	1.16E-03	1.60E-04	1.20E-04	1.06E-04	2.18E-05	0.00E+00	8.80E-06	6.24E-06	2.38E-08	6.14E-07	24.6	2.57E-04	4.37E-04
SI27_W	0.66	41	0	1	6.24E-03	6.90E-04	1.05E-04	7.98E-05	7.07E-05	1.45E-05	0.00E+00	5.85E-06	4.15E-06	1.59E-08	4.08E-07	16.3	1.71E-04	2.91E-04
SI27_W	0.66	36	0	1	5.44E-03	5.37E-04	9.10E-05	6.98E-05	6.19E-05	1.26E-05	0.00E+00	5.11E-06	3.62E-06	1.39E-08	3.56E-07	14.1	1.49E-04	2.55E-04
SI27_W	0.66	26	0	1	3.87E-03	3.84E-04	6.46E-05	4.99E-05	4.42E-05	9.02E-06	0.00E+00	3.64E-06	2.58E-06	9.94E-09	2.54E-07	10.0	1.06E-04	1.82E-04
SI27_W	0.66	36	0	1	5.42E-03	5.37E-04	9.02E-05	6.98E-05	6.19E-05	1.26E-05	0.00E+00	5.10E-06	3.61E-06	1.39E-08	3.56E-07	13.9	1.49E-04	2.55E-04
SI27_W	0.66	87	0	1	1.32E-02	1.31E-03	2.19E-04	1.70E-04	1.50E-04	3.06E-05	0.00E+00	1.24E-05	8.77E-06	3.38E-08	8.64E-07	33.8	3.61E-04	6.19E-04
SI27_W	0.66	262	0	1	3.96E-02	3.92E-03	6.61E-04	5.09E-04	4.51E-04	9.20E-05	0.00E+00	3.72E-05	2.64E-05	1.01E-07	2.60E-06	102.1	1.09E-03	1.86E-03
SI27_W	0.66	401	0	1	6.11E-02	7.32E-03	1.04E-03	7.78E-04	6.89E-04	1.42E-04	0.00E+00	5.72E-05	4.05E-05	1.55E-07	3.99E-06	159.9	1.67E-03	2.84E-03
SI27_W	0.66	324	0	1	4.99E-02	7.89E-03	8.65E-04	6.29E-04	5.57E-04	1.15E-04	0.00E+00	4.65E-05	3.30E-05	1.25E-07	3.25E-06	133.5	1.36E-03	2.29E-03
SI27_W	0.66	267	0	1	4.15E-02	7.56E-03	7.29E-04	5.19E-04	4.60E-04	9.55E-05	0.00E+00	3.86E-05	2.73E-05	1.03E-07	2.69E-06	112.6	1.13E-03	1.89E-03
SI27_W	0.66	242	0	1	3.78E-02	7.61E-03	6.70E-04	4.69E-04	4.15E-04	8.67E-05	0.00E+00	3.50E-05	2.48E-05	9.34E-08	2.44E-06	103.5	1.02E-03	1.71E-03
SI27_W	0.66	272	0	1	4.31E-02	1.02E-02	7.79E-04	5.29E-04	4.68E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.05E-07	2.78E-06	120.3	1.16E-03	1.93E-03
SI27_W	0.66	288	0	1	4.57E-02	1.12E-02	8.30E-04	5.59E-04	4.95E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.11E-07	2.94E-06	128.1	1.23E-03	2.04E-03
SI27_W	0.66	293	0	1	4.66E-02	1.17E-02	8.48E-04	5.69E-04	5.04E-04	1.06E-04	0.00E+00	4.29E-05	3.04E-05	1.13E-07	2.99E-06	131.0	1.25E-03	2.08E-03
SI27_W	0.66	303	0	1	4.83E-02	1.25E-02	8.82E-04	5.89E-04	5.21E-04	1.10E-04	0.00E+00	4.45E-05	3.15E-05	1.17E-07	3.10E-06	136.2	1.30E-03	2.15E-03
SI27_W	0.66	329	0	1	5.24E-02	1.34E-02	9.55E-04	6.39E-04	5.66E-04	1.19E-04	0.00E+00	4.82E-05	3.42E-05	1.27E-07	3.36E-06	147.5	1.41E-03	2.33E-03
SI27_W	0.66	406	0	1	6.46E-02	1.65E-02	1.18E-03	7.88E-04	6.98E-04	1.47E-04	0.00E+00	5.95E-05	4.22E-05	1.57E-07	4.15E-06	181.9	1.74E-03	2.88E-03
SI27_W	0.66	437	0	1	6.94E-02	1.73E-02	1.26E-03	8.48E-04	7.51E-04	1.58E-04	0.00E+00	6.39E-05	4.53E-05	1.69E-07	4.46E-06	194.5	1.86E-03	3.10E-03
SI27_W	0.66	303	0	1	4.80E-02	1.16E-02	8.68E-04	5.89E-04	5.21E-04	1.10E-04	0.00E+00	4.43E-05	3.14E-05	1.17E-07	3.09E-06	134.1	1.29E-03	2.15E-03
SI27_W	0.66	200	0	1	3.14E-02	6.69E-03	5.60E-04	3.89E-04	3.45E-04	7.20E-05	0.00E+00	2.91E-05	2.06E-05	7.75E-08	2.03E-06	86.4	8.49E-04	1.42E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI27_W	0.66	170	0	1	2.64E-02	5.06E-03	4.65E-04	3.29E-04	2.92E-04	6.07E-05	0.00E+00	2.45E-05	1.74E-05	6.56E-08	1.71E-06	71.8	7.15E-04	1.20E-03
SI27_W	0.66	144	0	1	2.23E-02	3.84E-03	3.88E-04	2.79E-04	2.47E-04	5.13E-05	0.00E+00	2.07E-05	1.47E-05	5.56E-08	1.45E-06	60.0	6.05E-04	1.02E-03
SI27_W	0.66	118	0	1	1.82E-02	2.82E-03	3.14E-04	2.29E-04	2.03E-04	4.20E-05	0.00E+00	1.70E-05	1.20E-05	4.57E-08	1.18E-06	48.5	4.95E-04	8.38E-04
SI27_W	0.66	87	0	1	1.34E-02	1.86E-03	2.29E-04	1.70E-04	1.50E-04	3.10E-05	0.00E+00	1.25E-05	8.86E-06	3.38E-08	8.73E-07	35.4	3.65E-04	6.19E-04
SI28_E	0.55	52	0	1	7.87E-03	9.68E-04	1.34E-04	1.00E-04	8.88E-05	1.82E-05	0.00E+00	7.37E-06	5.22E-06	2.00E-08	5.14E-07	20.6	2.15E-04	3.66E-04
SI28_E	0.55	34	0	1	5.22E-03	5.77E-04	8.81E-05	6.68E-05	5.92E-05	1.21E-05	0.00E+00	4.90E-06	3.47E-06	1.33E-08	3.42E-07	13.6	1.43E-04	2.44E-04
SI28_E	0.55	30	0	1	4.55E-03	4.50E-04	7.62E-05	5.85E-05	5.18E-05	1.06E-05	0.00E+00	4.28E-06	3.03E-06	1.16E-08	2.98E-07	11.8	1.25E-04	2.13E-04
SI28_E	0.55	22	0	1	3.24E-03	3.21E-04	5.40E-05	4.18E-05	3.70E-05	7.55E-06	0.00E+00	3.05E-06	2.16E-06	8.32E-09	2.13E-07	8.3	8.90E-05	1.52E-04
SI28_E	0.55	30	0	1	4.54E-03	4.50E-04	7.55E-05	5.85E-05	5.18E-05	1.06E-05	0.00E+00	4.27E-06	3.02E-06	1.16E-08	2.98E-07	11.7	1.24E-04	2.13E-04
SI28_E	0.55	73	0	1	1.10E-02	1.09E-03	1.83E-04	1.42E-04	1.26E-04	2.56E-05	0.00E+00	1.04E-05	7.34E-06	2.83E-08	7.23E-07	28.3	3.02E-04	5.18E-04
SI28_E	0.55	219	0	1	3.31E-02	3.28E-03	5.53E-04	4.26E-04	3.77E-04	7.70E-05	0.00E+00	3.11E-05	2.21E-05	8.48E-08	2.17E-06	85.4	9.08E-04	1.55E-03
SI28_E	0.55	336	0	1	5.11E-02	6.13E-03	8.67E-04	6.51E-04	5.77E-04	1.18E-04	0.00E+00	4.79E-05	3.39E-05	1.30E-07	3.34E-06	133.9	1.40E-03	2.38E-03
SI28_E	0.55	271	0	1	4.18E-02	6.60E-03	7.24E-04	5.26E-04	4.66E-04	9.64E-05	0.00E+00	3.89E-05	2.76E-05	1.05E-07	2.72E-06	111.8	1.14E-03	1.92E-03
SI28_E	0.55	224	0	1	3.48E-02	6.32E-03	6.10E-04	4.34E-04	3.85E-04	7.99E-05	0.00E+00	3.23E-05	2.29E-05	8.65E-08	2.25E-06	94.2	9.42E-04	1.59E-03
SI28_E	0.55	202	0	1	3.16E-02	6.37E-03	5.61E-04	3.93E-04	3.48E-04	7.25E-05	0.00E+00	2.93E-05	2.08E-05	7.82E-08	2.05E-06	86.6	8.55E-04	1.43E-03
SI28_E	0.55	228	0	1	3.61E-02	8.55E-03	6.52E-04	4.43E-04	3.92E-04	8.24E-05	0.00E+00	3.33E-05	2.36E-05	8.82E-08	2.32E-06	100.7	9.71E-04	1.62E-03
SI28_E	0.55	241	0	1	3.83E-02	9.40E-03	6.94E-04	4.68E-04	4.14E-04	8.72E-05	0.00E+00	3.52E-05	2.50E-05	9.32E-08	2.46E-06	107.2	1.03E-03	1.71E-03
SI28_E	0.55	245	0	1	3.90E-02	9.82E-03	7.10E-04	4.76E-04	4.22E-04	8.89E-05	0.00E+00	3.59E-05	2.54E-05	9.48E-08	2.51E-06	109.6	1.05E-03	1.74E-03
SI28_E	0.55	254	0	1	4.05E-02	1.04E-02	7.38E-04	4.93E-04	4.36E-04	9.21E-05	0.00E+00	3.72E-05	2.64E-05	9.81E-08	2.60E-06	114.0	1.09E-03	1.80E-03
SI28_E	0.55	275	0	1	4.38E-02	1.12E-02	7.99E-04	5.34E-04	4.73E-04	9.99E-05	0.00E+00	4.03E-05	2.86E-05	1.06E-07	2.82E-06	123.4	1.18E-03	1.95E-03
SI28_E	0.55	340	0	1	5.41E-02	1.38E-02	9.86E-04	6.60E-04	5.84E-04	1.23E-04	0.00E+00	4.98E-05	3.53E-05	1.31E-07	3.47E-06	152.2	1.45E-03	2.41E-03
SI28_E	0.55	366	0	1	5.81E-02	1.45E-02	1.05E-03	7.10E-04	6.29E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	162.8	1.56E-03	2.59E-03
SI28_E	0.55	254	0	1	4.02E-02	9.73E-03	7.27E-04	4.93E-04	4.36E-04	9.17E-05	0.00E+00	3.71E-05	2.63E-05	9.81E-08	2.59E-06	112.2	1.08E-03	1.80E-03
SI28_E	0.55	168	0	1	2.63E-02	5.60E-03	4.68E-04	3.26E-04	2.88E-04	6.03E-05	0.00E+00	2.44E-05	1.73E-05	6.49E-08	1.70E-06	72.3	7.11E-04	1.19E-03
SI28_E	0.55	142	0	1	2.21E-02	4.23E-03	3.89E-04	2.76E-04	2.44E-04	5.08E-05	0.00E+00	2.05E-05	1.45E-05	5.49E-08	1.43E-06	60.1	5.99E-04	1.01E-03
SI28_E	0.55	120	0	1	1.86E-02	3.22E-03	3.25E-04	2.34E-04	2.07E-04	4.29E-05	0.00E+00	1.74E-05	1.23E-05	4.66E-08	1.21E-06	50.2	5.06E-04	8.54E-04
SI28_E	0.55	99	0	1	1.52E-02	2.36E-03	2.63E-04	1.92E-04	1.70E-04	3.52E-05	0.00E+00	1.42E-05	1.01E-05	3.83E-08	9.91E-07	40.6	4.14E-04	7.01E-04
SI28_E	0.55	73	0	1	1.12E-02	1.56E-03	1.92E-04	1.42E-04	1.26E-04	2.59E-05	0.00E+00	1.05E-05	7.42E-06	2.83E-08	7.30E-07	29.6	3.05E-04	5.18E-04
SI28_W	0.63	62	0	1	9.48E-03	1.17E-03	1.61E-04	1.21E-04	1.07E-04	2.20E-05	0.00E+00	8.87E-06	6.29E-06	2.40E-08	6.19E-07	24.8	2.59E-04	4.41E-04
SI28_W	0.63	41	0	1	6.29E-03	6.95E-04	1.06E-04	8.05E-05	7.13E-05	1.46E-05	0.00E+00	5.90E-06	4.18E-06	1.60E-08	4.12E-07	16.4	1.72E-04	2.94E-04
SI28_W	0.63	36	0	1	5.48E-03	5.42E-04	9.17E-05	7.04E-05	6.24E-05	1.27E-05	0.00E+00	5.15E-06	3.65E-06	1.40E-08	3.59E-07	14.2	1.50E-04	2.57E-04
SI28_W	0.63	26	0	1	3.91E-03	3.87E-04	6.51E-05	5.03E-05	4.45E-05	9.09E-06	0.00E+00	3.67E-06	2.60E-06	1.00E-08	2.56E-07	10.1	1.07E-04	1.84E-04
SI28_W	0.63	36	0	1	5.46E-03	5.42E-04	9.09E-05	7.04E-05	6.24E-05	1.27E-05	0.00E+00	5.14E-06	3.64E-06	1.40E-08	3.59E-07	14.0	1.50E-04	2.57E-04
SI28_W	0.63	88	0	1	1.33E-02	1.32E-03	2.21E-04	1.71E-04	1.51E-04	3.09E-05	0.00E+00	1.25E-05	8.84E-06	3.41E-08	8.71E-07	34.1	3.64E-04	6.24E-04
SI28_W	0.63	264	0	1	3.99E-02	3.95E-03	6.66E-04	5.13E-04	4.54E-04	9.28E-05	0.00E+00	3.75E-05	2.66E-05	1.02E-07	2.62E-06	102.9	1.09E-03	1.87E-03
SI28_W	0.63	404	0	1	6.16E-02	7.38E-03	1.04E-03	7.85E-04	6.95E-04	1.43E-04	0.00E+00	5.76E-05	4.08E-05	1.56E-07	4.02E-06	161.2	1.68E-03	2.86E-03
SI28_W	0.63	326	0	1	5.03E-02	7.95E-03	8.72E-04	6.34E-04	5.61E-04	1.16E-04	0.00E+00	4.69E-05	3.32E-05	1.26E-07	3.27E-06	134.6	1.37E-03	2.31E-03
SI28_W	0.63	269	0	1	4.19E-02	7.62E-03	7.35E-04	5.23E-04	4.63E-04	9.63E-05	0.00E+00	3.89E-05	2.76E-05	1.04E-07	2.72E-06	113.5	1.14E-03	1.91E-03
SI28_W	0.63	244	0	1	3.81E-02	7.67E-03	6.76E-04	4.73E-04	4.19E-04	8.74E-05	0.00E+00	3.53E-05	2.50E-05	9.42E-08	2.46E-06	104.3	1.03E-03	1.73E-03
SI28_W	0.63	275	0	1	4.35E-02	1.03E-02	7.85E-04	5.33E-04	4.72E-04	9.92E-05	0.00E+00	4.01E-05	2.84E-05	1.06E-07	2.80E-06	121.3	1.17E-03	1.95E-03
SI28_W	0.63	290	0	1	4.61E-02	1.13E-02	8.36E-04	5.63E-04	4.99E-04	1.05E-04	0.00E+00	4.24E-05	3.01E-05	1.12E-07	2.96E-06	129.1	1.24E-03	2.06E-03
SI28_W	0.63	295	0	1	4.70E-02	1.18E-02	8.55E-04	5.73E-04	5.08E-04	1.07E-04	0.00E+00	4.33E-05	3.06E-05	1.14E-07	3.02E-06	132.0	1.26E-03	2.09E-03
SI28_W	0.63	306	0	1	4.87E-02	1.26E-02	8.89E-04	5.93E-04	5.26E-04	1.11E-04	0.00E+00	4.48E-05	3.18E-05	1.18E-07	3.13E-06	137.3	1.31E-03	2.17E-03
SI28_W	0.63	332	0	1	5.28E-02	1.35E-02	9.63E-04	6.44E-04	5.70E-04	1.20E-04	0.00E+00	4.86E-05	3.44E-05	1.28E-07	3.39E-06	148.6	1.42E-03	2.35E-03
SI28_W	0.63	409	0	1	6.52E-02	1.67E-02	1.19E-03	7.95E-04	7.04E-04	1.48E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.19E-06	183.3	1.75E-03	2.90E-03
SI28_W	0.63	440	0	1	6.99E-02	1.74E-02	1.27E-03	8.55E-04	7.57E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.70E-07	4.50E-06	196.1	1.88E-03	3.12E-03
SI28_W	0.63	306	0	1	4.84E-02	1.17E-02	8.75E-04	5.93E-04	5.26E-04	1.11E-04	0.00E+00	4.47E-05	3.16E-05	1.18E-07	3.12E-06	135.2	1.30E-03	2.17E-03
SI28_W	0.63	202	0	1	3.17E-02	6.74E-03	5.64E-04	3.92E-04	3.47E-04	7.26E-05	0.00E+00	2.93E-05	2.08E-05	7.81E-08	2.05E-06	87.1	8.56E-04	1.43E-03
SI28_W	0.63	171	0	1	2.66E-02	5.10E-03	4.69E-04	3.32E-04	2.94E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.61E-08	1.73E-06	72.4	7.21E-04	1.21E-03
SI28_W	0.63	145	0	1	2.25E-02	3.87E-03	3.91E-04	2.82E-04	2.49E-04	5.17E-05	0.00E+00	2.09E-05	1.48E-05	5.61E-08	1.46E-06	60.4	6.10E-04	1.03E-03
SI28_W	0.63	119	0	1	1.83E-02	2.85E-03	3.17E-04	2.31E-04	2.05E-04	4.23E-05	0.00E+00	1.71E-05	1.21E-05	4.61E-08	1.19E-06	48.9	4.99E-04	8.45E-04
SI28_W	0.63	88	0	1	1.35E-02	1.87E-03	2.31E-04	1.71E-04	1.51E-04	3.12E-05	0.00E+00	1.26E-05	8.93E-06	3.41E-08	8.80E-07	35.7	3.68E-04	6.24E-04
SI29_E	0.75	74	0	1	1.13E-02	1.39E-03	1.92E-04	1.44E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.87E-08	7.39E-07	29.6	3.09E-04	5.26E-04
SI29_E	0.75	49	0	1	7.51E-03	8.30E-04	1.27E-04	9.60E-05	8.50E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.91E-08	4.91E-07	19.6	2.05E-04	3.50E-04
SI29_E	0.75	43	0	1	6.54E-03	6.46E-04	1.09E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.14E-06	4.35E-06	1.67E-08	4.29E-07	16.9	1.79E-04	3.07E-04
SI29_E	0.75	31	0	1	4.66E-03	4.62E-04	7.77E-05	6.00E-05	5.31E-05	1.08E-05	0.00E+00	4.38E-06	3.11E-06	1.20E-08	3.06E-07	12.0	1.28E-04	2.19E-04
SI29_E	0.75	43	0	1	6.52E-03	6.46E-04	1.08E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.13E-06	4.35E-06	1.67E-08	4.28E-07	16.8	1.79E-04	3.07E-04
SI29_E	0.75	105	0	1	1.58E-02	1.57E-03	2.63E-04	2.04E-04	1.81E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.06E-08	1.04E-06	40.7	4.34E-04	7.45E-04
SI29_E	0.75	315	0	1	4.76E-02	4.71E-03	7.95E-04	6.12E-04	5.42E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.22E-07	3.12E-06	122.8	1.31E-03	2.23E-03
SI29_E	0.75	482	0	1	7.34E-02	8.80E-03	1.25E-03	9.36E-04	8.29E-04	1.70E-04	0.00E+00	6.88E-05	4.87E-05	1.86E-07	4.80E-06	192.4	2.01E-03	3.42E-03
SI29_E	0.75	390	0	1	6.01E-02	9.48E-03	1.04E-03	7.56E-04	6.70E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.51E-07	3.91E-06	160.6	1.63E-03	2.76E-03
SI29_E	0.75	322	0	1	5.00E-02	9.09E-03	8.77E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	135.4	1.35E-03	2.28E-03
SI29_E	0.75	291	0	1	4.55E-02	9.15E-03	8.06E-04	5.64E-04	5.00E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.12E-07	2.94E-06	124.5	1.23E-03	2.06E-03
SI29_E	0.75	328	0	1	5.19E-02	1.23E-02	9.37E-04	6.36E-04	5.63E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.27E-07	3.34E-06	144.7	1.40E-03	2.32E-03
SI29_E	0.75	346	0	1	5.50E-02	1.35E-02	9.98E-04	6.72E-04	5.95E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	154.1	1.48E-03	2.45E-03
SI29_E	0.75	352	0	1	5.61E-02	1.41E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.5	1.51E-03	2.50E-03
SI29_E	0.75	365	0	1	5.81E-02	1.50E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.8	1.56E-03	2.58E-03
SI29_E	0.75	396	0	1	6.30E-02	1.61E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.4	1.69E-03	2.80E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_E	0.75	488	0	1	7.78E-02	1.99E-02	1.42E-03	9.48E-04	8.40E-04	1.77E-04	0.00E+00	7.16E-05	5.07E-05	1.89E-07	4.99E-06	218.7	2.09E-03	3.46E-03
SI29_E	0.75	526	0	1	8.35E-02	2.08E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	233.9	2.24E-03	3.72E-03
SI29_E	0.75	365	0	1	5.78E-02	1.40E-02	1.04E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.33E-05	3.77E-05	1.41E-07	3.72E-06	161.3	1.55E-03	2.58E-03
SI29_E	0.75	241	0	1	3.78E-02	8.04E-03	6.73E-04	4.68E-04	4.15E-04	8.66E-05	0.00E+00	3.50E-05	2.48E-05	9.32E-08	2.44E-06	103.9	1.02E-03	1.71E-03
SI29_E	0.75	204	0	1	3.18E-02	6.08E-03	5.60E-04	3.96E-04	3.51E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.89E-08	2.06E-06	86.4	8.61E-04	1.45E-03
SI29_E	0.75	173	0	1	2.68E-02	4.62E-03	4.67E-04	3.36E-04	2.98E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.69E-08	1.74E-06	72.1	7.27E-04	1.23E-03
SI29_E	0.75	142	0	1	2.19E-02	3.40E-03	3.78E-04	2.76E-04	2.44E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.50E-08	1.42E-06	58.4	5.96E-04	1.01E-03
SI29_E	0.75	105	0	1	1.61E-02	2.24E-03	2.76E-04	2.04E-04	1.81E-04	3.72E-05	0.00E+00	1.50E-05	1.07E-05	4.06E-08	1.05E-06	42.6	4.39E-04	7.45E-04
SI29_W	0.75	74	0	1	1.13E-02	1.39E-03	1.92E-04	1.44E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.87E-08	7.39E-07	29.6	3.09E-04	5.26E-04
SI29_W	0.75	49	0	1	7.51E-03	8.30E-04	1.27E-04	9.60E-05	8.50E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.91E-08	4.91E-07	19.6	2.05E-04	3.50E-04
SI29_W	0.75	43	0	1	6.54E-03	6.46E-04	1.09E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.14E-06	4.35E-06	1.67E-08	4.29E-07	16.9	1.79E-04	3.07E-04
SI29_W	0.75	31	0	1	4.66E-03	4.62E-04	7.77E-05	6.00E-05	5.31E-05	1.08E-05	0.00E+00	4.38E-06	3.11E-06	1.20E-08	3.06E-07	12.0	1.28E-04	2.19E-04
SI29_W	0.75	43	0	1	6.52E-03	6.46E-04	1.08E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.13E-06	4.35E-06	1.67E-08	4.28E-07	16.8	1.79E-04	3.07E-04
SI29_W	0.75	105	0	1	1.58E-02	1.57E-03	2.63E-04	2.04E-04	1.81E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.06E-08	1.04E-06	40.7	4.34E-04	7.45E-04
SI29_W	0.75	315	0	1	4.76E-02	4.71E-03	7.95E-04	6.12E-04	5.42E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.22E-07	3.12E-06	122.8	1.31E-03	2.23E-03
SI29_W	0.75	482	0	1	7.34E-02	8.80E-03	1.25E-03	9.36E-04	8.29E-04	1.70E-04	0.00E+00	6.88E-05	4.87E-05	1.86E-07	4.80E-06	192.4	2.01E-03	3.42E-03
SI29_W	0.75	390	0	1	6.01E-02	9.48E-03	1.04E-03	7.56E-04	6.70E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.51E-07	3.91E-06	160.6	1.63E-03	2.76E-03
SI29_W	0.75	322	0	1	5.00E-02	9.09E-03	8.77E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	135.4	1.35E-03	2.28E-03
SI29_W	0.75	291	0	1	4.55E-02	9.15E-03	8.06E-04	5.64E-04	5.00E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.12E-07	2.94E-06	124.5	1.23E-03	2.06E-03
SI29_W	0.75	328	0	1	5.19E-02	1.23E-02	9.37E-04	6.36E-04	5.63E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.27E-07	3.34E-06	144.7	1.40E-03	2.32E-03
SI29_W	0.75	346	0	1	5.50E-02	1.35E-02	9.98E-04	6.72E-04	5.95E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	154.1	1.48E-03	2.45E-03
SI29_W	0.75	352	0	1	5.61E-02	1.41E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.5	1.51E-03	2.50E-03
SI29_W	0.75	365	0	1	5.81E-02	1.50E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.8	1.56E-03	2.58E-03
SI29_W	0.75	396	0	1	6.30E-02	1.61E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.4	1.69E-03	2.80E-03
SI29_W	0.75	488	0	1	7.78E-02	1.99E-02	1.42E-03	9.48E-04	8.40E-04	1.77E-04	0.00E+00	7.16E-05	5.07E-05	1.89E-07	4.99E-06	218.7	2.09E-03	3.46E-03
SI29_W	0.75	526	0	1	8.35E-02	2.08E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	233.9	2.24E-03	3.72E-03
SI29_W	0.75	365	0	1	5.78E-02	1.40E-02	1.04E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.33E-05	3.77E-05	1.41E-07	3.72E-06	161.3	1.55E-03	2.58E-03
SI29_W	0.75	241	0	1	3.78E-02	8.04E-03	6.73E-04	4.68E-04	4.15E-04	8.66E-05	0.00E+00	3.50E-05	2.48E-05	9.32E-08	2.44E-06	103.9	1.02E-03	1.71E-03
SI29_W	0.75	204	0	1	3.18E-02	6.08E-03	5.60E-04	3.96E-04	3.51E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.89E-08	2.06E-06	86.4	8.61E-04	1.45E-03
SI29_W	0.75	173	0	1	2.68E-02	4.62E-03	4.67E-04	3.36E-04	2.98E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.69E-08	1.74E-06	72.1	7.27E-04	1.23E-03
SI29_W	0.75	142	0	1	2.19E-02	3.40E-03	3.78E-04	2.76E-04	2.44E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.50E-08	1.42E-06	58.4	5.96E-04	1.01E-03
SI29_W	0.75	105	0	1	1.61E-02	2.24E-03	2.76E-04	2.04E-04	1.81E-04	3.72E-05	0.00E+00	1.50E-05	1.07E-05	4.06E-08	1.05E-06	42.6	4.39E-04	7.45E-04
SI30_E	0.75	74	0	1	1.13E-02	1.39E-03	1.92E-04	1.44E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.87E-08	7.39E-07	29.6	3.09E-04	5.26E-04
SI30_E	0.75	49	0	1	7.51E-03	8.30E-04	1.27E-04	9.60E-05	8.50E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.91E-08	4.91E-07	19.6	2.05E-04	3.50E-04
SI30_E	0.75	43	0	1	6.54E-03	6.46E-04	1.09E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.14E-06	4.35E-06	1.67E-08	4.29E-07	16.9	1.79E-04	3.07E-04
SI30_E	0.75	31	0	1	4.66E-03	4.62E-04	7.77E-05	6.00E-05	5.31E-05	1.08E-05	0.00E+00	4.38E-06	3.11E-06	1.20E-08	3.06E-07	12.0	1.28E-04	2.19E-04
SI30_E	0.75	43	0	1	6.52E-03	6.46E-04	1.08E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.13E-06	4.35E-06	1.67E-08	4.28E-07	16.8	1.79E-04	3.07E-04
SI30_E	0.75	105	0	1	1.58E-02	1.57E-03	2.63E-04	2.04E-04	1.81E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.06E-08	1.04E-06	40.7	4.34E-04	7.45E-04
SI30_E	0.75	315	0	1	4.76E-02	4.71E-03	7.95E-04	6.12E-04	5.42E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.22E-07	3.12E-06	122.8	1.31E-03	2.23E-03
SI30_E	0.75	482	0	1	7.34E-02	8.80E-03	1.25E-03	9.36E-04	8.29E-04	1.70E-04	0.00E+00	6.88E-05	4.87E-05	1.86E-07	4.80E-06	192.4	2.01E-03	3.42E-03
SI30_E	0.75	390	0	1	6.01E-02	9.48E-03	1.04E-03	7.56E-04	6.70E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.51E-07	3.91E-06	160.6	1.63E-03	2.76E-03
SI30_E	0.75	322	0	1	5.00E-02	9.09E-03	8.77E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	135.4	1.35E-03	2.28E-03
SI30_E	0.75	291	0	1	4.55E-02	9.15E-03	8.06E-04	5.64E-04	5.00E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.12E-07	2.94E-06	124.5	1.23E-03	2.06E-03
SI30_E	0.75	328	0	1	5.19E-02	1.23E-02	9.37E-04	6.36E-04	5.63E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.27E-07	3.34E-06	144.7	1.40E-03	2.32E-03
SI30_E	0.75	346	0	1	5.50E-02	1.35E-02	9.98E-04	6.72E-04	5.95E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	154.1	1.48E-03	2.45E-03
SI30_E	0.75	352	0	1	5.61E-02	1.41E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.5	1.51E-03	2.50E-03
SI30_E	0.75	365	0	1	5.81E-02	1.50E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.8	1.56E-03	2.58E-03
SI30_E	0.75	396	0	1	6.30E-02	1.61E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.4	1.69E-03	2.80E-03
SI30_E	0.75	488	0	1	7.78E-02	1.99E-02	1.42E-03	9.48E-04	8.40E-04	1.77E-04	0.00E+00	7.16E-05	5.07E-05	1.89E-07	4.99E-06	218.7	2.09E-03	3.46E-03
SI30_E	0.75	526	0	1	8.35E-02	2.08E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	233.9	2.24E-03	3.72E-03
SI30_E	0.75	365	0	1	5.78E-02	1.40E-02	1.04E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.33E-05	3.77E-05	1.41E-07	3.72E-06	161.3	1.55E-03	2.58E-03
SI30_E	0.75	241	0	1	3.78E-02	8.04E-03	6.73E-04	4.68E-04	4.15E-04	8.66E-05	0.00E+00	3.50E-05	2.48E-05	9.32E-08	2.44E-06	103.9	1.02E-03	1.71E-03
SI30_E	0.75	204	0	1	3.18E-02	6.08E-03	5.60E-04	3.96E-04	3.51E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.89E-08	2.06E-06	86.4	8.61E-04	1.45E-03
SI30_E	0.75	173	0	1	2.68E-02	4.62E-03	4.67E-04	3.36E-04	2.98E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.69E-08	1.74E-06	72.1	7.27E-04	1.23E-03
SI30_E	0.75	142	0	1	2.19E-02	3.40E-03	3.78E-04	2.76E-04	2.44E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.50E-08	1.42E-06	58.4	5.96E-04	1.01E-03
SI30_E	0.75	105	0	1	1.61E-02	2.24E-03	2.76E-04	2.04E-04	1.81E-04	3.72E-05	0.00E+00	1.50E-05	1.07E-05	4.06E-08	1.05E-06	42.6	4.39E-04	7.45E-04
SI30_W	0.75	74	0	1	1.13E-02	1.39E-03	1.92E-04	1.44E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.87E-08	7.39E-07	29.6	3.09E-04	5.26E-04
SI30_W	0.75	49	0	1	7.51E-03	8.30E-04	1.27E-04	9.60E-05	8.50E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.91E-08	4.91E-07	19.6	2.05E-04	3.50E-04
SI30_W	0.75	43	0	1	6.54E-03	6.46E-04	1.09E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.14E-06	4.35E-06	1.67E-08	4.29E-07	16.9	1.79E-04	3.07E-04
SI30_W	0.75	31	0	1	4.66E-03	4.62E-04	7.77E-05	6.00E-05	5.31E-05	1.08E-05	0.00E+00	4.38E-06	3.11E-06	1.20E-08	3.06E-07	12.0	1.28E-04	2.19E-04
SI30_W	0.75	43	0	1	6.52E-03	6.46E-04	1.08E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.13E-06	4.35E-06	1.67E-08	4.28E-07	16.8	1.79E-04	3.07E-04
SI30_W	0.75	105	0	1	1.58E-02	1.57E-03	2.63E-04	2.04E-04	1.81E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.06E-08	1.04E-06	40.7	4.34E-04	7.45E-04
SI30_W	0.75	315	0	1	4.76E-02	4.71E-03	7.95E-04	6.12E-04	5.42E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.22E-07	3.12E-06	122.8	1.31E-03	2.23E-03
SI30_W	0.75	482	0	1	7.34E-02	8.80E-03	1.25E-03	9.36E-04	8.29E-04	1.70E-04	0.00E+00	6.88E-05	4.87E-05	1.86E-07	4.80E-06	192.4	2.01E-03	3.42E-03
SI30_W	0.75	390	0	1	6.01E-02	9.48E-03	1.04E-03	7.56E-04	6.70E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.51E-07	3.91E-06	160.6	1.63E-03	2.76E-03
SI30_W	0.75	322	0	1	5.00E-02	9.09E-03	8.77E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	135.4	1.35E-03	2.28E-03
SI30_W	0.75	291	0	1	4.55E-02	9.15E-03	8.06E-04	5.64E-04	5.00E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.12E-07	2.94E-06	124.5	1.23E-03	2.06E-03
SI30_W	0.75	328	0	1	5.19E-02	1.23E-02	9.37E-04	6.36E-04	5.63E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.27E-07	3.34E-06	144.7	1.40E-03	2.32E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI30_W	0.75	346	0	1	5.50E-02	1.35E-02	9.98E-04	6.72E-04	5.95E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	154.1	1.48E-03	2.45E-03
SI30_W	0.75	352	0	1	5.61E-02	1.41E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.5	1.51E-03	2.50E-03
SI30_W	0.75	365	0	1	5.81E-02	1.50E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.8	1.56E-03	2.58E-03
SI30_W	0.75	396	0	1	6.30E-02	1.61E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.4	1.69E-03	2.80E-03
SI30_W	0.75	488	0	1	7.78E-02	1.99E-02	1.42E-03	9.48E-04	8.40E-04	1.77E-04	0.00E+00	7.16E-05	5.07E-05	1.89E-07	4.99E-06	218.7	2.09E-03	3.46E-03
SI30_W	0.75	526	0	1	8.35E-02	2.08E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	233.9	2.24E-03	3.72E-03
SI30_W	0.75	365	0	1	5.78E-02	1.40E-02	1.04E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.33E-05	3.77E-05	1.41E-07	3.72E-06	161.3	1.55E-03	2.58E-03
SI30_W	0.75	241	0	1	3.78E-02	8.04E-03	6.73E-04	4.68E-04	4.15E-04	8.66E-05	0.00E+00	3.50E-05	2.48E-05	9.32E-08	2.44E-06	103.9	1.02E-03	1.71E-03
SI30_W	0.75	204	0	1	3.18E-02	6.08E-03	5.60E-04	3.96E-04	3.51E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.89E-08	2.06E-06	86.4	8.61E-04	1.45E-03
SI30_W	0.75	173	0	1	2.68E-02	4.62E-03	4.67E-04	3.36E-04	2.98E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.69E-08	1.74E-06	72.1	7.27E-04	1.23E-03
SI30_W	0.75	142	0	1	2.19E-02	3.40E-03	3.78E-04	2.76E-04	2.44E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.50E-08	1.42E-06	58.4	5.96E-04	1.01E-03
SI30_W	0.75	105	0	1	1.61E-02	2.24E-03	2.76E-04	2.04E-04	1.81E-04	3.72E-05	0.00E+00	1.50E-05	1.07E-05	4.06E-08	1.05E-06	42.6	4.39E-04	7.45E-04
SI31_E	0.75	74	0	1	1.13E-02	1.39E-03	1.92E-04	1.44E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.87E-08	7.39E-07	29.6	3.09E-04	5.26E-04
SI31_E	0.75	49	0	1	7.51E-03	8.30E-04	1.27E-04	9.60E-05	8.50E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.91E-08	4.91E-07	19.6	2.05E-04	3.50E-04
SI31_E	0.75	43	0	1	6.54E-03	6.46E-04	1.09E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.14E-06	4.35E-06	1.67E-08	4.29E-07	16.9	1.79E-04	3.07E-04
SI31_E	0.75	31	0	1	4.66E-03	4.62E-04	7.77E-05	6.00E-05	5.31E-05	1.08E-05	0.00E+00	4.38E-06	3.11E-06	1.20E-08	3.06E-07	12.0	1.28E-04	2.19E-04
SI31_E	0.75	43	0	1	6.52E-03	6.46E-04	1.08E-04	8.40E-05	7.44E-05	1.52E-05	0.00E+00	6.13E-06	4.35E-06	1.67E-08	4.28E-07	16.8	1.79E-04	3.07E-04
SI31_E	0.75	105	0	1	1.58E-02	1.57E-03	2.63E-04	2.04E-04	1.81E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.06E-08	1.04E-06	40.7	4.34E-04	7.45E-04
SI31_E	0.75	315	0	1	4.76E-02	4.71E-03	7.95E-04	6.12E-04	5.42E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.22E-07	3.12E-06	122.8	1.31E-03	2.23E-03
SI31_E	0.75	482	0	1	7.34E-02	8.80E-03	1.25E-03	9.36E-04	8.29E-04	1.70E-04	0.00E+00	6.88E-05	4.87E-05	1.86E-07	4.80E-06	192.4	2.01E-03	3.42E-03
SI31_E	0.75	390	0	1	6.01E-02	9.48E-03	1.04E-03	7.56E-04	6.70E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.51E-07	3.91E-06	160.6	1.63E-03	2.76E-03
SI31_E	0.75	322	0	1	5.00E-02	9.09E-03	8.77E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	135.4	1.35E-03	2.28E-03
SI31_E	0.75	291	0	1	4.55E-02	9.15E-03	8.06E-04	5.64E-04	5.00E-04	1.04E-04	0.00E+00	4.21E-05	2.98E-05	1.12E-07	2.94E-06	124.5	1.23E-03	2.06E-03
SI31_E	0.75	328	0	1	5.19E-02	1.23E-02	9.37E-04	6.36E-04	5.63E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.27E-07	3.34E-06	144.7	1.40E-03	2.32E-03
SI31_E	0.75	346	0	1	5.50E-02	1.35E-02	9.98E-04	6.72E-04	5.95E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	154.1	1.48E-03	2.45E-03
SI31_E	0.75	352	0	1	5.61E-02	1.41E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.36E-07	3.60E-06	157.5	1.51E-03	2.50E-03
SI31_E	0.75	365	0	1	5.81E-02	1.50E-02	1.06E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.41E-07	3.73E-06	163.8	1.56E-03	2.58E-03
SI31_E	0.75	396	0	1	6.30E-02	1.61E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.4	1.69E-03	2.80E-03
SI31_E	0.75	488	0	1	7.78E-02	1.99E-02	1.42E-03	9.48E-04	8.40E-04	1.77E-04	0.00E+00	7.16E-05	5.07E-05	1.89E-07	4.99E-06	218.7	2.09E-03	3.46E-03
SI31_E	0.75	526	0	1	8.35E-02	2.08E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	233.9	2.24E-03	3.72E-03
SI31_E	0.75	365	0	1	5.78E-02	1.40E-02	1.04E-03	7.08E-04	6.27E-04	1.32E-04	0.00E+00	5.33E-05	3.77E-05	1.41E-07	3.72E-06	161.3	1.55E-03	2.58E-03
SI31_E	0.75	241	0	1	3.78E-02	8.04E-03	6.73E-04	4.68E-04	4.15E-04	8.66E-05	0.00E+00	3.50E-05	2.48E-05	9.32E-08	2.44E-06	103.9	1.02E-03	1.71E-03
SI31_E	0.75	204	0	1	3.18E-02	6.08E-03	5.60E-04	3.96E-04	3.51E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.89E-08	2.06E-06	86.4	8.61E-04	1.45E-03
SI31_E	0.75	173	0	1	2.68E-02	4.62E-03	4.67E-04	3.36E-04	2.98E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.69E-08	1.74E-06	72.1	7.27E-04	1.23E-03
SI31_E	0.75	142	0	1	2.19E-02	3.40E-03	3.78E-04	2.76E-04	2.44E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.50E-08	1.42E-06	58.4	5.96E-04	1.01E-03
SI31_E	0.75	105	0	1	1.61E-02	2.24E-03	2.76E-04	2.04E-04	1.81E-04	3.72E-05	0.00E+00	1.50E-05	1.07E-05	4.06E-08	1.05E-06	42.6	4.39E-04	7.45E-04
SI31_W	0.75	83	0	1	1.26E-02	1.55E-03	2.14E-04	1.61E-04	1.42E-04	2.92E-05	0.00E+00	1.18E-05	8.36E-06	3.20E-08	8.23E-07	33.0	3.44E-04	5.86E-04
SI31_W	0.75	55	0	1	8.37E-03	9.25E-04	1.41E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.85E-06	5.56E-06	2.13E-08	5.48E-07	21.8	2.29E-04	3.91E-04
SI31_W	0.75	48	0	1	7.29E-03	7.20E-04	1.22E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.85E-06	4.85E-06	1.86E-08	4.78E-07	18.8	2.00E-04	3.42E-04
SI31_W	0.75	34	0	1	5.19E-03	5.15E-04	8.66E-05	6.69E-05	5.92E-05	1.21E-05	0.00E+00	4.88E-06	3.46E-06	1.33E-08	3.41E-07	13.4	1.42E-04	2.44E-04
SI31_W	0.75	48	0	1	7.26E-03	7.20E-04	1.21E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.83E-06	4.84E-06	1.86E-08	4.77E-07	18.7	1.99E-04	3.42E-04
SI31_W	0.75	117	0	1	1.76E-02	1.75E-03	2.94E-04	2.27E-04	2.01E-04	4.11E-05	0.00E+00	1.66E-05	1.18E-05	4.53E-08	1.16E-06	45.3	4.84E-04	8.30E-04
SI31_W	0.75	351	0	1	5.30E-02	5.25E-03	8.86E-04	6.82E-04	6.04E-04	1.23E-04	0.00E+00	4.99E-05	3.53E-05	1.36E-07	3.48E-06	136.8	1.45E-03	2.49E-03
SI31_W	0.75	537	0	1	8.18E-02	9.81E-03	1.39E-03	1.04E-03	9.24E-04	1.90E-04	0.00E+00	7.67E-05	5.43E-05	2.08E-07	5.35E-06	214.4	2.24E-03	3.81E-03
SI31_W	0.75	434	0	1	6.69E-02	1.06E-02	1.16E-03	8.43E-04	7.46E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.68E-07	4.35E-06	179.0	1.82E-03	3.08E-03
SI31_W	0.75	358	0	1	5.57E-02	1.01E-02	9.77E-04	6.96E-04	6.16E-04	1.28E-04	0.00E+00	5.17E-05	3.67E-05	1.39E-07	3.61E-06	150.9	1.51E-03	2.54E-03
SI31_W	0.75	324	0	1	5.07E-02	1.02E-02	8.98E-04	6.29E-04	5.57E-04	1.16E-04	0.00E+00	4.69E-05	3.33E-05	1.25E-07	3.28E-06	138.7	1.37E-03	2.29E-03
SI31_W	0.75	365	0	1	5.78E-02	1.37E-02	1.04E-03	7.09E-04	6.28E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.41E-07	3.72E-06	161.2	1.56E-03	2.59E-03
SI31_W	0.75	386	0	1	6.13E-02	1.51E-02	1.11E-03	7.49E-04	6.63E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	171.7	1.65E-03	2.73E-03
SI31_W	0.75	393	0	1	6.25E-02	1.57E-02	1.14E-03	7.62E-04	6.75E-04	1.42E-04	0.00E+00	5.75E-05	4.07E-05	1.52E-07	4.01E-06	175.5	1.68E-03	2.78E-03
SI31_W	0.75	407	0	1	6.48E-02	1.67E-02	1.18E-03	7.89E-04	6.99E-04	1.48E-04	0.00E+00	5.96E-05	4.22E-05	1.57E-07	4.16E-06	182.6	1.74E-03	2.88E-03
SI31_W	0.75	441	0	1	7.02E-02	1.80E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.46E-05	4.58E-05	1.71E-07	4.51E-06	197.7	1.89E-03	3.12E-03
SI31_W	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.10E-07	5.57E-06	243.8	2.33E-03	3.86E-03
SI31_W	0.75	586	0	1	9.30E-02	2.32E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	260.7	2.50E-03	4.15E-03
SI31_W	0.75	407	0	1	6.44E-02	1.56E-02	1.16E-03	7.89E-04	6.99E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	179.7	1.73E-03	2.88E-03
SI31_W	0.75	269	0	1	4.21E-02	8.97E-03	7.50E-04	5.22E-04	4.62E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.04E-07	2.72E-06	115.8	1.14E-03	1.90E-03
SI31_W	0.75	227	0	1	3.54E-02	6.78E-03	6.24E-04	4.41E-04	3.91E-04	8.14E-05	0.00E+00	3.29E-05	2.33E-05	8.79E-08	2.29E-06	96.3	9.59E-04	1.61E-03
SI31_W	0.75	193	0	1	2.99E-02	5.15E-03	5.21E-04	3.75E-04	3.32E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.46E-08	1.94E-06	80.4	8.11E-04	1.37E-03
SI31_W	0.75	158	0	1	2.44E-02	3.78E-03	4.21E-04	3.08E-04	2.72E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.13E-08	1.59E-06	65.1	6.64E-04	1.12E-03
SI31_W	0.75	117	0	1	1.79E-02	2.49E-03	3.07E-04	2.27E-04	2.01E-04	4.15E-05	0.00E+00	1.68E-05	1.19E-05	4.53E-08	1.17E-06	47.5	4.89E-04	8.30E-04
SI32_E	0.75	83	0	1	1.26E-02	1.55E-03	2.14E-04	1.61E-04	1.42E-04	2.92E-05	0.00E+00	1.18E-05	8.36E-06	3.20E-08	8.23E-07	33.0	3.44E-04	5.86E-04
SI32_E	0.75	55	0	1	8.37E-03	9.25E-04	1.41E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.85E-06	5.56E-06	2.13E-08	5.48E-07	21.8	2.29E-04	3.91E-04
SI32_E	0.75	48	0	1	7.29E-03	7.20E-04	1.22E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.85E-06	4.85E-06	1.86E-08	4.78E-07	18.8	2.00E-04	3.42E-04
SI32_E	0.75	34	0	1	5.19E-03	5.15E-04	8.66E-05	6.69E-05	5.92E-05	1.21E-05	0.00E+00	4.88E-06	3.46E-06	1.33E-08	3.41E-07	13.4	1.42E-04	2.44E-04
SI32_E	0.75	48	0	1	7.26E-03	7.20E-04	1.21E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.83E-06	4.84E-06	1.86E-08	4.77E-07	18.7	1.99E-04	3.42E-04
SI32_E	0.75	117	0	1	1.76E-02	1.75E-03	2.94E-04	2.27E-04	2.01E-04	4.11E-05	0.00E+00	1.66E-05	1.18E-05	4.53E-08	1.16E-06	45.3	4.84E-04	8.30E-04
SI32_E	0.75	351	0	1	5.30E-02	5.25E-03	8.86E-04	6.82E-04	6.04E-04	1.23E-04	0.00E+00	4.99E-05	3.53E-05	1.36E-07	3.48E-06	136.8	1.45E-03	2.49E-03
SI32_E	0.75	537	0	1	8.18E-02	9.81E-03	1.39E-03	1.04E-03	9.24E-04	1.90E-04	0.00E+00	7.67E-05	5.43E-05	2.08E-07	5.35E-06	214.4	2.24E-03	3.81E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_E	0.75	434	0	1	6.69E-02	1.06E-02	1.16E-03	8.43E-04	7.46E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.68E-07	4.35E-06	179.0	1.82E-03	3.08E-03
SI32_E	0.75	358	0	1	5.57E-02	1.01E-02	9.77E-04	6.96E-04	6.16E-04	1.28E-04	0.00E+00	5.17E-05	3.67E-05	1.39E-07	3.61E-06	150.9	1.51E-03	2.54E-03
SI32_E	0.75	324	0	1	5.07E-02	1.02E-02	8.98E-04	6.29E-04	5.57E-04	1.16E-04	0.00E+00	4.69E-05	3.33E-05	1.25E-07	3.28E-06	138.7	1.37E-03	2.29E-03
SI32_E	0.75	365	0	1	5.78E-02	1.37E-02	1.04E-03	7.09E-04	6.28E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.41E-07	3.72E-06	161.2	1.56E-03	2.59E-03
SI32_E	0.75	386	0	1	6.13E-02	1.51E-02	1.11E-03	7.49E-04	6.63E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	171.7	1.65E-03	2.73E-03
SI32_E	0.75	393	0	1	6.25E-02	1.57E-02	1.14E-03	7.62E-04	6.75E-04	1.42E-04	0.00E+00	5.75E-05	4.07E-05	1.52E-07	4.01E-06	175.5	1.68E-03	2.78E-03
SI32_E	0.75	407	0	1	6.48E-02	1.67E-02	1.18E-03	7.89E-04	6.99E-04	1.48E-04	0.00E+00	5.96E-05	4.22E-05	1.57E-07	4.16E-06	182.6	1.74E-03	2.88E-03
SI32_E	0.75	441	0	1	7.02E-02	1.80E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.46E-05	4.58E-05	1.71E-07	4.51E-06	197.7	1.89E-03	3.12E-03
SI32_E	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.10E-07	5.57E-06	243.8	2.33E-03	3.86E-03
SI32_E	0.75	586	0	1	9.30E-02	2.32E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	260.7	2.50E-03	4.15E-03
SI32_E	0.75	407	0	1	6.44E-02	1.56E-02	1.16E-03	7.89E-04	6.99E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	179.7	1.73E-03	2.88E-03
SI32_E	0.75	269	0	1	4.21E-02	8.97E-03	7.50E-04	5.22E-04	4.62E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.04E-07	2.72E-06	115.8	1.14E-03	1.90E-03
SI32_E	0.75	227	0	1	3.54E-02	6.78E-03	6.24E-04	4.41E-04	3.91E-04	8.14E-05	0.00E+00	3.29E-05	2.33E-05	8.79E-08	2.29E-06	96.3	9.59E-04	1.61E-03
SI32_E	0.75	193	0	1	2.99E-02	5.15E-03	5.21E-04	3.75E-04	3.32E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.46E-08	1.94E-06	80.4	8.11E-04	1.37E-03
SI32_E	0.75	158	0	1	2.44E-02	3.78E-03	4.21E-04	3.08E-04	2.72E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.13E-08	1.59E-06	65.1	6.64E-04	1.12E-03
SI32_E	0.75	117	0	1	1.79E-02	2.49E-03	3.07E-04	2.27E-04	2.01E-04	4.15E-05	0.00E+00	1.68E-05	1.19E-05	4.53E-08	1.17E-06	47.5	4.89E-04	8.30E-04
SI32_W	0.75	83	0	1	1.26E-02	1.55E-03	2.14E-04	1.61E-04	1.42E-04	2.92E-05	0.00E+00	1.18E-05	8.36E-06	3.20E-08	8.23E-07	33.0	3.44E-04	5.86E-04
SI32_W	0.75	55	0	1	8.37E-03	9.25E-04	1.41E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.85E-06	5.56E-06	2.13E-08	5.48E-07	21.8	2.29E-04	3.91E-04
SI32_W	0.75	48	0	1	7.29E-03	7.20E-04	1.22E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.85E-06	4.85E-06	1.86E-08	4.78E-07	18.8	2.00E-04	3.42E-04
SI32_W	0.75	34	0	1	5.19E-03	5.15E-04	8.66E-05	6.69E-05	5.92E-05	1.21E-05	0.00E+00	4.88E-06	3.46E-06	1.33E-08	3.41E-07	13.4	1.42E-04	2.44E-04
SI32_W	0.75	48	0	1	7.26E-03	7.20E-04	1.21E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.83E-06	4.84E-06	1.86E-08	4.77E-07	18.7	1.99E-04	3.42E-04
SI32_W	0.75	117	0	1	1.76E-02	1.75E-03	2.94E-04	2.27E-04	2.01E-04	4.11E-05	0.00E+00	1.66E-05	1.18E-05	4.53E-08	1.16E-06	45.3	4.84E-04	8.30E-04
SI32_W	0.75	351	0	1	5.30E-02	5.25E-03	8.86E-04	6.82E-04	6.04E-04	1.23E-04	0.00E+00	4.99E-05	3.53E-05	1.36E-07	3.48E-06	136.8	1.45E-03	2.49E-03
SI32_W	0.75	537	0	1	8.18E-02	9.81E-03	1.39E-03	1.04E-03	9.24E-04	1.90E-04	0.00E+00	7.67E-05	5.43E-05	2.08E-07	5.35E-06	214.4	2.24E-03	3.81E-03
SI32_W	0.75	434	0	1	6.69E-02	1.06E-02	1.16E-03	8.43E-04	7.46E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.68E-07	4.35E-06	179.0	1.82E-03	3.08E-03
SI32_W	0.75	358	0	1	5.57E-02	1.01E-02	9.77E-04	6.96E-04	6.16E-04	1.28E-04	0.00E+00	5.17E-05	3.67E-05	1.39E-07	3.61E-06	150.9	1.51E-03	2.54E-03
SI32_W	0.75	324	0	1	5.07E-02	1.02E-02	8.98E-04	6.29E-04	5.57E-04	1.16E-04	0.00E+00	4.69E-05	3.33E-05	1.25E-07	3.28E-06	138.7	1.37E-03	2.29E-03
SI32_W	0.75	365	0	1	5.78E-02	1.37E-02	1.04E-03	7.09E-04	6.28E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.41E-07	3.72E-06	161.2	1.56E-03	2.59E-03
SI32_W	0.75	386	0	1	6.13E-02	1.51E-02	1.11E-03	7.49E-04	6.63E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	171.7	1.65E-03	2.73E-03
SI32_W	0.75	393	0	1	6.25E-02	1.57E-02	1.14E-03	7.62E-04	6.75E-04	1.42E-04	0.00E+00	5.75E-05	4.07E-05	1.52E-07	4.01E-06	175.5	1.68E-03	2.78E-03
SI32_W	0.75	407	0	1	6.48E-02	1.67E-02	1.18E-03	7.89E-04	6.99E-04	1.48E-04	0.00E+00	5.96E-05	4.22E-05	1.57E-07	4.16E-06	182.6	1.74E-03	2.88E-03
SI32_W	0.75	441	0	1	7.02E-02	1.80E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.46E-05	4.58E-05	1.71E-07	4.51E-06	197.7	1.89E-03	3.12E-03
SI32_W	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.10E-07	5.57E-06	243.8	2.33E-03	3.86E-03
SI32_W	0.75	586	0	1	9.30E-02	2.32E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	260.7	2.50E-03	4.15E-03
SI32_W	0.75	407	0	1	6.44E-02	1.56E-02	1.16E-03	7.89E-04	6.99E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	179.7	1.73E-03	2.88E-03
SI32_W	0.75	269	0	1	4.21E-02	8.97E-03	7.50E-04	5.22E-04	4.62E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.04E-07	2.72E-06	115.8	1.14E-03	1.90E-03
SI32_W	0.75	227	0	1	3.54E-02	6.78E-03	6.24E-04	4.41E-04	3.91E-04	8.14E-05	0.00E+00	3.29E-05	2.33E-05	8.79E-08	2.29E-06	96.3	9.59E-04	1.61E-03
SI32_W	0.75	193	0	1	2.99E-02	5.15E-03	5.21E-04	3.75E-04	3.32E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.46E-08	1.94E-06	80.4	8.11E-04	1.37E-03
SI32_W	0.75	158	0	1	2.44E-02	3.78E-03	4.21E-04	3.08E-04	2.72E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.13E-08	1.59E-06	65.1	6.64E-04	1.12E-03
SI32_W	0.75	117	0	1	1.79E-02	2.49E-03	3.07E-04	2.27E-04	2.01E-04	4.15E-05	0.00E+00	1.68E-05	1.19E-05	4.53E-08	1.17E-06	47.5	4.89E-04	8.30E-04
SI33_E	0.75	83	0	1	1.26E-02	1.55E-03	2.14E-04	1.61E-04	1.42E-04	2.92E-05	0.00E+00	1.18E-05	8.36E-06	3.20E-08	8.23E-07	33.0	3.44E-04	5.86E-04
SI33_E	0.75	55	0	1	8.37E-03	9.25E-04	1.41E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.85E-06	5.56E-06	2.13E-08	5.48E-07	21.8	2.29E-04	3.91E-04
SI33_E	0.75	48	0	1	7.29E-03	7.20E-04	1.22E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.85E-06	4.85E-06	1.86E-08	4.78E-07	18.8	2.00E-04	3.42E-04
SI33_E	0.75	34	0	1	5.19E-03	5.15E-04	8.66E-05	6.69E-05	5.92E-05	1.21E-05	0.00E+00	4.88E-06	3.46E-06	1.33E-08	3.41E-07	13.4	1.42E-04	2.44E-04
SI33_E	0.75	48	0	1	7.26E-03	7.20E-04	1.21E-04	9.36E-05	8.29E-05	1.69E-05	0.00E+00	6.83E-06	4.84E-06	1.86E-08	4.77E-07	18.7	1.99E-04	3.42E-04
SI33_E	0.75	117	0	1	1.76E-02	1.75E-03	2.94E-04	2.27E-04	2.01E-04	4.11E-05	0.00E+00	1.66E-05	1.18E-05	4.53E-08	1.16E-06	45.3	4.84E-04	8.30E-04
SI33_E	0.75	351	0	1	5.30E-02	5.25E-03	8.86E-04	6.82E-04	6.04E-04	1.23E-04	0.00E+00	4.99E-05	3.53E-05	1.36E-07	3.48E-06	136.8	1.45E-03	2.49E-03
SI33_E	0.75	537	0	1	8.18E-02	9.81E-03	1.39E-03	1.04E-03	9.24E-04	1.90E-04	0.00E+00	7.67E-05	5.43E-05	2.08E-07	5.35E-06	214.4	2.24E-03	3.81E-03
SI33_E	0.75	434	0	1	6.69E-02	1.06E-02	1.16E-03	8.43E-04	7.46E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.68E-07	4.35E-06	179.0	1.82E-03	3.08E-03
SI33_E	0.75	358	0	1	5.57E-02	1.01E-02	9.77E-04	6.96E-04	6.16E-04	1.28E-04	0.00E+00	5.17E-05	3.67E-05	1.39E-07	3.61E-06	150.9	1.51E-03	2.54E-03
SI33_E	0.75	324	0	1	5.07E-02	1.02E-02	8.98E-04	6.29E-04	5.57E-04	1.16E-04	0.00E+00	4.69E-05	3.33E-05	1.25E-07	3.28E-06	138.7	1.37E-03	2.29E-03
SI33_E	0.75	365	0	1	5.78E-02	1.37E-02	1.04E-03	7.09E-04	6.28E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.41E-07	3.72E-06	161.2	1.56E-03	2.59E-03
SI33_E	0.75	386	0	1	6.13E-02	1.51E-02	1.11E-03	7.49E-04	6.63E-04	1.40E-04	0.00E+00	5.64E-05	4.00E-05	1.49E-07	3.94E-06	171.7	1.65E-03	2.73E-03
SI33_E	0.75	393	0	1	6.25E-02	1.57E-02	1.14E-03	7.62E-04	6.75E-04	1.42E-04	0.00E+00	5.75E-05	4.07E-05	1.52E-07	4.01E-06	175.5	1.68E-03	2.78E-03
SI33_E	0.75	407	0	1	6.48E-02	1.67E-02	1.18E-03	7.89E-04	6.99E-04	1.48E-04	0.00E+00	5.96E-05	4.22E-05	1.57E-07	4.16E-06	182.6	1.74E-03	2.88E-03
SI33_E	0.75	441	0	1	7.02E-02	1.80E-02	1.28E-03	8.56E-04	7.58E-04	1.60E-04	0.00E+00	6.46E-05	4.58E-05	1.71E-07	4.51E-06	197.7	1.89E-03	3.12E-03
SI33_E	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.10E-07	5.57E-06	243.8	2.33E-03	3.86E-03
SI33_E	0.75	586	0	1	9.30E-02	2.32E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	260.7	2.50E-03	4.15E-03
SI33_E	0.75	407	0	1	6.44E-02	1.56E-02	1.16E-03	7.89E-04	6.99E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	179.7	1.73E-03	2.88E-03
SI33_E	0.75	269	0	1	4.21E-02	8.97E-03	7.50E-04	5.22E-04	4.62E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.04E-07	2.72E-06	115.8	1.14E-03	1.90E-03
SI33_E	0.75	227	0	1	3.54E-02	6.78E-03	6.24E-04	4.41E-04	3.91E-04	8.14E-05	0.00E+00	3.29E-05	2.33E-05	8.79E-08	2.29E-06	96.3	9.59E-04	1.61E-03
SI33_E	0.75	193	0	1	2.99E-02	5.15E-03	5.21E-04	3.75E-04	3.32E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.46E-08	1.94E-06	80.4	8.11E-04	1.37E-03
SI33_E	0.75	158	0	1	2.44E-02	3.78E-03	4.21E-04	3.08E-04	2.72E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.13E-08	1.59E-06	65.1	6.64E-04	1.12E-03
SI33_E	0.75	117	0	1	1.79E-02	2.49E-03	3.07E-04	2.27E-04	2.01E-04	4.15E-05	0.00E+00	1.68E-05	1.19E-05	4.53E-08	1.17E-06	47.5	4.89E-04	8.30E-04
SI33_W	0.75	87	0	1	1.32E-02	1.62E-03	2.24E-04	1.68E-04	1.49E-04	3.06E-05	0.00E+00	1.23E-05	8.75E-06	3.35E-08	8.62E-07	34.6	3.60E-04	6.13E-04
SI33_W	0.75	58	0	1	8.76E-03	9.68E-04	1.48E-04	1.12E-04	9.92E-05	2.03E-05	0.00E+00	8.21E-06	5.82E-06	2.23E-08	5.73E-07	22.8	2.40E-04	4.09E-04
SI33_W	0.75	50	0	1	7.63E-03	7.54E-04	1.28E-04	9.80E-05	8.68E-05	1.77E-05	0.00E+00	7.17E-06	5.08E-06	1.95E-08	5.00E-07	19.7	2.09E-04	3.58E-04
SI33_W	0.75	36	0	1	5.44E-03	5.39E-04	9.06E-05	7.00E-05	6.20E-05	1.26E-05	0.00E+00	5.11E-06	3.62E-06	1.39E-08	3.57E-07	14.0	1.49E-04	2.56E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	50	0	1	7.60E-03	7.54E-04	1.27E-04	9.80E-05	8.68E-05	1.77E-05	0.00E+00	7.15E-06	5.07E-06	1.95E-08	4.99E-07	19.5	2.09E-04	3.58E-04
SI33_W	0.75	123	0	1	1.85E-02	1.83E-03	3.07E-04	2.38E-04	2.11E-04	4.30E-05	0.00E+00	1.74E-05	1.23E-05	4.74E-08	1.21E-06	47.4	5.07E-04	8.69E-04
SI33_W	0.75	368	0	1	5.55E-02	5.49E-03	9.27E-04	7.14E-04	6.32E-04	1.29E-04	0.00E+00	5.22E-05	3.70E-05	1.42E-07	3.64E-06	143.2	1.52E-03	2.61E-03
SI33_W	0.75	562	0	1	8.57E-02	1.03E-02	1.45E-03	1.09E-03	9.67E-04	1.99E-04	0.00E+00	8.02E-05	5.68E-05	2.17E-07	5.60E-06	224.4	2.34E-03	3.99E-03
SI33_W	0.75	454	0	1	7.01E-02	1.11E-02	1.21E-03	8.82E-04	7.81E-04	1.62E-04	0.00E+00	6.53E-05	4.63E-05	1.76E-07	4.56E-06	187.4	1.90E-03	3.22E-03
SI33_W	0.75	375	0	1	5.83E-02	1.06E-02	1.02E-03	7.28E-04	6.45E-04	1.34E-04	0.00E+00	5.41E-05	3.84E-05	1.45E-07	3.78E-06	157.9	1.58E-03	2.66E-03
SI33_W	0.75	339	0	1	5.30E-02	1.07E-02	9.40E-04	6.58E-04	5.83E-04	1.22E-04	0.00E+00	4.91E-05	3.48E-05	1.31E-07	3.43E-06	145.2	1.43E-03	2.40E-03
SI33_W	0.75	382	0	1	6.05E-02	1.43E-02	1.09E-03	7.42E-04	6.57E-04	1.38E-04	0.00E+00	5.58E-05	3.95E-05	1.48E-07	3.89E-06	168.7	1.63E-03	2.71E-03
SI33_W	0.75	404	0	1	6.41E-02	1.58E-02	1.16E-03	7.84E-04	6.94E-04	1.46E-04	0.00E+00	5.91E-05	4.19E-05	1.56E-07	4.12E-06	179.7	1.72E-03	2.86E-03
SI33_W	0.75	411	0	1	6.54E-02	1.65E-02	1.19E-03	7.98E-04	7.07E-04	1.49E-04	0.00E+00	6.02E-05	4.26E-05	1.59E-07	4.20E-06	183.7	1.76E-03	2.91E-03
SI33_W	0.75	425	0	1	6.78E-02	1.75E-02	1.24E-03	8.26E-04	7.31E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.35E-06	191.1	1.82E-03	3.01E-03
SI33_W	0.75	462	0	1	7.35E-02	1.88E-02	1.34E-03	8.96E-04	7.93E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.78E-07	4.72E-06	206.9	1.97E-03	3.27E-03
SI33_W	0.75	570	0	1	9.07E-02	2.32E-02	1.65E-03	1.11E-03	9.79E-04	2.07E-04	0.00E+00	8.35E-05	5.91E-05	2.20E-07	5.82E-06	255.1	2.44E-03	4.04E-03
SI33_W	0.75	613	0	1	9.73E-02	2.43E-02	1.77E-03	1.19E-03	1.05E-03	2.22E-04	0.00E+00	8.97E-05	6.35E-05	2.37E-07	6.26E-06	272.9	2.62E-03	4.34E-03
SI33_W	0.75	425	0	1	6.74E-02	1.63E-02	1.22E-03	8.26E-04	7.31E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.65E-07	4.34E-06	188.1	1.81E-03	3.01E-03
SI33_W	0.75	281	0	1	4.41E-02	9.38E-03	7.85E-04	5.46E-04	4.83E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.09E-07	2.85E-06	121.2	1.19E-03	1.99E-03
SI33_W	0.75	238	0	1	3.71E-02	7.10E-03	6.53E-04	4.62E-04	4.09E-04	8.51E-05	0.00E+00	3.44E-05	2.44E-05	9.20E-08	2.40E-06	100.8	1.00E-03	1.69E-03
SI33_W	0.75	202	0	1	3.13E-02	5.39E-03	5.45E-04	3.92E-04	3.47E-04	7.20E-05	0.00E+00	2.91E-05	2.06E-05	7.81E-08	2.03E-06	84.1	8.48E-04	1.43E-03
SI33_W	0.75	166	0	1	2.55E-02	3.96E-03	4.41E-04	3.22E-04	2.85E-04	5.89E-05	0.00E+00	2.38E-05	1.69E-05	6.41E-08	1.66E-06	68.1	6.95E-04	1.18E-03
SI33_W	0.75	123	0	1	1.88E-02	2.61E-03	3.22E-04	2.38E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.74E-08	1.22E-06	49.7	5.12E-04	8.69E-04
SI34_E	0.75	87	0	1	1.32E-02	1.62E-03	2.24E-04	1.68E-04	1.49E-04	3.06E-05	0.00E+00	1.23E-05	8.75E-06	3.35E-08	8.62E-07	34.6	3.60E-04	6.13E-04
SI34_E	0.75	58	0	1	8.76E-03	9.68E-04	1.48E-04	1.12E-04	9.92E-05	2.03E-05	0.00E+00	8.21E-06	5.82E-06	2.23E-08	5.73E-07	22.8	2.40E-04	4.09E-04
SI34_E	0.75	50	0	1	7.63E-03	7.54E-04	1.28E-04	9.80E-05	8.68E-05	1.77E-05	0.00E+00	7.17E-06	5.08E-06	1.95E-08	5.00E-07	19.7	2.09E-04	3.58E-04
SI34_E	0.75	36	0	1	5.44E-03	5.39E-04	9.06E-05	7.00E-05	6.20E-05	1.26E-05	0.00E+00	5.11E-06	3.62E-06	1.39E-08	3.57E-07	14.0	1.49E-04	2.56E-04
SI34_E	0.75	50	0	1	7.60E-03	7.54E-04	1.27E-04	9.80E-05	8.68E-05	1.77E-05	0.00E+00	7.15E-06	5.07E-06	1.95E-08	4.99E-07	19.5	2.09E-04	3.58E-04
SI34_E	0.75	123	0	1	1.85E-02	1.83E-03	3.07E-04	2.38E-04	2.11E-04	4.30E-05	0.00E+00	1.74E-05	1.23E-05	4.74E-08	1.21E-06	47.4	5.07E-04	8.69E-04
SI34_E	0.75	368	0	1	5.55E-02	5.49E-03	9.27E-04	7.14E-04	6.32E-04	1.29E-04	0.00E+00	5.22E-05	3.70E-05	1.42E-07	3.64E-06	143.2	1.52E-03	2.61E-03
SI34_E	0.75	562	0	1	8.57E-02	1.03E-02	1.45E-03	1.09E-03	9.67E-04	1.99E-04	0.00E+00	8.02E-05	5.68E-05	2.17E-07	5.60E-06	224.4	2.34E-03	3.99E-03
SI34_E	0.75	454	0	1	7.01E-02	1.11E-02	1.21E-03	8.82E-04	7.81E-04	1.62E-04	0.00E+00	6.53E-05	4.63E-05	1.76E-07	4.56E-06	187.4	1.90E-03	3.22E-03
SI34_E	0.75	375	0	1	5.83E-02	1.06E-02	1.02E-03	7.28E-04	6.45E-04	1.34E-04	0.00E+00	5.41E-05	3.84E-05	1.45E-07	3.78E-06	157.9	1.58E-03	2.66E-03
SI34_E	0.75	339	0	1	5.30E-02	1.07E-02	9.40E-04	6.58E-04	5.83E-04	1.22E-04	0.00E+00	4.91E-05	3.48E-05	1.31E-07	3.43E-06	145.2	1.43E-03	2.40E-03
SI34_E	0.75	382	0	1	6.05E-02	1.43E-02	1.09E-03	7.42E-04	6.57E-04	1.38E-04	0.00E+00	5.58E-05	3.95E-05	1.48E-07	3.89E-06	168.7	1.63E-03	2.71E-03
SI34_E	0.75	404	0	1	6.41E-02	1.58E-02	1.16E-03	7.84E-04	6.94E-04	1.46E-04	0.00E+00	5.91E-05	4.19E-05	1.56E-07	4.12E-06	179.7	1.72E-03	2.86E-03
SI34_E	0.75	411	0	1	6.54E-02	1.65E-02	1.19E-03	7.98E-04	7.07E-04	1.49E-04	0.00E+00	6.02E-05	4.26E-05	1.59E-07	4.20E-06	183.7	1.76E-03	2.91E-03
SI34_E	0.75	425	0	1	6.78E-02	1.75E-02	1.24E-03	8.26E-04	7.31E-04	1.54E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.35E-06	191.1	1.82E-03	3.01E-03
SI34_E	0.75	462	0	1	7.35E-02	1.88E-02	1.34E-03	8.96E-04	7.93E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.78E-07	4.72E-06	206.9	1.97E-03	3.27E-03
SI34_E	0.75	570	0	1	9.07E-02	2.32E-02	1.65E-03	1.11E-03	9.79E-04	2.07E-04	0.00E+00	8.35E-05	5.91E-05	2.20E-07	5.82E-06	255.1	2.44E-03	4.04E-03
SI34_E	0.75	613	0	1	9.73E-02	2.43E-02	1.77E-03	1.19E-03	1.05E-03	2.22E-04	0.00E+00	8.97E-05	6.35E-05	2.37E-07	6.26E-06	272.9	2.62E-03	4.34E-03
SI34_E	0.75	425	0	1	6.74E-02	1.63E-02	1.22E-03	8.26E-04	7.31E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.65E-07	4.34E-06	188.1	1.81E-03	3.01E-03
SI34_E	0.75	281	0	1	4.41E-02	9.38E-03	7.85E-04	5.46E-04	4.83E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.09E-07	2.85E-06	121.2	1.19E-03	1.99E-03
SI34_E	0.75	238	0	1	3.71E-02	7.10E-03	6.53E-04	4.62E-04	4.09E-04	8.51E-05	0.00E+00	3.44E-05	2.44E-05	9.20E-08	2.40E-06	100.8	1.00E-03	1.69E-03
SI34_E	0.75	202	0	1	3.13E-02	5.39E-03	5.45E-04	3.92E-04	3.47E-04	7.20E-05	0.00E+00	2.91E-05	2.06E-05	7.81E-08	2.03E-06	84.1	8.48E-04	1.43E-03
SI34_E	0.75	166	0	1	2.55E-02	3.96E-03	4.41E-04	3.22E-04	2.85E-04	5.89E-05	0.00E+00	2.38E-05	1.69E-05	6.41E-08	1.66E-06	68.1	6.95E-04	1.18E-03
SI34_E	0.75	123	0	1	1.88E-02	2.61E-03	3.22E-04	2.38E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.74E-08	1.22E-06	49.7	5.12E-04	8.69E-04
SI34_W	0.75	94	0	1	1.44E-02	1.77E-03	2.44E-04	1.83E-04	1.62E-04	3.33E-05	0.00E+00	1.35E-05	9.54E-06	3.65E-08	9.40E-07	37.7	3.93E-04	6.69E-04
SI34_W	0.75	63	0	1	9.55E-03	1.06E-03	1.61E-04	1.22E-04	1.08E-04	2.22E-05	0.00E+00	8.96E-06	6.35E-06	2.43E-08	6.25E-07	24.9	2.61E-04	4.46E-04
SI34_W	0.75	55	0	1	8.32E-03	8.22E-04	1.39E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.82E-06	5.54E-06	2.13E-08	5.45E-07	21.5	2.28E-04	3.90E-04
SI34_W	0.75	39	0	1	5.93E-03	5.87E-04	9.88E-05	7.63E-05	6.76E-05	1.38E-05	0.00E+00	5.58E-06	3.95E-06	1.52E-08	3.89E-07	15.3	1.63E-04	2.79E-04
SI34_W	0.75	55	0	1	8.29E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI34_W	0.75	134	0	1	2.01E-02	2.00E-03	3.35E-04	2.60E-04	2.30E-04	4.69E-05	0.00E+00	1.89E-05	1.34E-05	5.17E-08	1.32E-06	51.7	5.53E-04	9.47E-04
SI34_W	0.75	401	0	1	6.05E-02	5.99E-03	1.01E-03	7.79E-04	6.90E-04	1.41E-04	0.00E+00	5.69E-05	4.03E-05	1.55E-07	3.97E-06	156.2	1.66E-03	2.84E-03
SI34_W	0.75	613	0	1	9.34E-02	1.12E-02	1.58E-03	1.19E-03	1.05E-03	2.17E-04	0.00E+00	8.75E-05	6.20E-05	2.37E-07	6.11E-06	244.7	2.55E-03	4.35E-03
SI34_W	0.75	496	0	1	7.64E-02	1.21E-02	1.32E-03	9.62E-04	8.52E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.92E-07	4.97E-06	204.3	2.08E-03	3.51E-03
SI34_W	0.75	409	0	1	6.36E-02	1.16E-02	1.12E-03	7.94E-04	7.03E-04	1.46E-04	0.00E+00	5.91E-05	4.18E-05	1.58E-07	4.12E-06	172.3	1.72E-03	2.90E-03
SI34_W	0.75	370	0	1	5.78E-02	1.16E-02	1.03E-03	7.18E-04	6.35E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.43E-07	3.74E-06	158.4	1.56E-03	2.62E-03
SI34_W	0.75	417	0	1	6.60E-02	1.56E-02	1.19E-03	8.09E-04	7.17E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.61E-07	4.25E-06	184.0	1.78E-03	2.95E-03
SI34_W	0.75	440	0	1	6.99E-02	1.72E-02	1.27E-03	8.55E-04	7.57E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.70E-07	4.50E-06	196.0	1.88E-03	3.12E-03
SI34_W	0.75	448	0	1	7.13E-02	1.80E-02	1.30E-03	8.70E-04	7.71E-04	1.62E-04	0.00E+00	6.57E-05	4.65E-05	1.73E-07	4.58E-06	200.4	1.92E-03	3.18E-03
SI34_W	0.75	464	0	1	7.40E-02	1.91E-02	1.35E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.75E-06	208.4	1.98E-03	3.29E-03
SI34_W	0.75	503	0	1	8.02E-02	2.05E-02	1.46E-03	9.77E-04	8.65E-04	1.83E-04	0.00E+00	7.38E-05	5.23E-05	1.95E-07	5.15E-06	225.6	2.15E-03	3.57E-03
SI34_W	0.75	621	0	1	9.89E-02	2.53E-02	1.80E-03	1.21E-03	1.07E-03	2.25E-04	0.00E+00	9.10E-05	6.45E-05	2.40E-07	6.35E-06	278.3	2.66E-03	4.40E-03
SI34_W	0.75	669	0	1	1.06E-01	2.65E-02	1.93E-03	1.30E-03	1.15E-03	2.42E-04	0.00E+00	9.78E-05	6.93E-05	2.58E-07	6.83E-06	297.6	2.85E-03	4.74E-03
SI34_W	0.75	464	0	1	7.35E-02	1.78E-02	1.33E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.79E-07	4.73E-06	205.1	1.98E-03	3.29E-03
SI34_W	0.75	307	0	1	4.81E-02	1.02E-02	8.56E-04	5.95E-04	5.27E-04	1.10E-04	0.00E+00	4.45E-05	3.16E-05	1.19E-07	3.11E-06	132.2	1.30E-03	2.17E-03
SI34_W	0.75	260	0	1	4.04E-02	7.74E-03	7.12E-04	5.04E-04	4.46E-04	9.29E-05	0.00E+00	3.75E-05	2.66E-05	1.00E-07	2.62E-06	109.9	1.09E-03	1.84E-03
SI34_W	0.75	220	0	1	3.41E-02	5.88E-03	5.94E-04	4.27E-04	3.79E-04	7.85E-05	0.00E+00	3.17E-05	2.25E-05	8.51E-08	2.21E-06	91.8	9.25E-04	1.56E-03
SI34_W	0.75	181	0	1	2.78E-02	4.32E-03	4.81E-04	3.51E-04	3.11E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	6.99E-08	1.81E-06	74.3	7.58E-04	1.28E-03
SI34_W	0.75	134	0	1	2.05E-02	2.85E-03	3.51E-04	2.60E-04	2.30E-04	4.74E-05	0.00E+00	1.91E-05	1.36E-05	5.17E-08	1.34E-06	54.2	5.58E-04	9.47E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	94	0	1	1.44E-02	1.77E-03	2.44E-04	1.83E-04	1.62E-04	3.33E-05	0.00E+00	1.35E-05	9.54E-06	3.65E-08	9.40E-07	37.7	3.93E-04	6.69E-04
SI35_E	0.75	63	0	1	9.55E-03	1.06E-03	1.61E-04	1.22E-04	1.08E-04	2.22E-05	0.00E+00	8.96E-06	6.35E-06	2.43E-08	6.25E-07	24.9	2.61E-04	4.46E-04
SI35_E	0.75	55	0	1	8.32E-03	8.22E-04	1.39E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.82E-06	5.54E-06	2.13E-08	5.45E-07	21.5	2.28E-04	3.90E-04
SI35_E	0.75	39	0	1	5.93E-03	5.87E-04	9.88E-05	7.63E-05	6.76E-05	1.38E-05	0.00E+00	5.58E-06	3.95E-06	1.52E-08	3.89E-07	15.3	1.63E-04	2.79E-04
SI35_E	0.75	55	0	1	8.29E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI35_E	0.75	134	0	1	2.01E-02	2.00E-03	3.35E-04	2.60E-04	2.30E-04	4.69E-05	0.00E+00	1.89E-05	1.34E-05	5.17E-08	1.32E-06	51.7	5.53E-04	9.47E-04
SI35_E	0.75	401	0	1	6.05E-02	5.99E-03	1.01E-03	7.79E-04	6.90E-04	1.41E-04	0.00E+00	5.69E-05	4.03E-05	1.55E-07	3.97E-06	156.2	1.66E-03	2.84E-03
SI35_E	0.75	613	0	1	9.34E-02	1.12E-02	1.58E-03	1.19E-03	1.05E-03	2.17E-04	0.00E+00	8.75E-05	6.20E-05	2.37E-07	6.11E-06	244.7	2.55E-03	4.35E-03
SI35_E	0.75	496	0	1	7.64E-02	1.21E-02	1.32E-03	9.62E-04	8.52E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.92E-07	4.97E-06	204.3	2.08E-03	3.51E-03
SI35_E	0.75	409	0	1	6.36E-02	1.16E-02	1.12E-03	7.94E-04	7.03E-04	1.46E-04	0.00E+00	5.91E-05	4.18E-05	1.58E-07	4.12E-06	172.3	1.72E-03	2.90E-03
SI35_E	0.75	370	0	1	5.78E-02	1.16E-02	1.03E-03	7.18E-04	6.35E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.43E-07	3.74E-06	158.4	1.56E-03	2.62E-03
SI35_E	0.75	417	0	1	6.60E-02	1.56E-02	1.19E-03	8.09E-04	7.17E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.61E-07	4.25E-06	184.0	1.78E-03	2.95E-03
SI35_E	0.75	440	0	1	6.99E-02	1.72E-02	1.27E-03	8.55E-04	7.57E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.70E-07	4.50E-06	196.0	1.88E-03	3.12E-03
SI35_E	0.75	448	0	1	7.13E-02	1.80E-02	1.30E-03	8.70E-04	7.71E-04	1.62E-04	0.00E+00	6.57E-05	4.65E-05	1.73E-07	4.58E-06	200.4	1.92E-03	3.18E-03
SI35_E	0.75	464	0	1	7.40E-02	1.91E-02	1.35E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.75E-06	208.4	1.98E-03	3.29E-03
SI35_E	0.75	503	0	1	8.02E-02	2.05E-02	1.46E-03	9.77E-04	8.65E-04	1.83E-04	0.00E+00	7.38E-05	5.23E-05	1.95E-07	5.15E-06	225.6	2.15E-03	3.57E-03
SI35_E	0.75	621	0	1	9.89E-02	2.53E-02	1.80E-03	1.21E-03	1.07E-03	2.25E-04	0.00E+00	9.10E-05	6.45E-05	2.40E-07	6.35E-06	278.3	2.66E-03	4.40E-03
SI35_E	0.75	669	0	1	1.06E-01	2.65E-02	1.93E-03	1.30E-03	1.15E-03	2.42E-04	0.00E+00	9.78E-05	6.93E-05	2.58E-07	6.83E-06	297.6	2.85E-03	4.74E-03
SI35_E	0.75	464	0	1	7.35E-02	1.78E-02	1.33E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.79E-07	4.73E-06	205.1	1.98E-03	3.29E-03
SI35_E	0.75	307	0	1	4.81E-02	1.02E-02	8.56E-04	5.95E-04	5.27E-04	1.10E-04	0.00E+00	4.45E-05	3.16E-05	1.19E-07	3.11E-06	132.2	1.30E-03	2.17E-03
SI35_E	0.75	260	0	1	4.04E-02	7.74E-03	7.12E-04	5.04E-04	4.46E-04	9.29E-05	0.00E+00	3.75E-05	2.66E-05	1.00E-07	2.62E-06	109.9	1.09E-03	1.84E-03
SI35_E	0.75	220	0	1	3.41E-02	5.88E-03	5.94E-04	4.27E-04	3.79E-04	7.85E-05	0.00E+00	3.17E-05	2.25E-05	8.51E-08	2.21E-06	91.8	9.25E-04	1.56E-03
SI35_E	0.75	181	0	1	2.78E-02	4.32E-03	4.81E-04	3.51E-04	3.11E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	6.99E-08	1.81E-06	74.3	7.58E-04	1.28E-03
SI35_E	0.75	134	0	1	2.05E-02	2.85E-03	3.51E-04	2.60E-04	2.30E-04	4.74E-05	0.00E+00	1.91E-05	1.36E-05	5.17E-08	1.34E-06	54.2	5.58E-04	9.47E-04
SI35_W	0.75	94	0	1	1.44E-02	1.77E-03	2.44E-04	1.83E-04	1.62E-04	3.33E-05	0.00E+00	1.35E-05	9.54E-06	3.65E-08	9.40E-07	37.7	3.93E-04	6.69E-04
SI35_W	0.75	63	0	1	9.55E-03	1.06E-03	1.61E-04	1.22E-04	1.08E-04	2.22E-05	0.00E+00	8.96E-06	6.35E-06	2.43E-08	6.25E-07	24.9	2.61E-04	4.46E-04
SI35_W	0.75	55	0	1	8.32E-03	8.22E-04	1.39E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.82E-06	5.54E-06	2.13E-08	5.45E-07	21.5	2.28E-04	3.90E-04
SI35_W	0.75	39	0	1	5.93E-03	5.87E-04	9.88E-05	7.63E-05	6.76E-05	1.38E-05	0.00E+00	5.58E-06	3.95E-06	1.52E-08	3.89E-07	15.3	1.63E-04	2.79E-04
SI35_W	0.75	55	0	1	8.29E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI35_W	0.75	134	0	1	2.01E-02	2.00E-03	3.35E-04	2.60E-04	2.30E-04	4.69E-05	0.00E+00	1.89E-05	1.34E-05	5.17E-08	1.32E-06	51.7	5.53E-04	9.47E-04
SI35_W	0.75	401	0	1	6.05E-02	5.99E-03	1.01E-03	7.79E-04	6.90E-04	1.41E-04	0.00E+00	5.69E-05	4.03E-05	1.55E-07	3.97E-06	156.2	1.66E-03	2.84E-03
SI35_W	0.75	613	0	1	9.34E-02	1.12E-02	1.58E-03	1.19E-03	1.05E-03	2.17E-04	0.00E+00	8.75E-05	6.20E-05	2.37E-07	6.11E-06	244.7	2.55E-03	4.35E-03
SI35_W	0.75	496	0	1	7.64E-02	1.21E-02	1.32E-03	9.62E-04	8.52E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.92E-07	4.97E-06	204.3	2.08E-03	3.51E-03
SI35_W	0.75	409	0	1	6.36E-02	1.16E-02	1.12E-03	7.94E-04	7.03E-04	1.46E-04	0.00E+00	5.91E-05	4.18E-05	1.58E-07	4.12E-06	172.3	1.72E-03	2.90E-03
SI35_W	0.75	370	0	1	5.78E-02	1.16E-02	1.03E-03	7.18E-04	6.35E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.43E-07	3.74E-06	158.4	1.56E-03	2.62E-03
SI35_W	0.75	417	0	1	6.60E-02	1.56E-02	1.19E-03	8.09E-04	7.17E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.61E-07	4.25E-06	184.0	1.78E-03	2.95E-03
SI35_W	0.75	440	0	1	6.99E-02	1.72E-02	1.27E-03	8.55E-04	7.57E-04	1.59E-04	0.00E+00	6.44E-05	4.57E-05	1.70E-07	4.50E-06	196.0	1.88E-03	3.12E-03
SI35_W	0.75	448	0	1	7.13E-02	1.80E-02	1.30E-03	8.70E-04	7.71E-04	1.62E-04	0.00E+00	6.57E-05	4.65E-05	1.73E-07	4.58E-06	200.4	1.92E-03	3.18E-03
SI35_W	0.75	464	0	1	7.40E-02	1.91E-02	1.35E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.80E-05	4.82E-05	1.79E-07	4.75E-06	208.4	1.98E-03	3.29E-03
SI35_W	0.75	503	0	1	8.02E-02	2.05E-02	1.46E-03	9.77E-04	8.65E-04	1.83E-04	0.00E+00	7.38E-05	5.23E-05	1.95E-07	5.15E-06	225.6	2.15E-03	3.57E-03
SI35_W	0.75	621	0	1	9.89E-02	2.53E-02	1.80E-03	1.21E-03	1.07E-03	2.25E-04	0.00E+00	9.10E-05	6.45E-05	2.40E-07	6.35E-06	278.3	2.66E-03	4.40E-03
SI35_W	0.75	669	0	1	1.06E-01	2.65E-02	1.93E-03	1.30E-03	1.15E-03	2.42E-04	0.00E+00	9.78E-05	6.93E-05	2.58E-07	6.83E-06	297.6	2.85E-03	4.74E-03
SI35_W	0.75	464	0	1	7.35E-02	1.78E-02	1.33E-03	9.01E-04	7.98E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.79E-07	4.73E-06	205.1	1.98E-03	3.29E-03
SI35_W	0.75	307	0	1	4.81E-02	1.02E-02	8.56E-04	5.95E-04	5.27E-04	1.10E-04	0.00E+00	4.45E-05	3.16E-05	1.19E-07	3.11E-06	132.2	1.30E-03	2.17E-03
SI35_W	0.75	260	0	1	4.04E-02	7.74E-03	7.12E-04	5.04E-04	4.46E-04	9.29E-05	0.00E+00	3.75E-05	2.66E-05	1.00E-07	2.62E-06	109.9	1.09E-03	1.84E-03
SI35_W	0.75	220	0	1	3.41E-02	5.88E-03	5.94E-04	4.27E-04	3.79E-04	7.85E-05	0.00E+00	3.17E-05	2.25E-05	8.51E-08	2.21E-06	91.8	9.25E-04	1.56E-03
SI35_W	0.75	181	0	1	2.78E-02	4.32E-03	4.81E-04	3.51E-04	3.11E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	6.99E-08	1.81E-06	74.3	7.58E-04	1.28E-03
SI35_W	0.75	134	0	1	2.05E-02	2.85E-03	3.51E-04	2.60E-04	2.30E-04	4.74E-05	0.00E+00	1.91E-05	1.36E-05	5.17E-08	1.34E-06	54.2	5.58E-04	9.47E-04
SI36_E	0.75	110	0	1	1.67E-02	2.06E-03	2.84E-04	2.13E-04	1.89E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	43.9	4.57E-04	7.78E-04
SI36_E	0.75	73	0	1	1.11E-02	1.23E-03	1.87E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.83E-08	7.27E-07	28.9	3.04E-04	5.19E-04
SI36_E	0.75	64	0	1	9.68E-03	9.57E-04	1.62E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.09E-06	6.44E-06	2.48E-08	6.35E-07	25.0	2.65E-04	4.54E-04
SI36_E	0.75	46	0	1	6.90E-03	6.83E-04	1.15E-04	8.88E-05	7.86E-05	1.60E-05	0.00E+00	6.49E-06	4.60E-06	1.77E-08	4.53E-07	17.7	1.89E-04	3.24E-04
SI36_E	0.75	64	0	1	9.65E-03	9.57E-04	1.61E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.07E-06	6.43E-06	2.48E-08	6.33E-07	24.8	2.65E-04	4.54E-04
SI36_E	0.75	156	0	1	2.34E-02	2.32E-03	3.90E-04	3.02E-04	2.67E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	6.01E-08	1.54E-06	60.2	6.43E-04	1.10E-03
SI36_E	0.75	467	0	1	7.04E-02	6.97E-03	1.18E-03	9.06E-04	8.02E-04	1.64E-04	0.00E+00	6.62E-05	4.69E-05	1.80E-07	4.62E-06	181.7	1.93E-03	3.31E-03
SI36_E	0.75	714	0	1	1.09E-01	1.30E-02	1.84E-03	1.39E-03	1.23E-03	2.52E-04	0.00E+00	1.02E-04	7.21E-05	2.76E-07	7.10E-06	284.7	2.97E-03	5.06E-03
SI36_E	0.75	576	0	1	8.89E-02	1.40E-02	1.54E-03	1.12E-03	9.91E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.23E-07	5.78E-06	237.7	2.42E-03	4.08E-03
SI36_E	0.75	476	0	1	7.39E-02	1.34E-02	1.30E-03	9.24E-04	8.18E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.84E-07	4.79E-06	200.4	2.00E-03	3.37E-03
SI36_E	0.75	430	0	1	6.73E-02	1.35E-02	1.19E-03	8.35E-04	7.39E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	184.2	1.82E-03	3.05E-03
SI36_E	0.75	485	0	1	7.68E-02	1.82E-02	1.39E-03	9.41E-04	8.34E-04	1.75E-04	0.00E+00	7.08E-05	5.02E-05	1.87E-07	4.94E-06	214.1	2.07E-03	3.44E-03
SI36_E	0.75	512	0	1	8.14E-02	2.00E-02	1.48E-03	9.95E-04	8.81E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	228.0	2.19E-03	3.63E-03
SI36_E	0.75	521	0	1	8.30E-02	2.09E-02	1.51E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.1	2.23E-03	3.70E-03
SI36_E	0.75	540	0	1	8.60E-02	2.22E-02	1.57E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.09E-07	5.52E-06	242.4	2.31E-03	3.83E-03
SI36_E	0.75	586	0	1	9.32E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.5	2.50E-03	4.15E-03
SI36_E	0.75	723	0	1	1.15E-01	2.94E-02	2.10E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.79E-07	7.39E-06	323.7	3.09E-03	5.12E-03
SI36_E	0.75	778	0	1	1.24E-01	3.08E-02	2.24E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.06E-05	3.01E-07	7.94E-06	346.2	3.32E-03	5.51E-03
SI36_E	0.75	540	0	1	8.55E-02	2.07E-02	1.55E-03	1.05E-03	9.28E-04	1.95E-04	0.00E+00	7.88E-05	5.59E-05	2.09E-07	5.50E-06	238.6	2.30E-03	3.83E-03
SI36_E	0.75	357	0	1	5.60E-02	1.19E-02	9.96E-04	6.93E-04	6.13E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.62E-06	153.8	1.51E-03	2.53E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_E	0.75	302	0	1	4.70E-02	9.00E-03	8.28E-04	5.86E-04	5.19E-04	1.08E-04	0.00E+00	4.37E-05	3.09E-05	1.17E-07	3.05E-06	127.9	1.27E-03	2.14E-03
SI36_E	0.75	256	0	1	3.97E-02	6.84E-03	6.91E-04	4.97E-04	4.40E-04	9.13E-05	0.00E+00	3.69E-05	2.61E-05	9.90E-08	2.57E-06	106.7	1.08E-03	1.82E-03
SI36_E	0.75	210	0	1	3.24E-02	5.02E-03	5.59E-04	4.08E-04	3.62E-04	7.48E-05	0.00E+00	3.02E-05	2.14E-05	8.14E-08	2.11E-06	86.4	8.81E-04	1.49E-03
SI36_E	0.75	156	0	1	2.38E-02	3.31E-03	4.08E-04	3.02E-04	2.67E-04	5.51E-05	0.00E+00	2.23E-05	1.58E-05	6.01E-08	1.55E-06	63.0	6.49E-04	1.10E-03
SI36_W	0.75	110	0	1	1.67E-02	2.06E-03	2.84E-04	2.13E-04	1.89E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	43.9	4.57E-04	7.78E-04
SI36_W	0.75	73	0	1	1.11E-02	1.23E-03	1.87E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.83E-08	7.27E-07	28.9	3.04E-04	5.19E-04
SI36_W	0.75	64	0	1	9.68E-03	9.57E-04	1.62E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.09E-06	6.44E-06	2.48E-08	6.35E-07	25.0	2.65E-04	4.54E-04
SI36_W	0.75	46	0	1	6.90E-03	6.83E-04	1.15E-04	8.88E-05	7.86E-05	1.60E-05	0.00E+00	6.49E-06	4.60E-06	1.77E-08	4.53E-07	17.7	1.89E-04	3.24E-04
SI36_W	0.75	64	0	1	9.65E-03	9.57E-04	1.61E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.07E-06	6.43E-06	2.48E-08	6.33E-07	24.8	2.65E-04	4.54E-04
SI36_W	0.75	156	0	1	2.34E-02	2.32E-03	3.90E-04	3.02E-04	2.67E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	6.01E-08	1.54E-06	60.2	6.43E-04	1.10E-03
SI36_W	0.75	467	0	1	7.04E-02	6.97E-03	1.18E-03	9.06E-04	8.02E-04	1.64E-04	0.00E+00	6.62E-05	4.69E-05	1.80E-07	4.62E-06	181.7	1.93E-03	3.31E-03
SI36_W	0.75	714	0	1	1.09E-01	1.30E-02	1.84E-03	1.39E-03	1.23E-03	2.52E-04	0.00E+00	1.02E-04	7.21E-05	2.76E-07	7.10E-06	284.7	2.97E-03	5.06E-03
SI36_W	0.75	576	0	1	8.89E-02	1.40E-02	1.54E-03	1.12E-03	9.91E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.23E-07	5.78E-06	237.7	2.42E-03	4.08E-03
SI36_W	0.75	476	0	1	7.39E-02	1.34E-02	1.30E-03	9.24E-04	8.18E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.84E-07	4.79E-06	200.4	2.00E-03	3.37E-03
SI36_W	0.75	430	0	1	6.73E-02	1.35E-02	1.19E-03	8.35E-04	7.39E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	184.2	1.82E-03	3.05E-03
SI36_W	0.75	485	0	1	7.68E-02	1.82E-02	1.39E-03	9.41E-04	8.34E-04	1.75E-04	0.00E+00	7.08E-05	5.02E-05	1.87E-07	4.94E-06	214.1	2.07E-03	3.44E-03
SI36_W	0.75	512	0	1	8.14E-02	2.00E-02	1.48E-03	9.95E-04	8.81E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	228.0	2.19E-03	3.63E-03
SI36_W	0.75	521	0	1	8.30E-02	2.09E-02	1.51E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.1	2.23E-03	3.70E-03
SI36_W	0.75	540	0	1	8.60E-02	2.22E-02	1.57E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.09E-07	5.52E-06	242.4	2.31E-03	3.83E-03
SI36_W	0.75	586	0	1	9.32E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.5	2.50E-03	4.15E-03
SI36_W	0.75	723	0	1	1.15E-01	2.94E-02	2.10E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.79E-07	7.39E-06	323.7	3.09E-03	5.12E-03
SI36_W	0.75	778	0	1	1.24E-01	3.08E-02	2.24E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.06E-05	3.01E-07	7.94E-06	346.2	3.32E-03	5.51E-03
SI36_W	0.75	540	0	1	8.55E-02	2.07E-02	1.55E-03	1.05E-03	9.28E-04	1.95E-04	0.00E+00	7.88E-05	5.59E-05	2.09E-07	5.50E-06	238.6	2.30E-03	3.83E-03
SI36_W	0.75	357	0	1	5.60E-02	1.19E-02	9.96E-04	6.93E-04	6.13E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.62E-06	153.8	1.51E-03	2.53E-03
SI36_W	0.75	302	0	1	4.70E-02	9.00E-03	8.28E-04	5.86E-04	5.19E-04	1.08E-04	0.00E+00	4.37E-05	3.09E-05	1.17E-07	3.05E-06	127.9	1.27E-03	2.14E-03
SI36_W	0.75	256	0	1	3.97E-02	6.84E-03	6.91E-04	4.97E-04	4.40E-04	9.13E-05	0.00E+00	3.69E-05	2.61E-05	9.90E-08	2.57E-06	106.7	1.08E-03	1.82E-03
SI36_W	0.75	210	0	1	3.24E-02	5.02E-03	5.59E-04	4.08E-04	3.62E-04	7.48E-05	0.00E+00	3.02E-05	2.14E-05	8.14E-08	2.11E-06	86.4	8.81E-04	1.49E-03
SI36_W	0.75	156	0	1	2.38E-02	3.31E-03	4.08E-04	3.02E-04	2.67E-04	5.51E-05	0.00E+00	2.23E-05	1.58E-05	6.01E-08	1.55E-06	63.0	6.49E-04	1.10E-03
SI37_E	0.75	110	0	1	1.67E-02	2.06E-03	2.84E-04	2.13E-04	1.89E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	43.9	4.57E-04	7.78E-04
SI37_E	0.75	73	0	1	1.11E-02	1.23E-03	1.87E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.83E-08	7.27E-07	28.9	3.04E-04	5.19E-04
SI37_E	0.75	64	0	1	9.68E-03	9.57E-04	1.62E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.09E-06	6.44E-06	2.48E-08	6.35E-07	25.0	2.65E-04	4.54E-04
SI37_E	0.75	46	0	1	6.90E-03	6.83E-04	1.15E-04	8.88E-05	7.86E-05	1.60E-05	0.00E+00	6.49E-06	4.60E-06	1.77E-08	4.53E-07	17.7	1.89E-04	3.24E-04
SI37_E	0.75	64	0	1	9.65E-03	9.57E-04	1.61E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.07E-06	6.43E-06	2.48E-08	6.33E-07	24.8	2.65E-04	4.54E-04
SI37_E	0.75	156	0	1	2.34E-02	2.32E-03	3.90E-04	3.02E-04	2.67E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	6.01E-08	1.54E-06	60.2	6.43E-04	1.10E-03
SI37_E	0.75	467	0	1	7.04E-02	6.97E-03	1.18E-03	9.06E-04	8.02E-04	1.64E-04	0.00E+00	6.62E-05	4.69E-05	1.80E-07	4.62E-06	181.7	1.93E-03	3.31E-03
SI37_E	0.75	714	0	1	1.09E-01	1.30E-02	1.84E-03	1.39E-03	1.23E-03	2.52E-04	0.00E+00	1.02E-04	7.21E-05	2.76E-07	7.10E-06	284.7	2.97E-03	5.06E-03
SI37_E	0.75	576	0	1	8.89E-02	1.40E-02	1.54E-03	1.12E-03	9.91E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.23E-07	5.78E-06	237.7	2.42E-03	4.08E-03
SI37_E	0.75	476	0	1	7.39E-02	1.34E-02	1.30E-03	9.24E-04	8.18E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.84E-07	4.79E-06	200.4	2.00E-03	3.37E-03
SI37_E	0.75	430	0	1	6.73E-02	1.35E-02	1.19E-03	8.35E-04	7.39E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	184.2	1.82E-03	3.05E-03
SI37_E	0.75	485	0	1	7.68E-02	1.82E-02	1.39E-03	9.41E-04	8.34E-04	1.75E-04	0.00E+00	7.08E-05	5.02E-05	1.87E-07	4.94E-06	214.1	2.07E-03	3.44E-03
SI37_E	0.75	512	0	1	8.14E-02	2.00E-02	1.48E-03	9.95E-04	8.81E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	228.0	2.19E-03	3.63E-03
SI37_E	0.75	521	0	1	8.30E-02	2.09E-02	1.51E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.1	2.23E-03	3.70E-03
SI37_E	0.75	540	0	1	8.60E-02	2.22E-02	1.57E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.09E-07	5.52E-06	242.4	2.31E-03	3.83E-03
SI37_E	0.75	586	0	1	9.32E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.5	2.50E-03	4.15E-03
SI37_E	0.75	723	0	1	1.15E-01	2.94E-02	2.10E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.79E-07	7.39E-06	323.7	3.09E-03	5.12E-03
SI37_E	0.75	778	0	1	1.24E-01	3.08E-02	2.24E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.06E-05	3.01E-07	7.94E-06	346.2	3.32E-03	5.51E-03
SI37_E	0.75	540	0	1	8.55E-02	2.07E-02	1.55E-03	1.05E-03	9.28E-04	1.95E-04	0.00E+00	7.88E-05	5.59E-05	2.09E-07	5.50E-06	238.6	2.30E-03	3.83E-03
SI37_E	0.75	357	0	1	5.60E-02	1.19E-02	9.96E-04	6.93E-04	6.13E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.62E-06	153.8	1.51E-03	2.53E-03
SI37_E	0.75	302	0	1	4.70E-02	9.00E-03	8.28E-04	5.86E-04	5.19E-04	1.08E-04	0.00E+00	4.37E-05	3.09E-05	1.17E-07	3.05E-06	127.9	1.27E-03	2.14E-03
SI37_E	0.75	256	0	1	3.97E-02	6.84E-03	6.91E-04	4.97E-04	4.40E-04	9.13E-05	0.00E+00	3.69E-05	2.61E-05	9.90E-08	2.57E-06	106.7	1.08E-03	1.82E-03
SI37_E	0.75	210	0	1	3.24E-02	5.02E-03	5.59E-04	4.08E-04	3.62E-04	7.48E-05	0.00E+00	3.02E-05	2.14E-05	8.14E-08	2.11E-06	86.4	8.81E-04	1.49E-03
SI37_E	0.75	156	0	1	2.38E-02	3.31E-03	4.08E-04	3.02E-04	2.67E-04	5.51E-05	0.00E+00	2.23E-05	1.58E-05	6.01E-08	1.55E-06	63.0	6.49E-04	1.10E-03
SI37_W	0.75	130	0	1	1.98E-02	2.44E-03	3.36E-04	2.52E-04	2.23E-04	4.59E-05	0.00E+00	1.85E-05	1.31E-05	5.03E-08	1.29E-06	51.9	5.41E-04	9.21E-04
SI37_W	0.75	87	0	1	1.32E-02	1.45E-03	2.22E-04	1.68E-04	1.49E-04	3.05E-05	0.00E+00	1.23E-05	8.74E-06	3.35E-08	8.61E-07	34.3	3.60E-04	6.14E-04
SI37_W	0.75	76	0	1	1.15E-02	1.13E-03	1.92E-04	1.47E-04	1.30E-04	2.66E-05	0.00E+00	1.08E-05	7.63E-06	2.93E-08	7.51E-07	29.6	3.14E-04	5.37E-04
SI37_W	0.75	54	0	1	8.16E-03	8.09E-04	1.36E-04	1.05E-04	9.31E-05	1.90E-05	0.00E+00	7.68E-06	5.44E-06	2.09E-08	5.36E-07	21.0	2.24E-04	3.84E-04
SI37_W	0.75	76	0	1	1.14E-02	1.13E-03	1.90E-04	1.47E-04	1.30E-04	2.66E-05	0.00E+00	1.07E-05	7.61E-06	2.93E-08	7.50E-07	29.3	3.13E-04	5.37E-04
SI37_W	0.75	184	0	1	2.77E-02	2.75E-03	4.62E-04	3.57E-04	3.17E-04	6.46E-05	0.00E+00	2.61E-05	1.85E-05	7.12E-08	1.82E-06	71.3	7.61E-04	1.30E-03
SI37_W	0.75	552	0	1	8.34E-02	8.25E-03	1.39E-03	1.07E-03	9.50E-04	1.94E-04	0.00E+00	7.84E-05	5.55E-05	2.14E-07	5.47E-06	215.1	2.29E-03	3.91E-03
SI37_W	0.75	845	0	1	1.29E-01	1.54E-02	2.18E-03	1.64E-03	1.45E-03	2.98E-04	0.00E+00	1.21E-04	8.54E-05	3.27E-07	8.41E-06	337.0	3.52E-03	5.99E-03
SI37_W	0.75	682	0	1	1.05E-01	1.66E-02	1.82E-03	1.32E-03	1.17E-03	2.43E-04	0.00E+00	9.81E-05	6.95E-05	2.64E-07	6.84E-06	281.4	2.86E-03	4.84E-03
SI37_W	0.75	563	0	1	8.75E-02	1.59E-02	1.54E-03	1.09E-03	9.68E-04	2.01E-04	0.00E+00	8.13E-05	5.76E-05	2.18E-07	5.68E-06	237.2	2.37E-03	3.99E-03
SI37_W	0.75	509	0	1	7.96E-02	1.60E-02	1.41E-03	9.88E-04	8.75E-04	1.83E-04	0.00E+00	7.38E-05	5.23E-05	1.97E-07	5.15E-06	218.1	2.15E-03	3.61E-03
SI37_W	0.75	574	0	1	9.09E-02	2.15E-02	1.64E-03	1.11E-03	9.87E-04	2.07E-04	0.00E+00	8.38E-05	5.94E-05	2.22E-07	5.85E-06	253.5	2.45E-03	4.07E-03
SI37_W	0.75	607	0	1	9.63E-02	2.37E-02	1.75E-03	1.18E-03	1.04E-03	2.20E-04	0.00E+00	8.87E-05	6.29E-05	2.35E-07	6.19E-06	269.9	2.59E-03	4.30E-03
SI37_W	0.75	617	0	1	9.82E-02	2.47E-02	1.79E-03	1.20E-03	1.06E-03	2.24E-04	0.00E+00	9.04E-05	6.41E-05	2.39E-07	6.31E-06	276.0	2.64E-03	4.38E-03
SI37_W	0.75	639	0	1	1.02E-01	2.63E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.37E-05	6.64E-05	2.47E-07	6.54E-06	287.0	2.73E-03	4.53E-03
SI37_W	0.75	693	0	1	1.10E-01	2.83E-02	2.01E-03	1.35E-03	1.19E-03	2.51E-04	0.00E+00	1.02E-04	7.20E-05	2.68E-07	7.09E-06	310.7	2.96E-03	4.91E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI37_W	0.75	856	0	1	1.36E-01	3.48E-02	2.48E-03	1.66E-03	1.47E-03	3.10E-04	0.00E+00	1.25E-04	8.88E-05	3.31E-07	8.75E-06	383.2	3.66E-03	6.06E-03
SI37_W	0.75	921	0	1	1.46E-01	3.65E-02	2.65E-03	1.79E-03	1.58E-03	3.33E-04	0.00E+00	1.35E-04	9.54E-05	3.56E-07	9.40E-06	409.9	3.93E-03	6.52E-03
SI37_W	0.75	639	0	1	1.01E-01	2.45E-02	1.83E-03	1.24E-03	1.10E-03	2.31E-04	0.00E+00	9.33E-05	6.61E-05	2.47E-07	6.51E-06	282.5	2.72E-03	4.53E-03
SI37_W	0.75	422	0	1	6.63E-02	1.41E-02	1.18E-03	8.20E-04	7.26E-04	1.52E-04	0.00E+00	6.13E-05	4.35E-05	1.63E-07	4.28E-06	182.1	1.79E-03	2.99E-03
SI37_W	0.75	357	0	1	5.57E-02	1.07E-02	9.80E-04	6.94E-04	6.15E-04	1.28E-04	0.00E+00	5.17E-05	3.66E-05	1.38E-07	3.61E-06	151.4	1.51E-03	2.53E-03
SI37_W	0.75	303	0	1	4.69E-02	8.10E-03	8.18E-04	5.89E-04	5.21E-04	1.08E-04	0.00E+00	4.37E-05	3.10E-05	1.17E-07	3.05E-06	126.4	1.27E-03	2.15E-03
SI37_W	0.75	249	0	1	3.83E-02	5.95E-03	6.62E-04	4.84E-04	4.28E-04	8.85E-05	0.00E+00	3.58E-05	2.53E-05	9.63E-08	2.50E-06	102.3	1.04E-03	1.77E-03
SI37_W	0.75	184	0	1	2.82E-02	3.92E-03	4.83E-04	3.57E-04	3.17E-04	6.52E-05	0.00E+00	2.64E-05	1.87E-05	7.12E-08	1.84E-06	74.6	7.69E-04	1.30E-03
SI38_E	0.36	62	0	1	9.43E-03	1.16E-03	1.60E-04	1.20E-04	1.06E-04	2.19E-05	0.00E+00	8.83E-06	6.26E-06	2.39E-08	6.16E-07	24.7	2.58E-04	4.39E-04
SI38_E	0.36	41	0	1	6.26E-03	6.92E-04	1.06E-04	8.01E-05	7.09E-05	1.45E-05	0.00E+00	5.87E-06	4.16E-06	1.60E-08	4.10E-07	16.3	1.71E-04	2.92E-04
SI38_E	0.36	36	0	1	5.46E-03	5.39E-04	9.13E-05	7.01E-05	6.21E-05	1.27E-05	0.00E+00	5.13E-06	3.63E-06	1.40E-08	3.58E-07	14.1	1.50E-04	2.56E-04
SI38_E	0.36	26	0	1	3.89E-03	3.85E-04	6.48E-05	5.01E-05	4.43E-05	9.05E-06	0.00E+00	3.66E-06	2.59E-06	9.97E-09	2.55E-07	10.0	1.07E-04	1.83E-04
SI38_E	0.36	36	0	1	5.44E-03	5.39E-04	9.05E-05	7.01E-05	6.21E-05	1.27E-05	0.00E+00	5.12E-06	3.62E-06	1.40E-08	3.57E-07	14.0	1.49E-04	2.56E-04
SI38_E	0.36	88	0	1	1.32E-02	1.31E-03	2.20E-04	1.70E-04	1.51E-04	3.07E-05	0.00E+00	1.24E-05	8.80E-06	3.39E-08	8.67E-07	33.9	3.62E-04	6.21E-04
SI38_E	0.36	263	0	1	3.97E-02	3.93E-03	6.63E-04	5.11E-04	4.52E-04	9.24E-05	0.00E+00	3.73E-05	2.64E-05	1.02E-07	2.60E-06	102.4	1.09E-03	1.86E-03
SI38_E	0.36	402	0	1	6.13E-02	7.34E-03	1.04E-03	7.81E-04	6.92E-04	1.42E-04	0.00E+00	5.74E-05	4.07E-05	1.56E-07	4.00E-06	160.5	1.67E-03	2.85E-03
SI38_E	0.36	325	0	1	5.01E-02	7.91E-03	8.68E-04	6.31E-04	5.59E-04	1.16E-04	0.00E+00	4.67E-05	3.31E-05	1.26E-07	3.26E-06	134.0	1.36E-03	2.30E-03
SI38_E	0.36	268	0	1	4.17E-02	7.58E-03	7.32E-04	5.21E-04	4.61E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.04E-07	2.70E-06	113.0	1.13E-03	1.90E-03
SI38_E	0.36	242	0	1	3.79E-02	7.63E-03	6.73E-04	4.71E-04	4.17E-04	8.70E-05	0.00E+00	3.51E-05	2.49E-05	9.37E-08	2.45E-06	103.9	1.03E-03	1.72E-03
SI38_E	0.36	273	0	1	4.33E-02	1.03E-02	7.82E-04	5.31E-04	4.70E-04	9.88E-05	0.00E+00	3.99E-05	2.83E-05	1.06E-07	2.79E-06	120.7	1.16E-03	1.94E-03
SI38_E	0.36	289	0	1	4.59E-02	1.13E-02	8.32E-04	5.61E-04	4.97E-04	1.05E-04	0.00E+00	4.23E-05	2.99E-05	1.12E-07	2.95E-06	128.5	1.23E-03	2.05E-03
SI38_E	0.36	294	0	1	4.68E-02	1.18E-02	8.51E-04	5.71E-04	5.05E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.14E-07	3.00E-06	131.4	1.26E-03	2.08E-03
SI38_E	0.36	304	0	1	4.85E-02	1.25E-02	8.85E-04	5.91E-04	5.23E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.18E-07	3.11E-06	136.7	1.30E-03	2.16E-03
SI38_E	0.36	330	0	1	5.26E-02	1.35E-02	9.58E-04	6.41E-04	5.68E-04	1.20E-04	0.00E+00	4.84E-05	3.43E-05	1.28E-07	3.38E-06	148.0	1.41E-03	2.34E-03
SI38_E	0.36	407	0	1	6.49E-02	1.66E-02	1.18E-03	7.91E-04	7.01E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.58E-07	4.17E-06	182.5	1.74E-03	2.89E-03
SI38_E	0.36	438	0	1	6.96E-02	1.74E-02	1.26E-03	8.51E-04	7.54E-04	1.59E-04	0.00E+00	6.41E-05	4.54E-05	1.70E-07	4.48E-06	195.2	1.87E-03	3.11E-03
SI38_E	0.36	304	0	1	4.82E-02	1.17E-02	8.71E-04	5.91E-04	5.23E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.18E-07	3.10E-06	134.5	1.30E-03	2.16E-03
SI38_E	0.36	201	0	1	3.15E-02	6.71E-03	5.62E-04	3.91E-04	3.46E-04	7.23E-05	0.00E+00	2.92E-05	2.07E-05	7.78E-08	2.04E-06	86.7	8.52E-04	1.43E-03
SI38_E	0.36	170	0	1	2.65E-02	5.08E-03	4.67E-04	3.30E-04	2.93E-04	6.09E-05	0.00E+00	2.46E-05	1.74E-05	6.58E-08	1.72E-06	72.1	7.18E-04	1.21E-03
SI38_E	0.36	144	0	1	2.24E-02	3.86E-03	3.90E-04	2.80E-04	2.48E-04	5.15E-05	0.00E+00	2.08E-05	1.47E-05	5.58E-08	1.45E-06	60.2	6.07E-04	1.02E-03
SI38_E	0.36	119	0	1	1.83E-02	2.83E-03	3.15E-04	2.30E-04	2.04E-04	4.21E-05	0.00E+00	1.70E-05	1.21E-05	4.59E-08	1.19E-06	48.7	4.97E-04	8.41E-04
SI38_E	0.36	88	0	1	1.34E-02	1.87E-03	2.30E-04	1.70E-04	1.51E-04	3.11E-05	0.00E+00	1.26E-05	8.89E-06	3.39E-08	8.76E-07	35.5	3.66E-04	6.21E-04
SI38_W	0.39	67	0	1	1.02E-02	1.25E-03	1.73E-04	1.30E-04	1.15E-04	2.36E-05	0.00E+00	9.54E-06	6.76E-06	2.58E-08	6.66E-07	26.7	2.78E-04	4.74E-04
SI38_W	0.39	45	0	1	6.76E-03	7.48E-04	1.14E-04	8.65E-05	7.66E-05	1.57E-05	0.00E+00	6.34E-06	4.49E-06	1.72E-08	4.43E-07	17.6	1.85E-04	3.16E-04
SI38_W	0.39	39	0	1	5.89E-03	5.82E-04	9.86E-05	7.57E-05	6.70E-05	1.37E-05	0.00E+00	5.54E-06	3.92E-06	1.51E-08	3.86E-07	15.2	1.62E-04	2.76E-04
SI38_W	0.39	28	0	1	4.20E-03	4.16E-04	7.00E-05	5.41E-05	4.79E-05	9.77E-06	0.00E+00	3.95E-06	2.80E-06	1.08E-08	2.76E-07	10.8	1.15E-04	1.97E-04
SI38_W	0.39	39	0	1	5.87E-03	5.82E-04	9.77E-05	7.57E-05	6.70E-05	1.37E-05	0.00E+00	5.53E-06	3.91E-06	1.51E-08	3.86E-07	15.1	1.61E-04	2.76E-04
SI38_W	0.39	95	0	1	1.43E-02	1.41E-03	2.37E-04	1.84E-04	1.63E-04	3.32E-05	0.00E+00	1.34E-05	9.51E-06	3.66E-08	9.36E-07	36.7	3.91E-04	6.71E-04
SI38_W	0.39	284	0	1	4.29E-02	4.24E-03	7.16E-04	5.52E-04	4.88E-04	9.97E-05	0.00E+00	4.03E-05	2.86E-05	1.10E-07	2.81E-06	110.6	1.18E-03	2.01E-03
SI38_W	0.39	435	0	1	6.62E-02	7.93E-03	1.12E-03	8.43E-04	7.47E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.68E-07	4.33E-06	173.3	1.81E-03	3.08E-03
SI38_W	0.39	351	0	1	5.41E-02	8.55E-03	9.37E-04	6.81E-04	6.03E-04	1.25E-04	0.00E+00	5.04E-05	3.57E-05	1.36E-07	3.52E-06	144.7	1.47E-03	2.49E-03
SI38_W	0.39	290	0	1	4.50E-02	8.19E-03	7.90E-04	5.62E-04	4.98E-04	1.04E-04	0.00E+00	4.18E-05	2.96E-05	1.12E-07	2.92E-06	122.0	1.22E-03	2.05E-03
SI38_W	0.39	262	0	1	4.10E-02	8.25E-03	7.26E-04	5.08E-04	4.50E-04	9.39E-05	0.00E+00	3.80E-05	2.69E-05	1.01E-07	2.65E-06	112.2	1.11E-03	1.86E-03
SI38_W	0.39	295	0	1	4.67E-02	1.11E-02	8.44E-04	5.73E-04	5.08E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.14E-07	3.01E-06	130.4	1.26E-03	2.09E-03
SI38_W	0.39	312	0	1	4.95E-02	1.22E-02	8.99E-04	6.06E-04	5.36E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.21E-07	3.18E-06	138.8	1.33E-03	2.21E-03
SI38_W	0.39	318	0	1	5.05E-02	1.27E-02	9.19E-04	6.16E-04	5.46E-04	1.15E-04	0.00E+00	4.65E-05	3.29E-05	1.23E-07	3.24E-06	141.9	1.36E-03	2.25E-03
SI38_W	0.39	329	0	1	5.24E-02	1.35E-02	9.56E-04	6.38E-04	5.65E-04	1.19E-04	0.00E+00	4.82E-05	3.41E-05	1.27E-07	3.36E-06	147.6	1.41E-03	2.33E-03
SI38_W	0.39	357	0	1	5.68E-02	1.45E-02	1.03E-03	6.92E-04	6.13E-04	1.29E-04	0.00E+00	5.22E-05	3.70E-05	1.38E-07	3.65E-06	159.8	1.52E-03	2.53E-03
SI38_W	0.39	440	0	1	7.01E-02	1.79E-02	1.28E-03	8.54E-04	7.57E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.70E-07	4.50E-06	197.1	1.88E-03	3.12E-03
SI38_W	0.39	474	0	1	7.52E-02	1.87E-02	1.37E-03	9.19E-04	8.14E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.83E-06	210.8	2.02E-03	3.36E-03
SI38_W	0.39	329	0	1	5.21E-02	1.26E-02	9.41E-04	6.38E-04	5.65E-04	1.19E-04	0.00E+00	4.80E-05	3.40E-05	1.27E-07	3.35E-06	145.3	1.40E-03	2.33E-03
SI38_W	0.39	217	0	1	3.41E-02	7.25E-03	6.07E-04	4.22E-04	3.73E-04	7.81E-05	0.00E+00	3.15E-05	2.23E-05	8.40E-08	2.20E-06	93.7	9.20E-04	1.54E-03
SI38_W	0.39	184	0	1	2.86E-02	5.48E-03	5.04E-04	3.57E-04	3.16E-04	6.58E-05	0.00E+00	2.66E-05	1.88E-05	7.11E-08	1.85E-06	77.9	7.75E-04	1.30E-03
SI38_W	0.39	156	0	1	2.41E-02	4.16E-03	4.21E-04	3.03E-04	2.68E-04	5.56E-05	0.00E+00	2.25E-05	1.59E-05	6.03E-08	1.57E-06	65.0	6.55E-04	1.11E-03
SI38_W	0.39	128	0	1	1.97E-02	3.06E-03	3.41E-04	2.49E-04	2.20E-04	4.55E-05	0.00E+00	1.84E-05	1.30E-05	4.95E-08	1.28E-06	52.6	5.37E-04	9.08E-04
SI38_W	0.39	95	0	1	1.45E-02	2.02E-03	2.48E-04	1.84E-04	1.63E-04	3.35E-05	0.00E+00	1.36E-05	9.60E-06	3.66E-08	9.46E-07	38.4	3.95E-04	6.71E-04
SI39_E	0.25	42	0	1	6.34E-03	7.79E-04	1.08E-04	8.07E-05	7.15E-05	1.47E-05	0.00E+00	5.93E-06	4.20E-06	1.61E-08	4.14E-07	16.6	1.73E-04	2.95E-04
SI39_E	0.25	28	0	1	4.21E-03	4.65E-04	7.10E-05	5.38E-05	4.77E-05	9.76E-06	0.00E+00	3.95E-06	2.80E-06	1.07E-08	2.75E-07	11.0	1.15E-04	1.96E-04
SI39_E	0.25	24	0	1	3.66E-03	3.62E-04	6.13E-05	4.71E-05	4.17E-05	8.52E-06	0.00E+00	3.44E-06	2.44E-06	9.38E-09	2.40E-07	9.5	1.00E-04	1.72E-04
SI39_E	0.25	17	0	1	2.61E-03	2.59E-04	4.35E-05	3.36E-05	2.98E-05	6.08E-06	0.00E+00	2.46E-06	1.74E-06	6.70E-09	1.71E-07	6.7	7.16E-05	1.23E-04
SI39_E	0.25	24	0	1	3.65E-03	3.62E-04	6.08E-05	4.71E-05	4.17E-05	8.50E-06	0.00E+00	3.44E-06	2.43E-06	9.38E-09	2.40E-07	9.4	1.00E-04	1.72E-04
SI39_E	0.25	59	0	1	8.87E-03	8.80E-04	1.48E-04	1.14E-04	1.01E-04	2.07E-05	0.00E+00	8.35E-06	5.91E-06	2.28E-08	5.82E-07	22.8	2.43E-04	4.17E-04
SI39_E	0.25	177	0	1	2.67E-02	2.64E-03	4.46E-04	3.43E-04	3.04E-04	6.20E-05	0.00E+00	2.51E-05	1.78E-05	6.83E-08	1.75E-06	68.8	7.31E-04	1.25E-03
SI39_E	0.25	270	0	1	4.12E-02	4.93E-03	6.98E-04	5.25E-04	4.65E-04	9.54E-05	0.00E+00	3.85E-05	2.73E-05	1.04E-07	2.69E-06	107.8	1.12E-03	1.92E-03
SI39_E	0.25	218	0	1	3.37E-02	5.32E-03	5.83E-04	4.24E-04	3.75E-04	7.76E-05	0.00E+00	3.14E-05	2.22E-05	8.44E-08	2.19E-06	90.0	9.15E-04	1.55E-03
SI39_E	0.25	180	0	1	2.80E-02	5.09E-03	4.91E-04	3.50E-04	3.10E-04	6.44E-05	0.00E+00	2.60E-05	1.84E-05	6.97E-08	1.82E-06	75.9	7.59E-04	1.28E-03
SI39_E	0.25	163	0	1	2.55E-02	5.13E-03	4.52E-04	3.16E-04	2.80E-04	5.84E-05	0.00E+00	2.36E-05	1.67E-05	6.30E-08	1.65E-06	69.8	6.89E-04	1.15E-03
SI39_E	0.25	184	0	1	2.91E-02	6.89E-03	5.25E-04	3.56E-04	3.16E-04	6.64E-05	0.00E+00	2.68E-05	1.90E-05	7.10E-08	1.87E-06	81.1	7.82E-04	1.30E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_E	0.25	194	0	1	3.08E-02	7.57E-03	5.59E-04	3.77E-04	3.34E-04	7.02E-05	0.00E+00	2.84E-05	2.01E-05	7.50E-08	1.98E-06	86.3	8.28E-04	1.37E-03
SI39_E	0.25	197	0	1	3.14E-02	7.91E-03	5.72E-04	3.83E-04	3.40E-04	7.16E-05	0.00E+00	2.89E-05	2.05E-05	7.64E-08	2.02E-06	88.3	8.44E-04	1.40E-03
SI39_E	0.25	204	0	1	3.26E-02	8.41E-03	5.95E-04	3.97E-04	3.51E-04	7.42E-05	0.00E+00	3.00E-05	2.12E-05	7.90E-08	2.09E-06	91.8	8.74E-04	1.45E-03
SI39_E	0.25	222	0	1	3.53E-02	9.04E-03	6.44E-04	4.30E-04	3.81E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.57E-08	2.27E-06	99.4	9.48E-04	1.57E-03
SI39_E	0.25	274	0	1	4.36E-02	1.11E-02	7.94E-04	5.31E-04	4.71E-04	9.92E-05	0.00E+00	4.01E-05	2.84E-05	1.06E-07	2.80E-06	122.6	1.17E-03	1.94E-03
SI39_E	0.25	295	0	1	4.68E-02	1.17E-02	8.49E-04	5.72E-04	5.06E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.14E-07	3.01E-06	131.1	1.26E-03	2.09E-03
SI39_E	0.25	204	0	1	3.24E-02	7.83E-03	5.85E-04	3.97E-04	3.51E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	7.90E-08	2.08E-06	90.4	8.71E-04	1.45E-03
SI39_E	0.25	135	0	1	2.12E-02	4.51E-03	3.77E-04	2.62E-04	2.32E-04	4.86E-05	0.00E+00	1.96E-05	1.39E-05	5.22E-08	1.37E-06	58.3	5.72E-04	9.58E-04
SI39_E	0.25	114	0	1	1.78E-02	3.41E-03	3.14E-04	2.22E-04	1.97E-04	4.09E-05	0.00E+00	1.65E-05	1.17E-05	4.42E-08	1.15E-06	48.4	4.82E-04	8.10E-04
SI39_E	0.25	97	0	1	1.50E-02	2.59E-03	2.62E-04	1.88E-04	1.67E-04	3.46E-05	0.00E+00	1.40E-05	9.90E-06	3.75E-08	9.75E-07	40.4	4.08E-04	6.87E-04
SI39_E	0.25	80	0	1	1.23E-02	1.90E-03	2.12E-04	1.55E-04	1.37E-04	2.83E-05	0.00E+00	1.14E-05	8.11E-06	3.08E-08	7.98E-07	32.7	3.34E-04	5.65E-04
SI39_E	0.25	59	0	1	9.02E-03	1.25E-03	1.55E-04	1.14E-04	1.01E-04	2.09E-05	0.00E+00	8.43E-06	5.97E-06	2.28E-08	5.88E-07	23.9	2.46E-04	4.17E-04
SI39_W	0.17	27	0	1	4.17E-03	5.13E-04	7.08E-05	5.31E-05	4.70E-05	9.66E-06	0.00E+00	3.90E-06	2.77E-06	1.06E-08	2.72E-07	10.9	1.14E-04	1.94E-04
SI39_W	0.17	18	0	1	2.77E-03	3.06E-04	4.67E-05	3.54E-05	3.14E-05	6.43E-06	0.00E+00	2.60E-06	1.84E-06	7.05E-09	1.81E-07	7.2	7.57E-05	1.29E-04
SI39_W	0.17	16	0	1	2.41E-03	2.38E-04	4.04E-05	3.10E-05	2.74E-05	5.61E-06	0.00E+00	2.27E-06	1.61E-06	6.17E-09	1.58E-07	6.2	6.61E-05	1.13E-04
SI39_W	0.17	11	0	1	1.72E-03	1.70E-04	2.86E-05	2.21E-05	1.96E-05	4.00E-06	0.00E+00	1.62E-06	1.15E-06	4.41E-09	1.13E-07	4.4	4.71E-05	8.08E-05
SI39_W	0.17	16	0	1	2.40E-03	2.38E-04	4.00E-05	3.10E-05	2.74E-05	5.60E-06	0.00E+00	2.26E-06	1.60E-06	6.17E-09	1.58E-07	6.2	6.60E-05	1.13E-04
SI39_W	0.17	39	0	1	5.84E-03	5.79E-04	9.72E-05	7.52E-05	6.66E-05	1.36E-05	0.00E+00	5.49E-06	3.89E-06	1.50E-08	3.83E-07	15.0	1.60E-04	2.75E-04
SI39_W	0.17	116	0	1	1.76E-02	1.74E-03	2.93E-04	2.26E-04	2.00E-04	4.08E-05	0.00E+00	1.65E-05	1.17E-05	4.50E-08	1.15E-06	45.3	4.81E-04	8.24E-04
SI39_W	0.17	178	0	1	2.71E-02	3.25E-03	4.59E-04	3.45E-04	3.06E-04	6.28E-05	0.00E+00	2.54E-05	1.80E-05	6.88E-08	1.77E-06	70.9	7.40E-04	1.26E-03
SI39_W	0.17	144	0	1	2.21E-02	3.50E-03	3.84E-04	2.79E-04	2.47E-04	5.11E-05	0.00E+00	2.06E-05	1.46E-05	5.55E-08	1.44E-06	59.2	6.02E-04	1.02E-03
SI39_W	0.17	119	0	1	1.84E-02	3.35E-03	3.23E-04	2.30E-04	2.04E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.58E-08	1.19E-06	49.9	4.99E-04	8.40E-04
SI39_W	0.17	107	0	1	1.68E-02	3.37E-03	2.97E-04	2.08E-04	1.84E-04	3.84E-05	0.00E+00	1.55E-05	1.10E-05	4.14E-08	1.08E-06	45.9	4.53E-04	7.59E-04
SI39_W	0.17	121	0	1	1.91E-02	4.53E-03	3.46E-04	2.35E-04	2.08E-04	4.37E-05	0.00E+00	1.76E-05	1.25E-05	4.67E-08	1.23E-06	53.4	5.15E-04	8.56E-04
SI39_W	0.17	128	0	1	2.03E-02	4.98E-03	3.68E-04	2.48E-04	2.20E-04	4.62E-05	0.00E+00	1.87E-05	1.32E-05	4.94E-08	1.30E-06	56.8	5.45E-04	9.05E-04
SI39_W	0.17	130	0	1	2.07E-02	5.21E-03	3.76E-04	2.52E-04	2.23E-04	4.71E-05	0.00E+00	1.90E-05	1.35E-05	5.03E-08	1.33E-06	58.1	5.55E-04	9.21E-04
SI39_W	0.17	135	0	1	2.14E-02	5.54E-03	3.91E-04	2.61E-04	2.31E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.20E-08	1.38E-06	60.4	5.75E-04	9.53E-04
SI39_W	0.17	146	0	1	2.32E-02	5.95E-03	4.24E-04	2.83E-04	2.51E-04	5.29E-05	0.00E+00	2.14E-05	1.52E-05	5.64E-08	1.49E-06	65.4	6.24E-04	1.03E-03
SI39_W	0.17	180	0	1	2.87E-02	7.33E-03	5.22E-04	3.50E-04	3.10E-04	6.53E-05	0.00E+00	2.64E-05	1.87E-05	6.96E-08	1.84E-06	80.7	7.70E-04	1.28E-03
SI39_W	0.17	194	0	1	3.08E-02	7.67E-03	5.59E-04	3.76E-04	3.33E-04	7.02E-05	0.00E+00	2.84E-05	2.01E-05	7.49E-08	1.98E-06	86.3	8.27E-04	1.37E-03
SI39_W	0.17	135	0	1	2.13E-02	5.16E-03	3.85E-04	2.61E-04	2.31E-04	4.86E-05	0.00E+00	1.96E-05	1.39E-05	5.20E-08	1.37E-06	59.5	5.73E-04	9.53E-04
SI39_W	0.17	89	0	1	1.39E-02	2.97E-03	2.48E-04	1.73E-04	1.53E-04	3.19E-05	0.00E+00	1.29E-05	9.15E-06	3.44E-08	9.01E-07	38.3	3.77E-04	6.30E-04
SI39_W	0.17	75	0	1	1.17E-02	2.24E-03	2.06E-04	1.46E-04	1.29E-04	2.69E-05	0.00E+00	1.09E-05	7.71E-06	2.91E-08	7.59E-07	31.9	3.17E-04	5.33E-04
SI39_W	0.17	64	0	1	9.88E-03	1.70E-03	1.72E-04	1.24E-04	1.10E-04	2.28E-05	0.00E+00	9.20E-06	6.52E-06	2.47E-08	6.42E-07	26.6	2.68E-04	4.52E-04
SI39_W	0.17	52	0	1	8.07E-03	1.25E-03	1.39E-04	1.02E-04	9.02E-05	1.86E-05	0.00E+00	7.53E-06	5.33E-06	2.03E-08	5.25E-07	21.5	2.20E-04	3.72E-04
SI39_W	0.17	39	0	1	5.94E-03	8.25E-04	1.02E-04	7.52E-05	6.66E-05	1.37E-05	0.00E+00	5.55E-06	3.93E-06	1.50E-08	3.87E-07	15.7	1.62E-04	2.75E-04
SI40_E	0.49	77	0	1	1.18E-02	1.45E-03	2.00E-04	1.50E-04	1.33E-04	2.73E-05	0.00E+00	1.10E-05	7.82E-06	2.99E-08	7.70E-07	30.9	3.22E-04	5.48E-04
SI40_E	0.49	52	0	1	7.83E-03	8.65E-04	1.32E-04	1.00E-04	8.87E-05	1.82E-05	0.00E+00	7.34E-06	5.20E-06	1.99E-08	5.12E-07	20.4	2.14E-04	3.66E-04
SI40_E	0.49	45	0	1	6.82E-03	6.74E-04	1.14E-04	8.76E-05	7.76E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.74E-08	4.47E-07	17.6	1.87E-04	3.20E-04
SI40_E	0.49	32	0	1	4.86E-03	4.82E-04	8.10E-05	6.26E-05	5.54E-05	1.13E-05	0.00E+00	4.57E-06	3.24E-06	1.25E-08	3.19E-07	12.5	1.33E-04	2.28E-04
SI40_E	0.49	45	0	1	6.80E-03	6.74E-04	1.13E-04	8.76E-05	7.76E-05	1.58E-05	0.00E+00	6.40E-06	4.53E-06	1.74E-08	4.46E-07	17.5	1.87E-04	3.20E-04
SI40_E	0.49	110	0	1	1.65E-02	1.64E-03	2.75E-04	2.13E-04	1.88E-04	3.84E-05	0.00E+00	1.55E-05	1.10E-05	4.24E-08	1.08E-06	42.4	4.53E-04	7.77E-04
SI40_E	0.49	329	0	1	4.96E-02	4.91E-03	8.29E-04	6.38E-04	5.65E-04	1.15E-04	0.00E+00	4.67E-05	3.31E-05	1.27E-07	3.26E-06	128.0	1.36E-03	2.33E-03
SI40_E	0.49	503	0	1	7.66E-02	9.18E-03	1.30E-03	9.76E-04	8.65E-04	1.78E-04	0.00E+00	7.17E-05	5.08E-05	1.94E-07	5.01E-06	200.6	2.09E-03	3.56E-03
SI40_E	0.49	406	0	1	6.26E-02	9.89E-03	1.08E-03	7.89E-04	6.98E-04	1.44E-04	0.00E+00	5.84E-05	4.14E-05	1.57E-07	4.07E-06	167.5	1.70E-03	2.88E-03
SI40_E	0.49	335	0	1	5.21E-02	9.48E-03	9.15E-04	6.51E-04	5.76E-04	1.20E-04	0.00E+00	4.84E-05	3.43E-05	1.30E-07	3.38E-06	141.2	1.41E-03	2.38E-03
SI40_E	0.49	303	0	1	4.74E-02	9.54E-03	8.41E-04	5.88E-04	5.21E-04	1.09E-04	0.00E+00	4.39E-05	3.11E-05	1.17E-07	3.07E-06	129.8	1.28E-03	2.15E-03
SI40_E	0.49	342	0	1	5.41E-02	1.28E-02	9.77E-04	6.63E-04	5.88E-04	1.23E-04	0.00E+00	4.99E-05	3.54E-05	1.32E-07	3.48E-06	150.9	1.46E-03	2.42E-03
SI40_E	0.49	361	0	1	5.73E-02	1.41E-02	1.04E-03	7.01E-04	6.21E-04	1.31E-04	0.00E+00	5.28E-05	3.74E-05	1.40E-07	3.69E-06	160.7	1.54E-03	2.56E-03
SI40_E	0.49	368	0	1	5.85E-02	1.47E-02	1.06E-03	7.13E-04	6.32E-04	1.33E-04	0.00E+00	5.38E-05	3.81E-05	1.42E-07	3.76E-06	164.3	1.57E-03	2.60E-03
SI40_E	0.49	380	0	1	6.06E-02	1.57E-02	1.11E-03	7.39E-04	6.54E-04	1.38E-04	0.00E+00	5.58E-05	3.95E-05	1.47E-07	3.89E-06	170.9	1.63E-03	2.70E-03
SI40_E	0.49	413	0	1	6.57E-02	1.68E-02	1.20E-03	8.01E-04	7.09E-04	1.50E-04	0.00E+00	6.05E-05	4.28E-05	1.60E-07	4.22E-06	185.0	1.76E-03	2.92E-03
SI40_E	0.49	509	0	1	8.11E-02	2.07E-02	1.48E-03	9.89E-04	8.76E-04	1.85E-04	0.00E+00	7.46E-05	5.29E-05	1.97E-07	5.21E-06	228.1	2.18E-03	3.61E-03
SI40_E	0.49	548	0	1	8.70E-02	2.17E-02	1.58E-03	1.06E-03	9.42E-04	1.98E-04	0.00E+00	8.02E-05	5.68E-05	2.12E-07	5.60E-06	244.0	2.34E-03	3.88E-03
SI40_E	0.49	380	0	1	6.03E-02	1.46E-02	1.09E-03	7.39E-04	6.54E-04	1.38E-04	0.00E+00	5.56E-05	3.94E-05	1.47E-07	3.88E-06	168.2	1.62E-03	2.70E-03
SI40_E	0.49	251	0	1	3.94E-02	8.39E-03	7.02E-04	4.88E-04	4.32E-04	9.04E-05	0.00E+00	3.65E-05	2.59E-05	9.72E-08	2.55E-06	108.4	1.07E-03	1.78E-03
SI40_E	0.49	213	0	1	3.31E-02	6.35E-03	5.84E-04	4.13E-04	3.66E-04	7.61E-05	0.00E+00	3.08E-05	2.18E-05	8.23E-08	2.15E-06	90.1	8.98E-04	1.51E-03
SI40_E	0.49	181	0	1	2.79E-02	4.82E-03	4.87E-04	3.50E-04	3.10E-04	6.44E-05	0.00E+00	2.60E-05	1.84E-05	6.98E-08	1.81E-06	75.2	7.59E-04	1.28E-03
SI40_E	0.49	148	0	1	2.28E-02	3.54E-03	3.94E-04	2.88E-04	2.55E-04	5.27E-05	0.00E+00	2.13E-05	1.51E-05	5.73E-08	1.49E-06	60.9	6.21E-04	1.05E-03
SI40_E	0.49	110	0	1	1.68E-02	2.33E-03	2.88E-04	2.13E-04	1.88E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	44.4	4.58E-04	7.77E-04
SI40_W	0.50	73	0	1	1.11E-02	1.37E-03	1.89E-04	1.42E-04	1.25E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.82E-08	7.26E-07	29.1	3.04E-04	5.17E-04
SI40_W	0.50	49	0	1	7.38E-03	8.16E-04	1.24E-04	9.44E-05	8.36E-05	1.71E-05	0.00E+00	6.92E-06	4.91E-06	1.88E-08	4.83E-07	19.2	2.02E-04	3.45E-04
SI40_W	0.50	43	0	1	6.43E-03	6.36E-04	1.08E-04	8.26E-05	7.32E-05	1.50E-05	0.00E+00	6.04E-06	4.28E-06	1.65E-08	4.22E-07	16.6	1.76E-04	3.02E-04
SI40_W	0.50	30	0	1	4.58E-03	4.54E-04	7.64E-05	5.90E-05	5.23E-05	1.07E-05	0.00E+00	4.31E-06	3.05E-06	1.18E-08	3.01E-07	11.8	1.26E-04	2.15E-04
SI40_W	0.50	43	0	1	6.41E-03	6.36E-04	1.07E-04	8.26E-05	7.32E-05	1.49E-05	0.00E+00	6.03E-06	4.27E-06	1.65E-08	4.21E-07	16.5	1.76E-04	3.02E-04
SI40_W	0.50	103	0	1	1.56E-02	1.54E-03	2.59E-04	2.01E-04	1.78E-04	3.62E-05	0.00E+00	1.46E-05	1.04E-05	4.00E-08	1.02E-06	40.0	4.27E-04	7.32E-04
SI40_W	0.50	310	0	1	4.68E-02	4.63E-03	7.82E-04	6.02E-04	5.33E-04	1.09E-04	0.00E+00	4.40E-05	3.12E-05	1.20E-07	3.07E-06	120.7	1.28E-03	2.20E-03
SI40_W	0.50	474	0	1	7.22E-02	8.66E-03	1.22E-03	9.20E-04	8.15E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.83E-07	4.72E-06	189.1	1.97E-03	3.36E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI40_W	0.50	383	0	1	5.91E-02	9.33E-03	1.02E-03	7.43E-04	6.58E-04	1.36E-04	0.00E+00	5.50E-05	3.90E-05	1.48E-07	3.84E-06	157.9	1.61E-03	2.71E-03
SI40_W	0.50	316	0	1	4.91E-02	8.94E-03	8.62E-04	6.14E-04	5.43E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.22E-07	3.19E-06	133.1	1.33E-03	2.24E-03
SI40_W	0.50	286	0	1	4.47E-02	9.00E-03	7.93E-04	5.55E-04	4.91E-04	1.03E-04	0.00E+00	4.14E-05	2.93E-05	1.10E-07	2.89E-06	122.4	1.21E-03	2.02E-03
SI40_W	0.50	322	0	1	5.10E-02	1.21E-02	9.21E-04	6.25E-04	5.54E-04	1.16E-04	0.00E+00	4.70E-05	3.33E-05	1.25E-07	3.28E-06	142.3	1.37E-03	2.28E-03
SI40_W	0.50	340	0	1	5.41E-02	1.33E-02	9.81E-04	6.61E-04	5.85E-04	1.23E-04	0.00E+00	4.98E-05	3.53E-05	1.32E-07	3.48E-06	151.5	1.45E-03	2.41E-03
SI40_W	0.50	347	0	1	5.51E-02	1.39E-02	1.00E-03	6.73E-04	5.96E-04	1.26E-04	0.00E+00	5.07E-05	3.60E-05	1.34E-07	3.54E-06	154.9	1.48E-03	2.46E-03
SI40_W	0.50	359	0	1	5.72E-02	1.48E-02	1.04E-03	6.96E-04	6.17E-04	1.30E-04	0.00E+00	5.26E-05	3.73E-05	1.39E-07	3.67E-06	161.1	1.53E-03	2.54E-03
SI40_W	0.50	389	0	1	6.20E-02	1.59E-02	1.13E-03	7.55E-04	6.69E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.50E-07	3.98E-06	174.4	1.66E-03	2.76E-03
SI40_W	0.50	480	0	1	7.65E-02	1.95E-02	1.39E-03	9.32E-04	8.26E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.86E-07	4.91E-06	215.1	2.05E-03	3.40E-03
SI40_W	0.50	517	0	1	8.21E-02	2.05E-02	1.49E-03	1.00E-03	8.88E-04	1.87E-04	0.00E+00	7.56E-05	5.36E-05	2.00E-07	5.28E-06	230.0	2.21E-03	3.66E-03
SI40_W	0.50	359	0	1	5.68E-02	1.37E-02	1.03E-03	6.96E-04	6.17E-04	1.30E-04	0.00E+00	5.24E-05	3.71E-05	1.39E-07	3.66E-06	158.6	1.53E-03	2.54E-03
SI40_W	0.50	237	0	1	3.72E-02	7.91E-03	6.62E-04	4.60E-04	4.08E-04	8.52E-05	0.00E+00	3.44E-05	2.44E-05	9.17E-08	2.40E-06	102.2	1.00E-03	1.68E-03
SI40_W	0.50	201	0	1	3.12E-02	5.98E-03	5.50E-04	3.89E-04	3.45E-04	7.18E-05	0.00E+00	2.90E-05	2.06E-05	7.76E-08	2.02E-06	85.0	8.46E-04	1.42E-03
SI40_W	0.50	170	0	1	2.63E-02	4.54E-03	4.59E-04	3.30E-04	2.93E-04	6.07E-05	0.00E+00	2.45E-05	1.74E-05	6.58E-08	1.71E-06	70.9	7.15E-04	1.21E-03
SI40_W	0.50	140	0	1	2.15E-02	3.34E-03	3.72E-04	2.71E-04	2.40E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.41E-08	1.40E-06	57.4	5.86E-04	9.91E-04
SI40_W	0.50	103	0	1	1.58E-02	2.20E-03	2.71E-04	2.01E-04	1.78E-04	3.66E-05	0.00E+00	1.48E-05	1.05E-05	4.00E-08	1.03E-06	41.9	4.32E-04	7.32E-04
SI41_E	0.75	109	0	1	1.67E-02	2.05E-03	2.83E-04	2.12E-04	1.88E-04	3.86E-05	0.00E+00	1.56E-05	1.11E-05	4.23E-08	1.09E-06	43.7	4.55E-04	7.75E-04
SI41_E	0.75	73	0	1	1.11E-02	1.22E-03	1.87E-04	1.42E-04	1.25E-04	2.57E-05	0.00E+00	1.04E-05	7.36E-06	2.82E-08	7.25E-07	28.8	3.03E-04	5.17E-04
SI41_E	0.75	64	0	1	9.65E-03	9.53E-04	1.61E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.06E-06	6.42E-06	2.47E-08	6.32E-07	24.9	2.64E-04	4.52E-04
SI41_E	0.75	46	0	1	6.87E-03	6.81E-04	1.15E-04	8.85E-05	7.84E-05	1.60E-05	0.00E+00	6.46E-06	4.58E-06	1.76E-08	4.51E-07	17.7	1.89E-04	3.23E-04
SI41_E	0.75	64	0	1	9.61E-03	9.53E-04	1.60E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.04E-06	6.41E-06	2.47E-08	6.31E-07	24.7	2.64E-04	4.52E-04
SI41_E	0.75	155	0	1	2.33E-02	2.32E-03	3.89E-04	3.01E-04	2.66E-04	5.44E-05	0.00E+00	2.20E-05	1.56E-05	5.99E-08	1.53E-06	60.0	6.41E-04	1.10E-03
SI41_E	0.75	465	0	1	7.02E-02	6.95E-03	1.17E-03	9.03E-04	7.99E-04	1.63E-04	0.00E+00	6.60E-05	4.68E-05	1.80E-07	4.60E-06	181.1	1.92E-03	3.30E-03
SI41_E	0.75	711	0	1	1.08E-01	1.30E-02	1.84E-03	1.38E-03	1.22E-03	2.51E-04	0.00E+00	1.01E-04	7.19E-05	2.75E-07	7.08E-06	283.7	2.96E-03	5.04E-03
SI41_E	0.75	574	0	1	8.86E-02	1.40E-02	1.53E-03	1.12E-03	9.88E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.22E-07	5.76E-06	236.9	2.41E-03	4.07E-03
SI41_E	0.75	474	0	1	7.37E-02	1.34E-02	1.29E-03	9.20E-04	8.15E-04	1.69E-04	0.00E+00	6.85E-05	4.85E-05	1.83E-07	4.78E-06	199.7	2.00E-03	3.36E-03
SI41_E	0.75	429	0	1	6.70E-02	1.35E-02	1.19E-03	8.32E-04	7.37E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.66E-07	4.34E-06	183.6	1.81E-03	3.04E-03
SI41_E	0.75	483	0	1	7.65E-02	1.81E-02	1.38E-03	9.38E-04	8.31E-04	1.75E-04	0.00E+00	7.06E-05	5.00E-05	1.87E-07	4.92E-06	213.4	2.06E-03	3.42E-03
SI41_E	0.75	511	0	1	8.11E-02	1.99E-02	1.47E-03	9.91E-04	8.78E-04	1.85E-04	0.00E+00	7.47E-05	5.29E-05	1.97E-07	5.21E-06	227.2	2.18E-03	3.62E-03
SI41_E	0.75	520	0	1	8.27E-02	2.08E-02	1.50E-03	1.01E-03	8.94E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.3	2.22E-03	3.68E-03
SI41_E	0.75	538	0	1	8.57E-02	2.21E-02	1.56E-03	1.04E-03	9.25E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.08E-07	5.50E-06	241.6	2.30E-03	3.81E-03
SI41_E	0.75	584	0	1	9.29E-02	2.38E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.6	2.49E-03	4.14E-03
SI41_E	0.75	720	0	1	1.15E-01	2.93E-02	2.09E-03	1.40E-03	1.24E-03	2.61E-04	0.00E+00	1.06E-04	7.48E-05	2.79E-07	7.37E-06	322.6	3.08E-03	5.10E-03
SI41_E	0.75	775	0	1	1.23E-01	3.07E-02	2.23E-03	1.50E-03	1.33E-03	2.81E-04	0.00E+00	1.13E-04	8.03E-05	3.00E-07	7.91E-06	345.0	3.31E-03	5.49E-03
SI41_E	0.75	538	0	1	8.52E-02	2.06E-02	1.54E-03	1.04E-03	9.25E-04	1.94E-04	0.00E+00	7.86E-05	5.57E-05	2.08E-07	5.48E-06	237.8	2.29E-03	3.81E-03
SI41_E	0.75	356	0	1	5.58E-02	1.19E-02	9.93E-04	6.90E-04	6.11E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.37E-07	3.60E-06	153.3	1.51E-03	2.52E-03
SI41_E	0.75	301	0	1	4.69E-02	8.97E-03	8.25E-04	5.84E-04	5.17E-04	1.08E-04	0.00E+00	4.35E-05	3.08E-05	1.16E-07	3.04E-06	127.4	1.27E-03	2.13E-03
SI41_E	0.75	255	0	1	3.95E-02	6.82E-03	6.89E-04	4.96E-04	4.39E-04	9.10E-05	0.00E+00	3.68E-05	2.61E-05	9.87E-08	2.57E-06	106.4	1.07E-03	1.81E-03
SI41_E	0.75	210	0	1	3.23E-02	5.01E-03	5.58E-04	4.07E-04	3.61E-04	7.45E-05	0.00E+00	3.01E-05	2.13E-05	8.11E-08	2.10E-06	86.1	8.78E-04	1.49E-03
SI41_E	0.75	155	0	1	2.37E-02	3.30E-03	4.07E-04	3.01E-04	2.66E-04	5.49E-05	0.00E+00	2.22E-05	1.57E-05	5.99E-08	1.55E-06	62.8	6.47E-04	1.10E-03
SI41_W	0.75	109	0	1	1.67E-02	2.05E-03	2.83E-04	2.12E-04	1.88E-04	3.86E-05	0.00E+00	1.56E-05	1.11E-05	4.23E-08	1.09E-06	43.7	4.55E-04	7.75E-04
SI41_W	0.75	73	0	1	1.11E-02	1.22E-03	1.87E-04	1.42E-04	1.25E-04	2.57E-05	0.00E+00	1.04E-05	7.36E-06	2.82E-08	7.25E-07	28.8	3.03E-04	5.17E-04
SI41_W	0.75	64	0	1	9.65E-03	9.53E-04	1.61E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.06E-06	6.42E-06	2.47E-08	6.32E-07	24.9	2.64E-04	4.52E-04
SI41_W	0.75	46	0	1	6.87E-03	6.81E-04	1.15E-04	8.85E-05	7.84E-05	1.60E-05	0.00E+00	6.46E-06	4.58E-06	1.76E-08	4.51E-07	17.7	1.89E-04	3.23E-04
SI41_W	0.75	64	0	1	9.61E-03	9.53E-04	1.60E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.04E-06	6.41E-06	2.47E-08	6.31E-07	24.7	2.64E-04	4.52E-04
SI41_W	0.75	155	0	1	2.33E-02	2.32E-03	3.89E-04	3.01E-04	2.66E-04	5.44E-05	0.00E+00	2.20E-05	1.56E-05	5.99E-08	1.53E-06	60.0	6.41E-04	1.10E-03
SI41_W	0.75	465	0	1	7.02E-02	6.95E-03	1.17E-03	9.03E-04	7.99E-04	1.63E-04	0.00E+00	6.60E-05	4.68E-05	1.80E-07	4.60E-06	181.1	1.92E-03	3.30E-03
SI41_W	0.75	711	0	1	1.08E-01	1.30E-02	1.84E-03	1.38E-03	1.22E-03	2.51E-04	0.00E+00	1.01E-04	7.19E-05	2.75E-07	7.08E-06	283.7	2.96E-03	5.04E-03
SI41_W	0.75	574	0	1	8.86E-02	1.40E-02	1.53E-03	1.12E-03	9.88E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.22E-07	5.76E-06	236.9	2.41E-03	4.07E-03
SI41_W	0.75	474	0	1	7.37E-02	1.34E-02	1.29E-03	9.20E-04	8.15E-04	1.69E-04	0.00E+00	6.85E-05	4.85E-05	1.83E-07	4.78E-06	199.7	2.00E-03	3.36E-03
SI41_W	0.75	429	0	1	6.70E-02	1.35E-02	1.19E-03	8.32E-04	7.37E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.66E-07	4.34E-06	183.6	1.81E-03	3.04E-03
SI41_W	0.75	483	0	1	7.65E-02	1.81E-02	1.38E-03	9.38E-04	8.31E-04	1.75E-04	0.00E+00	7.06E-05	5.00E-05	1.87E-07	4.92E-06	213.4	2.06E-03	3.42E-03
SI41_W	0.75	511	0	1	8.11E-02	1.99E-02	1.47E-03	9.91E-04	8.78E-04	1.85E-04	0.00E+00	7.47E-05	5.29E-05	1.97E-07	5.21E-06	227.2	2.18E-03	3.62E-03
SI41_W	0.75	520	0	1	8.27E-02	2.08E-02	1.50E-03	1.01E-03	8.94E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.3	2.22E-03	3.68E-03
SI41_W	0.75	538	0	1	8.57E-02	2.21E-02	1.56E-03	1.04E-03	9.25E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.08E-07	5.50E-06	241.6	2.30E-03	3.81E-03
SI41_W	0.75	584	0	1	9.29E-02	2.38E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.6	2.49E-03	4.14E-03
SI41_W	0.75	720	0	1	1.15E-01	2.93E-02	2.09E-03	1.40E-03	1.24E-03	2.61E-04	0.00E+00	1.06E-04	7.48E-05	2.79E-07	7.37E-06	322.6	3.08E-03	5.10E-03
SI41_W	0.75	775	0	1	1.23E-01	3.07E-02	2.23E-03	1.50E-03	1.33E-03	2.81E-04	0.00E+00	1.13E-04	8.03E-05	3.00E-07	7.91E-06	345.0	3.31E-03	5.49E-03
SI41_W	0.75	538	0	1	8.52E-02	2.06E-02	1.54E-03	1.04E-03	9.25E-04	1.94E-04	0.00E+00	7.86E-05	5.57E-05	2.08E-07	5.48E-06	237.8	2.29E-03	3.81E-03
SI41_W	0.75	356	0	1	5.58E-02	1.19E-02	9.93E-04	6.90E-04	6.11E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.37E-07	3.60E-06	153.3	1.51E-03	2.52E-03
SI41_W	0.75	301	0	1	4.69E-02	8.97E-03	8.25E-04	5.84E-04	5.17E-04	1.08E-04	0.00E+00	4.35E-05	3.08E-05	1.16E-07	3.04E-06	127.4	1.27E-03	2.13E-03
SI41_W	0.75	255	0	1	3.95E-02	6.82E-03	6.89E-04	4.96E-04	4.39E-04	9.10E-05	0.00E+00	3.68E-05	2.61E-05	9.87E-08	2.57E-06	106.4	1.07E-03	1.81E-03
SI41_W	0.75	210	0	1	3.23E-02	5.01E-03	5.58E-04	4.07E-04	3.61E-04	7.45E-05	0.00E+00	3.01E-05	2.13E-05	8.11E-08	2.10E-06	86.1	8.78E-04	1.49E-03
SI41_W	0.75	155	0	1	2.37E-02	3.30E-03	4.07E-04	3.01E-04	2.66E-04	5.49E-05	0.00E+00	2.22E-05	1.57E-05	5.99E-08	1.55E-06	62.8	6.47E-04	1.10E-03
SI42_E	0.75	109	0	1	1.67E-02	2.05E-03	2.83E-04	2.12E-04	1.88E-04	3.86E-05	0.00E+00	1.56E-05	1.11E-05	4.23E-08	1.09E-06	43.7	4.55E-04	7.75E-04
SI42_E	0.75	73	0	1	1.11E-02	1.22E-03	1.87E-04	1.42E-04	1.25E-04	2.57E-05	0.00E+00	1.04E-05	7.36E-06	2.82E-08	7.25E-07	28.8	3.03E-04	5.17E-04
SI42_E	0.75	64	0	1	9.65E-03	9.53E-04	1.61E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.06E-06	6.42E-06	2.47E-08	6.32E-07	24.9	2.64E-04	4.52E-04
SI42_E	0.75	46	0	1	6.87E-03	6.81E-04	1.15E-04	8.85E-05	7.84E-05	1.60E-05	0.00E+00	6.46E-06	4.58E-06	1.76E-08	4.51E-07	17.7	1.89E-04	3.23E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_E	0.75	64	0	1	9.61E-03	9.53E-04	1.60E-04	1.24E-04	1.10E-04	2.24E-05	0.00E+00	9.04E-06	6.41E-06	2.47E-08	6.31E-07	24.7	2.64E-04	4.52E-04
SI42_E	0.75	155	0	1	2.33E-02	2.32E-03	3.89E-04	3.01E-04	2.66E-04	5.44E-05	0.00E+00	2.20E-05	1.56E-05	5.99E-08	1.53E-06	60.0	6.41E-04	1.10E-03
SI42_E	0.75	465	0	1	7.02E-02	6.95E-03	1.17E-03	9.03E-04	7.99E-04	1.63E-04	0.00E+00	6.60E-05	4.68E-05	1.80E-07	4.60E-06	181.1	1.92E-03	3.30E-03
SI42_E	0.75	711	0	1	1.08E-01	1.30E-02	1.84E-03	1.38E-03	1.22E-03	2.51E-04	0.00E+00	1.01E-04	7.19E-05	2.75E-07	7.08E-06	283.7	2.96E-03	5.04E-03
SI42_E	0.75	574	0	1	8.86E-02	1.40E-02	1.53E-03	1.12E-03	9.88E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.22E-07	5.76E-06	236.9	2.41E-03	4.07E-03
SI42_E	0.75	474	0	1	7.37E-02	1.34E-02	1.29E-03	9.20E-04	8.15E-04	1.69E-04	0.00E+00	6.85E-05	4.85E-05	1.83E-07	4.78E-06	199.7	2.00E-03	3.36E-03
SI42_E	0.75	429	0	1	6.70E-02	1.35E-02	1.19E-03	8.32E-04	7.37E-04	1.54E-04	0.00E+00	6.21E-05	4.40E-05	1.66E-07	4.34E-06	183.6	1.81E-03	3.04E-03
SI42_E	0.75	483	0	1	7.65E-02	1.81E-02	1.38E-03	9.38E-04	8.31E-04	1.75E-04	0.00E+00	7.06E-05	5.00E-05	1.87E-07	4.92E-06	213.4	2.06E-03	3.42E-03
SI42_E	0.75	511	0	1	8.11E-02	1.99E-02	1.47E-03	9.91E-04	8.78E-04	1.85E-04	0.00E+00	7.47E-05	5.29E-05	1.97E-07	5.21E-06	227.2	2.18E-03	3.62E-03
SI42_E	0.75	520	0	1	8.27E-02	2.08E-02	1.50E-03	1.01E-03	8.94E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.3	2.22E-03	3.68E-03
SI42_E	0.75	538	0	1	8.57E-02	2.21E-02	1.56E-03	1.04E-03	9.25E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.08E-07	5.50E-06	241.6	2.30E-03	3.81E-03
SI42_E	0.75	584	0	1	9.29E-02	2.38E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.6	2.49E-03	4.14E-03
SI42_E	0.75	720	0	1	1.15E-01	2.93E-02	2.09E-03	1.40E-03	1.24E-03	2.61E-04	0.00E+00	1.06E-04	7.48E-05	2.79E-07	7.37E-06	322.6	3.08E-03	5.10E-03
SI42_E	0.75	775	0	1	1.23E-01	3.07E-02	2.23E-03	1.50E-03	1.33E-03	2.81E-04	0.00E+00	1.13E-04	8.03E-05	3.00E-07	7.91E-06	345.0	3.31E-03	5.49E-03
SI42_E	0.75	538	0	1	8.52E-02	2.06E-02	1.54E-03	1.04E-03	9.25E-04	1.94E-04	0.00E+00	7.86E-05	5.57E-05	2.08E-07	5.48E-06	237.8	2.29E-03	3.81E-03
SI42_E	0.75	356	0	1	5.58E-02	1.19E-02	9.93E-04	6.90E-04	6.11E-04	1.28E-04	0.00E+00	5.16E-05	3.66E-05	1.37E-07	3.60E-06	153.3	1.51E-03	2.52E-03
SI42_E	0.75	301	0	1	4.69E-02	8.97E-03	8.25E-04	5.84E-04	5.17E-04	1.08E-04	0.00E+00	4.35E-05	3.08E-05	1.16E-07	3.04E-06	127.4	1.27E-03	2.13E-03
SI42_E	0.75	255	0	1	3.95E-02	6.82E-03	6.89E-04	4.96E-04	4.39E-04	9.10E-05	0.00E+00	3.68E-05	2.61E-05	9.87E-08	2.57E-06	106.4	1.07E-03	1.81E-03
SI42_E	0.75	210	0	1	3.23E-02	5.01E-03	5.58E-04	4.07E-04	3.61E-04	7.45E-05	0.00E+00	3.01E-05	2.13E-05	8.11E-08	2.10E-06	86.1	8.78E-04	1.49E-03
SI42_E	0.75	155	0	1	2.37E-02	3.30E-03	4.07E-04	3.01E-04	2.66E-04	5.49E-05	0.00E+00	2.22E-05	1.57E-05	5.99E-08	1.55E-06	62.8	6.47E-04	1.10E-03
SI42_W	0.75	91	0	1	1.39E-02	1.71E-03	2.36E-04	1.77E-04	1.57E-04	3.22E-05	0.00E+00	1.30E-05	9.22E-06	3.53E-08	9.08E-07	36.4	3.80E-04	6.46E-04
SI42_W	0.75	61	0	1	9.23E-03	1.02E-03	1.56E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.13E-06	2.35E-08	6.04E-07	24.0	2.52E-04	4.31E-04
SI42_W	0.75	53	0	1	8.04E-03	7.95E-04	1.35E-04	1.03E-04	9.15E-05	1.87E-05	0.00E+00	7.55E-06	5.35E-06	2.06E-08	5.27E-07	20.8	2.20E-04	3.77E-04
SI42_W	0.75	38	0	1	5.73E-03	5.68E-04	9.55E-05	7.38E-05	6.53E-05	1.33E-05	0.00E+00	5.39E-06	3.82E-06	1.47E-08	3.76E-07	14.7	1.57E-04	2.69E-04
SI42_W	0.75	53	0	1	8.01E-03	7.95E-04	1.33E-04	1.03E-04	9.15E-05	1.87E-05	0.00E+00	7.54E-06	5.34E-06	2.06E-08	5.26E-07	20.6	2.20E-04	3.77E-04
SI42_W	0.75	129	0	1	1.95E-02	1.93E-03	3.24E-04	2.51E-04	2.22E-04	4.53E-05	0.00E+00	1.83E-05	1.30E-05	4.99E-08	1.28E-06	50.0	5.34E-04	9.16E-04
SI42_W	0.75	388	0	1	5.85E-02	5.79E-03	9.77E-04	7.52E-04	6.66E-04	1.36E-04	0.00E+00	5.50E-05	3.90E-05	1.50E-07	3.84E-06	150.9	1.60E-03	2.75E-03
SI42_W	0.75	593	0	1	9.03E-02	1.08E-02	1.53E-03	1.15E-03	1.02E-03	2.09E-04	0.00E+00	8.46E-05	5.99E-05	2.29E-07	5.90E-06	236.5	2.47E-03	4.20E-03
SI42_W	0.75	479	0	1	7.38E-02	1.17E-02	1.28E-03	9.29E-04	8.23E-04	1.70E-04	0.00E+00	6.88E-05	4.88E-05	1.85E-07	4.80E-06	197.5	2.01E-03	3.39E-03
SI42_W	0.75	395	0	1	6.14E-02	1.12E-02	1.08E-03	7.67E-04	6.79E-04	1.41E-04	0.00E+00	5.71E-05	4.04E-05	1.53E-07	3.98E-06	166.5	1.66E-03	2.80E-03
SI42_W	0.75	357	0	1	5.59E-02	1.12E-02	9.91E-04	6.93E-04	6.14E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.61E-06	153.0	1.51E-03	2.53E-03
SI42_W	0.75	403	0	1	6.38E-02	1.51E-02	1.15E-03	7.82E-04	6.92E-04	1.46E-04	0.00E+00	5.88E-05	4.17E-05	1.56E-07	4.10E-06	177.8	1.72E-03	2.85E-03
SI42_W	0.75	426	0	1	6.76E-02	1.66E-02	1.23E-03	8.26E-04	7.32E-04	1.54E-04	0.00E+00	6.23E-05	4.41E-05	1.65E-07	4.34E-06	189.4	1.82E-03	3.02E-03
SI42_W	0.75	433	0	1	6.89E-02	1.74E-02	1.25E-03	8.41E-04	7.45E-04	1.57E-04	0.00E+00	6.34E-05	4.49E-05	1.68E-07	4.43E-06	193.6	1.85E-03	3.07E-03
SI42_W	0.75	448	0	1	7.15E-02	1.85E-02	1.30E-03	8.70E-04	7.71E-04	1.63E-04	0.00E+00	6.57E-05	4.66E-05	1.73E-07	4.59E-06	201.4	1.92E-03	3.18E-03
SI42_W	0.75	486	0	1	7.75E-02	1.98E-02	1.41E-03	9.44E-04	8.36E-04	1.76E-04	0.00E+00	7.13E-05	5.05E-05	1.88E-07	4.97E-06	218.0	2.08E-03	3.45E-03
SI42_W	0.75	600	0	1	9.56E-02	2.44E-02	1.74E-03	1.17E-03	1.03E-03	2.18E-04	0.00E+00	8.80E-05	6.23E-05	2.32E-07	6.14E-06	268.9	2.57E-03	4.25E-03
SI42_W	0.75	646	0	1	1.03E-01	2.56E-02	1.86E-03	1.25E-03	1.11E-03	2.34E-04	0.00E+00	9.45E-05	6.70E-05	2.50E-07	6.60E-06	287.6	2.76E-03	4.58E-03
SI42_W	0.75	448	0	1	7.10E-02	1.72E-02	1.28E-03	8.70E-04	7.71E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.73E-07	4.57E-06	198.2	1.91E-03	3.18E-03
SI42_W	0.75	296	0	1	4.65E-02	9.89E-03	8.28E-04	5.75E-04	5.10E-04	1.07E-04	0.00E+00	4.30E-05	3.05E-05	1.15E-07	3.00E-06	127.8	1.26E-03	2.10E-03
SI42_W	0.75	251	0	1	3.91E-02	7.48E-03	6.88E-04	4.87E-04	4.31E-04	8.97E-05	0.00E+00	3.63E-05	2.57E-05	9.70E-08	2.53E-06	106.2	1.06E-03	1.78E-03
SI42_W	0.75	213	0	1	3.29E-02	5.68E-03	5.74E-04	4.13E-04	3.66E-04	7.59E-05	0.00E+00	3.07E-05	2.17E-05	8.23E-08	2.14E-06	88.7	8.94E-04	1.51E-03
SI42_W	0.75	175	0	1	2.69E-02	4.17E-03	4.65E-04	3.39E-04	3.01E-04	6.21E-05	0.00E+00	2.51E-05	1.78E-05	6.76E-08	1.75E-06	71.8	7.32E-04	1.24E-03
SI42_W	0.75	129	0	1	1.98E-02	2.75E-03	3.39E-04	2.51E-04	2.22E-04	4.58E-05	0.00E+00	1.85E-05	1.31E-05	5.00E-08	1.29E-06	52.3	5.39E-04	9.16E-04
SI43_E	0.75	100	0	1	1.53E-02	1.88E-03	2.60E-04	1.95E-04	1.72E-04	3.54E-05	0.00E+00	1.43E-05	1.01E-05	3.88E-08	9.99E-07	40.1	4.18E-04	7.11E-04
SI43_E	0.75	67	0	1	1.02E-02	1.12E-03	1.71E-04	1.30E-04	1.15E-04	2.36E-05	0.00E+00	9.52E-06	6.75E-06	2.59E-08	6.64E-07	26.4	2.78E-04	4.74E-04
SI43_E	0.75	59	0	1	8.84E-03	8.74E-04	1.48E-04	1.14E-04	1.01E-04	2.06E-05	0.00E+00	8.31E-06	5.89E-06	2.26E-08	5.80E-07	22.9	2.42E-04	4.15E-04
SI43_E	0.75	42	0	1	6.30E-03	6.24E-04	1.05E-04	8.11E-05	7.19E-05	1.47E-05	0.00E+00	5.93E-06	4.20E-06	1.62E-08	4.14E-07	16.2	1.73E-04	2.96E-04
SI43_E	0.75	59	0	1	8.81E-03	8.74E-04	1.47E-04	1.14E-04	1.01E-04	2.05E-05	0.00E+00	8.29E-06	5.87E-06	2.26E-08	5.79E-07	22.6	2.42E-04	4.15E-04
SI43_E	0.75	142	0	1	2.14E-02	2.12E-03	3.56E-04	2.76E-04	2.44E-04	4.98E-05	0.00E+00	2.01E-05	1.43E-05	5.49E-08	1.41E-06	55.0	5.87E-04	1.01E-03
SI43_E	0.75	426	0	1	6.44E-02	6.37E-03	1.07E-03	8.28E-04	7.33E-04	1.50E-04	0.00E+00	6.05E-05	4.29E-05	1.65E-07	4.22E-06	166.0	1.76E-03	3.02E-03
SI43_E	0.75	652	0	1	9.93E-02	1.19E-02	1.68E-03	1.27E-03	1.12E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.52E-07	6.49E-06	260.1	2.71E-03	4.62E-03
SI43_E	0.75	527	0	1	8.12E-02	1.28E-02	1.41E-03	1.02E-03	9.05E-04	1.87E-04	0.00E+00	7.57E-05	5.36E-05	2.04E-07	5.28E-06	217.2	2.21E-03	3.73E-03
SI43_E	0.75	435	0	1	6.76E-02	1.23E-02	1.19E-03	8.44E-04	7.47E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.68E-07	4.38E-06	183.1	1.83E-03	3.08E-03
SI43_E	0.75	393	0	1	6.15E-02	1.24E-02	1.09E-03	7.63E-04	6.75E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.52E-07	3.97E-06	168.3	1.66E-03	2.78E-03
SI43_E	0.75	443	0	1	7.01E-02	1.66E-02	1.27E-03	8.60E-04	7.62E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	195.6	1.89E-03	3.14E-03
SI43_E	0.75	468	0	1	7.43E-02	1.83E-02	1.35E-03	9.09E-04	8.05E-04	1.69E-04	0.00E+00	6.85E-05	4.85E-05	1.81E-07	4.78E-06	208.3	2.00E-03	3.32E-03
SI43_E	0.75	476	0	1	7.58E-02	1.91E-02	1.38E-03	9.25E-04	8.19E-04	1.73E-04	0.00E+00	6.98E-05	4.94E-05	1.84E-07	4.87E-06	213.0	2.04E-03	3.38E-03
SI43_E	0.75	493	0	1	7.86E-02	2.03E-02	1.43E-03	9.57E-04	8.48E-04	1.79E-04	0.00E+00	7.23E-05	5.12E-05	1.91E-07	5.05E-06	221.5	2.11E-03	3.50E-03
SI43_E	0.75	535	0	1	8.52E-02	2.18E-02	1.55E-03	1.04E-03	9.20E-04	1.94E-04	0.00E+00	7.84E-05	5.55E-05	2.07E-07	5.47E-06	239.8	2.29E-03	3.79E-03
SI43_E	0.75	660	0	1	1.05E-01	2.69E-02	1.92E-03	1.28E-03	1.14E-03	2.39E-04	0.00E+00	9.68E-05	6.86E-05	2.55E-07	6.75E-06	295.8	2.82E-03	4.68E-03
SI43_E	0.75	711	0	1	1.13E-01	2.81E-02	2.05E-03	1.38E-03	1.22E-03	2.57E-04	0.00E+00	1.04E-04	7.37E-05	2.75E-07	7.25E-06	316.3	3.03E-03	5.04E-03
SI43_E	0.75	493	0	1	7.81E-02	1.89E-02	1.41E-03	9.57E-04	8.48E-04	1.78E-04	0.00E+00	7.20E-05	5.10E-05	1.91E-07	5.03E-06	218.0	2.10E-03	3.50E-03
SI43_E	0.75	326	0	1	5.11E-02	1.09E-02	9.10E-04	6.33E-04	5.60E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.26E-07	3.30E-06	140.5	1.38E-03	2.31E-03
SI43_E	0.75	276	0	1	4.30E-02	8.23E-03	7.57E-04	5.36E-04	4.74E-04	9.87E-05	0.00E+00	3.99E-05	2.83E-05	1.07E-07	2.78E-06	116.8	1.16E-03	1.95E-03
SI43_E	0.75	234	0	1	3.62E-02	6.25E-03	6.32E-04	4.54E-04	4.02E-04	8.34E-05	0.00E+00	3.37E-05	2.39E-05	9.05E-08	2.35E-06	97.5	9.84E-04	1.66E-03
SI43_E	0.75	192	0	1	2.96E-02	4.59E-03	5.11E-04	3.73E-04	3.31E-04	6.83E-05	0.00E+00	2.76E-05	1.96E-05	7.43E-08	1.93E-06	78.9	8.05E-04	1.36E-03
SI43_E	0.75	142	0	1	2.18E-02	3.02E-03	3.73E-04	2.76E-04	2.44E-04	5.03E-05	0.00E+00	2.03E-05	1.44E-05	5.49E-08	1.42E-06	57.6	5.93E-04	1.01E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI43_W	0.75	94	0	1	1.44E-02	1.77E-03	2.44E-04	1.83E-04	1.62E-04	3.33E-05	0.00E+00	1.34E-05	9.53E-06	3.64E-08	9.39E-07	37.7	3.92E-04	6.68E-04
SI43_W	0.75	63	0	1	9.54E-03	1.05E-03	1.61E-04	1.22E-04	1.08E-04	2.21E-05	0.00E+00	8.95E-06	6.34E-06	2.43E-08	6.24E-07	24.8	2.61E-04	4.45E-04
SI43_W	0.75	55	0	1	8.31E-03	8.21E-04	1.39E-04	1.07E-04	9.45E-05	1.93E-05	0.00E+00	7.81E-06	5.53E-06	2.13E-08	5.45E-07	21.5	2.28E-04	3.90E-04
SI43_W	0.75	39	0	1	5.92E-03	5.87E-04	9.87E-05	7.62E-05	6.75E-05	1.38E-05	0.00E+00	5.57E-06	3.95E-06	1.52E-08	3.89E-07	15.2	1.62E-04	2.78E-04
SI43_W	0.75	55	0	1	8.28E-03	8.21E-04	1.38E-04	1.07E-04	9.45E-05	1.93E-05	0.00E+00	7.79E-06	5.52E-06	2.13E-08	5.44E-07	21.3	2.27E-04	3.90E-04
SI43_W	0.75	134	0	1	2.01E-02	1.99E-03	3.35E-04	2.59E-04	2.30E-04	4.68E-05	0.00E+00	1.89E-05	1.34E-05	5.16E-08	1.32E-06	51.7	5.52E-04	9.46E-04
SI43_W	0.75	401	0	1	6.05E-02	5.98E-03	1.01E-03	7.78E-04	6.89E-04	1.41E-04	0.00E+00	5.68E-05	4.03E-05	1.55E-07	3.97E-06	156.0	1.66E-03	2.84E-03
SI43_W	0.75	613	0	1	9.33E-02	1.12E-02	1.58E-03	1.19E-03	1.05E-03	2.16E-04	0.00E+00	8.74E-05	6.19E-05	2.37E-07	6.10E-06	244.4	2.55E-03	4.34E-03
SI43_W	0.75	495	0	1	7.63E-02	1.21E-02	1.32E-03	9.61E-04	8.51E-04	1.76E-04	0.00E+00	7.11E-05	5.04E-05	1.91E-07	4.96E-06	204.1	2.07E-03	3.51E-03
SI43_W	0.75	408	0	1	6.35E-02	1.15E-02	1.11E-03	7.93E-04	7.02E-04	1.46E-04	0.00E+00	5.90E-05	4.18E-05	1.58E-07	4.12E-06	172.0	1.72E-03	2.89E-03
SI43_W	0.75	369	0	1	5.78E-02	1.16E-02	1.02E-03	7.17E-04	6.35E-04	1.32E-04	0.00E+00	5.35E-05	3.79E-05	1.43E-07	3.73E-06	158.2	1.56E-03	2.62E-03
SI43_W	0.75	416	0	1	6.59E-02	1.56E-02	1.19E-03	8.08E-04	7.16E-04	1.50E-04	0.00E+00	6.08E-05	4.31E-05	1.61E-07	4.24E-06	183.8	1.77E-03	2.95E-03
SI43_W	0.75	440	0	1	6.98E-02	1.72E-02	1.27E-03	8.54E-04	7.56E-04	1.59E-04	0.00E+00	6.43E-05	4.56E-05	1.70E-07	4.49E-06	195.7	1.88E-03	3.12E-03
SI43_W	0.75	448	0	1	7.12E-02	1.79E-02	1.30E-03	8.69E-04	7.70E-04	1.62E-04	0.00E+00	6.56E-05	4.65E-05	1.73E-07	4.58E-06	200.1	1.91E-03	3.17E-03
SI43_W	0.75	463	0	1	7.39E-02	1.91E-02	1.35E-03	9.00E-04	7.97E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.79E-07	4.74E-06	208.1	1.98E-03	3.28E-03
SI43_W	0.75	503	0	1	8.01E-02	2.05E-02	1.46E-03	9.76E-04	8.64E-04	1.82E-04	0.00E+00	7.37E-05	5.22E-05	1.94E-07	5.14E-06	225.3	2.15E-03	3.56E-03
SI43_W	0.75	621	0	1	9.88E-02	2.53E-02	1.80E-03	1.20E-03	1.07E-03	2.25E-04	0.00E+00	9.09E-05	6.44E-05	2.40E-07	6.34E-06	277.9	2.65E-03	4.40E-03
SI43_W	0.75	668	0	1	1.06E-01	2.64E-02	1.92E-03	1.30E-03	1.15E-03	2.42E-04	0.00E+00	9.77E-05	6.92E-05	2.58E-07	6.82E-06	297.2	2.85E-03	4.73E-03
SI43_W	0.75	463	0	1	7.34E-02	1.78E-02	1.33E-03	9.00E-04	7.97E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	204.9	1.97E-03	3.28E-03
SI43_W	0.75	306	0	1	4.80E-02	1.02E-02	8.55E-04	5.95E-04	5.27E-04	1.10E-04	0.00E+00	4.45E-05	3.15E-05	1.18E-07	3.10E-06	132.1	1.30E-03	2.17E-03
SI43_W	0.75	259	0	1	4.04E-02	7.73E-03	7.11E-04	5.03E-04	4.46E-04	9.27E-05	0.00E+00	3.75E-05	2.66E-05	1.00E-07	2.62E-06	109.8	1.09E-03	1.84E-03
SI43_W	0.75	220	0	1	3.40E-02	5.87E-03	5.93E-04	4.27E-04	3.78E-04	7.84E-05	0.00E+00	3.17E-05	2.24E-05	8.50E-08	2.21E-06	91.6	9.24E-04	1.56E-03
SI43_W	0.75	181	0	1	2.78E-02	4.31E-03	4.80E-04	3.51E-04	3.11E-04	6.42E-05	0.00E+00	2.59E-05	1.84E-05	6.98E-08	1.81E-06	74.2	7.57E-04	1.28E-03
SI43_W	0.75	134	0	1	2.05E-02	2.84E-03	3.50E-04	2.59E-04	2.30E-04	4.73E-05	0.00E+00	1.91E-05	1.35E-05	5.16E-08	1.33E-06	54.1	5.58E-04	9.46E-04
SI44_E	0.75	91	0	1	1.39E-02	1.71E-03	2.36E-04	1.77E-04	1.57E-04	3.22E-05	0.00E+00	1.30E-05	9.22E-06	3.53E-08	9.08E-07	36.4	3.80E-04	6.46E-04
SI44_E	0.75	61	0	1	9.23E-03	1.02E-03	1.56E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.13E-06	2.35E-08	6.04E-07	24.0	2.52E-04	4.31E-04
SI44_E	0.75	53	0	1	8.04E-03	7.95E-04	1.35E-04	1.03E-04	9.15E-05	1.87E-05	0.00E+00	7.55E-06	5.35E-06	2.06E-08	5.27E-07	20.8	2.20E-04	3.77E-04
SI44_E	0.75	38	0	1	5.73E-03	5.68E-04	9.55E-05	7.38E-05	6.53E-05	1.33E-05	0.00E+00	5.39E-06	3.82E-06	1.47E-08	3.76E-07	14.7	1.57E-04	2.69E-04
SI44_E	0.75	53	0	1	8.01E-03	7.95E-04	1.33E-04	1.03E-04	9.15E-05	1.87E-05	0.00E+00	7.54E-06	5.34E-06	2.06E-08	5.26E-07	20.6	2.20E-04	3.77E-04
SI44_E	0.75	129	0	1	1.95E-02	1.93E-03	3.24E-04	2.51E-04	2.22E-04	4.53E-05	0.00E+00	1.83E-05	1.30E-05	4.99E-08	1.28E-06	50.0	5.34E-04	9.16E-04
SI44_E	0.75	388	0	1	5.85E-02	5.79E-03	9.77E-04	7.52E-04	6.66E-04	1.36E-04	0.00E+00	5.50E-05	3.90E-05	1.50E-07	3.84E-06	150.9	1.60E-03	2.75E-03
SI44_E	0.75	593	0	1	9.03E-02	1.08E-02	1.53E-03	1.15E-03	1.02E-03	2.09E-04	0.00E+00	8.46E-05	5.99E-05	2.29E-07	5.90E-06	236.5	2.47E-03	4.20E-03
SI44_E	0.75	479	0	1	7.38E-02	1.17E-02	1.28E-03	9.29E-04	8.23E-04	1.70E-04	0.00E+00	6.88E-05	4.88E-05	1.85E-07	4.80E-06	197.5	2.01E-03	3.39E-03
SI44_E	0.75	395	0	1	6.14E-02	1.12E-02	1.08E-03	7.67E-04	6.79E-04	1.41E-04	0.00E+00	5.71E-05	4.04E-05	1.53E-07	3.98E-06	166.5	1.66E-03	2.80E-03
SI44_E	0.75	357	0	1	5.59E-02	1.12E-02	9.91E-04	6.93E-04	6.14E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.61E-06	153.0	1.51E-03	2.53E-03
SI44_E	0.75	403	0	1	6.38E-02	1.51E-02	1.15E-03	7.82E-04	6.92E-04	1.46E-04	0.00E+00	5.88E-05	4.17E-05	1.56E-07	4.10E-06	177.8	1.72E-03	2.85E-03
SI44_E	0.75	426	0	1	6.76E-02	1.66E-02	1.23E-03	8.26E-04	7.32E-04	1.54E-04	0.00E+00	6.23E-05	4.41E-05	1.65E-07	4.34E-06	189.4	1.82E-03	3.02E-03
SI44_E	0.75	433	0	1	6.89E-02	1.74E-02	1.25E-03	8.41E-04	7.45E-04	1.57E-04	0.00E+00	6.34E-05	4.49E-05	1.68E-07	4.43E-06	193.6	1.85E-03	3.07E-03
SI44_E	0.75	448	0	1	7.15E-02	1.85E-02	1.30E-03	8.70E-04	7.71E-04	1.63E-04	0.00E+00	6.57E-05	4.66E-05	1.73E-07	4.59E-06	201.4	1.92E-03	3.18E-03
SI44_E	0.75	486	0	1	7.75E-02	1.98E-02	1.41E-03	9.44E-04	8.36E-04	1.76E-04	0.00E+00	7.13E-05	5.05E-05	1.88E-07	4.97E-06	218.0	2.08E-03	3.45E-03
SI44_E	0.75	600	0	1	9.56E-02	2.44E-02	1.74E-03	1.17E-03	1.03E-03	2.18E-04	0.00E+00	8.80E-05	6.23E-05	2.32E-07	6.14E-06	268.9	2.57E-03	4.25E-03
SI44_E	0.75	646	0	1	1.03E-01	2.56E-02	1.86E-03	1.25E-03	1.11E-03	2.34E-04	0.00E+00	9.45E-05	6.70E-05	2.50E-07	6.60E-06	287.6	2.76E-03	4.58E-03
SI44_E	0.75	448	0	1	7.10E-02	1.72E-02	1.28E-03	8.70E-04	7.71E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.73E-07	4.57E-06	198.2	1.91E-03	3.18E-03
SI44_E	0.75	296	0	1	4.65E-02	9.89E-03	8.28E-04	5.75E-04	5.10E-04	1.07E-04	0.00E+00	4.30E-05	3.05E-05	1.15E-07	3.00E-06	127.8	1.26E-03	2.10E-03
SI44_E	0.75	251	0	1	3.91E-02	7.48E-03	6.88E-04	4.87E-04	4.31E-04	8.97E-05	0.00E+00	3.63E-05	2.57E-05	9.70E-08	2.53E-06	106.2	1.06E-03	1.78E-03
SI44_E	0.75	213	0	1	3.29E-02	5.68E-03	5.74E-04	4.13E-04	3.66E-04	7.59E-05	0.00E+00	3.07E-05	2.17E-05	8.23E-08	2.14E-06	88.7	8.94E-04	1.51E-03
SI44_E	0.75	175	0	1	2.69E-02	4.17E-03	4.65E-04	3.39E-04	3.01E-04	6.21E-05	0.00E+00	2.51E-05	1.78E-05	6.76E-08	1.75E-06	71.8	7.32E-04	1.24E-03
SI44_E	0.75	129	0	1	1.98E-02	2.75E-03	3.39E-04	2.51E-04	2.22E-04	4.58E-05	0.00E+00	1.85E-05	1.31E-05	5.00E-08	1.29E-06	52.3	5.39E-04	9.16E-04
SI44_W	0.75	97	0	1	1.48E-02	1.82E-03	2.52E-04	1.89E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.84E-06	3.76E-08	9.69E-07	38.9	4.05E-04	6.90E-04
SI44_W	0.75	65	0	1	9.85E-03	1.09E-03	1.66E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.24E-06	6.54E-06	2.51E-08	6.44E-07	25.6	2.69E-04	4.60E-04
SI44_W	0.75	57	0	1	8.58E-03	8.48E-04	1.44E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.06E-06	5.71E-06	2.19E-08	5.62E-07	22.2	2.35E-04	4.02E-04
SI44_W	0.75	41	0	1	6.11E-03	6.06E-04	1.02E-04	7.87E-05	6.97E-05	1.42E-05	0.00E+00	5.75E-06	4.07E-06	1.57E-08	4.01E-07	15.7	1.68E-04	2.87E-04
SI44_W	0.75	57	0	1	8.55E-03	8.48E-04	1.42E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.04E-06	5.70E-06	2.19E-08	5.61E-07	22.0	2.35E-04	4.02E-04
SI44_W	0.75	138	0	1	2.08E-02	2.06E-03	3.46E-04	2.68E-04	2.37E-04	4.83E-05	0.00E+00	1.95E-05	1.38E-05	5.33E-08	1.36E-06	53.4	5.70E-04	9.77E-04
SI44_W	0.75	414	0	1	6.24E-02	6.18E-03	1.04E-03	8.03E-04	7.11E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.60E-07	4.09E-06	161.0	1.71E-03	2.93E-03
SI44_W	0.75	633	0	1	9.63E-02	1.15E-02	1.63E-03	1.23E-03	1.09E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.45E-07	6.30E-06	252.3	2.63E-03	4.48E-03
SI44_W	0.75	511	0	1	7.88E-02	1.24E-02	1.36E-03	9.92E-04	8.78E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	1.98E-07	5.12E-06	210.7	2.14E-03	3.62E-03
SI44_W	0.75	422	0	1	6.55E-02	1.19E-02	1.15E-03	8.19E-04	7.25E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.63E-07	4.25E-06	177.6	1.78E-03	2.99E-03
SI44_W	0.75	381	0	1	5.96E-02	1.20E-02	1.06E-03	7.40E-04	6.55E-04	1.37E-04	0.00E+00	5.53E-05	3.92E-05	1.47E-07	3.86E-06	163.3	1.61E-03	2.70E-03
SI44_W	0.75	430	0	1	6.80E-02	1.61E-02	1.23E-03	8.34E-04	7.39E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	189.8	1.83E-03	3.05E-03
SI44_W	0.75	454	0	1	7.21E-02	1.77E-02	1.31E-03	8.82E-04	7.81E-04	1.64E-04	0.00E+00	6.64E-05	4.71E-05	1.76E-07	4.64E-06	202.1	1.94E-03	3.22E-03
SI44_W	0.75	462	0	1	7.35E-02	1.85E-02	1.34E-03	8.97E-04	7.95E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	206.6	1.97E-03	3.28E-03
SI44_W	0.75	478	0	1	7.63E-02	1.97E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.85E-07	4.90E-06	214.9	2.05E-03	3.39E-03
SI44_W	0.75	519	0	1	8.27E-02	2.12E-02	1.51E-03	1.01E-03	8.92E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.6	2.22E-03	3.68E-03
SI44_W	0.75	641	0	1	1.02E-01	2.61E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.39E-05	6.65E-05	2.48E-07	6.55E-06	286.9	2.74E-03	4.54E-03
SI44_W	0.75	689	0	1	1.09E-01	2.73E-02	1.99E-03	1.34E-03	1.19E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.67E-07	7.04E-06	306.9	2.94E-03	4.88E-03
SI44_W	0.75	478	0	1	7.58E-02	1.83E-02	1.37E-03	9.29E-04	8.23E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.85E-07	4.88E-06	211.5	2.04E-03	3.39E-03
SI44_W	0.75	316	0	1	4.96E-02	1.06E-02	8.83E-04	6.14E-04	5.44E-04	1.14E-04	0.00E+00	4.59E-05	3.25E-05	1.22E-07	3.20E-06	136.3	1.34E-03	2.24E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_W	0.75	268	0	1	4.17E-02	7.98E-03	7.34E-04	5.20E-04	4.60E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.03E-07	2.70E-06	113.3	1.13E-03	1.90E-03
SI44_W	0.75	227	0	1	3.51E-02	6.06E-03	6.13E-04	4.41E-04	3.90E-04	8.09E-05	0.00E+00	3.27E-05	2.32E-05	8.78E-08	2.28E-06	94.6	9.54E-04	1.61E-03
SI44_W	0.75	187	0	1	2.87E-02	4.45E-03	4.96E-04	3.62E-04	3.21E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.21E-08	1.87E-06	76.6	7.81E-04	1.32E-03
SI44_W	0.75	138	0	1	2.11E-02	2.93E-03	3.62E-04	2.68E-04	2.37E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.33E-08	1.38E-06	55.9	5.76E-04	9.77E-04
SI45_E	0.75	97	0	1	1.48E-02	1.82E-03	2.52E-04	1.89E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.84E-06	3.76E-08	9.69E-07	38.9	4.05E-04	6.90E-04
SI45_E	0.75	65	0	1	9.85E-03	1.09E-03	1.66E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.24E-06	6.54E-06	2.51E-08	6.44E-07	25.6	2.69E-04	4.60E-04
SI45_E	0.75	57	0	1	8.58E-03	8.48E-04	1.44E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.06E-06	5.71E-06	2.19E-08	5.62E-07	22.2	2.35E-04	4.02E-04
SI45_E	0.75	41	0	1	6.11E-03	6.06E-04	1.02E-04	7.87E-05	6.97E-05	1.42E-05	0.00E+00	5.75E-06	4.07E-06	1.57E-08	4.01E-07	15.7	1.68E-04	2.87E-04
SI45_E	0.75	57	0	1	8.55E-03	8.48E-04	1.42E-04	1.10E-04	9.76E-05	1.99E-05	0.00E+00	8.04E-06	5.70E-06	2.19E-08	5.61E-07	22.0	2.35E-04	4.02E-04
SI45_E	0.75	138	0	1	2.08E-02	2.06E-03	3.46E-04	2.68E-04	2.37E-04	4.83E-05	0.00E+00	1.95E-05	1.38E-05	5.33E-08	1.36E-06	53.4	5.70E-04	9.77E-04
SI45_E	0.75	414	0	1	6.24E-02	6.18E-03	1.04E-03	8.03E-04	7.11E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.60E-07	4.09E-06	161.0	1.71E-03	2.93E-03
SI45_E	0.75	633	0	1	9.63E-02	1.15E-02	1.63E-03	1.23E-03	1.09E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.45E-07	6.30E-06	252.3	2.63E-03	4.48E-03
SI45_E	0.75	511	0	1	7.88E-02	1.24E-02	1.36E-03	9.92E-04	8.78E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	1.98E-07	5.12E-06	210.7	2.14E-03	3.62E-03
SI45_E	0.75	422	0	1	6.55E-02	1.19E-02	1.15E-03	8.19E-04	7.25E-04	1.51E-04	0.00E+00	6.09E-05	4.31E-05	1.63E-07	4.25E-06	177.6	1.78E-03	2.99E-03
SI45_E	0.75	381	0	1	5.96E-02	1.20E-02	1.06E-03	7.40E-04	6.55E-04	1.37E-04	0.00E+00	5.53E-05	3.92E-05	1.47E-07	3.86E-06	163.3	1.61E-03	2.70E-03
SI45_E	0.75	430	0	1	6.80E-02	1.61E-02	1.23E-03	8.34E-04	7.39E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.66E-07	4.38E-06	189.8	1.83E-03	3.05E-03
SI45_E	0.75	454	0	1	7.21E-02	1.77E-02	1.31E-03	8.82E-04	7.81E-04	1.64E-04	0.00E+00	6.64E-05	4.71E-05	1.76E-07	4.64E-06	202.1	1.94E-03	3.22E-03
SI45_E	0.75	462	0	1	7.35E-02	1.85E-02	1.34E-03	8.97E-04	7.95E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.79E-07	4.72E-06	206.6	1.97E-03	3.28E-03
SI45_E	0.75	478	0	1	7.63E-02	1.97E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.85E-07	4.90E-06	214.9	2.05E-03	3.39E-03
SI45_E	0.75	519	0	1	8.27E-02	2.12E-02	1.51E-03	1.01E-03	8.92E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.01E-07	5.31E-06	232.6	2.22E-03	3.68E-03
SI45_E	0.75	641	0	1	1.02E-01	2.61E-02	1.86E-03	1.24E-03	1.10E-03	2.32E-04	0.00E+00	9.39E-05	6.65E-05	2.48E-07	6.55E-06	286.9	2.74E-03	4.54E-03
SI45_E	0.75	689	0	1	1.09E-01	2.73E-02	1.99E-03	1.34E-03	1.19E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.67E-07	7.04E-06	306.9	2.94E-03	4.88E-03
SI45_E	0.75	478	0	1	7.58E-02	1.83E-02	1.37E-03	9.29E-04	8.23E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.85E-07	4.88E-06	211.5	2.04E-03	3.39E-03
SI45_E	0.75	316	0	1	4.96E-02	1.06E-02	8.83E-04	6.14E-04	5.44E-04	1.14E-04	0.00E+00	4.59E-05	3.25E-05	1.22E-07	3.20E-06	136.3	1.34E-03	2.24E-03
SI45_E	0.75	268	0	1	4.17E-02	7.98E-03	7.34E-04	5.20E-04	4.60E-04	9.58E-05	0.00E+00	3.87E-05	2.74E-05	1.03E-07	2.70E-06	113.3	1.13E-03	1.90E-03
SI45_E	0.75	227	0	1	3.51E-02	6.06E-03	6.13E-04	4.41E-04	3.90E-04	8.09E-05	0.00E+00	3.27E-05	2.32E-05	8.78E-08	2.28E-06	94.6	9.54E-04	1.61E-03
SI45_E	0.75	187	0	1	2.87E-02	4.45E-03	4.96E-04	3.62E-04	3.21E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.21E-08	1.87E-06	76.6	7.81E-04	1.32E-03
SI45_E	0.75	138	0	1	2.11E-02	2.93E-03	3.62E-04	2.68E-04	2.37E-04	4.88E-05	0.00E+00	1.97E-05	1.40E-05	5.33E-08	1.38E-06	55.9	5.76E-04	9.77E-04
SI45_W	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI45_W	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI45_W	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI45_W	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI45_W	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI45_W	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI45_W	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI45_W	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI45_W	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI45_W	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI45_W	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI45_W	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI45_W	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI45_W	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI45_W	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI45_W	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03
SI45_W	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI45_W	0.75	684	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.09E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI45_W	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI45_W	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI45_W	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.50E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI45_W	0.75	225	0	1	3.49E-02	6.01E-03	6.08E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI45_W	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI45_W	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI46_E	0.75	96	0	1	1.47E-02	1.81E-03	2.50E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.76E-06	3.73E-08	9.61E-07	38.6	4.02E-04	6.84E-04
SI46_E	0.75	64	0	1	9.76E-03	1.08E-03	1.65E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.4	2.67E-04	4.56E-04
SI46_E	0.75	56	0	1	8.51E-03	8.41E-04	1.42E-04	1.09E-04	9.68E-05	1.98E-05	0.00E+00	7.99E-06	5.66E-06	2.18E-08	5.58E-07	22.0	2.33E-04	3.99E-04
SI46_E	0.75	40	0	1	6.06E-03	6.01E-04	1.01E-04	7.80E-05	6.91E-05	1.41E-05	0.00E+00	5.70E-06	4.04E-06	1.55E-08	3.98E-07	15.6	1.66E-04	2.85E-04
SI46_E	0.75	56	0	1	8.48E-03	8.41E-04	1.41E-04	1.09E-04	9.68E-05	1.97E-05	0.00E+00	7.98E-06	5.65E-06	2.18E-08	5.57E-07	21.8	2.33E-04	3.99E-04
SI46_E	0.75	137	0	1	2.06E-02	2.04E-03	3.43E-04	2.65E-04	2.35E-04	4.79E-05	0.00E+00	1.94E-05	1.37E-05	5.28E-08	1.35E-06	52.9	5.65E-04	9.69E-04
SI46_E	0.75	410	0	1	6.19E-02	6.13E-03	1.03E-03	7.96E-04	7.05E-04	1.44E-04	0.00E+00	5.82E-05	4.12E-05	1.59E-07	4.06E-06	159.7	1.70E-03	2.91E-03
SI46_E	0.75	627	0	1	9.55E-02	1.14E-02	1.62E-03	1.22E-03	1.08E-03	2.21E-04	0.00E+00	8.95E-05	6.34E-05	2.42E-07	6.24E-06	250.2	2.61E-03	4.44E-03
SI46_E	0.75	507	0	1	7.81E-02	1.23E-02	1.35E-03	9.83E-04	8.71E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.96E-07	5.08E-06	208.9	2.12E-03	3.59E-03
SI46_E	0.75	418	0	1	6.50E-02	1.18E-02	1.14E-03	8.12E-04	7.19E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.62E-07	4.21E-06	176.1	1.76E-03	2.96E-03
SI46_E	0.75	378	0	1	5.91E-02	1.19E-02	1.05E-03	7.34E-04	6.50E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.82E-06	161.9	1.60E-03	2.68E-03
SI46_E	0.75	426	0	1	6.75E-02	1.60E-02	1.22E-03	8.27E-04	7.33E-04	1.54E-04	0.00E+00	6.22E-05	4.41E-05	1.65E-07	4.34E-06	188.2	1.82E-03	3.02E-03
SI46_E	0.75	450	0	1	7.15E-02	1.76E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.59E-05	4.67E-05	1.74E-07	4.60E-06	200.4	1.92E-03	3.19E-03
SI46_E	0.75	458	0	1	7.29E-02	1.84E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.77E-07	4.68E-06	204.9	1.96E-03	3.25E-03
SI46_E	0.75	474	0	1	7.56E-02	1.95E-02	1.38E-03	9.21E-04	8.16E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.83E-07	4.85E-06	213.1	2.03E-03	3.36E-03
SI46_E	0.75	515	0	1	8.20E-02	2.10E-02	1.49E-03	9.99E-04	8.85E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	230.7	2.20E-03	3.65E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.59E-05	2.46E-07	6.49E-06	284.5	2.72E-03	4.50E-03
SI46_E	0.75	684	0	1	1.09E-01	2.71E-02	1.97E-03	1.33E-03	1.18E-03	2.47E-04	0.00E+00	1.00E-04	7.09E-05	2.64E-07	6.98E-06	304.3	2.92E-03	4.84E-03
SI46_E	0.75	474	0	1	7.51E-02	1.82E-02	1.36E-03	9.21E-04	8.16E-04	1.71E-04	0.00E+00	6.93E-05	4.91E-05	1.83E-07	4.84E-06	209.7	2.02E-03	3.36E-03
SI46_E	0.75	314	0	1	4.92E-02	1.05E-02	8.76E-04	6.09E-04	5.39E-04	1.13E-04	0.00E+00	4.55E-05	3.23E-05	1.21E-07	3.18E-06	135.2	1.33E-03	2.22E-03
SI46_E	0.75	265	0	1	4.13E-02	7.91E-03	7.28E-04	5.15E-04	4.56E-04	9.50E-05	0.00E+00	3.84E-05	2.72E-05	1.03E-07	2.68E-06	112.4	1.12E-03	1.88E-03
SI46_E	0.75	225	0	1	3.49E-02	6.01E-03	6.08E-04	4.37E-04	3.87E-04	8.03E-05	0.00E+00	3.24E-05	2.30E-05	8.70E-08	2.26E-06	93.8	9.46E-04	1.60E-03
SI46_E	0.75	185	0	1	2.85E-02	4.42E-03	4.92E-04	3.59E-04	3.18E-04	6.57E-05	0.00E+00	2.66E-05	1.88E-05	7.15E-08	1.85E-06	75.9	7.75E-04	1.31E-03
SI46_E	0.75	137	0	1	2.09E-02	2.91E-03	3.59E-04	2.65E-04	2.35E-04	4.84E-05	0.00E+00	1.96E-05	1.39E-05	5.28E-08	1.37E-06	55.4	5.71E-04	9.69E-04
SI46_W	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI46_W	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.7	2.48E-04	4.24E-04
SI46_W	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI46_W	0.75	37	0	1	5.64E-03	5.59E-04	9.40E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI46_W	0.75	52	0	1	7.89E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI46_W	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.2	5.26E-04	9.01E-04
SI46_W	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI46_W	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.26E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI46_W	0.75	471	0	1	7.27E-02	1.15E-02	1.26E-03	9.15E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.73E-06	194.3	1.98E-03	3.34E-03
SI46_W	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI46_W	0.75	352	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI46_W	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI46_W	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	186.4	1.79E-03	2.97E-03
SI46_W	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.28E-04	7.33E-04	1.55E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.6	1.82E-03	3.02E-03
SI46_W	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.2	1.89E-03	3.13E-03
SI46_W	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.6	2.05E-03	3.39E-03
SI46_W	0.75	591	0	1	9.41E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.53E-03	4.19E-03
SI46_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	283.0	2.71E-03	4.50E-03
SI46_W	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI46_W	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.96E-06	125.7	1.24E-03	2.07E-03
SI46_W	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI46_W	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.07E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.10E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI46_W	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI46_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI47_E	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI47_E	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.7	2.48E-04	4.24E-04
SI47_E	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI47_E	0.75	37	0	1	5.64E-03	5.59E-04	9.40E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI47_E	0.75	52	0	1	7.89E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI47_E	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.2	5.26E-04	9.01E-04
SI47_E	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI47_E	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.26E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI47_E	0.75	471	0	1	7.27E-02	1.15E-02	1.26E-03	9.15E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.73E-06	194.3	1.98E-03	3.34E-03
SI47_E	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI47_E	0.75	352	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI47_E	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI47_E	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	186.4	1.79E-03	2.97E-03
SI47_E	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.28E-04	7.33E-04	1.55E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.6	1.82E-03	3.02E-03
SI47_E	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.2	1.89E-03	3.13E-03
SI47_E	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.6	2.05E-03	3.39E-03
SI47_E	0.75	591	0	1	9.41E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.53E-03	4.19E-03
SI47_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	283.0	2.71E-03	4.50E-03
SI47_E	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI47_E	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.96E-06	125.7	1.24E-03	2.07E-03
SI47_E	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI47_E	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.07E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.10E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI47_E	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI47_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI47_W	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI47_W	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.7	2.48E-04	4.24E-04
SI47_W	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI47_W	0.75	37	0	1	5.64E-03	5.59E-04	9.40E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI47_W	0.75	52	0	1	7.89E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI47_W	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.2	5.26E-04	9.01E-04
SI47_W	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI47_W	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.26E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI47_W	0.75	471	0	1	7.27E-02	1.15E-02	1.26E-03	9.15E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.73E-06	194.3	1.98E-03	3.34E-03
SI47_W	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI47_W	0.75	352	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI47_W	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI47_W	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	186.4	1.79E-03	2.97E-03
SI47_W	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.28E-04	7.33E-04	1.55E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.6	1.82E-03	3.02E-03
SI47_W	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.2	1.89E-03	3.13E-03
SI47_W	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.6	2.05E-03	3.39E-03
SI47_W	0.75	591	0	1	9.41E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.53E-03	4.19E-03
SI47_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	283.0	2.71E-03	4.50E-03
SI47_W	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI47_W	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.96E-06	125.7	1.24E-03	2.07E-03
SI47_W	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI47_W	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.07E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.10E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI47_W	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI47_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI48_E	0.75	90	0	1	1.37E-02	1.68E-03	2.32E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.07E-06	3.47E-08	8.94E-07	35.9	3.74E-04	6.36E-04
SI48_E	0.75	60	0	1	9.08E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.52E-06	6.03E-06	2.31E-08	5.94E-07	23.7	2.48E-04	4.24E-04
SI48_E	0.75	52	0	1	7.91E-03	7.82E-04	1.32E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.43E-06	5.27E-06	2.02E-08	5.19E-07	20.4	2.17E-04	3.71E-04
SI48_E	0.75	37	0	1	5.64E-03	5.59E-04	9.40E-05	7.26E-05	6.43E-05	1.31E-05	0.00E+00	5.30E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI48_E	0.75	52	0	1	7.89E-03	7.82E-04	1.31E-04	1.02E-04	9.00E-05	1.84E-05	0.00E+00	7.42E-06	5.26E-06	2.02E-08	5.18E-07	20.3	2.16E-04	3.71E-04
SI48_E	0.75	127	0	1	1.91E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.2	5.26E-04	9.01E-04
SI48_E	0.75	381	0	1	5.76E-02	5.70E-03	9.62E-04	7.40E-04	6.56E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.78E-06	148.5	1.58E-03	2.70E-03
SI48_E	0.75	583	0	1	8.88E-02	1.06E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.26E-07	5.81E-06	232.7	2.43E-03	4.13E-03
SI48_E	0.75	471	0	1	7.27E-02	1.15E-02	1.26E-03	9.15E-04	8.10E-04	1.68E-04	0.00E+00	6.77E-05	4.80E-05	1.82E-07	4.73E-06	194.3	1.98E-03	3.34E-03
SI48_E	0.75	389	0	1	6.04E-02	1.10E-02	1.06E-03	7.55E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	163.8	1.64E-03	2.76E-03
SI48_E	0.75	352	0	1	5.50E-02	1.11E-02	9.75E-04	6.82E-04	6.04E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.6	1.49E-03	2.49E-03
SI48_E	0.75	396	0	1	6.27E-02	1.49E-02	1.13E-03	7.69E-04	6.81E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	175.0	1.69E-03	2.81E-03
SI48_E	0.75	419	0	1	6.65E-02	1.63E-02	1.21E-03	8.13E-04	7.20E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	186.4	1.79E-03	2.97E-03
SI48_E	0.75	426	0	1	6.78E-02	1.71E-02	1.23E-03	8.28E-04	7.33E-04	1.55E-04	0.00E+00	6.24E-05	4.42E-05	1.65E-07	4.36E-06	190.6	1.82E-03	3.02E-03
SI48_E	0.75	441	0	1	7.03E-02	1.82E-02	1.28E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.47E-05	4.58E-05	1.71E-07	4.51E-06	198.2	1.89E-03	3.13E-03
SI48_E	0.75	479	0	1	7.62E-02	1.95E-02	1.39E-03	9.29E-04	8.23E-04	1.74E-04	0.00E+00	7.01E-05	4.97E-05	1.85E-07	4.89E-06	214.6	2.05E-03	3.39E-03
SI48_E	0.75	591	0	1	9.41E-02	2.40E-02	1.71E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.13E-05	2.28E-07	6.04E-06	264.6	2.53E-03	4.19E-03
SI48_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.46E-07	6.49E-06	283.0	2.71E-03	4.50E-03
SI48_E	0.75	441	0	1	6.99E-02	1.69E-02	1.26E-03	8.57E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI48_E	0.75	292	0	1	4.57E-02	9.73E-03	8.14E-04	5.66E-04	5.01E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.96E-06	125.7	1.24E-03	2.07E-03
SI48_E	0.75	247	0	1	3.84E-02	7.36E-03	6.77E-04	4.79E-04	4.24E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.54E-08	2.49E-06	104.5	1.04E-03	1.75E-03
SI48_E	0.75	209	0	1	3.24E-02	5.59E-03	5.65E-04	4.07E-04	3.60E-04	7.46E-05	0.00E+00	3.02E-05	2.14E-05	8.10E-08	2.10E-06	87.2	8.80E-04	1.48E-03
SI48_E	0.75	172	0	1	2.65E-02	4.11E-03	4.57E-04	3.34E-04	2.96E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.65E-08	1.72E-06	70.6	7.20E-04	1.22E-03
SI48_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.50E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.5	5.31E-04	9.01E-04
SI48_W	0.75	87	0	1	1.32E-02	1.63E-03	2.25E-04	1.69E-04	1.49E-04	3.07E-05	0.00E+00	1.24E-05	8.78E-06	3.36E-08	8.64E-07	34.7	3.61E-04	6.15E-04
SI48_W	0.75	58	0	1	8.78E-03	9.71E-04	1.48E-04	1.12E-04	9.95E-05	2.04E-05	0.00E+00	8.24E-06	5.84E-06	2.24E-08	5.75E-07	22.9	2.40E-04	4.10E-04
SI48_W	0.75	51	0	1	7.65E-03	7.56E-04	1.28E-04	9.83E-05	8.71E-05	1.78E-05	0.00E+00	7.19E-06	5.09E-06	1.96E-08	5.02E-07	19.8	2.10E-04	3.59E-04
SI48_W	0.75	36	0	1	5.45E-03	5.40E-04	9.09E-05	7.02E-05	6.22E-05	1.27E-05	0.00E+00	5.13E-06	3.63E-06	1.40E-08	3.58E-07	14.0	1.50E-04	2.56E-04
SI48_W	0.75	51	0	1	7.63E-03	7.56E-04	1.27E-04	9.83E-05	8.71E-05	1.78E-05	0.00E+00	7.18E-06	5.08E-06	1.96E-08	5.01E-07	19.6	2.09E-04	3.59E-04
SI48_W	0.75	123	0	1	1.85E-02	1.84E-03	3.08E-04	2.39E-04	2.11E-04	4.31E-05	0.00E+00	1.74E-05	1.23E-05	4.75E-08	1.22E-06	47.6	5.08E-04	8.71E-04
SI48_W	0.75	369	0	1	5.57E-02	5.51E-03	9.30E-04	7.16E-04	6.34E-04	1.30E-04	0.00E+00	5.23E-05	3.71E-05	1.43E-07	3.65E-06	143.6	1.53E-03	2.61E-03
SI48_W	0.75	564	0	1	8.59E-02	1.03E-02	1.46E-03	1.10E-03	9.70E-04	1.99E-04	0.00E+00	8.05E-05	5.70E-05	2.18E-07	5.62E-06	225.1	2.35E-03	4.00E-03
SI48_W	0.75	456	0	1	7.03E-02	1.11E-02	1.22E-03	8.85E-04	7.84E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.76E-07	4.57E-06	187.9	1.91E-03	3.23E-03
SI48_W	0.75	376	0	1	5.85E-02	1.06E-02	1.03E-03	7.30E-04	6.47E-04	1.34E-04	0.00E+00	5.43E-05	3.85E-05	1.45E-07	3.79E-06	158.4	1.58E-03	2.67E-03
SI48_W	0.75	340	0	1	5.32E-02	1.07E-02	9.43E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.93E-05	3.49E-05	1.31E-07	3.44E-06	145.7	1.44E-03	2.41E-03
SI48_W	0.75	383	0	1	6.07E-02	1.44E-02	1.10E-03	7.44E-04	6.59E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.48E-07	3.91E-06	169.3	1.63E-03	2.72E-03
SI48_W	0.75	405	0	1	6.43E-02	1.58E-02	1.17E-03	7.86E-04	6.96E-04	1.47E-04	0.00E+00	5.93E-05	4.20E-05	1.57E-07	4.14E-06	180.3	1.73E-03	2.87E-03
SI48_W	0.75	412	0	1	6.56E-02	1.65E-02	1.19E-03	8.00E-04	7.09E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.59E-07	4.21E-06	184.3	1.76E-03	2.92E-03
SI48_W	0.75	427	0	1	6.80E-02	1.76E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.65E-07	4.37E-06	191.7	1.83E-03	3.02E-03
SI48_W	0.75	463	0	1	7.37E-02	1.89E-02	1.34E-03	8.99E-04	7.96E-04	1.68E-04	0.00E+00	6.78E-05	4.81E-05	1.79E-07	4.73E-06	207.5	1.98E-03	3.28E-03
SI48_W	0.75	572	0	1	9.10E-02	2.33E-02	1.66E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.37E-05	5.93E-05	2.21E-07	5.84E-06	255.9	2.44E-03	4.05E-03
SI48_W	0.75	615	0	1	9.77E-02	2.43E-02	1.77E-03	1.19E-03	1.06E-03	2.23E-04	0.00E+00	9.00E-05	6.37E-05	2.38E-07	6.28E-06	273.7	2.62E-03	4.36E-03
SI48_W	0.75	427	0	1	6.76E-02	1.64E-02	1.22E-03	8.29E-04	7.34E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.65E-07	4.35E-06	188.7	1.82E-03	3.02E-03
SI48_W	0.75	282	0	1	4.42E-02	9.41E-03	7.88E-04	5.48E-04	4.85E-04	1.01E-04	0.00E+00	4.10E-05	2.90E-05	1.09E-07	2.86E-06	121.6	1.19E-03	2.00E-03
SI48_W	0.75	239	0	1	3.72E-02	7.12E-03	6.55E-04	4.63E-04	4.10E-04	8.54E-05	0.00E+00	3.45E-05	2.45E-05	9.23E-08	2.41E-06	101.1	1.01E-03	1.69E-03
SI48_W	0.75	203	0	1	3.14E-02	5.41E-03	5.47E-04	3.93E-04	3.48E-04	7.22E-05	0.00E+00	2.92E-05	2.07E-05	7.83E-08	2.04E-06	84.4	8.51E-04	1.44E-03
SI48_W	0.75	166	0	1	2.56E-02	3.97E-03	4.42E-04	3.23E-04	2.86E-04	5.91E-05	0.00E+00	2.39E-05	1.69E-05	6.43E-08	1.67E-06	68.3	6.97E-04	1.18E-03
SI48_W	0.75	123	0	1	1.88E-02	2.62E-03	3.23E-04	2.39E-04	2.11E-04	4.36E-05	0.00E+00	1.76E-05	1.25E-05	4.75E-08	1.23E-06	49.8	5.13E-04	8.71E-04
SI49_E	0.75	87	0	1	1.32E-02	1.63E-03	2.25E-04	1.69E-04	1.49E-04	3.07E-05	0.00E+00	1.24E-05	8.78E-06	3.36E-08	8.64E-07	34.7	3.61E-04	6.15E-04
SI49_E	0.75	58	0	1	8.78E-03	9.71E-04	1.48E-04	1.12E-04	9.95E-05	2.04E-05	0.00E+00	8.24E-06	5.84E-06	2.24E-08	5.75E-07	22.9	2.40E-04	4.10E-04
SI49_E	0.75	51	0	1	7.65E-03	7.56E-04	1.28E-04	9.83E-05	8.71E-05	1.78E-05	0.00E+00	7.19E-06	5.09E-06	1.96E-08	5.02E-07	19.8	2.10E-04	3.59E-04
SI49_E	0.75	36	0	1	5.45E-03	5.40E-04	9.09E-05	7.02E-05	6.22E-05	1.27E-05	0.00E+00	5.13E-06	3.63E-06	1.40E-08	3.58E-07	14.0	1.50E-04	2.56E-04
SI49_E	0.75	51	0	1	7.63E-03	7.56E-04	1.27E-04	9.83E-05	8.71E-05	1.78E-05	0.00E+00	7.18E-06	5.08E-06	1.96E-08	5.01E-07	19.6	2.09E-04	3.59E-04
SI49_E	0.75	123	0	1	1.85E-02	1.84E-03	3.08E-04	2.39E-04	2.11E-04	4.31E-05	0.00E+00	1.74E-05	1.23E-05	4.75E-08	1.22E-06	47.6	5.08E-04	8.71E-04
SI49_E	0.75	369	0	1	5.57E-02	5.51E-03	9.30E-04	7.16E-04	6.34E-04	1.30E-04	0.00E+00	5.23E-05	3.71E-05	1.43E-07	3.65E-06	143.6	1.53E-03	2.61E-03
SI49_E	0.75	564	0	1	8.59E-02	1.03E-02	1.46E-03	1.10E-03	9.70E-04	1.99E-04	0.00E+00	8.05E-05	5.70E-05	2.18E-07	5.62E-06	225.1	2.35E-03	4.00E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_E	0.75	456	0	1	7.03E-02	1.11E-02	1.22E-03	8.85E-04	7.84E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.76E-07	4.57E-06	187.9	1.91E-03	3.23E-03
SI49_E	0.75	376	0	1	5.85E-02	1.06E-02	1.03E-03	7.30E-04	6.47E-04	1.34E-04	0.00E+00	5.43E-05	3.85E-05	1.45E-07	3.79E-06	158.4	1.58E-03	2.67E-03
SI49_E	0.75	340	0	1	5.32E-02	1.07E-02	9.43E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.93E-05	3.49E-05	1.31E-07	3.44E-06	145.7	1.44E-03	2.41E-03
SI49_E	0.75	383	0	1	6.07E-02	1.44E-02	1.10E-03	7.44E-04	6.59E-04	1.39E-04	0.00E+00	5.60E-05	3.97E-05	1.48E-07	3.91E-06	169.3	1.63E-03	2.72E-03
SI49_E	0.75	405	0	1	6.43E-02	1.58E-02	1.17E-03	7.86E-04	6.96E-04	1.47E-04	0.00E+00	5.93E-05	4.20E-05	1.57E-07	4.14E-06	180.3	1.73E-03	2.87E-03
SI49_E	0.75	412	0	1	6.56E-02	1.65E-02	1.19E-03	8.00E-04	7.09E-04	1.49E-04	0.00E+00	6.04E-05	4.28E-05	1.59E-07	4.21E-06	184.3	1.76E-03	2.92E-03
SI49_E	0.75	427	0	1	6.80E-02	1.76E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.65E-07	4.37E-06	191.7	1.83E-03	3.02E-03
SI49_E	0.75	463	0	1	7.37E-02	1.89E-02	1.34E-03	8.99E-04	7.96E-04	1.68E-04	0.00E+00	6.78E-05	4.81E-05	1.79E-07	4.73E-06	207.5	1.98E-03	3.28E-03
SI49_E	0.75	572	0	1	9.10E-02	2.33E-02	1.66E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.37E-05	5.93E-05	2.21E-07	5.84E-06	255.9	2.44E-03	4.05E-03
SI49_E	0.75	615	0	1	9.77E-02	2.43E-02	1.77E-03	1.19E-03	1.06E-03	2.23E-04	0.00E+00	9.00E-05	6.37E-05	2.38E-07	6.28E-06	273.7	2.62E-03	4.36E-03
SI49_E	0.75	427	0	1	6.76E-02	1.64E-02	1.22E-03	8.29E-04	7.34E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.65E-07	4.35E-06	188.7	1.82E-03	3.02E-03
SI49_E	0.75	282	0	1	4.42E-02	9.41E-03	7.88E-04	5.48E-04	4.85E-04	1.01E-04	0.00E+00	4.10E-05	2.90E-05	1.09E-07	2.86E-06	121.6	1.19E-03	2.00E-03
SI49_E	0.75	239	0	1	3.72E-02	7.12E-03	6.55E-04	4.63E-04	4.10E-04	8.54E-05	0.00E+00	3.45E-05	2.45E-05	9.23E-08	2.41E-06	101.1	1.01E-03	1.69E-03
SI49_E	0.75	203	0	1	3.14E-02	5.41E-03	5.47E-04	3.93E-04	3.48E-04	7.22E-05	0.00E+00	2.92E-05	2.07E-05	7.83E-08	2.04E-06	84.4	8.51E-04	1.44E-03
SI49_E	0.75	166	0	1	2.56E-02	3.97E-03	4.42E-04	3.23E-04	2.86E-04	5.91E-05	0.00E+00	2.39E-05	1.69E-05	6.43E-08	1.67E-06	68.3	6.97E-04	1.18E-03
SI49_E	0.75	123	0	1	1.88E-02	2.62E-03	3.23E-04	2.39E-04	2.11E-04	4.36E-05	0.00E+00	1.76E-05	1.25E-05	4.75E-08	1.23E-06	49.8	5.13E-04	8.71E-04
SI49_W	0.75	110	0	1	1.67E-02	2.06E-03	2.84E-04	2.13E-04	1.89E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	43.9	4.57E-04	7.78E-04
SI49_W	0.75	73	0	1	1.11E-02	1.23E-03	1.87E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.83E-08	7.27E-07	28.9	3.04E-04	5.19E-04
SI49_W	0.75	64	0	1	9.68E-03	9.56E-04	1.62E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.09E-06	6.44E-06	2.48E-08	6.34E-07	25.0	2.65E-04	4.54E-04
SI49_W	0.75	46	0	1	6.89E-03	6.83E-04	1.15E-04	8.88E-05	7.86E-05	1.60E-05	0.00E+00	6.48E-06	4.59E-06	1.77E-08	4.52E-07	17.7	1.89E-04	3.24E-04
SI49_W	0.75	64	0	1	9.64E-03	9.56E-04	1.60E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.07E-06	6.43E-06	2.48E-08	6.33E-07	24.8	2.65E-04	4.54E-04
SI49_W	0.75	155	0	1	2.34E-02	2.32E-03	3.90E-04	3.02E-04	2.67E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	6.01E-08	1.54E-06	60.2	6.43E-04	1.10E-03
SI49_W	0.75	466	0	1	7.04E-02	6.97E-03	1.18E-03	9.06E-04	8.02E-04	1.64E-04	0.00E+00	6.62E-05	4.69E-05	1.80E-07	4.62E-06	181.6	1.93E-03	3.31E-03
SI49_W	0.75	713	0	1	1.09E-01	1.30E-02	1.84E-03	1.38E-03	1.23E-03	2.52E-04	0.00E+00	1.02E-04	7.21E-05	2.76E-07	7.10E-06	284.6	2.97E-03	5.06E-03
SI49_W	0.75	576	0	1	8.89E-02	1.40E-02	1.54E-03	1.12E-03	9.91E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.23E-07	5.78E-06	237.6	2.42E-03	4.08E-03
SI49_W	0.75	476	0	1	7.39E-02	1.34E-02	1.30E-03	9.23E-04	8.18E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.84E-07	4.79E-06	200.3	2.00E-03	3.37E-03
SI49_W	0.75	430	0	1	6.73E-02	1.35E-02	1.19E-03	8.35E-04	7.39E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	184.2	1.82E-03	3.05E-03
SI49_W	0.75	485	0	1	7.67E-02	1.82E-02	1.39E-03	9.41E-04	8.33E-04	1.75E-04	0.00E+00	7.08E-05	5.02E-05	1.87E-07	4.94E-06	214.0	2.07E-03	3.44E-03
SI49_W	0.75	512	0	1	8.13E-02	2.00E-02	1.48E-03	9.94E-04	8.81E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	227.9	2.19E-03	3.63E-03
SI49_W	0.75	521	0	1	8.29E-02	2.09E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.0	2.23E-03	3.69E-03
SI49_W	0.75	540	0	1	8.60E-02	2.22E-02	1.57E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.09E-07	5.52E-06	242.4	2.31E-03	3.82E-03
SI49_W	0.75	585	0	1	9.32E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.4	2.50E-03	4.15E-03
SI49_W	0.75	723	0	1	1.15E-01	2.94E-02	2.10E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.79E-07	7.39E-06	323.6	3.09E-03	5.12E-03
SI49_W	0.75	777	0	1	1.23E-01	3.08E-02	2.24E-03	1.51E-03	1.34E-03	2.81E-04	0.00E+00	1.14E-04	8.06E-05	3.01E-07	7.94E-06	346.1	3.32E-03	5.51E-03
SI49_W	0.75	540	0	1	8.55E-02	2.07E-02	1.55E-03	1.05E-03	9.28E-04	1.95E-04	0.00E+00	7.88E-05	5.58E-05	2.09E-07	5.50E-06	238.6	2.30E-03	3.82E-03
SI49_W	0.75	357	0	1	5.59E-02	1.19E-02	9.96E-04	6.92E-04	6.13E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.61E-06	153.8	1.51E-03	2.53E-03
SI49_W	0.75	302	0	1	4.70E-02	9.00E-03	8.28E-04	5.86E-04	5.19E-04	1.08E-04	0.00E+00	4.36E-05	3.09E-05	1.17E-07	3.05E-06	127.8	1.27E-03	2.14E-03
SI49_W	0.75	256	0	1	3.96E-02	6.84E-03	6.91E-04	4.97E-04	4.40E-04	9.13E-05	0.00E+00	3.69E-05	2.61E-05	9.90E-08	2.57E-06	106.7	1.08E-03	1.81E-03
SI49_W	0.75	210	0	1	3.24E-02	5.02E-03	5.59E-04	4.08E-04	3.62E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.13E-08	2.11E-06	86.4	8.81E-04	1.49E-03
SI49_W	0.75	155	0	1	2.38E-02	3.31E-03	4.08E-04	3.02E-04	2.67E-04	5.51E-05	0.00E+00	2.23E-05	1.58E-05	6.01E-08	1.55E-06	63.0	6.49E-04	1.10E-03
SI50_E	0.75	110	0	1	1.67E-02	2.06E-03	2.84E-04	2.13E-04	1.89E-04	3.88E-05	0.00E+00	1.57E-05	1.11E-05	4.24E-08	1.09E-06	43.9	4.57E-04	7.78E-04
SI50_E	0.75	73	0	1	1.11E-02	1.23E-03	1.87E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.83E-08	7.27E-07	28.9	3.04E-04	5.19E-04
SI50_E	0.75	64	0	1	9.68E-03	9.56E-04	1.62E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.09E-06	6.44E-06	2.48E-08	6.34E-07	25.0	2.65E-04	4.54E-04
SI50_E	0.75	46	0	1	6.89E-03	6.83E-04	1.15E-04	8.88E-05	7.86E-05	1.60E-05	0.00E+00	6.48E-06	4.59E-06	1.77E-08	4.52E-07	17.7	1.89E-04	3.24E-04
SI50_E	0.75	64	0	1	9.64E-03	9.56E-04	1.60E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.07E-06	6.43E-06	2.48E-08	6.33E-07	24.8	2.65E-04	4.54E-04
SI50_E	0.75	155	0	1	2.34E-02	2.32E-03	3.90E-04	3.02E-04	2.67E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	6.01E-08	1.54E-06	60.2	6.43E-04	1.10E-03
SI50_E	0.75	466	0	1	7.04E-02	6.97E-03	1.18E-03	9.06E-04	8.02E-04	1.64E-04	0.00E+00	6.62E-05	4.69E-05	1.80E-07	4.62E-06	181.6	1.93E-03	3.31E-03
SI50_E	0.75	713	0	1	1.09E-01	1.30E-02	1.84E-03	1.38E-03	1.23E-03	2.52E-04	0.00E+00	1.02E-04	7.21E-05	2.76E-07	7.10E-06	284.6	2.97E-03	5.06E-03
SI50_E	0.75	576	0	1	8.89E-02	1.40E-02	1.54E-03	1.12E-03	9.91E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.23E-07	5.78E-06	237.6	2.42E-03	4.08E-03
SI50_E	0.75	476	0	1	7.39E-02	1.34E-02	1.30E-03	9.23E-04	8.18E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.84E-07	4.79E-06	200.3	2.00E-03	3.37E-03
SI50_E	0.75	430	0	1	6.73E-02	1.35E-02	1.19E-03	8.35E-04	7.39E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	184.2	1.82E-03	3.05E-03
SI50_E	0.75	485	0	1	7.67E-02	1.82E-02	1.39E-03	9.41E-04	8.33E-04	1.75E-04	0.00E+00	7.08E-05	5.02E-05	1.87E-07	4.94E-06	214.0	2.07E-03	3.44E-03
SI50_E	0.75	512	0	1	8.13E-02	2.00E-02	1.48E-03	9.94E-04	8.81E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	227.9	2.19E-03	3.63E-03
SI50_E	0.75	521	0	1	8.29E-02	2.09E-02	1.51E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.64E-05	5.41E-05	2.02E-07	5.33E-06	233.0	2.23E-03	3.69E-03
SI50_E	0.75	540	0	1	8.60E-02	2.22E-02	1.57E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.09E-07	5.52E-06	242.4	2.31E-03	3.82E-03
SI50_E	0.75	585	0	1	9.32E-02	2.39E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.4	2.50E-03	4.15E-03
SI50_E	0.75	723	0	1	1.15E-01	2.94E-02	2.10E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.79E-07	7.39E-06	323.6	3.09E-03	5.12E-03
SI50_E	0.75	777	0	1	1.23E-01	3.08E-02	2.24E-03	1.51E-03	1.34E-03	2.81E-04	0.00E+00	1.14E-04	8.06E-05	3.01E-07	7.94E-06	346.1	3.32E-03	5.51E-03
SI50_E	0.75	540	0	1	8.55E-02	2.07E-02	1.55E-03	1.05E-03	9.28E-04	1.95E-04	0.00E+00	7.88E-05	5.58E-05	2.09E-07	5.50E-06	238.6	2.30E-03	3.82E-03
SI50_E	0.75	357	0	1	5.59E-02	1.19E-02	9.96E-04	6.92E-04	6.13E-04	1.28E-04	0.00E+00	5.18E-05	3.67E-05	1.38E-07	3.61E-06	153.8	1.51E-03	2.53E-03
SI50_E	0.75	302	0	1	4.70E-02	9.00E-03	8.28E-04	5.86E-04	5.19E-04	1.08E-04	0.00E+00	4.36E-05	3.09E-05	1.17E-07	3.05E-06	127.8	1.27E-03	2.14E-03
SI50_E	0.75	256	0	1	3.96E-02	6.84E-03	6.91E-04	4.97E-04	4.40E-04	9.13E-05	0.00E+00	3.69E-05	2.61E-05	9.90E-08	2.57E-06	106.7	1.08E-03	1.81E-03
SI50_E	0.75	210	0	1	3.24E-02	5.02E-03	5.59E-04	4.08E-04	3.62E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.13E-08	2.11E-06	86.4	8.81E-04	1.49E-03
SI50_E	0.75	155	0	1	2.38E-02	3.31E-03	4.08E-04	3.02E-04	2.67E-04	5.51E-05	0.00E+00	2.23E-05	1.58E-05	6.01E-08	1.55E-06	63.0	6.49E-04	1.10E-03
SI50_W	0.75	117	0	1	1.78E-02	2.19E-03	3.02E-04	2.27E-04	2.01E-04	4.12E-05	0.00E+00	1.67E-05	1.18E-05	4.52E-08	1.16E-06	46.7	4.86E-04	8.28E-04
SI50_W	0.75	78	0	1	1.18E-02	1.31E-03	1.99E-04	1.51E-04	1.34E-04	2.74E-05	0.00E+00	1.11E-05	7.85E-06	3.01E-08	7.73E-07	30.8	3.23E-04	5.52E-04
SI50_W	0.75	68	0	1	1.03E-02	1.02E-03	1.72E-04	1.32E-04	1.17E-04	2.39E-05	0.00E+00	9.67E-06	6.85E-06	2.63E-08	6.75E-07	26.6	2.82E-04	4.83E-04
SI50_W	0.75	49	0	1	7.34E-03	7.27E-04	1.22E-04	9.45E-05	8.37E-05	1.71E-05	0.00E+00	6.90E-06	4.89E-06	1.88E-08	4.81E-07	18.9	2.01E-04	3.45E-04

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI50_W	0.75	68	0	1	1.03E-02	1.02E-03	1.71E-04	1.32E-04	1.17E-04	2.39E-05	0.00E+00	9.65E-06	6.84E-06	2.63E-08	6.74E-07	26.4	2.82E-04	4.83E-04
SI50_W	0.75	165	0	1	2.49E-02	2.47E-03	4.15E-04	3.21E-04	2.84E-04	5.80E-05	0.00E+00	2.34E-05	1.66E-05	6.40E-08	1.64E-06	64.0	6.84E-04	1.17E-03
SI50_W	0.75	496	0	1	7.49E-02	7.41E-03	1.25E-03	9.64E-04	8.53E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.92E-07	4.91E-06	193.3	2.05E-03	3.52E-03
SI50_W	0.75	759	0	1	1.16E-01	1.39E-02	1.96E-03	1.47E-03	1.31E-03	2.68E-04	0.00E+00	1.08E-04	7.67E-05	2.93E-07	7.56E-06	302.8	3.16E-03	5.38E-03
SI50_W	0.75	613	0	1	9.45E-02	1.49E-02	1.64E-03	1.19E-03	1.05E-03	2.18E-04	0.00E+00	8.81E-05	6.24E-05	2.37E-07	6.15E-06	252.9	2.57E-03	4.35E-03
SI50_W	0.75	506	0	1	7.87E-02	1.43E-02	1.38E-03	9.82E-04	8.70E-04	1.81E-04	0.00E+00	7.31E-05	5.18E-05	1.96E-07	5.10E-06	213.2	2.13E-03	3.59E-03
SI50_W	0.75	457	0	1	7.16E-02	1.44E-02	1.27E-03	8.88E-04	7.86E-04	1.64E-04	0.00E+00	6.63E-05	4.70E-05	1.77E-07	4.63E-06	196.0	1.93E-03	3.24E-03
SI50_W	0.75	516	0	1	8.17E-02	1.94E-02	1.47E-03	1.00E-03	8.87E-04	1.86E-04	0.00E+00	7.53E-05	5.34E-05	1.99E-07	5.26E-06	227.8	2.20E-03	3.66E-03
SI50_W	0.75	545	0	1	8.65E-02	2.13E-02	1.57E-03	1.06E-03	9.37E-04	1.97E-04	0.00E+00	7.97E-05	5.65E-05	2.11E-07	5.56E-06	242.5	2.33E-03	3.86E-03
SI50_W	0.75	555	0	1	8.83E-02	2.22E-02	1.61E-03	1.08E-03	9.54E-04	2.01E-04	0.00E+00	8.12E-05	5.76E-05	2.15E-07	5.67E-06	248.0	2.37E-03	3.93E-03
SI50_W	0.75	574	0	1	9.15E-02	2.36E-02	1.67E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.42E-05	5.97E-05	2.22E-07	5.88E-06	257.9	2.46E-03	4.07E-03
SI50_W	0.75	623	0	1	9.92E-02	2.54E-02	1.81E-03	1.21E-03	1.07E-03	2.26E-04	0.00E+00	9.13E-05	6.47E-05	2.41E-07	6.37E-06	279.2	2.66E-03	4.41E-03
SI50_W	0.75	769	0	1	1.22E-01	3.13E-02	2.23E-03	1.49E-03	1.32E-03	2.79E-04	0.00E+00	1.13E-04	7.98E-05	2.97E-07	7.86E-06	344.4	3.29E-03	5.45E-03
SI50_W	0.75	827	0	1	1.31E-01	3.28E-02	2.39E-03	1.61E-03	1.42E-03	3.00E-04	0.00E+00	1.21E-04	8.58E-05	3.20E-07	8.45E-06	368.3	3.53E-03	5.86E-03
SI50_W	0.75	574	0	1	9.10E-02	2.20E-02	1.64E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.39E-05	5.94E-05	2.22E-07	5.85E-06	253.9	2.45E-03	4.07E-03
SI50_W	0.75	380	0	1	5.95E-02	1.27E-02	1.06E-03	7.37E-04	6.53E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.47E-07	3.85E-06	163.6	1.61E-03	2.69E-03
SI50_W	0.75	321	0	1	5.00E-02	9.58E-03	8.81E-04	6.24E-04	5.52E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	136.0	1.35E-03	2.28E-03
SI50_W	0.75	273	0	1	4.22E-02	7.27E-03	7.35E-04	5.29E-04	4.69E-04	9.71E-05	0.00E+00	3.93E-05	2.78E-05	1.05E-07	2.74E-06	113.5	1.15E-03	1.93E-03
SI50_W	0.75	224	0	1	3.45E-02	5.34E-03	5.95E-04	4.35E-04	3.85E-04	7.95E-05	0.00E+00	3.21E-05	2.28E-05	8.65E-08	2.24E-06	91.9	9.38E-04	1.59E-03
SI50_W	0.75	165	0	1	2.53E-02	3.52E-03	4.34E-04	3.21E-04	2.84E-04	5.86E-05	0.00E+00	2.37E-05	1.68E-05	6.40E-08	1.65E-06	67.0	6.91E-04	1.17E-03
SI51_E	0.75	117	0	1	1.78E-02	2.19E-03	3.02E-04	2.27E-04	2.01E-04	4.12E-05	0.00E+00	1.67E-05	1.18E-05	4.52E-08	1.16E-06	46.7	4.86E-04	8.28E-04
SI51_E	0.75	78	0	1	1.18E-02	1.31E-03	1.99E-04	1.51E-04	1.34E-04	2.74E-05	0.00E+00	1.11E-05	7.85E-06	3.01E-08	7.73E-07	30.8	3.23E-04	5.52E-04
SI51_E	0.75	68	0	1	1.03E-02	1.02E-03	1.72E-04	1.32E-04	1.17E-04	2.39E-05	0.00E+00	9.67E-06	6.85E-06	2.63E-08	6.75E-07	26.6	2.82E-04	4.83E-04
SI51_E	0.75	49	0	1	7.34E-03	7.27E-04	1.22E-04	9.45E-05	8.37E-05	1.71E-05	0.00E+00	6.90E-06	4.89E-06	1.88E-08	4.81E-07	18.9	2.01E-04	3.45E-04
SI51_E	0.75	68	0	1	1.03E-02	1.02E-03	1.71E-04	1.32E-04	1.17E-04	2.39E-05	0.00E+00	9.65E-06	6.84E-06	2.63E-08	6.74E-07	26.4	2.82E-04	4.83E-04
SI51_E	0.75	165	0	1	2.49E-02	2.47E-03	4.15E-04	3.21E-04	2.84E-04	5.80E-05	0.00E+00	2.34E-05	1.66E-05	6.40E-08	1.64E-06	64.0	6.84E-04	1.17E-03
SI51_E	0.75	496	0	1	7.49E-02	7.41E-03	1.25E-03	9.64E-04	8.53E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.92E-07	4.91E-06	193.3	2.05E-03	3.52E-03
SI51_E	0.75	759	0	1	1.16E-01	1.39E-02	1.96E-03	1.47E-03	1.31E-03	2.68E-04	0.00E+00	1.08E-04	7.67E-05	2.93E-07	7.56E-06	302.8	3.16E-03	5.38E-03
SI51_E	0.75	613	0	1	9.45E-02	1.49E-02	1.64E-03	1.19E-03	1.05E-03	2.18E-04	0.00E+00	8.81E-05	6.24E-05	2.37E-07	6.15E-06	252.9	2.57E-03	4.35E-03
SI51_E	0.75	506	0	1	7.87E-02	1.43E-02	1.38E-03	9.82E-04	8.70E-04	1.81E-04	0.00E+00	7.31E-05	5.18E-05	1.96E-07	5.10E-06	213.2	2.13E-03	3.59E-03
SI51_E	0.75	457	0	1	7.16E-02	1.44E-02	1.27E-03	8.88E-04	7.86E-04	1.64E-04	0.00E+00	6.63E-05	4.70E-05	1.77E-07	4.63E-06	196.0	1.93E-03	3.24E-03
SI51_E	0.75	516	0	1	8.17E-02	1.94E-02	1.47E-03	1.00E-03	8.87E-04	1.86E-04	0.00E+00	7.53E-05	5.34E-05	1.99E-07	5.26E-06	227.8	2.20E-03	3.66E-03
SI51_E	0.75	545	0	1	8.65E-02	2.13E-02	1.57E-03	1.06E-03	9.37E-04	1.97E-04	0.00E+00	7.97E-05	5.65E-05	2.11E-07	5.56E-06	242.5	2.33E-03	3.86E-03
SI51_E	0.75	555	0	1	8.83E-02	2.22E-02	1.61E-03	1.08E-03	9.54E-04	2.01E-04	0.00E+00	8.12E-05	5.76E-05	2.15E-07	5.67E-06	248.0	2.37E-03	3.93E-03
SI51_E	0.75	574	0	1	9.15E-02	2.36E-02	1.67E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.42E-05	5.97E-05	2.22E-07	5.88E-06	257.9	2.46E-03	4.07E-03
SI51_E	0.75	623	0	1	9.92E-02	2.54E-02	1.81E-03	1.21E-03	1.07E-03	2.26E-04	0.00E+00	9.13E-05	6.47E-05	2.41E-07	6.37E-06	279.2	2.66E-03	4.41E-03
SI51_E	0.75	769	0	1	1.22E-01	3.13E-02	2.23E-03	1.49E-03	1.32E-03	2.79E-04	0.00E+00	1.13E-04	7.98E-05	2.97E-07	7.86E-06	344.4	3.29E-03	5.45E-03
SI51_E	0.75	827	0	1	1.31E-01	3.28E-02	2.39E-03	1.61E-03	1.42E-03	3.00E-04	0.00E+00	1.21E-04	8.58E-05	3.20E-07	8.45E-06	368.3	3.53E-03	5.86E-03
SI51_E	0.75	574	0	1	9.10E-02	2.20E-02	1.64E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.39E-05	5.94E-05	2.22E-07	5.85E-06	253.9	2.45E-03	4.07E-03
SI51_E	0.75	380	0	1	5.95E-02	1.27E-02	1.06E-03	7.37E-04	6.53E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.47E-07	3.85E-06	163.6	1.61E-03	2.69E-03
SI51_E	0.75	321	0	1	5.00E-02	9.58E-03	8.81E-04	6.24E-04	5.52E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	136.0	1.35E-03	2.28E-03
SI51_E	0.75	273	0	1	4.22E-02	7.27E-03	7.35E-04	5.29E-04	4.69E-04	9.71E-05	0.00E+00	3.93E-05	2.78E-05	1.05E-07	2.74E-06	113.5	1.15E-03	1.93E-03
SI51_E	0.75	224	0	1	3.45E-02	5.34E-03	5.95E-04	4.35E-04	3.85E-04	7.95E-05	0.00E+00	3.21E-05	2.28E-05	8.65E-08	2.24E-06	91.9	9.38E-04	1.59E-03
SI51_E	0.75	165	0	1	2.53E-02	3.52E-03	4.34E-04	3.21E-04	2.84E-04	5.86E-05	0.00E+00	2.37E-05	1.68E-05	6.40E-08	1.65E-06	67.0	6.91E-04	1.17E-03
SI51_W	0.75	121	0	1	1.85E-02	2.28E-03	3.14E-04	2.36E-04	2.09E-04	4.29E-05	0.00E+00	1.73E-05	1.23E-05	4.70E-08	1.21E-06	48.5	5.06E-04	8.61E-04
SI51_W	0.75	81	0	1	1.23E-02	1.36E-03	2.07E-04	1.57E-04	1.39E-04	2.85E-05	0.00E+00	1.15E-05	8.17E-06	3.13E-08	8.05E-07	32.0	3.36E-04	5.74E-04
SI51_W	0.75	71	0	1	1.07E-02	1.06E-03	1.79E-04	1.38E-04	1.22E-04	2.49E-05	0.00E+00	1.01E-05	7.13E-06	2.74E-08	7.02E-07	27.7	2.94E-04	5.02E-04
SI51_W	0.75	51	0	1	7.63E-03	7.56E-04	1.27E-04	9.83E-05	8.70E-05	1.78E-05	0.00E+00	7.18E-06	5.08E-06	1.96E-08	5.01E-07	19.6	2.09E-04	3.59E-04
SI51_W	0.75	71	0	1	1.07E-02	1.06E-03	1.78E-04	1.38E-04	1.22E-04	2.48E-05	0.00E+00	1.00E-05	7.11E-06	2.74E-08	7.01E-07	27.4	2.93E-04	5.02E-04
SI51_W	0.75	172	0	1	2.59E-02	2.57E-03	4.31E-04	3.34E-04	2.96E-04	6.03E-05	0.00E+00	2.44E-05	1.73E-05	6.65E-08	1.70E-06	66.6	7.11E-04	1.22E-03
SI51_W	0.75	516	0	1	7.79E-02	7.71E-03	1.30E-03	1.00E-03	8.88E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	2.00E-07	5.11E-06	201.0	2.14E-03	3.66E-03
SI51_W	0.75	790	0	1	1.20E-01	1.44E-02	2.04E-03	1.53E-03	1.36E-03	2.79E-04	0.00E+00	1.13E-04	7.98E-05	3.05E-07	7.86E-06	315.0	3.29E-03	5.60E-03
SI51_W	0.75	638	0	1	9.83E-02	1.55E-02	1.70E-03	1.24E-03	1.10E-03	2.27E-04	0.00E+00	9.17E-05	6.49E-05	2.47E-07	6.40E-06	263.0	2.67E-03	4.52E-03
SI51_W	0.75	526	0	1	8.18E-02	1.49E-02	1.44E-03	1.02E-03	9.05E-04	1.88E-04	0.00E+00	7.60E-05	5.39E-05	2.04E-07	5.30E-06	221.7	2.22E-03	3.73E-03
SI51_W	0.75	476	0	1	7.44E-02	1.50E-02	1.32E-03	9.24E-04	8.18E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.84E-07	4.81E-06	203.8	2.01E-03	3.37E-03
SI51_W	0.75	537	0	1	8.49E-02	2.01E-02	1.53E-03	1.04E-03	9.22E-04	1.94E-04	0.00E+00	7.83E-05	5.55E-05	2.07E-07	5.47E-06	236.9	2.29E-03	3.80E-03
SI51_W	0.75	567	0	1	9.00E-02	2.21E-02	1.63E-03	1.10E-03	9.75E-04	2.05E-04	0.00E+00	8.29E-05	5.88E-05	2.19E-07	5.79E-06	252.3	2.42E-03	4.02E-03
SI51_W	0.75	577	0	1	9.18E-02	2.31E-02	1.67E-03	1.12E-03	9.92E-04	2.09E-04	0.00E+00	8.45E-05	5.99E-05	2.23E-07	5.90E-06	257.9	2.47E-03	4.09E-03
SI51_W	0.75	597	0	1	9.52E-02	2.46E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.76E-05	6.20E-05	2.31E-07	6.11E-06	268.3	2.55E-03	4.23E-03
SI51_W	0.75	648	0	1	1.03E-01	2.64E-02	1.88E-03	1.26E-03	1.11E-03	2.35E-04	0.00E+00	9.50E-05	6.73E-05	2.51E-07	6.63E-06	290.4	2.77E-03	4.59E-03
SI51_W	0.75	800	0	1	1.27E-01	3.25E-02	2.32E-03	1.55E-03	1.37E-03	2.90E-04	0.00E+00	1.17E-04	8.30E-05	3.09E-07	8.18E-06	358.2	3.42E-03	5.67E-03
SI51_W	0.75	861	0	1	1.37E-01	3.41E-02	2.48E-03	1.67E-03	1.48E-03	3.12E-04	0.00E+00	1.26E-04	8.92E-05	3.33E-07	8.79E-06	383.1	3.67E-03	6.10E-03
SI51_W	0.75	597	0	1	9.46E-02	2.29E-02	1.71E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.72E-05	6.18E-05	2.31E-07	6.09E-06	264.1	2.55E-03	4.23E-03
SI51_W	0.75	395	0	1	6.19E-02	1.32E-02	1.10E-03	7.66E-04	6.79E-04	1.42E-04	0.00E+00	5.73E-05	4.06E-05	1.53E-07	4.00E-06	170.2	1.67E-03	2.80E-03
SI51_W	0.75	334	0	1	5.20E-02	9.96E-03	9.16E-04	6.49E-04	5.74E-04	1.20E-04	0.00E+00	4.83E-05	3.42E-05	1.29E-07	3.37E-06	141.5	1.41E-03	2.37E-03
SI51_W	0.75	283	0	1	4.39E-02	7.57E-03	7.65E-04	5.50E-04	4.87E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.10E-07	2.85E-06	118.1	1.19E-03	2.01E-03
SI51_W	0.75	233	0	1	3.58E-02	5.56E-03	6.19E-04	4.52E-04	4.00E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	9.00E-08	2.33E-06	95.6	9.75E-04	1.65E-03
SI51_W	0.75	172	0	1	2.64E-02	3.66E-03	4.52E-04	3.34E-04	2.96E-04	6.10E-05	0.00E+00	2.46E-05	1.75E-05	6.65E-08	1.72E-06	69.7	7.19E-04	1.22E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_E	0.75	121	0	1	1.85E-02	2.28E-03	3.14E-04	2.36E-04	2.09E-04	4.29E-05	0.00E+00	1.73E-05	1.23E-05	4.70E-08	1.21E-06	48.5	5.06E-04	8.61E-04
SI52_E	0.75	81	0	1	1.23E-02	1.36E-03	2.07E-04	1.57E-04	1.39E-04	2.85E-05	0.00E+00	1.15E-05	8.17E-06	3.13E-08	8.05E-07	32.0	3.36E-04	5.74E-04
SI52_E	0.75	71	0	1	1.07E-02	1.06E-03	1.79E-04	1.38E-04	1.22E-04	2.49E-05	0.00E+00	1.01E-05	7.13E-06	2.74E-08	7.02E-07	27.7	2.94E-04	5.02E-04
SI52_E	0.75	51	0	1	7.63E-03	7.56E-04	1.27E-04	9.83E-05	8.70E-05	1.78E-05	0.00E+00	7.18E-06	5.08E-06	1.96E-08	5.01E-07	19.6	2.09E-04	3.59E-04
SI52_E	0.75	71	0	1	1.07E-02	1.06E-03	1.78E-04	1.38E-04	1.22E-04	2.48E-05	0.00E+00	1.00E-05	7.11E-06	2.74E-08	7.01E-07	27.4	2.93E-04	5.02E-04
SI52_E	0.75	172	0	1	2.59E-02	2.57E-03	4.31E-04	3.34E-04	2.96E-04	6.03E-05	0.00E+00	2.44E-05	1.73E-05	6.65E-08	1.70E-06	66.6	7.11E-04	1.22E-03
SI52_E	0.75	516	0	1	7.79E-02	7.71E-03	1.30E-03	1.00E-03	8.88E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	2.00E-07	5.11E-06	201.0	2.14E-03	3.66E-03
SI52_E	0.75	790	0	1	1.20E-01	1.44E-02	2.04E-03	1.53E-03	1.36E-03	2.79E-04	0.00E+00	1.13E-04	7.98E-05	3.05E-07	7.86E-06	315.0	3.29E-03	5.60E-03
SI52_E	0.75	638	0	1	9.83E-02	1.55E-02	1.70E-03	1.24E-03	1.10E-03	2.27E-04	0.00E+00	9.17E-05	6.49E-05	2.47E-07	6.40E-06	263.0	2.67E-03	4.52E-03
SI52_E	0.75	526	0	1	8.18E-02	1.49E-02	1.44E-03	1.02E-03	9.05E-04	1.88E-04	0.00E+00	7.60E-05	5.39E-05	2.04E-07	5.30E-06	221.7	2.22E-03	3.73E-03
SI52_E	0.75	476	0	1	7.44E-02	1.50E-02	1.32E-03	9.24E-04	8.18E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.84E-07	4.81E-06	203.8	2.01E-03	3.37E-03
SI52_E	0.75	537	0	1	8.49E-02	2.01E-02	1.53E-03	1.04E-03	9.22E-04	1.94E-04	0.00E+00	7.83E-05	5.55E-05	2.07E-07	5.47E-06	236.9	2.29E-03	3.80E-03
SI52_E	0.75	567	0	1	9.00E-02	2.21E-02	1.63E-03	1.10E-03	9.75E-04	2.05E-04	0.00E+00	8.29E-05	5.88E-05	2.19E-07	5.79E-06	252.3	2.42E-03	4.02E-03
SI52_E	0.75	577	0	1	9.18E-02	2.31E-02	1.67E-03	1.12E-03	9.92E-04	2.09E-04	0.00E+00	8.45E-05	5.99E-05	2.23E-07	5.90E-06	257.9	2.47E-03	4.09E-03
SI52_E	0.75	597	0	1	9.52E-02	2.46E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.76E-05	6.20E-05	2.31E-07	6.11E-06	268.3	2.55E-03	4.23E-03
SI52_E	0.75	648	0	1	1.03E-01	2.64E-02	1.88E-03	1.26E-03	1.11E-03	2.35E-04	0.00E+00	9.50E-05	6.73E-05	2.51E-07	6.63E-06	290.4	2.77E-03	4.59E-03
SI52_E	0.75	800	0	1	1.27E-01	3.25E-02	2.32E-03	1.55E-03	1.37E-03	2.90E-04	0.00E+00	1.17E-04	8.30E-05	3.09E-07	8.18E-06	358.2	3.42E-03	5.67E-03
SI52_E	0.75	861	0	1	1.37E-01	3.41E-02	2.48E-03	1.67E-03	1.48E-03	3.12E-04	0.00E+00	1.26E-04	8.92E-05	3.33E-07	8.79E-06	383.1	3.67E-03	6.10E-03
SI52_E	0.75	597	0	1	9.46E-02	2.29E-02	1.71E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.72E-05	6.18E-05	2.31E-07	6.09E-06	264.1	2.55E-03	4.23E-03
SI52_E	0.75	395	0	1	6.19E-02	1.32E-02	1.10E-03	7.66E-04	6.79E-04	1.42E-04	0.00E+00	5.73E-05	4.06E-05	1.53E-07	4.00E-06	170.2	1.67E-03	2.80E-03
SI52_E	0.75	334	0	1	5.20E-02	9.96E-03	9.16E-04	6.49E-04	5.74E-04	1.20E-04	0.00E+00	4.83E-05	3.42E-05	1.29E-07	3.37E-06	141.5	1.41E-03	2.37E-03
SI52_E	0.75	283	0	1	4.39E-02	7.57E-03	7.65E-04	5.50E-04	4.87E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.10E-07	2.85E-06	118.1	1.19E-03	2.01E-03
SI52_E	0.75	233	0	1	3.58E-02	5.56E-03	6.19E-04	4.52E-04	4.00E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	9.00E-08	2.33E-06	95.6	9.75E-04	1.65E-03
SI52_E	0.75	172	0	1	2.64E-02	3.66E-03	4.52E-04	3.34E-04	2.96E-04	6.10E-05	0.00E+00	2.46E-05	1.75E-05	6.65E-08	1.72E-06	69.7	7.19E-04	1.22E-03
SI52_W	0.75	121	0	1	1.85E-02	2.28E-03	3.14E-04	2.36E-04	2.09E-04	4.29E-05	0.00E+00	1.73E-05	1.23E-05	4.70E-08	1.21E-06	48.5	5.06E-04	8.61E-04
SI52_W	0.75	81	0	1	1.23E-02	1.36E-03	2.07E-04	1.57E-04	1.39E-04	2.85E-05	0.00E+00	1.15E-05	8.17E-06	3.13E-08	8.05E-07	32.0	3.36E-04	5.74E-04
SI52_W	0.75	71	0	1	1.07E-02	1.06E-03	1.79E-04	1.38E-04	1.22E-04	2.49E-05	0.00E+00	1.01E-05	7.13E-06	2.74E-08	7.02E-07	27.7	2.94E-04	5.02E-04
SI52_W	0.75	51	0	1	7.63E-03	7.56E-04	1.27E-04	9.83E-05	8.70E-05	1.78E-05	0.00E+00	7.18E-06	5.08E-06	1.96E-08	5.01E-07	19.6	2.09E-04	3.59E-04
SI52_W	0.75	71	0	1	1.07E-02	1.06E-03	1.78E-04	1.38E-04	1.22E-04	2.48E-05	0.00E+00	1.00E-05	7.11E-06	2.74E-08	7.01E-07	27.4	2.93E-04	5.02E-04
SI52_W	0.75	172	0	1	2.59E-02	2.57E-03	4.31E-04	3.34E-04	2.96E-04	6.03E-05	0.00E+00	2.44E-05	1.73E-05	6.65E-08	1.70E-06	66.6	7.11E-04	1.22E-03
SI52_W	0.75	516	0	1	7.79E-02	7.71E-03	1.30E-03	1.00E-03	8.88E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	2.00E-07	5.11E-06	201.0	2.14E-03	3.66E-03
SI52_W	0.75	790	0	1	1.20E-01	1.44E-02	2.04E-03	1.53E-03	1.36E-03	2.79E-04	0.00E+00	1.13E-04	7.98E-05	3.05E-07	7.86E-06	315.0	3.29E-03	5.60E-03
SI52_W	0.75	638	0	1	9.83E-02	1.55E-02	1.70E-03	1.24E-03	1.10E-03	2.27E-04	0.00E+00	9.17E-05	6.49E-05	2.47E-07	6.40E-06	263.0	2.67E-03	4.52E-03
SI52_W	0.75	526	0	1	8.18E-02	1.49E-02	1.44E-03	1.02E-03	9.05E-04	1.88E-04	0.00E+00	7.60E-05	5.39E-05	2.04E-07	5.30E-06	221.7	2.22E-03	3.73E-03
SI52_W	0.75	476	0	1	7.44E-02	1.50E-02	1.32E-03	9.24E-04	8.18E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.84E-07	4.81E-06	203.8	2.01E-03	3.37E-03
SI52_W	0.75	537	0	1	8.49E-02	2.01E-02	1.53E-03	1.04E-03	9.22E-04	1.94E-04	0.00E+00	7.83E-05	5.55E-05	2.07E-07	5.47E-06	236.9	2.29E-03	3.80E-03
SI52_W	0.75	567	0	1	9.00E-02	2.21E-02	1.63E-03	1.10E-03	9.75E-04	2.05E-04	0.00E+00	8.29E-05	5.88E-05	2.19E-07	5.79E-06	252.3	2.42E-03	4.02E-03
SI52_W	0.75	577	0	1	9.18E-02	2.31E-02	1.67E-03	1.12E-03	9.92E-04	2.09E-04	0.00E+00	8.45E-05	5.99E-05	2.23E-07	5.90E-06	257.9	2.47E-03	4.09E-03
SI52_W	0.75	597	0	1	9.52E-02	2.46E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.76E-05	6.20E-05	2.31E-07	6.11E-06	268.3	2.55E-03	4.23E-03
SI52_W	0.75	648	0	1	1.03E-01	2.64E-02	1.88E-03	1.26E-03	1.11E-03	2.35E-04	0.00E+00	9.50E-05	6.73E-05	2.51E-07	6.63E-06	290.4	2.77E-03	4.59E-03
SI52_W	0.75	800	0	1	1.27E-01	3.25E-02	2.32E-03	1.55E-03	1.37E-03	2.90E-04	0.00E+00	1.17E-04	8.30E-05	3.09E-07	8.18E-06	358.2	3.42E-03	5.67E-03
SI52_W	0.75	861	0	1	1.37E-01	3.41E-02	2.48E-03	1.67E-03	1.48E-03	3.12E-04	0.00E+00	1.26E-04	8.92E-05	3.33E-07	8.79E-06	383.1	3.67E-03	6.10E-03
SI52_W	0.75	597	0	1	9.46E-02	2.29E-02	1.71E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.72E-05	6.18E-05	2.31E-07	6.09E-06	264.1	2.55E-03	4.23E-03
SI52_W	0.75	395	0	1	6.19E-02	1.32E-02	1.10E-03	7.66E-04	6.79E-04	1.42E-04	0.00E+00	5.73E-05	4.06E-05	1.53E-07	4.00E-06	170.2	1.67E-03	2.80E-03
SI52_W	0.75	334	0	1	5.20E-02	9.96E-03	9.16E-04	6.49E-04	5.74E-04	1.20E-04	0.00E+00	4.83E-05	3.42E-05	1.29E-07	3.37E-06	141.5	1.41E-03	2.37E-03
SI52_W	0.75	283	0	1	4.39E-02	7.57E-03	7.65E-04	5.50E-04	4.87E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.10E-07	2.85E-06	118.1	1.19E-03	2.01E-03
SI52_W	0.75	233	0	1	3.58E-02	5.56E-03	6.19E-04	4.52E-04	4.00E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	9.00E-08	2.33E-06	95.6	9.75E-04	1.65E-03
SI52_W	0.75	172	0	1	2.64E-02	3.66E-03	4.52E-04	3.34E-04	2.96E-04	6.10E-05	0.00E+00	2.46E-05	1.75E-05	6.65E-08	1.72E-06	69.7	7.19E-04	1.22E-03
SI1N_E	0.45	68	0	1	1.04E-02	1.28E-03	1.76E-04	1.32E-04	1.17E-04	2.40E-05	0.00E+00	9.71E-06	6.88E-06	2.63E-08	6.77E-07	27.2	2.83E-04	4.82E-04
SI1N_E	0.45	45	0	1	6.88E-03	7.61E-04	1.16E-04	8.80E-05	7.80E-05	1.60E-05	0.00E+00	6.46E-06	4.57E-06	1.75E-08	4.51E-07	17.9	1.88E-04	3.21E-04
SI1N_E	0.45	40	0	1	6.00E-03	5.93E-04	1.00E-04	7.70E-05	6.82E-05	1.39E-05	0.00E+00	5.63E-06	3.99E-06	1.53E-08	3.93E-07	15.5	1.64E-04	2.81E-04
SI1N_E	0.45	28	0	1	4.27E-03	4.23E-04	7.12E-05	5.50E-05	4.87E-05	9.95E-06	0.00E+00	4.02E-06	2.85E-06	1.10E-08	2.80E-07	11.0	1.17E-04	2.01E-04
SI1N_E	0.45	40	0	1	5.98E-03	5.93E-04	9.95E-05	7.70E-05	6.82E-05	1.39E-05	0.00E+00	5.62E-06	3.98E-06	1.53E-08	3.92E-07	15.4	1.64E-04	2.81E-04
SI1N_E	0.45	96	0	1	1.45E-02	1.44E-03	2.42E-04	1.87E-04	1.66E-04	3.38E-05	0.00E+00	1.37E-05	9.68E-06	3.73E-08	9.53E-07	37.3	3.98E-04	6.83E-04
SI1N_E	0.45	289	0	1	4.36E-02	4.32E-03	7.29E-04	5.61E-04	4.97E-04	1.02E-04	0.00E+00	4.10E-05	2.91E-05	1.12E-07	2.86E-06	112.6	1.20E-03	2.05E-03
SI1N_E	0.45	442	0	1	6.73E-02	8.07E-03	1.14E-03	8.58E-04	7.60E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.71E-07	4.40E-06	176.4	1.84E-03	3.13E-03
SI1N_E	0.45	357	0	1	5.51E-02	8.70E-03	9.54E-04	6.93E-04	6.14E-04	1.27E-04	0.00E+00	5.13E-05	3.64E-05	1.38E-07	3.58E-06	147.3	1.50E-03	2.53E-03
SI1N_E	0.45	295	0	1	4.58E-02	8.33E-03	8.04E-04	5.72E-04	5.07E-04	1.05E-04	0.00E+00	4.26E-05	3.02E-05	1.14E-07	2.97E-06	124.2	1.24E-03	2.09E-03
SI1N_E	0.45	266	0	1	4.17E-02	8.39E-03	7.39E-04	5.17E-04	4.58E-04	9.56E-05	0.00E+00	3.86E-05	2.74E-05	1.03E-07	2.70E-06	114.2	1.13E-03	1.89E-03
SI1N_E	0.45	300	0	1	4.76E-02	1.13E-02	8.59E-04	5.83E-04	5.17E-04	1.09E-04	0.00E+00	4.39E-05	3.11E-05	1.16E-07	3.06E-06	132.7	1.28E-03	2.13E-03
SI1N_E	0.45	318	0	1	5.04E-02	1.24E-02	9.15E-04	6.16E-04	5.46E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.23E-07	3.24E-06	141.3	1.35E-03	2.25E-03
SI1N_E	0.45	323	0	1	5.14E-02	1.29E-02	9.36E-04	6.27E-04	5.56E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.25E-07	3.30E-06	144.5	1.38E-03	2.29E-03
SI1N_E	0.45	335	0	1	5.33E-02	1.38E-02	9.73E-04	6.49E-04	5.75E-04	1.21E-04	0.00E+00	4.90E-05	3.47E-05	1.29E-07	3.42E-06	150.2	1.43E-03	2.37E-03
SI1N_E	0.45	363	0	1	5.78E-02	1.48E-02	1.05E-03	7.04E-04	6.24E-04	1.32E-04	0.00E+00	5.32E-05	3.77E-05	1.40E-07	3.71E-06	162.6	1.55E-03	2.57E-03
SI1N_E	0.45	448	0	1	7.13E-02	1.82E-02	1.30E-03	8.69E-04	7.70E-04	1.62E-04	0.00E+00	6.56E-05	4.65E-05	1.73E-07	4.58E-06	200.6	1.91E-03	3.17E-03
SI1N_E	0.45	482	0	1	7.65E-02	1.91E-02	1.39E-03	9.36E-04	8.28E-04	1.74E-04	0.00E+00	7.05E-05	5.00E-05	1.86E-07	4.92E-06	214.5	2.06E-03	3.42E-03
SI1N_E	0.45	335	0	1	5.30E-02	1.28E-02	9.58E-04	6.49E-04	5.75E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.29E-07	3.41E-06	147.9	1.43E-03	2.37E-03
SI1N_E	0.45	221	0	1	3.47E-02	7.38E-03	6.17E-04	4.29E-04	3.80E-04	7.94E-05	0.00E+00	3.21E-05	2.27E-05	8.55E-08	2.24E-06	95.3	9.37E-04	1.57E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1N_E	0.45	187	0	1	2.91E-02	5.58E-03	5.13E-04	3.63E-04	3.22E-04	6.69E-05	0.00E+00	2.71E-05	1.92E-05	7.23E-08	1.89E-06	79.2	7.89E-04	1.33E-03
SI1N_E	0.45	159	0	1	2.46E-02	4.24E-03	4.28E-04	3.08E-04	2.73E-04	5.66E-05	0.00E+00	2.29E-05	1.62E-05	6.14E-08	1.60E-06	66.1	6.67E-04	1.12E-03
SI1N_E	0.45	130	0	1	2.01E-02	3.11E-03	3.47E-04	2.53E-04	2.24E-04	4.63E-05	0.00E+00	1.87E-05	1.33E-05	5.04E-08	1.31E-06	53.5	5.46E-04	9.24E-04
SI1N_E	0.45	96	0	1	1.48E-02	2.05E-03	2.53E-04	1.87E-04	1.66E-04	3.41E-05	0.00E+00	1.38E-05	9.77E-06	3.73E-08	9.63E-07	39.0	4.02E-04	6.83E-04
SI1N_W	0.37	59	0	1	8.97E-03	1.10E-03	1.52E-04	1.14E-04	1.01E-04	2.08E-05	0.00E+00	8.40E-06	5.95E-06	2.27E-08	5.86E-07	23.5	2.45E-04	4.17E-04
SI1N_W	0.37	39	0	1	5.95E-03	6.58E-04	1.00E-04	7.62E-05	6.74E-05	1.38E-05	0.00E+00	5.58E-06	3.96E-06	1.52E-08	3.90E-07	15.5	1.63E-04	2.78E-04
SI1N_W	0.37	34	0	1	5.19E-03	5.13E-04	8.68E-05	6.66E-05	5.90E-05	1.21E-05	0.00E+00	4.87E-06	3.45E-06	1.33E-08	3.40E-07	13.4	1.42E-04	2.43E-04
SI1N_W	0.37	25	0	1	3.70E-03	3.66E-04	6.16E-05	4.76E-05	4.22E-05	8.60E-06	0.00E+00	3.48E-06	2.46E-06	9.48E-09	2.43E-07	9.5	1.01E-04	1.74E-04
SI1N_W	0.37	34	0	1	5.17E-03	5.13E-04	8.60E-05	6.66E-05	5.90E-05	1.20E-05	0.00E+00	4.86E-06	3.45E-06	1.33E-08	3.39E-07	13.3	1.42E-04	2.43E-04
SI1N_W	0.37	83	0	1	1.26E-02	1.25E-03	2.09E-04	1.62E-04	1.43E-04	2.92E-05	0.00E+00	1.18E-05	8.37E-06	3.22E-08	8.24E-07	32.3	3.45E-04	5.91E-04
SI1N_W	0.37	250	0	1	3.77E-02	3.74E-03	6.31E-04	4.85E-04	4.30E-04	8.78E-05	0.00E+00	3.55E-05	2.51E-05	9.67E-08	2.48E-06	97.4	1.04E-03	1.77E-03
SI1N_W	0.37	382	0	1	5.82E-02	6.98E-03	9.88E-04	7.42E-04	6.58E-04	1.35E-04	0.00E+00	5.46E-05	3.87E-05	1.48E-07	3.81E-06	152.6	1.59E-03	2.71E-03
SI1N_W	0.37	309	0	1	4.76E-02	7.52E-03	8.25E-04	6.00E-04	5.31E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	127.4	1.30E-03	2.19E-03
SI1N_W	0.37	255	0	1	3.96E-02	7.21E-03	6.96E-04	4.95E-04	4.38E-04	9.11E-05	0.00E+00	3.68E-05	2.61E-05	9.86E-08	2.57E-06	107.4	1.07E-03	1.81E-03
SI1N_W	0.37	230	0	1	3.61E-02	7.26E-03	6.39E-04	4.47E-04	3.96E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	8.91E-08	2.33E-06	98.7	9.75E-04	1.63E-03
SI1N_W	0.37	260	0	1	4.11E-02	9.75E-03	7.43E-04	5.05E-04	4.47E-04	9.39E-05	0.00E+00	3.79E-05	2.69E-05	1.00E-07	2.65E-06	114.7	1.11E-03	1.84E-03
SI1N_W	0.37	275	0	1	4.36E-02	1.07E-02	7.91E-04	5.33E-04	4.72E-04	9.94E-05	0.00E+00	4.02E-05	2.85E-05	1.06E-07	2.80E-06	122.2	1.17E-03	1.95E-03
SI1N_W	0.37	280	0	1	4.45E-02	1.12E-02	8.09E-04	5.43E-04	4.81E-04	1.01E-04	0.00E+00	4.09E-05	2.90E-05	1.08E-07	2.86E-06	124.9	1.19E-03	1.98E-03
SI1N_W	0.37	289	0	1	4.61E-02	1.19E-02	8.42E-04	5.62E-04	4.97E-04	1.05E-04	0.00E+00	4.24E-05	3.01E-05	1.12E-07	2.96E-06	129.9	1.24E-03	2.05E-03
SI1N_W	0.37	314	0	1	5.00E-02	1.28E-02	9.11E-04	6.09E-04	5.40E-04	1.14E-04	0.00E+00	4.60E-05	3.26E-05	1.21E-07	3.21E-06	140.7	1.34E-03	2.22E-03
SI1N_W	0.37	387	0	1	6.17E-02	1.58E-02	1.12E-03	7.52E-04	6.66E-04	1.40E-04	0.00E+00	5.68E-05	4.02E-05	1.50E-07	3.96E-06	173.5	1.66E-03	2.75E-03
SI1N_W	0.37	417	0	1	6.62E-02	1.65E-02	1.20E-03	8.09E-04	7.17E-04	1.51E-04	0.00E+00	6.10E-05	4.32E-05	1.61E-07	4.26E-06	185.5	1.78E-03	2.95E-03
SI1N_W	0.37	289	0	1	4.58E-02	1.11E-02	8.28E-04	5.62E-04	4.97E-04	1.05E-04	0.00E+00	4.23E-05	2.99E-05	1.12E-07	2.95E-06	127.9	1.23E-03	2.05E-03
SI1N_W	0.37	191	0	1	3.00E-02	6.38E-03	5.34E-04	3.71E-04	3.29E-04	6.87E-05	0.00E+00	2.78E-05	1.97E-05	7.39E-08	1.94E-06	82.4	8.10E-04	1.36E-03
SI1N_W	0.37	162	0	1	2.52E-02	4.83E-03	4.44E-04	3.14E-04	2.78E-04	5.79E-05	0.00E+00	2.34E-05	1.66E-05	6.26E-08	1.63E-06	68.5	6.83E-04	1.15E-03
SI1N_W	0.37	137	0	1	2.13E-02	3.66E-03	3.70E-04	2.67E-04	2.36E-04	4.89E-05	0.00E+00	1.98E-05	1.40E-05	5.31E-08	1.38E-06	57.2	5.77E-04	9.73E-04
SI1N_W	0.37	113	0	1	1.74E-02	2.69E-03	3.00E-04	2.19E-04	1.94E-04	4.01E-05	0.00E+00	1.62E-05	1.15E-05	4.36E-08	1.13E-06	46.3	4.72E-04	7.99E-04
SI1N_W	0.37	83	0	1	1.28E-02	1.77E-03	2.19E-04	1.62E-04	1.43E-04	2.95E-05	0.00E+00	1.19E-05	8.45E-06	3.22E-08	8.33E-07	33.8	3.48E-04	5.91E-04
SI2N_E	0.40	50	0	1	7.58E-03	9.32E-04	1.29E-04	9.66E-05	8.55E-05	1.76E-05	0.00E+00	7.10E-06	5.03E-06	1.92E-08	4.95E-07	19.9	2.07E-04	3.52E-04
SI2N_E	0.40	33	0	1	5.03E-03	5.56E-04	8.49E-05	6.44E-05	5.70E-05	1.17E-05	0.00E+00	4.72E-06	3.34E-06	1.28E-08	3.29E-07	13.1	1.38E-04	2.35E-04
SI2N_E	0.40	29	0	1	4.38E-03	4.33E-04	7.34E-05	5.63E-05	4.99E-05	1.02E-05	0.00E+00	4.12E-06	2.92E-06	1.12E-08	2.87E-07	11.3	1.20E-04	2.06E-04
SI2N_E	0.40	21	0	1	3.12E-03	3.10E-04	5.21E-05	4.02E-05	3.56E-05	7.27E-06	0.00E+00	2.94E-06	2.08E-06	8.01E-09	2.05E-07	8.0	8.57E-05	1.47E-04
SI2N_E	0.40	29	0	1	4.37E-03	4.33E-04	7.27E-05	5.63E-05	4.99E-05	1.02E-05	0.00E+00	4.11E-06	2.91E-06	1.12E-08	2.87E-07	11.2	1.20E-04	2.06E-04
SI2N_E	0.40	70	0	1	1.06E-02	1.05E-03	1.77E-04	1.37E-04	1.21E-04	2.47E-05	0.00E+00	9.98E-06	7.07E-06	2.72E-08	6.97E-07	27.3	2.91E-04	4.99E-04
SI2N_E	0.40	211	0	1	3.19E-02	3.16E-03	5.33E-04	4.10E-04	3.63E-04	7.42E-05	0.00E+00	3.00E-05	2.13E-05	8.17E-08	2.09E-06	82.3	8.75E-04	1.50E-03
SI2N_E	0.40	323	0	1	4.92E-02	5.90E-03	8.35E-04	6.28E-04	5.56E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.25E-07	3.22E-06	129.0	1.35E-03	2.29E-03
SI2N_E	0.40	261	0	1	4.03E-02	6.36E-03	6.97E-04	5.07E-04	4.49E-04	9.29E-05	0.00E+00	3.75E-05	2.66E-05	1.01E-07	2.62E-06	107.7	1.09E-03	1.85E-03
SI2N_E	0.40	216	0	1	3.35E-02	6.09E-03	5.88E-04	4.18E-04	3.71E-04	7.70E-05	0.00E+00	3.11E-05	2.21E-05	8.33E-08	2.17E-06	90.8	9.08E-04	1.53E-03
SI2N_E	0.40	195	0	1	3.05E-02	6.14E-03	5.40E-04	3.78E-04	3.35E-04	6.99E-05	0.00E+00	2.82E-05	2.00E-05	7.53E-08	1.97E-06	83.5	8.24E-04	1.38E-03
SI2N_E	0.40	220	0	1	3.48E-02	8.24E-03	6.28E-04	4.26E-04	3.78E-04	7.94E-05	0.00E+00	3.21E-05	2.27E-05	8.49E-08	2.24E-06	97.0	9.36E-04	1.56E-03
SI2N_E	0.40	232	0	1	3.69E-02	9.06E-03	6.69E-04	4.51E-04	3.99E-04	8.40E-05	0.00E+00	3.40E-05	2.41E-05	8.98E-08	2.37E-06	103.3	9.91E-04	1.64E-03
SI2N_E	0.40	236	0	1	3.76E-02	9.46E-03	6.84E-04	4.59E-04	4.06E-04	8.56E-05	0.00E+00	3.46E-05	2.45E-05	9.14E-08	2.41E-06	105.6	1.01E-03	1.67E-03
SI2N_E	0.40	245	0	1	3.90E-02	1.01E-02	7.11E-04	4.75E-04	4.20E-04	8.87E-05	0.00E+00	3.59E-05	2.54E-05	9.46E-08	2.50E-06	109.8	1.05E-03	1.73E-03
SI2N_E	0.40	265	0	1	4.22E-02	1.08E-02	7.70E-04	5.15E-04	4.56E-04	9.62E-05	0.00E+00	3.89E-05	2.75E-05	1.03E-07	2.71E-06	118.9	1.13E-03	1.88E-03
SI2N_E	0.40	327	0	1	5.21E-02	1.33E-02	9.50E-04	6.36E-04	5.63E-04	1.19E-04	0.00E+00	4.80E-05	3.40E-05	1.27E-07	3.35E-06	146.7	1.40E-03	2.32E-03
SI2N_E	0.40	352	0	1	5.60E-02	1.39E-02	1.02E-03	6.84E-04	6.06E-04	1.28E-04	0.00E+00	5.15E-05	3.65E-05	1.36E-07	3.60E-06	156.8	1.50E-03	2.50E-03
SI2N_E	0.40	245	0	1	3.87E-02	9.37E-03	7.00E-04	4.75E-04	4.20E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.46E-08	2.49E-06	108.1	1.04E-03	1.73E-03
SI2N_E	0.40	162	0	1	2.54E-02	5.39E-03	4.51E-04	3.14E-04	2.78E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.25E-08	1.64E-06	69.7	6.85E-04	1.15E-03
SI2N_E	0.40	137	0	1	2.13E-02	4.08E-03	3.75E-04	2.66E-04	2.35E-04	4.89E-05	0.00E+00	1.98E-05	1.40E-05	5.29E-08	1.38E-06	57.9	5.77E-04	9.69E-04
SI2N_E	0.40	116	0	1	1.80E-02	3.10E-03	3.13E-04	2.25E-04	2.00E-04	4.14E-05	0.00E+00	1.67E-05	1.18E-05	4.49E-08	1.17E-06	48.4	4.88E-04	8.22E-04
SI2N_E	0.40	95	0	1	1.47E-02	2.28E-03	2.53E-04	1.85E-04	1.64E-04	3.39E-05	0.00E+00	1.37E-05	9.70E-06	3.69E-08	9.55E-07	39.1	3.99E-04	6.76E-04
SI2N_E	0.40	70	0	1	1.08E-02	1.50E-03	1.85E-04	1.37E-04	1.21E-04	2.50E-05	0.00E+00	1.01E-05	7.15E-06	2.72E-08	7.04E-07	28.5	2.94E-04	4.99E-04
SI2N_W	0.30	38	0	1	5.83E-03	7.18E-04	9.91E-05	7.43E-05	6.58E-05	1.35E-05	0.00E+00	5.46E-06	3.87E-06	1.48E-08	3.81E-07	15.3	1.59E-04	2.71E-04
SI2N_W	0.30	26	0	1	3.87E-03	4.28E-04	6.53E-05	4.95E-05	4.39E-05	8.99E-06	0.00E+00	3.63E-06	2.57E-06	9.87E-09	2.54E-07	10.1	1.06E-04	1.81E-04
SI2N_W	0.30	22	0	1	3.37E-03	3.34E-04	5.65E-05	4.34E-05	3.84E-05	7.85E-06	0.00E+00	3.17E-06	2.25E-06	8.63E-09	2.21E-07	8.7	9.25E-05	1.58E-04
SI2N_W	0.30	16	0	1	2.40E-03	2.38E-04	4.01E-05	3.10E-05	2.74E-05	5.60E-06	0.00E+00	2.26E-06	1.60E-06	6.17E-09	1.58E-07	6.2	6.60E-05	1.13E-04
SI2N_W	0.30	22	0	1	3.36E-03	3.34E-04	5.60E-05	4.34E-05	3.84E-05	7.83E-06	0.00E+00	3.16E-06	2.24E-06	8.63E-09	2.21E-07	8.6	9.23E-05	1.58E-04
SI2N_W	0.30	54	0	1	8.17E-03	8.10E-04	1.36E-04	1.05E-04	9.32E-05	1.90E-05	0.00E+00	7.69E-06	5.45E-06	2.10E-08	5.36E-07	21.0	2.24E-04	3.84E-04
SI2N_W	0.30	163	0	1	2.46E-02	2.43E-03	4.10E-04	3.16E-04	2.80E-04	5.71E-05	0.00E+00	2.31E-05	1.64E-05	6.29E-08	1.61E-06	63.4	6.73E-04	1.15E-03
SI2N_W	0.30	249	0	1	3.79E-02	4.54E-03	6.43E-04	4.83E-04	4.28E-04	8.78E-05	0.00E+00	3.55E-05	2.52E-05	9.62E-08	2.48E-06	99.3	1.04E-03	1.76E-03
SI2N_W	0.30	201	0	1	3.10E-02	4.89E-03	5.37E-04	3.90E-04	3.46E-04	7.15E-05	0.00E+00	2.89E-05	2.05E-05	7.77E-08	2.02E-06	82.9	8.43E-04	1.42E-03
SI2N_W	0.30	166	0	1	2.58E-02	4.69E-03	4.53E-04	3.22E-04	2.85E-04	5.93E-05	0.00E+00	2.40E-05	1.70E-05	6.41E-08	1.67E-06	69.9	6.99E-04	1.18E-03
SI2N_W	0.30	150	0	1	2.35E-02	4.72E-03	4.16E-04	2.91E-04	2.58E-04	5.38E-05	0.00E+00	2.17E-05	1.54E-05	5.80E-08	1.52E-06	64.2	6.34E-04	1.06E-03
SI2N_W	0.30	169	0	1	2.68E-02	6.34E-03	4.84E-04	3.28E-04	2.91E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.54E-08	1.72E-06	74.7	7.20E-04	1.20E-03
SI2N_W	0.30	179	0	1	2.84E-02	6.97E-03	5.15E-04	3.47E-04	3.07E-04	6.47E-05	0.00E+00	2.61E-05	1.85E-05	6.91E-08	1.82E-06	79.5	7.63E-04	1.27E-03
SI2N_W	0.30	182	0	1	2.89E-02	7.28E-03	5.26E-04	3.53E-04	3.13E-04	6.59E-05	0.00E+00	2.66E-05	1.89E-05	7.03E-08	1.86E-06	81.3	7.77E-04	1.29E-03
SI2N_W	0.30	188	0	1	3.00E-02	7.75E-03	5.48E-04	3.65E-04	3.24E-04	6.83E-05	0.00E+00	2.76E-05	1.96E-05	7.28E-08	1.93E-06	84.5	8.05E-04	1.33E-03
SI2N_W	0.30	204	0	1	3.25E-02	8.33E-03	5.93E-04	3.96E-04	3.51E-04	7.41E-05	0.00E+00	2.99E-05	2.12E-05	7.90E-08	2.09E-06	91.5	8.73E-04	1.45E-03

Table F-2: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2N_W	0.30	252	0	1	4.01E-02	1.03E-02	7.31E-04	4.89E-04	4.33E-04	9.14E-05	0.00E+00	3.69E-05	2.62E-05	9.75E-08	2.58E-06	112.9	1.08E-03	1.79E-03
SI2N_W	0.30	271	0	1	4.31E-02	1.07E-02	7.82E-04	5.26E-04	4.66E-04	9.82E-05	0.00E+00	3.97E-05	2.81E-05	1.05E-07	2.77E-06	120.7	1.16E-03	1.92E-03
SI2N_W	0.30	188	0	1	2.98E-02	7.21E-03	5.39E-04	3.65E-04	3.24E-04	6.80E-05	0.00E+00	2.75E-05	1.95E-05	7.28E-08	1.92E-06	83.2	8.02E-04	1.33E-03
SI2N_W	0.30	124	0	1	1.95E-02	4.15E-03	3.47E-04	2.42E-04	2.14E-04	4.47E-05	0.00E+00	1.81E-05	1.28E-05	4.81E-08	1.26E-06	53.6	5.27E-04	8.82E-04
SI2N_W	0.30	105	0	1	1.64E-02	3.14E-03	2.89E-04	2.04E-04	1.81E-04	3.77E-05	0.00E+00	1.52E-05	1.08E-05	4.07E-08	1.06E-06	44.6	4.44E-04	7.46E-04
SI2N_W	0.30	89	0	1	1.38E-02	2.38E-03	2.41E-04	1.73E-04	1.54E-04	3.18E-05	0.00E+00	1.29E-05	9.12E-06	3.45E-08	8.98E-07	37.2	3.75E-04	6.33E-04
SI2N_W	0.30	73	0	1	1.13E-02	1.75E-03	1.95E-04	1.42E-04	1.26E-04	2.61E-05	0.00E+00	1.05E-05	7.46E-06	2.84E-08	7.35E-07	30.1	3.07E-04	5.20E-04
SI2N_W	0.30	54	0	1	8.31E-03	1.15E-03	1.42E-04	1.05E-04	9.32E-05	1.92E-05	0.00E+00	7.76E-06	5.50E-06	2.10E-08	5.42E-07	22.0	2.26E-04	3.84E-04
SI3N_E	0.75	93	0	1	1.42E-02	1.75E-03	2.41E-04	1.81E-04	1.60E-04	3.29E-05	0.00E+00	1.33E-05	9.43E-06	3.61E-08	9.29E-07	37.3	3.88E-04	6.61E-04
SI3N_E	0.75	62	0	1	9.44E-03	1.04E-03	1.59E-04	1.21E-04	1.07E-04	2.19E-05	0.00E+00	8.85E-06	6.27E-06	2.40E-08	6.18E-07	24.6	2.58E-04	4.41E-04
SI3N_E	0.75	54	0	1	8.22E-03	8.13E-04	1.38E-04	1.06E-04	9.35E-05	1.91E-05	0.00E+00	7.72E-06	5.47E-06	2.10E-08	5.39E-07	21.2	2.25E-04	3.86E-04
SI3N_E	0.75	39	0	1	5.86E-03	5.80E-04	9.76E-05	7.54E-05	6.68E-05	1.36E-05	0.00E+00	5.51E-06	3.90E-06	1.50E-08	3.84E-07	15.1	1.61E-04	2.75E-04
SI3N_E	0.75	54	0	1	8.19E-03	8.13E-04	1.36E-04	1.06E-04	9.35E-05	1.91E-05	0.00E+00	7.71E-06	5.46E-06	2.10E-08	5.38E-07	21.1	2.25E-04	3.86E-04
SI3N_E	0.75	132	0	1	1.99E-02	1.97E-03	3.31E-04	2.56E-04	2.27E-04	4.63E-05	0.00E+00	1.87E-05	1.33E-05	5.11E-08	1.31E-06	51.1	5.46E-04	9.36E-04
SI3N_E	0.75	396	0	1	5.98E-02	5.92E-03	9.99E-04	7.69E-04	6.81E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.53E-07	3.92E-06	154.3	1.64E-03	2.81E-03
SI3N_E	0.75	606	0	1	9.23E-02	1.11E-02	1.57E-03	1.18E-03	1.04E-03	2.14E-04	0.00E+00	8.65E-05	6.13E-05	2.34E-07	6.03E-06	241.8	2.52E-03	4.30E-03
SI3N_E	0.75	490	0	1	7.55E-02	1.19E-02	1.31E-03	9.51E-04	8.42E-04	1.74E-04	0.00E+00	7.04E-05	4.99E-05	1.89E-07	4.91E-06	201.9	2.05E-03	3.47E-03
SI3N_E	0.75	404	0	1	6.28E-02	1.14E-02	1.10E-03	7.85E-04	6.95E-04	1.44E-04	0.00E+00	5.84E-05	4.13E-05	1.56E-07	4.07E-06	170.2	1.70E-03	2.86E-03
SI3N_E	0.75	365	0	1	5.71E-02	1.15E-02	1.01E-03	7.09E-04	6.28E-04	1.31E-04	0.00E+00	5.30E-05	3.75E-05	1.41E-07	3.70E-06	156.5	1.54E-03	2.59E-03
SI3N_E	0.75	412	0	1	6.52E-02	1.55E-02	1.18E-03	8.00E-04	7.08E-04	1.49E-04	0.00E+00	6.01E-05	4.26E-05	1.59E-07	4.20E-06	181.9	1.75E-03	2.92E-03
SI3N_E	0.75	435	0	1	6.91E-02	1.70E-02	1.25E-03	8.45E-04	7.48E-04	1.58E-04	0.00E+00	6.37E-05	4.51E-05	1.68E-07	4.44E-06	193.7	1.86E-03	3.08E-03
SI3N_E	0.75	443	0	1	7.05E-02	1.77E-02	1.28E-03	8.60E-04	7.62E-04	1.61E-04	0.00E+00	6.49E-05	4.60E-05	1.71E-07	4.53E-06	198.0	1.89E-03	3.14E-03
SI3N_E	0.75	459	0	1	7.31E-02	1.89E-02	1.33E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.72E-05	4.76E-05	1.77E-07	4.69E-06	205.9	1.96E-03	3.25E-03
SI3N_E	0.75	497	0	1	7.92E-02	2.03E-02	1.44E-03	9.66E-04	8.55E-04	1.80E-04	0.00E+00	7.29E-05	5.16E-05	1.92E-07	5.09E-06	223.0	2.13E-03	3.52E-03
SI3N_E	0.75	614	0	1	9.77E-02	2.50E-02	1.78E-03	1.19E-03	1.06E-03	2.23E-04	0.00E+00	9.00E-05	6.37E-05	2.37E-07	6.28E-06	275.0	2.62E-03	4.35E-03
SI3N_E	0.75	661	0	1	1.05E-01	2.62E-02	1.90E-03	1.28E-03	1.14E-03	2.39E-04	0.00E+00	9.67E-05	6.85E-05	2.55E-07	6.74E-06	294.1	2.82E-03	4.68E-03
SI3N_E	0.75	459	0	1	7.26E-02	1.76E-02	1.31E-03	8.90E-04	7.88E-04	1.66E-04	0.00E+00	6.70E-05	4.75E-05	1.77E-07	4.67E-06	202.7	1.95E-03	3.25E-03
SI3N_E	0.75	303	0	1	4.75E-02	1.01E-02	8.46E-04	5.88E-04	5.21E-04	1.09E-04	0.00E+00	4.40E-05	3.12E-05	1.17E-07	3.07E-06	130.7	1.28E-03	2.15E-03
SI3N_E	0.75	256	0	1	4.00E-02	7.65E-03	7.03E-04	4.98E-04	4.41E-04	9.18E-05	0.00E+00	3.71E-05	2.63E-05	9.92E-08	2.59E-06	108.6	1.08E-03	1.82E-03
SI3N_E	0.75	218	0	1	3.37E-02	5.81E-03	5.87E-04	4.22E-04	3.74E-04	7.76E-05	0.00E+00	3.13E-05	2.22E-05	8.41E-08	2.19E-06	90.7	9.14E-04	1.54E-03
SI3N_E	0.75	179	0	1	2.75E-02	4.27E-03	4.75E-04	3.47E-04	3.07E-04	6.35E-05	0.00E+00	2.57E-05	1.82E-05	6.91E-08	1.79E-06	73.4	7.49E-04	1.27E-03
SI3N_E	0.75	132	0	1	2.02E-02	2.81E-03	3.47E-04	2.56E-04	2.27E-04	4.68E-05	0.00E+00	1.89E-05	1.34E-05	5.11E-08	1.32E-06	53.5	5.52E-04	9.36E-04
SI3N_W	0.75	96	0	1	1.46E-02	1.79E-03	2.48E-04	1.86E-04	1.65E-04	3.38E-05	0.00E+00	1.37E-05	9.68E-06	3.70E-08	9.53E-07	38.2	3.98E-04	6.78E-04
SI3N_W	0.75	64	0	1	9.69E-03	1.07E-03	1.63E-04	1.24E-04	1.10E-04	2.25E-05	0.00E+00	9.08E-06	6.44E-06	2.47E-08	6.34E-07	25.2	2.65E-04	4.52E-04
SI3N_W	0.75	56	0	1	8.44E-03	8.34E-04	1.41E-04	1.08E-04	9.60E-05	1.96E-05	0.00E+00	7.93E-06	5.62E-06	2.16E-08	5.53E-07	21.8	2.31E-04	3.96E-04
SI3N_W	0.75	40	0	1	6.01E-03	5.96E-04	1.00E-04	7.74E-05	6.86E-05	1.40E-05	0.00E+00	5.65E-06	4.01E-06	1.54E-08	3.95E-07	15.5	1.65E-04	2.83E-04
SI3N_W	0.75	56	0	1	8.41E-03	8.34E-04	1.40E-04	1.08E-04	9.60E-05	1.96E-05	0.00E+00	7.91E-06	5.61E-06	2.16E-08	5.52E-07	21.6	2.31E-04	3.96E-04
SI3N_W	0.75	136	0	1	2.04E-02	2.03E-03	3.40E-04	2.63E-04	2.33E-04	4.75E-05	0.00E+00	1.92E-05	1.36E-05	5.24E-08	1.34E-06	52.5	5.60E-04	9.61E-04
SI3N_W	0.75	407	0	1	6.14E-02	6.08E-03	1.03E-03	7.90E-04	6.99E-04	1.43E-04	0.00E+00	5.77E-05	4.09E-05	1.57E-07	4.03E-06	158.4	1.68E-03	2.88E-03
SI3N_W	0.75	622	0	1	9.47E-02	1.14E-02	1.61E-03	1.21E-03	1.07E-03	2.20E-04	0.00E+00	8.87E-05	6.29E-05	2.41E-07	6.19E-06	248.2	2.59E-03	4.41E-03
SI3N_W	0.75	503	0	1	7.75E-02	1.22E-02	1.34E-03	9.75E-04	8.64E-04	1.79E-04	0.00E+00	7.22E-05	5.12E-05	1.94E-07	5.04E-06	207.2	2.11E-03	3.56E-03
SI3N_W	0.75	415	0	1	6.45E-02	1.17E-02	1.13E-03	8.05E-04	7.13E-04	1.48E-04	0.00E+00	5.99E-05	4.24E-05	1.60E-07	4.18E-06	174.7	1.75E-03	2.94E-03
SI3N_W	0.75	375	0	1	5.87E-02	1.18E-02	1.04E-03	7.28E-04	6.44E-04	1.34E-04	0.00E+00	5.43E-05	3.85E-05	1.45E-07	3.79E-06	160.6	1.59E-03	2.66E-03
SI3N_W	0.75	423	0	1	6.69E-02	1.59E-02	1.21E-03	8.21E-04	7.27E-04	1.53E-04	0.00E+00	6.17E-05	4.37E-05	1.63E-07	4.31E-06	186.6	1.80E-03	3.00E-03
SI3N_W	0.75	447	0	1	7.09E-02	1.74E-02	1.29E-03	8.67E-04	7.68E-04	1.62E-04	0.00E+00	6.53E-05	4.63E-05	1.73E-07	4.56E-06	198.8	1.91E-03	3.17E-03
SI3N_W	0.75	455	0	1	7.23E-02	1.82E-02	1.32E-03	8.83E-04	7.82E-04	1.65E-04	0.00E+00	6.66E-05	4.72E-05	1.76E-07	4.65E-06	203.2	1.94E-03	3.22E-03
SI3N_W	0.75	471	0	1	7.50E-02	1.94E-02	1.37E-03	9.14E-04	8.09E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.82E-07	4.81E-06	211.4	2.01E-03	3.33E-03
SI3N_W	0.75	510	0	1	8.13E-02	2.08E-02	1.48E-03	9.91E-04	8.78E-04	1.85E-04	0.00E+00	7.48E-05	5.30E-05	1.97E-07	5.22E-06	228.8	2.18E-03	3.62E-03
SI3N_W	0.75	630	0	1	1.00E-01	2.56E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	282.2	2.69E-03	4.47E-03
SI3N_W	0.75	678	0	1	1.08E-01	2.68E-02	1.95E-03	1.32E-03	1.17E-03	2.45E-04	0.00E+00	9.92E-05	7.03E-05	2.62E-07	6.92E-06	301.8	2.89E-03	4.80E-03
SI3N_W	0.75	471	0	1	7.45E-02	1.80E-02	1.35E-03	9.14E-04	8.09E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.82E-07	4.80E-06	208.0	2.01E-03	3.33E-03
SI3N_W	0.75	311	0	1	4.88E-02	1.04E-02	8.68E-04	6.04E-04	5.35E-04	1.12E-04	0.00E+00	4.52E-05	3.20E-05	1.20E-07	3.15E-06	134.1	1.32E-03	2.20E-03
SI3N_W	0.75	263	0	1	4.10E-02	7.85E-03	7.22E-04	5.11E-04	4.53E-04	9.42E-05	0.00E+00	3.81E-05	2.70E-05	1.02E-07	2.66E-06	111.5	1.11E-03	1.87E-03
SI3N_W	0.75	223	0	1	3.46E-02	5.96E-03	6.03E-04	4.34E-04	3.84E-04	7.96E-05	0.00E+00	3.22E-05	2.28E-05	8.63E-08	2.24E-06	93.0	9.38E-04	1.58E-03
SI3N_W	0.75	183	0	1	2.82E-02	4.38E-03	4.88E-04	3.56E-04	3.15E-04	6.52E-05	0.00E+00	2.63E-05	1.87E-05	7.09E-08	1.84E-06	75.3	7.68E-04	1.30E-03
SI3N_W	0.75	136	0	1	2.08E-02	2.89E-03	3.56E-04	2.63E-04	2.33E-04	4.80E-05	0.00E+00	1.94E-05	1.38E-05	5.24E-08	1.35E-06	54.9	5.66E-04	9.61E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	2.49E-03	1.34E-03	4.32E-06	1.77E-04	2.92E-05	1.25E-06	0.00E+00	3.24E-06	2.99E-06	1.16E-09	9.04E-08	1.1	3.78E-04	4.41E-06
S1	60	8	2	5	1.66E-03	8.96E-04	2.88E-06	1.18E-04	1.95E-05	8.34E-07	0.00E+00	2.16E-06	2.00E-06	7.76E-10	6.03E-08	0.7	2.52E-04	2.94E-06
S1	60	8	3	5	1.45E-03	7.84E-04	2.52E-06	1.03E-04	1.70E-05	7.30E-07	0.00E+00	1.89E-06	1.75E-06	6.79E-10	5.28E-08	0.6	2.20E-04	2.57E-06
S1	60	8	4	5	1.04E-03	5.60E-04	1.80E-06	7.37E-05	1.22E-05	5.21E-07	0.00E+00	1.35E-06	1.25E-06	4.85E-10	3.77E-08	0.4	1.57E-04	1.84E-06
S1	60	8	5	5	1.45E-03	7.84E-04	2.52E-06	1.03E-04	1.70E-05	7.30E-07	0.00E+00	1.89E-06	1.75E-06	6.79E-10	5.28E-08	0.6	2.20E-04	2.57E-06
S1	60	8	6	5	3.53E-03	1.90E-03	6.11E-06	2.51E-04	4.14E-05	1.77E-06	0.00E+00	4.58E-06	4.24E-06	1.65E-09	1.28E-07	1.5	5.35E-04	6.24E-06
S1	60	8	7	5	1.06E-02	5.71E-03	1.83E-05	7.52E-04	1.24E-04	5.32E-06	0.00E+00	1.38E-05	1.27E-05	4.95E-09	3.84E-07	4.5	1.61E-03	1.87E-05
S1	60	8	8	5	1.62E-02	8.74E-03	2.80E-05	1.15E-03	1.90E-04	8.14E-06	0.00E+00	2.10E-05	1.95E-05	7.56E-09	5.88E-07	6.9	2.46E-03	2.86E-05
S1	60	8	9	5	1.31E-02	7.06E-03	2.27E-05	9.29E-04	1.53E-04	6.57E-06	0.00E+00	1.70E-05	1.57E-05	6.11E-09	4.75E-07	5.6	1.98E-03	2.31E-05
S1	60	8	10	5	1.08E-02	5.83E-03	1.87E-05	7.66E-04	1.27E-04	5.43E-06	0.00E+00	1.40E-05	1.30E-05	5.04E-09	3.92E-07	4.6	1.64E-03	1.91E-05
S1	60	8	11	5	9.75E-03	5.27E-03	1.69E-05	6.93E-04	1.14E-04	4.91E-06	0.00E+00	1.27E-05	1.17E-05	4.56E-09	3.54E-07	4.2	1.48E-03	1.73E-05
S1	60	8	12	5	1.10E-02	5.94E-03	1.91E-05	7.81E-04	1.29E-04	5.54E-06	0.00E+00	1.43E-05	1.32E-05	5.14E-09	3.99E-07	4.7	1.67E-03	1.95E-05
S1	60	8	13	5	1.16E-02	6.27E-03	2.01E-05	8.25E-04	1.36E-04	5.86E-06	0.00E+00	1.51E-05	1.40E-05	5.43E-09	4.22E-07	5.0	1.76E-03	2.06E-05
S1	60	8	14	5	1.18E-02	6.39E-03	2.05E-05	8.40E-04	1.39E-04	5.97E-06	0.00E+00	1.54E-05	1.42E-05	5.53E-09	4.30E-07	5.1	1.80E-03	2.09E-05
S1	60	8	15	5	1.22E-02	6.61E-03	2.12E-05	8.70E-04	1.44E-04	6.17E-06	0.00E+00	1.59E-05	1.47E-05	5.72E-09	4.45E-07	5.2	1.86E-03	2.17E-05
S1	60	8	16	5	1.33E-02	7.17E-03	2.30E-05	9.43E-04	1.56E-04	6.69E-06	0.00E+00	1.73E-05	1.60E-05	6.21E-09	4.82E-07	5.7	2.02E-03	2.35E-05
S1	60	8	17	5	1.64E-02	8.85E-03	2.84E-05	1.16E-03	1.92E-04	8.26E-06	0.00E+00	2.13E-05	1.97E-05	7.66E-09	5.95E-07	7.0	2.49E-03	2.90E-05
S1	60	8	18	5	1.76E-02	9.52E-03	3.06E-05	1.25E-03	2.07E-04	8.89E-06	0.00E+00	2.29E-05	2.12E-05	8.24E-09	6.41E-07	7.5	2.68E-03	3.12E-05
S1	60	8	19	5	1.22E-02	6.61E-03	2.12E-05	8.70E-04	1.44E-04	6.16E-06	0.00E+00	1.59E-05	1.47E-05	5.72E-09	4.45E-07	5.2	1.86E-03	2.17E-05
S1	60	8	20	5	8.09E-03	4.37E-03	1.40E-05	5.75E-04	9.50E-05	4.07E-06	0.00E+00	1.05E-05	9.73E-06	3.78E-09	2.94E-07	3.5	1.23E-03	1.43E-05
S1	60	8	21	5	6.85E-03	3.70E-03	1.19E-05	4.86E-04	8.04E-05	3.44E-06	0.00E+00	8.90E-06	8.23E-06	3.20E-09	2.49E-07	2.9	1.04E-03	1.21E-05
S1	60	8	22	5	5.81E-03	3.14E-03	1.01E-05	4.13E-04	6.82E-05	2.92E-06	0.00E+00	7.55E-06	6.99E-06	2.72E-09	2.11E-07	2.5	8.82E-04	1.03E-05
S1	60	8	23	5	4.77E-03	2.58E-03	8.27E-06	3.39E-04	5.60E-05	2.40E-06	0.00E+00	6.20E-06	5.74E-06	2.23E-09	1.73E-07	2.0	7.24E-04	8.44E-06
S1	60	8	24	5	3.53E-03	1.90E-03	6.11E-06	2.51E-04	4.14E-05	1.77E-06	0.00E+00	4.58E-06	4.24E-06	1.65E-09	1.28E-07	1.5	5.35E-04	6.24E-06
S2	60	8	1	5	1.28E-03	6.91E-04	2.22E-06	9.08E-05	1.50E-05	6.43E-07	0.00E+00	1.66E-06	1.54E-06	5.98E-10	4.64E-08	0.5	1.94E-04	2.26E-06
S2	60	8	2	5	8.52E-04	4.60E-04	1.48E-06	6.06E-05	1.00E-05	4.28E-07	0.00E+00	1.11E-06	1.02E-06	3.98E-10	3.10E-08	0.4	1.29E-04	1.51E-06
S2	60	8	3	5	7.46E-04	4.03E-04	1.29E-06	5.30E-05	8.75E-06	3.75E-07	0.00E+00	9.69E-07	8.97E-07	3.49E-10	2.71E-08	0.3	1.13E-04	1.32E-06
S2	60	8	4	5	5.33E-04	2.88E-04	9.23E-07	3.78E-05	6.25E-06	2.68E-07	0.00E+00	6.92E-07	6.41E-07	2.49E-10	1.94E-08	0.2	8.09E-05	9.43E-07
S2	60	8	5	5	7.46E-04	4.03E-04	1.29E-06	5.30E-05	8.75E-06	3.75E-07	0.00E+00	9.69E-07	8.97E-07	3.49E-10	2.71E-08	0.3	1.13E-04	1.32E-06
S2	60	8	6	5	1.81E-03	9.78E-04	3.14E-06	1.29E-04	2.13E-05	9.10E-07	0.00E+00	2.35E-06	2.18E-06	8.47E-10	6.58E-08	0.8	2.75E-04	3.21E-06
S2	60	8	7	5	5.43E-03	2.93E-03	9.42E-06	3.86E-04	6.38E-05	2.73E-06	0.00E+00	7.06E-06	6.53E-06	2.54E-09	1.97E-07	2.3	8.25E-04	9.62E-06
S2	60	8	8	5	8.31E-03	4.49E-03	1.44E-05	5.90E-04	9.75E-05	4.18E-06	0.00E+00	1.08E-05	9.99E-06	3.88E-09	3.02E-07	3.6	1.26E-03	1.47E-05
S2	60	8	9	5	6.71E-03	3.63E-03	1.16E-05	4.77E-04	7.88E-05	3.37E-06	0.00E+00	8.72E-06	8.07E-06	3.14E-09	2.44E-07	2.9	1.02E-03	1.19E-05
S2	60	8	10	5	5.54E-03	2.99E-03	9.60E-06	3.94E-04	6.50E-05	2.79E-06	0.00E+00	7.20E-06	6.66E-06	2.59E-09	2.01E-07	2.4	8.41E-04	9.80E-06
S2	60	8	11	5	5.01E-03	2.70E-03	8.68E-06	3.56E-04	5.88E-05	2.52E-06	0.00E+00	6.51E-06	6.02E-06	2.34E-09	1.82E-07	2.1	7.60E-04	8.86E-06
S2	60	8	12	5	5.65E-03	3.05E-03	9.79E-06	4.01E-04	6.63E-05	2.85E-06	0.00E+00	7.34E-06	6.79E-06	2.64E-09	2.05E-07	2.4	8.57E-04	9.99E-06
S2	60	8	13	5	5.97E-03	3.22E-03	1.03E-05	4.24E-04	7.00E-05	3.01E-06	0.00E+00	7.75E-06	7.17E-06	2.79E-09	2.17E-07	2.5	9.06E-04	1.06E-05
S2	60	8	14	5	6.07E-03	3.28E-03	1.05E-05	4.31E-04	7.13E-05	3.06E-06	0.00E+00	7.89E-06	7.30E-06	2.84E-09	2.21E-07	2.6	9.22E-04	1.07E-05
S2	60	8	15	5	6.29E-03	3.40E-03	1.09E-05	4.47E-04	7.38E-05	3.17E-06	0.00E+00	8.17E-06	7.56E-06	2.94E-09	2.28E-07	2.7	9.54E-04	1.11E-05
S2	60	8	16	5	6.82E-03	3.68E-03	1.18E-05	4.84E-04	8.00E-05	3.44E-06	0.00E+00	8.86E-06	8.20E-06	3.19E-09	2.48E-07	2.9	1.04E-03	1.21E-05
S2	60	8	17	5	8.42E-03	4.55E-03	1.46E-05	5.98E-04	9.88E-05	4.24E-06	0.00E+00	1.09E-05	1.01E-05	3.93E-09	3.06E-07	3.6	1.28E-03	1.49E-05
S2	60	8	18	5	9.06E-03	4.89E-03	1.57E-05	6.43E-04	1.06E-04	4.56E-06	0.00E+00	1.18E-05	1.09E-05	4.23E-09	3.29E-07	3.9	1.37E-03	1.60E-05
S2	60	8	19	5	6.29E-03	3.40E-03	1.09E-05	4.47E-04	7.38E-05	3.17E-06	0.00E+00	8.17E-06	7.56E-06	2.94E-09	2.28E-07	2.7	9.54E-04	1.11E-05
S2	60	8	20	5	4.16E-03	2.24E-03	7.20E-06	2.95E-04	4.88E-05	2.09E-06	0.00E+00	5.40E-06	5.00E-06	1.94E-09	1.51E-07	1.8	6.31E-04	7.35E-06
S2	60	8	21	5	3.52E-03	1.90E-03	6.09E-06	2.50E-04	4.13E-05	1.77E-06	0.00E+00	4.57E-06	4.23E-06	1.64E-09	1.28E-07	1.5	5.34E-04	6.22E-06
S2	60	8	22	5	2.98E-03	1.61E-03	5.17E-06	2.12E-04	3.50E-05	1.50E-06	0.00E+00	3.88E-06	3.59E-06	1.39E-09	1.08E-07	1.3	4.53E-04	5.28E-06
S2	60	8	23	5	2.45E-03	1.32E-03	4.25E-06	1.74E-04	2.88E-05	1.23E-06	0.00E+00	3.18E-06	2.95E-06	1.15E-09	8.90E-08	1.0	3.72E-04	4.34E-06
S2	60	8	24	5	1.81E-03	9.78E-04	3.14E-06	1.29E-04	2.13E-05	9.11E-07	0.00E+00	2.35E-06	2.18E-06	8.47E-10	6.58E-08	0.8	2.75E-04	3.21E-06
S3	60	8	1	5	1.62E-03	8.77E-04	2.81E-06	1.15E-04	1.91E-05	8.16E-07	0.00E+00	2.11E-06	1.95E-06	7.59E-10	5.90E-08	0.7	2.46E-04	2.87E-06
S3	60	8	2	5	1.08E-03	5.85E-04	1.88E-06	7.69E-05	1.27E-05	5.44E-07	0.00E+00	1.41E-06	1.30E-06	5.06E-10	3.93E-08	0.5	1.64E-04	1.92E-06
S3	60	8	3	5	9.47E-04	5.11E-04	1.64E-06	6.73E-05	1.11E-05	4.76E-07	0.00E+00	1.23E-06	1.14E-06	4.43E-10	3.44E-08	0.4	1.44E-04	1.68E-06
S3	60	8	4	5	6.76E-04	3.65E-04	1.17E-06	4.81E-05	7.94E-06	3.40E-07	0.00E+00	8.79E-07	8.13E-07	3.16E-10	2.46E-08	0.3	1.03E-04	1.20E-06
S3	60	8	5	5	9.47E-04	5.11E-04	1.64E-06	6.73E-05	1.11E-05	4.76E-07	0.00E+00	1.23E-06	1.14E-06	4.43E-10	3.44E-08	0.4	1.44E-04	1.68E-06
S3	60	8	6	5	2.30E-03	1.24E-03	3.99E-06	1.63E-04	2.70E-05	1.16E-06	0.00E+00	2.99E-06	2.77E-06	1.08E-09	8.35E-08	1.0	3.49E-04	4.07E-06
S3	60	8	7	5	6.90E-03	3.73E-03	1.20E-05	4.90E-04	8.10E-05	3.47E-06	0.00E+00	8.97E-06	8.30E-06	3.23E-09	2.51E-07	2.9	1.05E-03	1.22E-05
S3	60	8	8	5	1.06E-02	5.70E-03	1.83E-05	7.50E-04	1.24E-04	5.31E-06	0.00E+00	1.37E-05	1.27E-05	4.93E-09	3.83E-07	4.5	1.60E-03	1.87E-05
S3	60	8	9	5	8.52E-03	4.60E-03	1.48E-05	6.05E-04	1.00E-04	4.28E-06	0.00E+00	1.11E-05	1.02E-05	3.98E-09	3.10E-07	3.6	1.29E-03	1.51E-05
S3	60	8	10	5	7.04E-03	3.80E-03	1.22E-05	5.00E-04	8.26E-05	3.54E-06	0.00E+00	9.14E-06	8.46E-06	3.29E-09	2.56E-07	3.0	1.07E-03	1.24E-05
S3	60	8	11	5	6.36E-03	3.43E-03	1.10E-05	4.52E-04	7.46E-05	3.20E-06	0.00E+00	8.26E-06	7.65E-06	2.97E-09	2.31E-07	2.7	9.65E-04	1.13E-05
S3	60	8	12	5	7.17E-03	3.87E-03	1.24E-05	5.09E-04	8.42E-05	3.61E-06	0.00E+00	9.32E-06	8.62E-06	3.35E-09	2.60E-07	3.1	1.09E-03	1.27E-05
S3	60	8	13	5	7.58E-03	4.09E-03	1.31E-05	5.38E-04	8.89E-05	3.82E-06	0.00E+00	9.85E-06	9.11E-06	3.54E-09	2.75E-07	3.2	1.15E-03	1.34E-05
S3	60	8	14	5	7.71E-03	4.16E-03	1.34E-05	5.48E-04	9.05E-05	3.89E-06	0.00E+00	1.00E-05	9.27E-06	3.60E-09	2.80E-07	3.3	1.17E-03	1.36E-05
S3	60	8	15	5	7.98E-03	4.31E-03	1.38E-05	5.67E-04	9.37E-05	4.03E-06	0.00E+00	1.04E-05	9.60E-06	3.73E-09	2.90E-07	3.4	1.21E-03	1.41E-05
S3	60	8	16	5	8.66E-03	4.68E-03	1.50E-05	6.15E-04	1.02E-04	4.36E-06	0.00E+00	1.13E-05	1.04E-05	4.05E-09	3.14E-07	3.7	1.31E-03	1.53E-05
S3	60	8	17	5	1.07E-02	5.77E-03	1.85E-05	7.59E-04	1.25E-04	5.38E-06	0.00E+00	1.39E-05	1.29E-05	5.00E-09	3.88E-07	4.6	1.62E-03	1.89E-05
S3	60	8	18	5	1.15E-02	6.21E-03	1.99E-05	8.17E-04	1.35E-04	5.80E-06	0.00E+00	1.49E-05	1.38E-05	5.38E-09	4.18E-07	4.9	1.75E-03	2.03E-05
S3	60	8	19	5	7.98E-03	4.31E-03	1.38E-05	5.67E-04	9.37E-05	4.02E-06	0.00E+00	1.04E-05	9.60E-06	3.73E-09	2.90E-07	3.4	1.21E-03	1.41E-05
S3	60	8	20	5	5.28E-03	2.85E-03	9.14E-06	3.75E-04	6.19E-05	2.65E-06	0.00E+00	6.86E-06	6.34E-06	2.47E-09	1.92E-07	2.3	8.01E-04	9.34E-06

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	21	5	4.46E-03	2.41E-03	7.74E-06	3.17E-04	5.24E-05	2.25E-06	0.00E+00	5.80E-06	5.37E-06	2.09E-09	1.62E-07	1.9	6.78E-04	7.90E-06
S3	60	8	22	5	3.79E-03	2.05E-03	6.57E-06	2.69E-04	4.45E-05	1.90E-06	0.00E+00	4.92E-06	4.55E-06	1.77E-09	1.38E-07	1.6	5.75E-04	6.70E-06
S3	60	8	23	5	3.11E-03	1.68E-03	5.39E-06	2.21E-04	3.65E-05	1.56E-06	0.00E+00	4.04E-06	3.74E-06	1.45E-09	1.13E-07	1.3	4.72E-04	5.51E-06
S3	60	8	24	5	2.30E-03	1.24E-03	3.99E-06	1.63E-04	2.70E-05	1.16E-06	0.00E+00	2.99E-06	2.77E-06	1.08E-09	8.35E-08	1.0	3.49E-04	4.07E-06
S4	60	8	1	5	3.43E-03	1.85E-03	5.94E-06	2.44E-04	4.02E-05	1.72E-06	0.00E+00	4.45E-06	4.12E-06	1.60E-09	1.25E-07	1.5	5.20E-04	6.07E-06
S4	60	8	2	5	2.29E-03	1.23E-03	3.96E-06	1.62E-04	2.68E-05	1.15E-06	0.00E+00	2.97E-06	2.75E-06	1.07E-09	8.30E-08	1.0	3.47E-04	4.04E-06
S4	60	8	3	5	2.00E-03	1.08E-03	3.47E-06	1.42E-04	2.35E-05	1.01E-06	0.00E+00	2.60E-06	2.40E-06	9.35E-10	7.26E-08	0.9	3.04E-04	3.54E-06
S4	60	8	4	5	1.43E-03	7.71E-04	2.48E-06	1.01E-04	1.68E-05	7.18E-07	0.00E+00	1.86E-06	1.72E-06	6.68E-10	5.19E-08	0.6	2.17E-04	2.53E-06
S4	60	8	5	5	2.00E-03	1.08E-03	3.47E-06	1.42E-04	2.35E-05	1.00E-06	0.00E+00	2.60E-06	2.40E-06	9.35E-10	7.26E-08	0.9	3.04E-04	3.54E-06
S4	60	8	6	5	4.86E-03	2.62E-03	8.42E-06	3.45E-04	5.70E-05	2.44E-06	0.00E+00	6.31E-06	5.84E-06	2.27E-09	1.76E-07	2.1	7.37E-04	8.59E-06
S4	60	8	7	5	1.46E-02	7.87E-03	2.53E-05	1.03E-03	1.71E-04	7.32E-06	0.00E+00	1.89E-05	1.75E-05	6.81E-09	5.29E-07	6.2	2.21E-03	2.58E-05
S4	60	8	8	5	2.23E-02	1.20E-02	3.86E-05	1.58E-03	2.62E-04	1.12E-05	0.00E+00	2.90E-05	2.68E-05	1.04E-08	8.09E-07	9.5	3.38E-03	3.94E-05
S4	60	8	9	5	1.80E-02	9.72E-03	3.12E-05	1.28E-03	2.11E-04	9.05E-06	0.00E+00	2.34E-05	2.16E-05	8.41E-09	6.54E-07	7.7	2.73E-03	3.18E-05
S4	60	8	10	5	1.49E-02	8.02E-03	2.57E-05	1.06E-03	1.74E-04	7.47E-06	0.00E+00	1.93E-05	1.79E-05	6.94E-09	5.40E-07	6.3	2.25E-03	2.63E-05
S4	60	8	11	5	1.34E-02	7.25E-03	2.33E-05	9.54E-04	1.58E-04	6.76E-06	0.00E+00	1.74E-05	1.61E-05	6.28E-09	4.88E-07	5.7	2.04E-03	2.38E-05
S4	60	8	12	5	1.51E-02	8.18E-03	2.62E-05	1.08E-03	1.78E-04	7.63E-06	0.00E+00	1.97E-05	1.82E-05	7.08E-09	5.50E-07	6.5	2.30E-03	2.68E-05
S4	60	8	13	5	1.60E-02	8.64E-03	2.77E-05	1.14E-03	1.88E-04	8.06E-06	0.00E+00	2.08E-05	1.92E-05	7.48E-09	5.81E-07	6.8	2.43E-03	2.83E-05
S4	60	8	14	5	1.63E-02	8.79E-03	2.82E-05	1.16E-03	1.91E-04	8.21E-06	0.00E+00	2.12E-05	1.96E-05	7.61E-09	5.91E-07	7.0	2.47E-03	2.88E-05
S4	60	8	15	5	1.69E-02	9.10E-03	2.92E-05	1.20E-03	1.98E-04	8.50E-06	0.00E+00	2.19E-05	2.03E-05	7.88E-09	6.12E-07	7.2	2.56E-03	2.98E-05
S4	60	8	16	5	1.83E-02	9.87E-03	3.17E-05	1.30E-03	2.15E-04	9.22E-06	0.00E+00	2.38E-05	2.20E-05	8.55E-09	6.64E-07	7.8	2.78E-03	3.24E-05
S4	60	8	17	5	2.26E-02	1.22E-02	3.91E-05	1.60E-03	2.65E-04	1.14E-05	0.00E+00	2.93E-05	2.71E-05	1.05E-08	8.20E-07	9.6	3.43E-03	3.99E-05
S4	60	8	18	5	2.43E-02	1.31E-02	4.21E-05	1.72E-03	2.85E-04	1.22E-05	0.00E+00	3.16E-05	2.92E-05	1.14E-08	8.82E-07	10.4	3.69E-03	4.30E-05
S4	60	8	19	5	1.69E-02	9.10E-03	2.92E-05	1.20E-03	1.98E-04	8.49E-06	0.00E+00	2.19E-05	2.03E-05	7.88E-09	6.12E-07	7.2	2.56E-03	2.98E-05
S4	60	8	20	5	1.11E-02	6.02E-03	1.93E-05	7.91E-04	1.31E-04	5.60E-06	0.00E+00	1.45E-05	1.34E-05	5.21E-09	4.05E-07	4.8	1.69E-03	1.97E-05
S4	60	8	21	5	9.43E-03	5.09E-03	1.63E-05	6.70E-04	1.11E-04	4.74E-06	0.00E+00	1.23E-05	1.13E-05	4.41E-09	3.42E-07	4.0	1.43E-03	1.67E-05
S4	60	8	22	5	8.00E-03	4.32E-03	1.39E-05	5.68E-04	9.39E-05	4.02E-06	0.00E+00	1.04E-05	9.62E-06	3.74E-09	2.91E-07	3.4	1.21E-03	1.42E-05
S4	60	8	23	5	6.57E-03	3.55E-03	1.14E-05	4.67E-04	7.71E-05	3.30E-06	0.00E+00	8.54E-06	7.90E-06	3.07E-09	2.39E-07	2.8	9.97E-04	1.16E-05
S4	60	8	24	5	4.86E-03	2.62E-03	8.42E-06	3.45E-04	5.70E-05	2.44E-06	0.00E+00	6.31E-06	5.84E-06	2.27E-09	1.76E-07	2.1	7.37E-04	8.59E-06
S5	60	8	1	5	1.25E-03	6.73E-04	2.16E-06	8.85E-05	1.46E-05	6.26E-07	0.00E+00	1.62E-06	1.50E-06	5.82E-10	4.53E-08	0.5	1.89E-04	2.20E-06
S5	60	8	2	5	8.31E-04	4.49E-04	1.44E-06	5.90E-05	9.75E-06	4.18E-07	0.00E+00	1.08E-06	9.99E-07	3.88E-10	3.02E-08	0.4	1.26E-04	1.47E-06
S5	60	8	3	5	7.27E-04	3.93E-04	1.26E-06	5.16E-05	8.53E-06	3.65E-07	0.00E+00	9.45E-07	8.74E-07	3.40E-10	2.64E-08	0.3	1.10E-04	1.29E-06
S5	60	8	4	5	5.19E-04	2.80E-04	9.00E-07	3.69E-05	6.09E-06	2.61E-07	0.00E+00	6.75E-07	6.24E-07	2.43E-10	1.89E-08	0.2	7.88E-05	9.19E-07
S5	60	8	5	5	7.27E-04	3.93E-04	1.26E-06	5.16E-05	8.53E-06	3.65E-07	0.00E+00	9.45E-07	8.74E-07	3.40E-10	2.64E-08	0.3	1.10E-04	1.29E-06
S5	60	8	6	5	1.77E-03	9.53E-04	3.06E-06	1.25E-04	2.07E-05	8.87E-07	0.00E+00	2.29E-06	2.12E-06	8.25E-10	6.41E-08	0.8	2.68E-04	3.12E-06
S5	60	8	7	5	5.30E-03	2.86E-03	9.18E-06	3.76E-04	6.22E-05	2.66E-06	0.00E+00	6.88E-06	6.37E-06	2.48E-09	1.92E-07	2.3	8.04E-04	9.37E-06
S5	60	8	8	5	8.10E-03	4.37E-03	1.40E-05	5.75E-04	9.51E-05	4.07E-06	0.00E+00	1.05E-05	9.74E-06	3.79E-09	2.94E-07	3.5	1.23E-03	1.43E-05
S5	60	8	9	5	6.54E-03	3.53E-03	1.13E-05	4.65E-04	7.68E-05	3.29E-06	0.00E+00	8.50E-06	7.87E-06	3.06E-09	2.38E-07	2.8	9.93E-04	1.16E-05
S5	60	8	10	5	5.40E-03	2.92E-03	9.36E-06	3.84E-04	6.34E-05	2.72E-06	0.00E+00	7.02E-06	6.49E-06	2.52E-09	1.96E-07	2.3	8.20E-04	9.55E-06
S5	60	8	11	5	4.88E-03	2.64E-03	8.46E-06	3.47E-04	5.73E-05	2.46E-06	0.00E+00	6.34E-06	5.87E-06	2.28E-09	1.77E-07	2.1	7.41E-04	8.64E-06
S5	60	8	12	5	5.50E-03	2.97E-03	9.54E-06	3.91E-04	6.46E-05	2.77E-06	0.00E+00	7.15E-06	6.62E-06	2.57E-09	2.00E-07	2.4	8.35E-04	9.74E-06
S5	60	8	13	5	5.82E-03	3.14E-03	1.01E-05	4.13E-04	6.83E-05	2.93E-06	0.00E+00	7.56E-06	6.99E-06	2.72E-09	2.11E-07	2.5	8.83E-04	1.03E-05
S5	60	8	14	5	5.92E-03	3.20E-03	1.03E-05	4.20E-04	6.95E-05	2.99E-06	0.00E+00	7.69E-06	7.12E-06	2.77E-09	2.15E-07	2.5	8.98E-04	1.05E-05
S5	60	8	15	5	6.13E-03	3.31E-03	1.06E-05	4.35E-04	7.19E-05	3.09E-06	0.00E+00	7.96E-06	7.37E-06	2.86E-09	2.23E-07	2.6	9.30E-04	1.08E-05
S5	60	8	16	5	6.65E-03	3.59E-03	1.15E-05	4.72E-04	7.80E-05	3.35E-06	0.00E+00	8.64E-06	7.99E-06	3.11E-09	2.41E-07	2.8	1.01E-03	1.18E-05
S5	60	8	17	5	8.20E-03	4.43E-03	1.42E-05	5.83E-04	9.63E-05	4.13E-06	0.00E+00	1.07E-05	9.86E-06	3.83E-09	2.98E-07	3.5	1.25E-03	1.45E-05
S5	60	8	18	5	8.83E-03	4.77E-03	1.53E-05	6.27E-04	1.04E-04	4.45E-06	0.00E+00	1.15E-05	1.06E-05	4.13E-09	3.21E-07	3.8	1.34E-03	1.56E-05
S5	60	8	19	5	6.13E-03	3.31E-03	1.06E-05	4.35E-04	7.19E-05	3.09E-06	0.00E+00	7.96E-06	7.37E-06	2.86E-09	2.23E-07	2.6	9.30E-04	1.08E-05
S5	60	8	20	5	4.05E-03	2.19E-03	7.02E-06	2.88E-04	4.75E-05	2.04E-06	0.00E+00	5.26E-06	4.87E-06	1.89E-09	1.47E-07	1.7	6.15E-04	7.17E-06
S5	60	8	21	5	3.43E-03	1.85E-03	5.94E-06	2.43E-04	4.02E-05	1.72E-06	0.00E+00	4.45E-06	4.12E-06	1.60E-09	1.24E-07	1.5	5.20E-04	6.06E-06
S5	60	8	22	5	2.91E-03	1.57E-03	5.04E-06	2.07E-04	3.41E-05	1.46E-06	0.00E+00	3.78E-06	3.50E-06	1.36E-09	1.06E-07	1.2	4.41E-04	5.14E-06
S5	60	8	23	5	2.39E-03	1.29E-03	4.14E-06	1.70E-04	2.80E-05	1.20E-06	0.00E+00	3.10E-06	2.87E-06	1.12E-09	8.68E-08	1.0	3.63E-04	4.23E-06
S5	60	8	24	5	1.77E-03	9.53E-04	3.06E-06	1.25E-04	2.07E-05	8.87E-07	0.00E+00	2.29E-06	2.12E-06	8.25E-10	6.41E-08	0.8	2.68E-04	3.12E-06
S6	60	8	1	5	1.69E-03	9.12E-04	2.93E-06	1.20E-04	1.98E-05	8.49E-07	0.00E+00	2.20E-06	2.03E-06	7.90E-10	6.14E-08	0.7	2.56E-04	2.99E-06
S6	60	8	2	5	1.13E-03	6.08E-04	1.95E-06	8.00E-05	1.32E-05	5.66E-07	0.00E+00	1.46E-06	1.35E-06	5.26E-10	4.09E-08	0.5	1.71E-04	1.99E-06
S6	60	8	3	5	9.85E-04	5.32E-04	1.71E-06	7.00E-05	1.16E-05	4.95E-07	0.00E+00	1.28E-06	1.18E-06	4.61E-10	3.58E-08	0.4	1.50E-04	1.74E-06
S6	60	8	4	5	7.04E-04	3.80E-04	1.22E-06	5.00E-05	8.26E-06	3.54E-07	0.00E+00	9.15E-07	8.46E-07	3.29E-10	2.56E-08	0.3	1.07E-04	1.25E-06
S6	60	8	5	5	9.85E-04	5.32E-04	1.71E-06	7.00E-05	1.16E-05	4.95E-07	0.00E+00	1.28E-06	1.18E-06	4.61E-10	3.58E-08	0.4	1.50E-04	1.74E-06
S6	60	8	6	5	2.39E-03	1.29E-03	4.15E-06	1.70E-04	2.81E-05	1.20E-06	0.00E+00	3.11E-06	2.88E-06	1.12E-09	8.69E-08	1.0	3.63E-04	4.23E-06
S6	60	8	7	5	7.18E-03	3.88E-03	1.24E-05	5.10E-04	8.43E-05	3.61E-06	0.00E+00	9.33E-06	8.63E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S6	60	8	8	5	1.10E-02	5.93E-03	1.90E-05	7.80E-04	1.29E-04	5.52E-06	0.00E+00	1.43E-05	1.32E-05	5.13E-09	3.99E-07	4.7	1.67E-03	1.94E-05
S6	60	8	9	5	8.87E-03	4.79E-03	1.54E-05	6.30E-04	1.04E-04	4.46E-06	0.00E+00	1.15E-05	1.07E-05	4.14E-09	3.22E-07	3.8	1.35E-03	1.57E-05
S6	60	8	10	5	7.32E-03	3.95E-03	1.27E-05	5.20E-04	8.59E-05	3.68E-06	0.00E+00	9.51E-06	8.80E-06	3.42E-09	2.66E-07	3.1	1.11E-03	1.30E-05
S6	60	8	11	5	6.62E-03	3.57E-03	1.15E-05	4.70E-04	7.76E-05	3.33E-06	0.00E+00	8.60E-06	7.95E-06	3.09E-09	2.40E-07	2.8	1.00E-03	1.17E-05
S6	60	8	12	5	7.46E-03	4.03E-03	1.29E-05	5.30E-04	8.76E-05	3.76E-06	0.00E+00	9.69E-06	8.97E-06	3.49E-09	2.71E-07	3.2	1.13E-03	1.32E-05
S6	60	8	13	5	7.88E-03	4.26E-03	1.37E-05	5.60E-04	9.25E-05	3.97E-06	0.00E+00	1.02E-05	9.48E-06	3.68E-09	2.86E-07	3.4	1.20E-03	1.39E-05
S6	60	8	14	5	8.02E-03	4.33E-03	1.39E-05	5.70E-04	9.42E-05	4.05E-06	0.00E+00	1.04E-05	9.65E-06	3.75E-09	2.91E-07	3.4	1.22E-03	1.42E-05
S6	60	8	15	5	8.31E-03	4.49E-03	1.44E-05	5.90E-04	9.75E-05	4.19E-06	0.00E+00	1.08E-05	9.99E-06	3.88E-09	3.02E-07	3.5	1.26E-03	1.47E-05
S6	60	8	16	5	9.01E-03	4.87E-03	1.56E-05	6.40E-04	1.06E-04	4.54E-06	0.00E+00	1.17E-05	1.08E-05	4.21E-09	3.27E-07	3.8	1.37E-03	1.59E-05
S6	60	8	17	5	1.11E-02	6.01E-03	1.93E-05	7.90E-04	1.31E-04	5.60E-06	0.00E+00	1.45E-05	1.34E-05	5.20E-09	4.04E-07	4.7	1.69E-03	1.97E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	18	5	1.20E-02	6.46E-03	2.07E-05	8.50E-04	1.40E-04	6.03E-06	0.00E+00	1.55E-05	1.44E-05	5.59E-09	4.35E-07	5.1	1.82E-03	2.12E-05
S6	60	8	19	5	8.31E-03	4.49E-03	1.44E-05	5.90E-04	9.75E-05	4.18E-06	0.00E+00	1.08E-05	9.99E-06	3.88E-09	3.02E-07	3.5	1.26E-03	1.47E-05
S6	60	8	20	5	5.49E-03	2.96E-03	9.51E-06	3.90E-04	6.44E-05	2.76E-06	0.00E+00	7.13E-06	6.60E-06	2.57E-09	1.99E-07	2.3	8.33E-04	9.71E-06
S6	60	8	21	5	4.65E-03	2.51E-03	8.05E-06	3.30E-04	5.45E-05	2.34E-06	0.00E+00	6.04E-06	5.59E-06	2.17E-09	1.69E-07	2.0	7.05E-04	8.22E-06
S6	60	8	22	5	3.94E-03	2.13E-03	6.83E-06	2.80E-04	4.63E-05	1.98E-06	0.00E+00	5.12E-06	4.74E-06	1.84E-09	1.43E-07	1.7	5.98E-04	6.97E-06
S6	60	8	23	5	3.24E-03	1.75E-03	5.61E-06	2.30E-04	3.80E-05	1.63E-06	0.00E+00	4.21E-06	3.89E-06	1.51E-09	1.18E-07	1.4	4.91E-04	5.73E-06
S6	60	8	24	5	2.39E-03	1.29E-03	4.15E-06	1.70E-04	2.81E-05	1.20E-06	0.00E+00	3.11E-06	2.88E-06	1.12E-09	8.69E-08	1.0	3.63E-04	4.23E-06
S7	60	8	1	5	4.08E-03	2.20E-03	7.07E-06	2.90E-04	4.79E-05	2.05E-06	0.00E+00	5.30E-06	4.91E-06	1.91E-09	1.48E-07	1.7	6.19E-04	7.22E-06
S7	60	8	2	5	2.72E-03	1.47E-03	4.71E-06	1.93E-04	3.19E-05	1.37E-06	0.00E+00	3.53E-06	3.27E-06	1.27E-09	9.88E-08	1.2	4.13E-04	4.81E-06
S7	60	8	3	5	2.38E-03	1.29E-03	4.12E-06	1.69E-04	2.79E-05	1.20E-06	0.00E+00	3.09E-06	2.86E-06	1.11E-09	8.64E-08	1.0	3.61E-04	4.21E-06
S7	60	8	4	5	1.70E-03	9.18E-04	2.95E-06	1.21E-04	2.00E-05	8.54E-07	0.00E+00	2.21E-06	2.04E-06	7.95E-10	6.17E-08	0.7	2.58E-04	3.01E-06
S7	60	8	5	5	2.38E-03	1.29E-03	4.12E-06	1.69E-04	2.79E-05	1.20E-06	0.00E+00	3.09E-06	2.86E-06	1.11E-09	8.64E-08	1.0	3.61E-04	4.21E-06
S7	60	8	6	5	5.78E-03	3.12E-03	1.00E-05	4.11E-04	6.78E-05	2.90E-06	0.00E+00	7.51E-06	6.95E-06	2.70E-09	2.10E-07	2.5	8.77E-04	1.02E-05
S7	60	8	7	5	1.73E-02	9.36E-03	3.00E-05	1.23E-03	2.03E-04	8.71E-06	0.00E+00	2.25E-05	2.08E-05	8.10E-09	6.30E-07	7.4	2.63E-03	3.07E-05
S7	60	8	8	5	2.65E-02	1.43E-02	4.60E-05	1.88E-03	3.11E-04	1.33E-05	0.00E+00	3.45E-05	3.19E-05	1.24E-08	9.63E-07	11.3	4.03E-03	4.69E-05
S7	60	8	9	5	2.14E-02	1.16E-02	3.71E-05	1.52E-03	2.51E-04	1.08E-05	0.00E+00	2.78E-05	2.58E-05	1.00E-08	7.78E-07	9.1	3.25E-03	3.79E-05
S7	60	8	10	5	1.77E-02	9.55E-03	3.06E-05	1.26E-03	2.07E-04	8.89E-06	0.00E+00	2.30E-05	2.13E-05	8.26E-09	6.42E-07	7.6	2.68E-03	3.13E-05
S7	60	8	11	5	1.60E-02	8.63E-03	2.77E-05	1.14E-03	1.88E-04	8.04E-06	0.00E+00	2.08E-05	1.92E-05	7.47E-09	5.80E-07	6.8	2.43E-03	2.83E-05
S7	60	8	12	5	1.80E-02	9.73E-03	3.12E-05	1.28E-03	2.11E-04	9.08E-06	0.00E+00	2.34E-05	2.17E-05	8.42E-09	6.54E-07	7.7	2.73E-03	3.19E-05
S7	60	8	13	5	1.90E-02	1.03E-02	3.30E-05	1.35E-03	2.23E-04	9.59E-06	0.00E+00	2.47E-05	2.29E-05	8.90E-09	6.91E-07	8.1	2.89E-03	3.37E-05
S7	60	8	14	5	1.94E-02	1.05E-02	3.36E-05	1.38E-03	2.27E-04	9.77E-06	0.00E+00	2.52E-05	2.33E-05	9.06E-09	7.04E-07	8.3	2.94E-03	3.43E-05
S7	60	8	15	5	2.01E-02	1.08E-02	3.48E-05	1.42E-03	2.35E-04	1.01E-05	0.00E+00	2.61E-05	2.41E-05	9.38E-09	7.29E-07	8.6	3.04E-03	3.55E-05
S7	60	8	16	5	2.18E-02	1.18E-02	3.77E-05	1.55E-03	2.55E-04	1.10E-05	0.00E+00	2.83E-05	2.62E-05	1.02E-08	7.90E-07	9.3	3.30E-03	3.85E-05
S7	60	8	17	5	2.69E-02	1.45E-02	4.65E-05	1.91E-03	3.15E-04	1.35E-05	0.00E+00	3.49E-05	3.23E-05	1.26E-08	9.75E-07	11.5	4.08E-03	4.75E-05
S7	60	8	18	5	2.89E-02	1.56E-02	5.01E-05	2.05E-03	3.39E-04	1.46E-05	0.00E+00	3.76E-05	3.47E-05	1.35E-08	1.05E-06	12.3	4.39E-03	5.11E-05
S7	60	8	19	5	2.01E-02	1.08E-02	3.48E-05	1.42E-03	2.35E-04	1.01E-05	0.00E+00	2.61E-05	2.41E-05	9.38E-09	7.29E-07	8.6	3.04E-03	3.55E-05
S7	60	8	20	5	1.33E-02	7.16E-03	2.30E-05	9.42E-04	1.56E-04	6.67E-06	0.00E+00	1.72E-05	1.59E-05	6.20E-09	4.82E-07	5.7	2.01E-03	2.35E-05
S7	60	8	21	5	1.12E-02	6.06E-03	1.94E-05	7.97E-04	1.32E-04	5.64E-06	0.00E+00	1.46E-05	1.35E-05	5.24E-09	4.07E-07	4.8	1.70E-03	1.99E-05
S7	60	8	22	5	9.52E-03	5.14E-03	1.65E-05	6.76E-04	1.12E-04	4.79E-06	0.00E+00	1.24E-05	1.14E-05	4.45E-09	3.46E-07	4.1	1.44E-03	1.68E-05
S7	60	8	23	5	7.82E-03	4.22E-03	1.36E-05	5.55E-04	9.18E-05	3.93E-06	0.00E+00	1.02E-05	9.40E-06	3.65E-09	2.84E-07	3.3	1.19E-03	1.38E-05
S7	60	8	24	5	5.78E-03	3.12E-03	1.00E-05	4.11E-04	6.78E-05	2.91E-06	0.00E+00	7.51E-06	6.95E-06	2.70E-09	2.10E-07	2.5	8.77E-04	1.02E-05
S8	60	8	1	5	3.08E-03	1.66E-03	5.33E-06	2.19E-04	3.61E-05	1.55E-06	0.00E+00	4.00E-06	3.70E-06	1.44E-09	1.12E-07	1.3	4.67E-04	5.44E-06
S8	60	8	2	5	2.05E-03	1.11E-03	3.55E-06	1.46E-04	2.41E-05	1.03E-06	0.00E+00	2.66E-06	2.47E-06	9.59E-10	7.45E-08	0.9	3.11E-04	3.63E-06
S8	60	8	3	5	1.79E-03	9.69E-04	3.11E-06	1.27E-04	2.11E-05	9.02E-07	0.00E+00	2.33E-06	2.16E-06	8.39E-10	6.52E-08	0.8	2.72E-04	3.17E-06
S8	60	8	4	5	1.28E-03	6.92E-04	2.22E-06	9.10E-05	1.50E-05	6.44E-07	0.00E+00	1.67E-06	1.54E-06	5.99E-10	4.66E-08	0.5	1.95E-04	2.27E-06
S8	60	8	5	5	1.79E-03	9.69E-04	3.11E-06	1.27E-04	2.11E-05	9.02E-07	0.00E+00	2.33E-06	2.16E-06	8.39E-10	6.52E-08	0.8	2.72E-04	3.17E-06
S8	60	8	6	5	4.36E-03	2.35E-03	7.55E-06	3.10E-04	5.11E-05	2.19E-06	0.00E+00	5.66E-06	5.24E-06	2.04E-09	1.58E-07	1.9	6.61E-04	7.71E-06
S8	60	8	7	5	1.31E-02	7.06E-03	2.27E-05	9.29E-04	1.53E-04	6.57E-06	0.00E+00	1.70E-05	1.57E-05	6.11E-09	4.75E-07	5.6	1.98E-03	2.31E-05
S8	60	8	8	5	2.00E-02	1.08E-02	3.47E-05	1.42E-03	2.35E-04	1.01E-05	0.00E+00	2.60E-05	2.40E-05	9.35E-09	7.26E-07	8.5	3.03E-03	3.54E-05
S8	60	8	9	5	1.61E-02	8.72E-03	2.80E-05	1.15E-03	1.90E-04	8.12E-06	0.00E+00	2.10E-05	1.94E-05	7.55E-09	5.87E-07	6.9	2.45E-03	2.86E-05
S8	60	8	10	5	1.33E-02	7.20E-03	2.31E-05	9.47E-04	1.56E-04	6.70E-06	0.00E+00	1.73E-05	1.60E-05	6.23E-09	4.84E-07	5.7	2.02E-03	2.36E-05
S8	60	8	11	5	1.20E-02	6.51E-03	2.09E-05	8.56E-04	1.41E-04	6.07E-06	0.00E+00	1.57E-05	1.45E-05	5.63E-09	4.38E-07	5.1	1.83E-03	2.13E-05
S8	60	8	12	5	1.36E-02	7.34E-03	2.35E-05	9.65E-04	1.59E-04	6.85E-06	0.00E+00	1.77E-05	1.63E-05	6.35E-09	4.93E-07	5.8	2.06E-03	2.40E-05
S8	60	8	13	5	1.44E-02	7.75E-03	2.49E-05	1.02E-03	1.68E-04	7.23E-06	0.00E+00	1.87E-05	1.73E-05	6.71E-09	5.21E-07	6.1	2.18E-03	2.54E-05
S8	60	8	14	5	1.46E-02	7.89E-03	2.53E-05	1.04E-03	1.71E-04	7.37E-06	0.00E+00	1.90E-05	1.76E-05	6.83E-09	5.31E-07	6.2	2.22E-03	2.59E-05
S8	60	8	15	5	1.51E-02	8.17E-03	2.62E-05	1.07E-03	1.78E-04	7.63E-06	0.00E+00	1.97E-05	1.82E-05	7.07E-09	5.49E-07	6.5	2.30E-03	2.68E-05
S8	60	8	16	5	1.64E-02	8.86E-03	2.84E-05	1.17E-03	1.93E-04	8.27E-06	0.00E+00	2.13E-05	1.97E-05	7.67E-09	5.96E-07	7.0	2.49E-03	2.90E-05
S8	60	8	17	5	2.03E-02	1.09E-02	3.51E-05	1.44E-03	2.38E-04	1.02E-05	0.00E+00	2.63E-05	2.43E-05	9.47E-09	7.36E-07	8.6	3.07E-03	3.58E-05
S8	60	8	18	5	2.18E-02	1.18E-02	3.78E-05	1.55E-03	2.56E-04	1.10E-05	0.00E+00	2.83E-05	2.62E-05	1.02E-08	7.91E-07	9.3	3.31E-03	3.86E-05
S8	60	8	19	5	1.51E-02	8.17E-03	2.62E-05	1.07E-03	1.78E-04	7.62E-06	0.00E+00	1.97E-05	1.82E-05	7.07E-09	5.49E-07	6.5	2.30E-03	2.68E-05
S8	60	8	20	5	1.00E-02	5.40E-03	1.73E-05	7.10E-04	1.17E-04	5.03E-06	0.00E+00	1.30E-05	1.20E-05	4.67E-09	3.63E-07	4.3	1.52E-03	1.77E-05
S8	60	8	21	5	8.46E-03	4.57E-03	1.47E-05	6.01E-04	9.93E-05	4.25E-06	0.00E+00	1.10E-05	1.02E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.50E-05
S8	60	8	22	5	7.18E-03	3.88E-03	1.24E-05	5.10E-04	8.42E-05	3.61E-06	0.00E+00	9.33E-06	8.63E-06	3.35E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S8	60	8	23	5	5.90E-03	3.18E-03	1.02E-05	4.19E-04	6.92E-05	2.96E-06	0.00E+00	7.66E-06	7.09E-06	2.76E-09	2.14E-07	2.5	8.95E-04	1.04E-05
S8	60	8	24	5	4.36E-03	2.35E-03	7.55E-06	3.10E-04	5.11E-05	2.19E-06	0.00E+00	5.66E-06	5.24E-06	2.04E-09	1.58E-07	1.9	6.61E-04	7.71E-06
S9	60	8	1	5	2.08E-03	1.12E-03	3.60E-06	1.48E-04	2.44E-05	1.05E-06	0.00E+00	2.70E-06	2.50E-06	9.72E-10	7.55E-08	0.9	3.16E-04	3.68E-06
S9	60	8	2	5	1.39E-03	7.49E-04	2.40E-06	9.85E-05	1.63E-05	6.97E-07	0.00E+00	1.80E-06	1.67E-06	6.48E-10	5.04E-08	0.6	2.10E-04	2.45E-06
S9	60	8	3	5	1.21E-03	6.55E-04	2.10E-06	8.62E-05	1.42E-05	6.10E-07	0.00E+00	1.58E-06	1.46E-06	5.67E-10	4.41E-08	0.5	1.84E-04	2.15E-06
S9	60	8	4	5	8.67E-04	4.68E-04	1.50E-06	6.16E-05	1.02E-05	4.36E-07	0.00E+00	1.13E-06	1.04E-06	4.05E-10	3.15E-08	0.4	1.32E-04	1.53E-06
S9	60	8	5	5	1.21E-03	6.55E-04	2.10E-06	8.62E-05	1.42E-05	6.10E-07	0.00E+00	1.58E-06	1.46E-06	5.67E-10	4.41E-08	0.5	1.84E-04	2.15E-06
S9	60	8	6	5	2.95E-03	1.59E-03	5.11E-06	2.09E-04	3.46E-05	1.48E-06	0.00E+00	3.83E-06	3.54E-06	1.38E-09	1.07E-07	1.3	4.47E-04	5.21E-06
S9	60	8	7	5	8.84E-03	4.77E-03	1.53E-05	6.28E-04	1.04E-04	4.44E-06	0.00E+00	1.15E-05	1.06E-05	4.13E-09	3.21E-07	3.8	1.34E-03	1.56E-05
S9	60	8	8	5	1.35E-02	7.30E-03	2.34E-05	9.60E-04	1.59E-04	6.80E-06	0.00E+00	1.76E-05	1.63E-05	6.32E-09	4.91E-07	5.8	2.05E-03	2.39E-05
S9	60	8	9	5	1.09E-02	5.90E-03	1.89E-05	7.76E-04	1.28E-04	5.49E-06	0.00E+00	1.42E-05	1.31E-05	5.10E-09	3.97E-07	4.7	1.66E-03	1.93E-05
S9	60	8	10	5	9.01E-03	4.87E-03	1.56E-05	6.40E-04	1.06E-04	4.53E-06	0.00E+00	1.17E-05	1.08E-05	4.21E-09	3.27E-07	3.8	1.37E-03	1.59E-05
S9	60	8	11	5	8.15E-03	4.40E-03	1.41E-05	5.79E-04	9.56E-05	4.10E-06	0.00E+00	1.06E-05	9.79E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S9	60	8	12	5	9.19E-03	4.96E-03	1.59E-05	6.53E-04	1.08E-04	4.63E-06	0.00E+00	1.19E-05	1.10E-05	4.29E-09	3.34E-07	3.9	1.39E-03	1.63E-05
S9	60	8	13	5	9.71E-03	5.24E-03	1.68E-05	6.89E-04	1.14E-04	4.89E-06	0.00E+00	1.26E-05	1.17E-05	4.54E-09	3.53E-07	4.1	1.47E-03	1.72E-05
S9	60	8	14	5	9.88E-03	5.34E-03	1.71E-05	7.02E-04	1.16E-04	4.98E-06	0.00E+00	1.28E-05	1.19E-05	4.62E-09	3.59E-07	4.2	1.50E-03	1.75E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	15	5	1.02E-02	5.52E-03	1.77E-05	7.26E-04	1.20E-04	5.16E-06	0.00E+00	1.33E-05	1.23E-05	4.78E-09	3.71E-07	4.4	1.55E-03	1.81E-05
S9	60	8	16	5	1.11E-02	5.99E-03	1.92E-05	7.88E-04	1.30E-04	5.59E-06	0.00E+00	1.44E-05	1.33E-05	5.18E-09	4.03E-07	4.7	1.68E-03	1.96E-05
S9	60	8	17	5	1.37E-02	7.39E-03	2.37E-05	9.73E-04	1.61E-04	6.90E-06	0.00E+00	1.78E-05	1.65E-05	6.40E-09	4.97E-07	5.8	2.08E-03	2.42E-05
S9	60	8	18	5	1.47E-02	7.96E-03	2.55E-05	1.05E-03	1.73E-04	7.42E-06	0.00E+00	1.91E-05	1.77E-05	6.89E-09	5.35E-07	6.3	2.24E-03	2.61E-05
S9	60	8	19	5	1.02E-02	5.52E-03	1.77E-05	7.26E-04	1.20E-04	5.15E-06	0.00E+00	1.33E-05	1.23E-05	4.78E-09	3.71E-07	4.4	1.55E-03	1.81E-05
S9	60	8	20	5	6.76E-03	3.65E-03	1.17E-05	4.80E-04	7.93E-05	3.40E-06	0.00E+00	8.78E-06	8.13E-06	3.16E-09	2.46E-07	2.9	1.03E-03	1.20E-05
S9	60	8	21	5	5.72E-03	3.09E-03	9.91E-06	4.06E-04	6.71E-05	2.88E-06	0.00E+00	7.43E-06	6.88E-06	2.67E-09	2.08E-07	2.4	8.68E-04	1.01E-05
S9	60	8	22	5	4.85E-03	2.62E-03	8.41E-06	3.45E-04	5.70E-05	2.44E-06	0.00E+00	6.31E-06	5.83E-06	2.27E-09	1.76E-07	2.1	7.37E-04	8.59E-06
S9	60	8	23	5	3.99E-03	2.15E-03	6.91E-06	2.83E-04	4.68E-05	2.00E-06	0.00E+00	5.18E-06	4.79E-06	1.86E-09	1.45E-07	1.7	6.05E-04	7.05E-06
S9	60	8	24	5	2.95E-03	1.59E-03	5.11E-06	2.09E-04	3.46E-05	1.48E-06	0.00E+00	3.83E-06	3.54E-06	1.38E-09	1.07E-07	1.3	4.47E-04	5.21E-06
S10	60	8	1	5	7.05E-03	3.80E-03	1.22E-05	5.00E-04	8.27E-05	3.54E-06	0.00E+00	9.15E-06	8.47E-06	3.29E-09	2.56E-07	3.0	1.07E-03	1.25E-05
S10	60	8	2	5	4.70E-03	2.54E-03	8.14E-06	3.34E-04	5.51E-05	2.36E-06	0.00E+00	6.10E-06	5.65E-06	2.20E-09	1.71E-07	2.0	7.13E-04	8.31E-06
S10	60	8	3	5	4.11E-03	2.22E-03	7.12E-06	2.92E-04	4.82E-05	2.07E-06	0.00E+00	5.34E-06	4.94E-06	1.92E-09	1.49E-07	1.8	6.24E-04	7.27E-06
S10	60	8	4	5	2.94E-03	1.59E-03	5.09E-06	2.09E-04	3.45E-05	1.48E-06	0.00E+00	3.81E-06	3.53E-06	1.37E-09	1.07E-07	1.3	4.46E-04	5.19E-06
S10	60	8	5	5	4.11E-03	2.22E-03	7.12E-06	2.92E-04	4.82E-05	2.07E-06	0.00E+00	5.34E-06	4.94E-06	1.92E-09	1.49E-07	1.8	6.24E-04	7.27E-06
S10	60	8	6	5	9.98E-03	5.39E-03	1.73E-05	7.09E-04	1.17E-04	5.02E-06	0.00E+00	1.30E-05	1.20E-05	4.66E-09	3.62E-07	4.3	1.51E-03	1.77E-05
S10	60	8	7	5	2.99E-02	1.62E-02	5.19E-05	2.13E-03	3.51E-04	1.50E-05	0.00E+00	3.89E-05	3.60E-05	1.40E-08	1.09E-06	12.8	4.54E-03	5.30E-05
S10	60	8	8	5	4.58E-02	2.47E-02	7.94E-05	3.25E-03	5.37E-04	2.30E-05	0.00E+00	5.95E-05	5.51E-05	2.14E-08	1.66E-06	19.6	6.95E-03	8.10E-05
S10	60	8	9	5	3.70E-02	2.00E-02	6.41E-05	2.63E-03	4.34E-04	1.86E-05	0.00E+00	4.81E-05	4.45E-05	1.73E-08	1.34E-06	15.8	5.61E-03	6.54E-05
S10	60	8	10	5	3.05E-02	1.65E-02	5.29E-05	2.17E-03	3.58E-04	1.54E-05	0.00E+00	3.97E-05	3.67E-05	1.43E-08	1.11E-06	13.0	4.63E-03	5.40E-05
S10	60	8	11	5	2.76E-02	1.49E-02	4.78E-05	1.96E-03	3.24E-04	1.39E-05	0.00E+00	3.59E-05	3.32E-05	1.29E-08	1.00E-06	11.8	4.19E-03	4.88E-05
S10	60	8	12	5	3.11E-02	1.68E-02	5.39E-05	2.21E-03	3.65E-04	1.57E-05	0.00E+00	4.04E-05	3.74E-05	1.45E-08	1.13E-06	13.3	4.72E-03	5.51E-05
S10	60	8	13	5	3.29E-02	1.78E-02	5.70E-05	2.34E-03	3.86E-04	1.66E-05	0.00E+00	4.27E-05	3.95E-05	1.54E-08	1.19E-06	14.0	4.99E-03	5.82E-05
S10	60	8	14	5	3.35E-02	1.81E-02	5.80E-05	2.38E-03	3.93E-04	1.69E-05	0.00E+00	4.35E-05	4.02E-05	1.56E-08	1.22E-06	14.3	5.08E-03	5.92E-05
S10	60	8	15	5	3.46E-02	1.87E-02	6.00E-05	2.46E-03	4.07E-04	1.75E-05	0.00E+00	4.50E-05	4.16E-05	1.62E-08	1.26E-06	14.8	5.26E-03	6.13E-05
S10	60	8	16	5	3.76E-02	2.03E-02	6.51E-05	2.67E-03	4.41E-04	1.89E-05	0.00E+00	4.88E-05	4.52E-05	1.76E-08	1.36E-06	16.0	5.70E-03	6.65E-05
S10	60	8	17	5	4.64E-02	2.50E-02	8.04E-05	3.29E-03	5.44E-04	2.34E-05	0.00E+00	6.03E-05	5.58E-05	2.17E-08	1.68E-06	19.8	7.04E-03	8.21E-05
S10	60	8	18	5	4.99E-02	2.69E-02	8.65E-05	3.54E-03	5.86E-04	2.51E-05	0.00E+00	6.48E-05	6.00E-05	2.33E-08	1.81E-06	21.3	7.57E-03	8.83E-05
S10	60	8	19	5	3.46E-02	1.87E-02	6.00E-05	2.46E-03	4.07E-04	1.74E-05	0.00E+00	4.50E-05	4.16E-05	1.62E-08	1.26E-06	14.8	5.26E-03	6.13E-05
S10	60	8	20	5	2.29E-02	1.24E-02	3.97E-05	1.63E-03	2.69E-04	1.15E-05	0.00E+00	2.98E-05	2.75E-05	1.07E-08	8.32E-07	9.8	3.48E-03	4.05E-05
S10	60	8	21	5	1.94E-02	1.05E-02	3.36E-05	1.38E-03	2.27E-04	9.74E-06	0.00E+00	2.52E-05	2.33E-05	9.06E-09	7.04E-07	8.3	2.94E-03	3.43E-05
S10	60	8	22	5	1.64E-02	8.88E-03	2.85E-05	1.17E-03	1.93E-04	8.27E-06	0.00E+00	2.14E-05	1.98E-05	7.68E-09	5.97E-07	7.0	2.50E-03	2.91E-05
S10	60	8	23	5	1.35E-02	7.29E-03	2.34E-05	9.59E-04	1.58E-04	6.79E-06	0.00E+00	1.75E-05	1.62E-05	6.31E-09	4.90E-07	5.8	2.05E-03	2.39E-05
S10	60	8	24	5	9.98E-03	5.39E-03	1.73E-05	7.09E-04	1.17E-04	5.02E-06	0.00E+00	1.30E-05	1.20E-05	4.66E-09	3.62E-07	4.3	1.51E-03	1.77E-05
S11	60	8	1	5	1.67E-03	9.04E-04	2.90E-06	1.19E-04	1.96E-05	8.41E-07	0.00E+00	2.18E-06	2.01E-06	7.82E-10	6.08E-08	0.7	2.54E-04	2.96E-06
S11	60	8	2	5	1.12E-03	6.03E-04	1.93E-06	7.93E-05	1.31E-05	5.61E-07	0.00E+00	1.45E-06	1.34E-06	5.22E-10	4.05E-08	0.5	1.69E-04	1.97E-06
S11	60	8	3	5	9.77E-04	5.27E-04	1.69E-06	6.94E-05	1.15E-05	4.91E-07	0.00E+00	1.27E-06	1.17E-06	4.56E-10	3.55E-08	0.4	1.48E-04	1.73E-06
S11	60	8	4	5	6.98E-04	3.77E-04	1.21E-06	4.95E-05	8.19E-06	3.51E-07	0.00E+00	9.06E-07	8.39E-07	3.26E-10	2.53E-08	0.3	1.06E-04	1.23E-06
S11	60	8	5	5	9.77E-04	5.27E-04	1.69E-06	6.94E-05	1.15E-05	4.91E-07	0.00E+00	1.27E-06	1.17E-06	4.56E-10	3.55E-08	0.4	1.48E-04	1.73E-06
S11	60	8	6	5	2.37E-03	1.28E-03	4.11E-06	1.68E-04	2.78E-05	1.19E-06	0.00E+00	3.08E-06	2.85E-06	1.11E-09	8.61E-08	1.0	3.60E-04	4.20E-06
S11	60	8	7	5	7.11E-03	3.84E-03	1.23E-05	5.05E-04	8.35E-05	3.58E-06	0.00E+00	9.25E-06	8.55E-06	3.33E-09	2.58E-07	3.0	1.08E-03	1.26E-05
S11	60	8	8	5	1.09E-02	5.88E-03	1.89E-05	7.73E-04	1.28E-04	5.47E-06	0.00E+00	1.41E-05	1.31E-05	5.09E-09	3.95E-07	4.6	1.65E-03	1.93E-05
S11	60	8	9	5	8.79E-03	4.75E-03	1.52E-05	6.24E-04	1.03E-04	4.42E-06	0.00E+00	1.14E-05	1.06E-05	4.11E-09	3.19E-07	3.8	1.33E-03	1.56E-05
S11	60	8	10	5	7.25E-03	3.92E-03	1.26E-05	5.15E-04	8.51E-05	3.65E-06	0.00E+00	9.43E-06	8.72E-06	3.39E-09	2.63E-07	3.1	1.10E-03	1.28E-05
S11	60	8	11	5	6.56E-03	3.54E-03	1.14E-05	4.66E-04	7.70E-05	3.30E-06	0.00E+00	8.52E-06	7.88E-06	3.06E-09	2.38E-07	2.8	9.95E-04	1.16E-05
S11	60	8	12	5	7.39E-03	3.99E-03	1.28E-05	5.25E-04	8.68E-05	3.73E-06	0.00E+00	9.61E-06	8.89E-06	3.46E-09	2.69E-07	3.2	1.12E-03	1.31E-05
S11	60	8	13	5	7.81E-03	4.22E-03	1.35E-05	5.55E-04	9.17E-05	3.94E-06	0.00E+00	1.02E-05	9.39E-06	3.65E-09	2.84E-07	3.3	1.19E-03	1.38E-05
S11	60	8	14	5	7.95E-03	4.29E-03	1.38E-05	5.65E-04	9.33E-05	4.01E-06	0.00E+00	1.03E-05	9.56E-06	3.72E-09	2.89E-07	3.4	1.21E-03	1.41E-05
S11	60	8	15	5	8.23E-03	4.45E-03	1.43E-05	5.85E-04	9.66E-05	4.15E-06	0.00E+00	1.07E-05	9.90E-06	3.85E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S11	60	8	16	5	8.93E-03	4.82E-03	1.55E-05	6.34E-04	1.05E-04	4.50E-06	0.00E+00	1.16E-05	1.07E-05	4.17E-09	3.24E-07	3.8	1.36E-03	1.58E-05
S11	60	8	17	5	1.10E-02	5.95E-03	1.91E-05	7.83E-04	1.29E-04	5.55E-06	0.00E+00	1.43E-05	1.33E-05	5.15E-09	4.00E-07	4.7	1.67E-03	1.95E-05
S11	60	8	18	5	1.19E-02	6.40E-03	2.06E-05	8.42E-04	1.39E-04	5.98E-06	0.00E+00	1.54E-05	1.43E-05	5.54E-09	4.31E-07	5.1	1.80E-03	2.10E-05
S11	60	8	19	5	8.23E-03	4.45E-03	1.43E-05	5.85E-04	9.66E-05	4.14E-06	0.00E+00	1.07E-05	9.90E-06	3.85E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S11	60	8	20	5	5.44E-03	2.94E-03	9.43E-06	3.86E-04	6.39E-05	2.74E-06	0.00E+00	7.07E-06	6.54E-06	2.54E-09	1.98E-07	2.3	8.26E-04	9.63E-06
S11	60	8	21	5	4.60E-03	2.49E-03	7.98E-06	3.27E-04	5.40E-05	2.32E-06	0.00E+00	5.98E-06	5.54E-06	2.15E-09	1.67E-07	2.0	6.99E-04	8.15E-06
S11	60	8	22	5	3.91E-03	2.11E-03	6.77E-06	2.77E-04	4.58E-05	1.96E-06	0.00E+00	5.08E-06	4.70E-06	1.83E-09	1.42E-07	1.7	5.93E-04	6.91E-06
S11	60	8	23	5	3.21E-03	1.73E-03	5.56E-06	2.28E-04	3.77E-05	1.61E-06	0.00E+00	4.17E-06	3.86E-06	1.50E-09	1.17E-07	1.4	4.87E-04	5.68E-06
S11	60	8	24	5	2.37E-03	1.28E-03	4.11E-06	1.68E-04	2.78E-05	1.19E-06	0.00E+00	3.08E-06	2.85E-06	1.11E-09	8.61E-08	1.0	3.60E-04	4.20E-06
S12	60	8	1	5	4.29E-03	2.32E-03	7.44E-06	3.05E-04	5.04E-05	2.16E-06	0.00E+00	5.58E-06	5.16E-06	2.01E-09	1.56E-07	1.8	6.51E-04	7.59E-06
S12	60	8	2	5	2.86E-03	1.55E-03	4.96E-06	2.03E-04	3.36E-05	1.44E-06	0.00E+00	3.72E-06	3.44E-06	1.34E-09	1.04E-07	1.2	4.34E-04	5.06E-06
S12	60	8	3	5	2.50E-03	1.35E-03	4.34E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.09E-08	1.1	3.80E-04	4.43E-06
S12	60	8	4	5	1.79E-03	9.66E-04	3.10E-06	1.27E-04	2.10E-05	8.99E-07	0.00E+00	2.32E-06	2.15E-06	8.36E-10	6.50E-08	0.8	2.71E-04	3.16E-06
S12	60	8	5	5	2.50E-03	1.35E-03	4.34E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.09E-08	1.1	3.80E-04	4.43E-06
S12	60	8	6	5	6.08E-03	3.28E-03	1.05E-05	4.32E-04	7.14E-05	3.06E-06	0.00E+00	7.90E-06	7.31E-06	2.84E-09	2.21E-07	2.6	9.23E-04	1.08E-05
S12	60	8	7	5	1.82E-02	9.85E-03	3.16E-05	1.30E-03	2.14E-04	9.17E-06	0.00E+00	2.37E-05	2.19E-05	8.53E-09	6.63E-07	7.8	2.77E-03	3.23E-05
S12	60	8	8	5	2.79E-02	1.51E-02	4.84E-05	1.98E-03	3.27E-04	1.40E-05	0.00E+00	3.63E-05	3.35E-05	1.30E-08	1.01E-06	11.9	4.23E-03	4.94E-05
S12	60	8	9	5	2.25E-02	1.22E-02	3.91E-05	1.60E-03	2.64E-04	1.13E-05	0.00E+00	2.93E-05	2.71E-05	1.05E-08	8.18E-07	9.6	3.42E-03	3.99E-05
S12	60	8	10	5	1.86E-02	1.00E-02	3.22E-05	1.32E-03	2.18E-04	9.35E-06	0.00E+00	2.42E-05	2.24E-05	8.69E-09	6.76E-07	7.9	2.82E-03	3.29E-05
S12	60	8	11	5	1.68E-02	9.08E-03	2.91E-05	1.19E-03	1.97E-04	8.46E-06	0.00E+00	2.18E-05	2.02E-05	7.86E-09	6.11E-07	7.2	2.55E-03	2.97E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	12	5	1.90E-02	1.02E-02	3.29E-05	1.35E-03	2.22E-04	9.55E-06	0.00E+00	2.46E-05	2.28E-05	8.86E-09	6.89E-07	8.1	2.88E-03	3.35E-05
S12	60	8	13	5	2.00E-02	1.08E-02	3.47E-05	1.42E-03	2.35E-04	1.01E-05	0.00E+00	2.60E-05	2.41E-05	9.36E-09	7.27E-07	8.6	3.04E-03	3.54E-05
S12	60	8	14	5	2.04E-02	1.10E-02	3.53E-05	1.45E-03	2.39E-04	1.03E-05	0.00E+00	2.65E-05	2.45E-05	9.53E-09	7.40E-07	8.7	3.09E-03	3.61E-05
S12	60	8	15	5	2.11E-02	1.14E-02	3.66E-05	1.50E-03	2.48E-04	1.06E-05	0.00E+00	2.74E-05	2.54E-05	9.86E-09	7.66E-07	9.0	3.20E-03	3.73E-05
S12	60	8	16	5	2.29E-02	1.24E-02	3.97E-05	1.63E-03	2.69E-04	1.15E-05	0.00E+00	2.97E-05	2.75E-05	1.07E-08	8.31E-07	9.8	3.47E-03	4.05E-05
S12	60	8	17	5	2.83E-02	1.53E-02	4.90E-05	2.01E-03	3.32E-04	1.42E-05	0.00E+00	3.67E-05	3.40E-05	1.32E-08	1.03E-06	12.1	4.29E-03	5.00E-05
S12	60	8	18	5	3.04E-02	1.64E-02	5.27E-05	2.16E-03	3.57E-04	1.53E-05	0.00E+00	3.95E-05	3.66E-05	1.42E-08	1.10E-06	13.0	4.61E-03	5.38E-05
S12	60	8	19	5	2.11E-02	1.14E-02	3.66E-05	1.50E-03	2.48E-04	1.06E-05	0.00E+00	2.74E-05	2.54E-05	9.86E-09	7.66E-07	9.0	3.20E-03	3.73E-05
S12	60	8	20	5	1.39E-02	7.53E-03	2.42E-05	9.91E-04	1.64E-04	7.01E-06	0.00E+00	1.81E-05	1.68E-05	6.52E-09	5.07E-07	6.0	2.12E-03	2.47E-05
S12	60	8	21	5	1.18E-02	6.37E-03	2.05E-05	8.38E-04	1.39E-04	5.94E-06	0.00E+00	1.53E-05	1.42E-05	5.52E-09	4.29E-07	5.0	1.79E-03	2.09E-05
S12	60	8	22	5	1.00E-02	5.41E-03	1.74E-05	7.11E-04	1.18E-04	5.04E-06	0.00E+00	1.30E-05	1.20E-05	4.68E-09	3.64E-07	4.3	1.52E-03	1.77E-05
S12	60	8	23	5	8.23E-03	4.44E-03	1.43E-05	5.84E-04	9.66E-05	4.14E-06	0.00E+00	1.07E-05	9.89E-06	3.85E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S12	60	8	24	5	6.08E-03	3.28E-03	1.05E-05	4.32E-04	7.14E-05	3.06E-06	0.00E+00	7.90E-06	7.31E-06	2.84E-09	2.21E-07	2.6	9.23E-04	1.08E-05
S13	60	8	1	5	2.73E-03	1.48E-03	4.73E-06	1.94E-04	3.21E-05	1.37E-06	0.00E+00	3.55E-06	3.28E-06	1.28E-09	9.92E-08	1.2	4.15E-04	4.83E-06
S13	60	8	2	5	1.82E-03	9.83E-04	3.16E-06	1.29E-04	2.14E-05	9.15E-07	0.00E+00	2.37E-06	2.19E-06	8.51E-10	6.61E-08	0.8	2.76E-04	3.22E-06
S13	60	8	3	5	1.59E-03	8.60E-04	2.76E-06	1.13E-04	1.87E-05	8.01E-07	0.00E+00	2.07E-06	1.92E-06	7.45E-10	5.79E-08	0.7	2.42E-04	2.82E-06
S13	60	8	4	5	1.14E-03	6.15E-04	1.97E-06	8.08E-05	1.34E-05	5.72E-07	0.00E+00	1.48E-06	1.37E-06	5.32E-10	4.13E-08	0.5	1.73E-04	2.01E-06
S13	60	8	5	5	1.59E-03	8.60E-04	2.76E-06	1.13E-04	1.87E-05	8.01E-07	0.00E+00	2.07E-06	1.92E-06	7.45E-10	5.79E-08	0.7	2.42E-04	2.82E-06
S13	60	8	6	5	3.87E-03	2.09E-03	6.71E-06	2.75E-04	4.54E-05	1.94E-06	0.00E+00	5.03E-06	4.65E-06	1.81E-09	1.41E-07	1.7	5.87E-04	6.85E-06
S13	60	8	7	5	1.16E-02	6.27E-03	2.01E-05	8.25E-04	1.36E-04	5.83E-06	0.00E+00	1.51E-05	1.40E-05	5.43E-09	4.22E-07	5.0	1.76E-03	2.05E-05
S13	60	8	8	5	1.78E-02	9.59E-03	3.08E-05	1.26E-03	2.08E-04	8.93E-06	0.00E+00	2.31E-05	2.13E-05	8.30E-09	6.45E-07	7.6	2.69E-03	3.14E-05
S13	60	8	9	5	1.43E-02	7.74E-03	2.49E-05	1.02E-03	1.68E-04	7.21E-06	0.00E+00	1.86E-05	1.72E-05	6.70E-09	5.21E-07	6.1	2.18E-03	2.54E-05
S13	60	8	10	5	1.18E-02	6.39E-03	2.05E-05	8.41E-04	1.39E-04	5.95E-06	0.00E+00	1.54E-05	1.42E-05	5.53E-09	4.30E-07	5.1	1.80E-03	2.09E-05
S13	60	8	11	5	1.07E-02	5.78E-03	1.85E-05	7.60E-04	1.26E-04	5.39E-06	0.00E+00	1.39E-05	1.29E-05	5.00E-09	3.89E-07	4.6	1.62E-03	1.89E-05
S13	60	8	12	5	1.21E-02	6.51E-03	2.09E-05	8.57E-04	1.42E-04	6.08E-06	0.00E+00	1.57E-05	1.45E-05	5.64E-09	4.38E-07	5.2	1.83E-03	2.13E-05
S13	60	8	13	5	1.27E-02	6.88E-03	2.21E-05	9.05E-04	1.50E-04	6.42E-06	0.00E+00	1.66E-05	1.53E-05	5.96E-09	4.63E-07	5.4	1.93E-03	2.26E-05
S13	60	8	14	5	1.30E-02	7.01E-03	2.25E-05	9.22E-04	1.52E-04	6.54E-06	0.00E+00	1.69E-05	1.56E-05	6.06E-09	4.71E-07	5.5	1.97E-03	2.30E-05
S13	60	8	15	5	1.34E-02	7.25E-03	2.33E-05	9.54E-04	1.58E-04	6.77E-06	0.00E+00	1.75E-05	1.61E-05	6.28E-09	4.88E-07	5.7	2.04E-03	2.38E-05
S13	60	8	16	5	1.46E-02	7.87E-03	2.52E-05	1.03E-03	1.71E-04	7.34E-06	0.00E+00	1.89E-05	1.75E-05	6.81E-09	5.29E-07	6.2	2.21E-03	2.58E-05
S13	60	8	17	5	1.80E-02	9.71E-03	3.12E-05	1.28E-03	2.11E-04	9.06E-06	0.00E+00	2.34E-05	2.16E-05	8.40E-09	6.53E-07	7.7	2.73E-03	3.18E-05
S13	60	8	18	5	1.93E-02	1.04E-02	3.35E-05	1.37E-03	2.27E-04	9.75E-06	0.00E+00	2.51E-05	2.33E-05	9.04E-09	7.03E-07	8.3	2.94E-03	3.42E-05
S13	60	8	19	5	1.34E-02	7.25E-03	2.33E-05	9.54E-04	1.58E-04	6.76E-06	0.00E+00	1.75E-05	1.61E-05	6.28E-09	4.88E-07	5.7	2.04E-03	2.38E-05
S13	60	8	20	5	8.88E-03	4.79E-03	1.54E-05	6.31E-04	1.04E-04	4.46E-06	0.00E+00	1.15E-05	1.07E-05	4.15E-09	3.22E-07	3.8	1.35E-03	1.57E-05
S13	60	8	21	5	7.51E-03	4.06E-03	1.30E-05	5.34E-04	8.82E-05	3.78E-06	0.00E+00	9.76E-06	9.03E-06	3.51E-09	2.73E-07	3.2	1.14E-03	1.33E-05
S13	60	8	22	5	6.37E-03	3.44E-03	1.10E-05	4.53E-04	7.48E-05	3.20E-06	0.00E+00	8.28E-06	7.66E-06	2.98E-09	2.31E-07	2.7	9.67E-04	1.13E-05
S13	60	8	23	5	5.24E-03	2.83E-03	9.07E-06	3.72E-04	6.14E-05	2.63E-06	0.00E+00	6.80E-06	6.29E-06	2.45E-09	1.90E-07	2.2	7.95E-04	9.26E-06
S13	60	8	24	5	3.87E-03	2.09E-03	6.71E-06	2.75E-04	4.54E-05	1.94E-06	0.00E+00	5.03E-06	4.65E-06	1.81E-09	1.41E-07	1.7	5.87E-04	6.85E-06
S14	60	8	1	5	1.51E-03	8.18E-04	2.62E-06	1.08E-04	1.78E-05	7.61E-07	0.00E+00	1.97E-06	1.82E-06	7.08E-10	5.50E-08	0.6	2.30E-04	2.68E-06
S14	60	8	2	5	1.01E-03	5.45E-04	1.75E-06	7.17E-05	1.18E-05	5.07E-07	0.00E+00	1.31E-06	1.21E-06	4.72E-10	3.67E-08	0.4	1.53E-04	1.79E-06
S14	60	8	3	5	8.83E-04	4.77E-04	1.53E-06	6.27E-05	1.04E-05	4.44E-07	0.00E+00	1.15E-06	1.06E-06	4.13E-10	3.21E-08	0.4	1.34E-04	1.56E-06
S14	60	8	4	5	6.31E-04	3.41E-04	1.09E-06	4.48E-05	7.40E-06	3.17E-07	0.00E+00	8.20E-07	7.58E-07	2.95E-10	2.29E-08	0.3	9.57E-05	1.12E-06
S14	60	8	5	5	8.83E-04	4.77E-04	1.53E-06	6.27E-05	1.04E-05	4.44E-07	0.00E+00	1.15E-06	1.06E-06	4.13E-10	3.21E-08	0.4	1.34E-04	1.56E-06
S14	60	8	6	5	2.14E-03	1.16E-03	3.72E-06	1.52E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.79E-08	0.9	3.26E-04	3.79E-06
S14	60	8	7	5	6.43E-03	3.47E-03	1.12E-05	4.57E-04	7.55E-05	3.23E-06	0.00E+00	8.36E-06	7.74E-06	3.01E-09	2.34E-07	2.7	9.77E-04	1.14E-05
S14	60	8	8	5	9.84E-03	5.31E-03	1.71E-05	6.99E-04	1.15E-04	4.95E-06	0.00E+00	1.28E-05	1.18E-05	4.60E-09	3.57E-07	4.2	1.49E-03	1.74E-05
S14	60	8	9	5	7.95E-03	4.29E-03	1.38E-05	5.65E-04	9.33E-05	4.00E-06	0.00E+00	1.03E-05	9.56E-06	3.71E-09	2.89E-07	3.4	1.21E-03	1.41E-05
S14	60	8	10	5	6.56E-03	3.54E-03	1.14E-05	4.66E-04	7.70E-05	3.30E-06	0.00E+00	8.52E-06	7.89E-06	3.07E-09	2.38E-07	2.8	9.96E-04	1.16E-05
S14	60	8	11	5	5.93E-03	3.20E-03	1.03E-05	4.21E-04	6.96E-05	2.99E-06	0.00E+00	7.70E-06	7.13E-06	2.77E-09	2.15E-07	2.5	9.00E-04	1.05E-05
S14	60	8	12	5	6.69E-03	3.61E-03	1.16E-05	4.75E-04	7.85E-05	3.37E-06	0.00E+00	8.69E-06	8.04E-06	3.13E-09	2.43E-07	2.9	1.01E-03	1.18E-05
S14	60	8	13	5	7.06E-03	3.82E-03	1.22E-05	5.02E-04	8.29E-05	3.56E-06	0.00E+00	9.18E-06	8.49E-06	3.30E-09	2.57E-07	3.0	1.07E-03	1.25E-05
S14	60	8	14	5	7.19E-03	3.88E-03	1.25E-05	5.11E-04	8.44E-05	3.63E-06	0.00E+00	9.34E-06	8.65E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S14	60	8	15	5	7.44E-03	4.02E-03	1.29E-05	5.29E-04	8.74E-05	3.75E-06	0.00E+00	9.67E-06	8.95E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S14	60	8	16	5	8.07E-03	4.36E-03	1.40E-05	5.74E-04	9.48E-05	4.07E-06	0.00E+00	1.05E-05	9.71E-06	3.77E-09	2.93E-07	3.4	1.23E-03	1.43E-05
S14	60	8	17	5	9.97E-03	5.38E-03	1.73E-05	7.08E-04	1.17E-04	5.02E-06	0.00E+00	1.30E-05	1.20E-05	4.66E-09	3.62E-07	4.3	1.51E-03	1.76E-05
S14	60	8	18	5	1.07E-02	5.79E-03	1.86E-05	7.62E-04	1.26E-04	5.40E-06	0.00E+00	1.39E-05	1.29E-05	5.01E-09	3.89E-07	4.6	1.63E-03	1.90E-05
S14	60	8	19	5	7.44E-03	4.02E-03	1.29E-05	5.29E-04	8.74E-05	3.75E-06	0.00E+00	9.67E-06	8.95E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S14	60	8	20	5	4.92E-03	2.66E-03	8.53E-06	3.49E-04	5.77E-05	2.47E-06	0.00E+00	6.39E-06	5.92E-06	2.30E-09	1.79E-07	2.1	7.47E-04	8.71E-06
S14	60	8	21	5	4.16E-03	2.25E-03	7.22E-06	2.96E-04	4.89E-05	2.09E-06	0.00E+00	5.41E-06	5.01E-06	1.95E-09	1.51E-07	1.8	6.32E-04	7.37E-06
S14	60	8	22	5	3.53E-03	1.91E-03	6.12E-06	2.51E-04	4.15E-05	1.78E-06	0.00E+00	4.59E-06	4.25E-06	1.65E-09	1.28E-07	1.5	5.36E-04	6.25E-06
S14	60	8	23	5	2.90E-03	1.57E-03	5.03E-06	2.06E-04	3.41E-05	1.46E-06	0.00E+00	3.77E-06	3.49E-06	1.36E-09	1.05E-07	1.2	4.40E-04	5.13E-06
S14	60	8	24	5	2.14E-03	1.16E-03	3.72E-06	1.52E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.79E-08	0.9	3.26E-04	3.79E-06
S15	60	8	1	5	1.14E-03	6.17E-04	1.98E-06	8.11E-05	1.34E-05	5.74E-07	0.00E+00	1.48E-06	1.37E-06	5.34E-10	4.15E-08	0.5	1.73E-04	2.02E-06
S15	60	8	2	5	7.62E-04	4.11E-04	1.32E-06	5.41E-05	8.94E-06	3.83E-07	0.00E+00	9.90E-07	9.16E-07	3.56E-10	2.77E-08	0.3	1.16E-04	1.35E-06
S15	60	8	3	5	6.66E-04	3.60E-04	1.15E-06	4.73E-05	7.82E-06	3.35E-07	0.00E+00	8.66E-07	8.01E-07	3.11E-10	2.42E-08	0.3	1.01E-04	1.18E-06
S15	60	8	4	5	4.76E-04	2.57E-04	8.25E-07	3.38E-05	5.59E-06	2.39E-07	0.00E+00	6.19E-07	5.72E-07	2.22E-10	1.73E-08	0.2	7.22E-05	8.42E-07
S15	60	8	5	5	6.66E-04	3.60E-04	1.15E-06	4.73E-05	7.82E-06	3.35E-07	0.00E+00	8.66E-07	8.01E-07	3.11E-10	2.42E-08	0.3	1.01E-04	1.18E-06
S15	60	8	6	5	1.62E-03	8.74E-04	2.80E-06	1.15E-04	1.90E-05	8.13E-07	0.00E+00	2.10E-06	1.95E-06	7.56E-10	5.88E-08	0.7	2.46E-04	2.86E-06
S15	60	8	7	5	4.86E-03	2.62E-03	8.41E-06	3.45E-04	5.70E-05	2.44E-06	0.00E+00	6.31E-06	5.84E-06	2.27E-09	1.76E-07	2.1	7.37E-04	8.59E-06
S15	60	8	8	5	7.43E-03	4.01E-03	1.29E-05	5.27E-04	8.71E-05	3.73E-06	0.00E+00	9.65E-06	8.93E-06	3.47E-09	2.70E-07	3.2	1.13E-03	1.31E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	9	5	6.00E-03	3.24E-03	1.04E-05	4.26E-04	7.04E-05	3.02E-06	0.00E+00	7.79E-06	7.21E-06	2.80E-09	2.18E-07	2.6	9.10E-04	1.06E-05
S15	60	8	10	5	4.95E-03	2.67E-03	8.58E-06	3.52E-04	5.81E-05	2.49E-06	0.00E+00	6.43E-06	5.95E-06	2.31E-09	1.80E-07	2.1	7.51E-04	8.76E-06
S15	60	8	11	5	4.47E-03	2.42E-03	7.75E-06	3.18E-04	5.25E-05	2.25E-06	0.00E+00	5.81E-06	5.38E-06	2.09E-09	1.63E-07	1.9	6.79E-04	7.92E-06
S15	60	8	12	5	5.05E-03	2.72E-03	8.74E-06	3.58E-04	5.92E-05	2.54E-06	0.00E+00	6.56E-06	6.07E-06	2.36E-09	1.83E-07	2.2	7.66E-04	8.93E-06
S15	60	8	13	5	5.33E-03	2.88E-03	9.24E-06	3.79E-04	6.26E-05	2.69E-06	0.00E+00	6.93E-06	6.41E-06	2.49E-09	1.94E-07	2.3	8.09E-04	9.43E-06
S15	60	8	14	5	5.43E-03	2.93E-03	9.40E-06	3.85E-04	6.37E-05	2.74E-06	0.00E+00	7.05E-06	6.52E-06	2.54E-09	1.97E-07	2.3	8.24E-04	9.60E-06
S15	60	8	15	5	5.62E-03	3.03E-03	9.73E-06	3.99E-04	6.59E-05	2.83E-06	0.00E+00	7.30E-06	6.75E-06	2.63E-09	2.04E-07	2.4	8.53E-04	9.94E-06
S15	60	8	16	5	6.09E-03	3.29E-03	1.06E-05	4.33E-04	7.15E-05	3.07E-06	0.00E+00	7.92E-06	7.33E-06	2.85E-09	2.21E-07	2.6	9.25E-04	1.08E-05
S15	60	8	17	5	7.52E-03	4.06E-03	1.30E-05	5.34E-04	8.83E-05	3.79E-06	0.00E+00	9.77E-06	9.04E-06	3.52E-09	2.73E-07	3.2	1.14E-03	1.33E-05
S15	60	8	18	5	8.09E-03	4.37E-03	1.40E-05	5.75E-04	9.50E-05	4.08E-06	0.00E+00	1.05E-05	9.73E-06	3.78E-09	2.94E-07	3.5	1.23E-03	1.43E-05
S15	60	8	19	5	5.62E-03	3.03E-03	9.73E-06	3.99E-04	6.59E-05	2.83E-06	0.00E+00	7.30E-06	6.75E-06	2.63E-09	2.04E-07	2.4	8.53E-04	9.94E-06
S15	60	8	20	5	3.71E-03	2.01E-03	6.43E-06	2.64E-04	4.36E-05	1.87E-06	0.00E+00	4.82E-06	4.46E-06	1.74E-09	1.35E-07	1.6	5.64E-04	6.57E-06
S15	60	8	21	5	3.14E-03	1.70E-03	5.44E-06	2.23E-04	3.69E-05	1.58E-06	0.00E+00	4.08E-06	3.78E-06	1.47E-09	1.14E-07	1.3	4.77E-04	5.56E-06
S15	60	8	22	5	2.67E-03	1.44E-03	4.62E-06	1.89E-04	3.13E-05	1.34E-06	0.00E+00	3.46E-06	3.20E-06	1.25E-09	9.68E-08	1.1	4.05E-04	4.72E-06
S15	60	8	23	5	2.19E-03	1.18E-03	3.79E-06	1.56E-04	2.57E-05	1.10E-06	0.00E+00	2.85E-06	2.63E-06	1.02E-09	7.95E-08	0.9	3.32E-04	3.87E-06
S15	60	8	24	5	1.62E-03	8.74E-04	2.80E-06	1.15E-04	1.90E-05	8.13E-07	0.00E+00	2.10E-06	1.95E-06	7.56E-10	5.88E-08	0.7	2.46E-04	2.86E-06
S16	60	8	1	5	1.10E-03	5.96E-04	1.91E-06	7.85E-05	1.30E-05	5.55E-07	0.00E+00	1.44E-06	1.33E-06	5.16E-10	4.01E-08	0.5	1.68E-04	1.95E-06
S16	60	8	2	5	7.36E-04	3.98E-04	1.28E-06	5.23E-05	8.64E-06	3.70E-07	0.00E+00	9.57E-07	8.85E-07	3.44E-10	2.67E-08	0.3	1.12E-04	1.30E-06
S16	60	8	3	5	6.44E-04	3.48E-04	1.12E-06	4.58E-05	7.56E-06	3.24E-07	0.00E+00	8.37E-07	7.75E-07	3.01E-10	2.34E-08	0.3	9.78E-05	1.14E-06
S16	60	8	4	5	4.60E-04	2.49E-04	7.98E-07	3.27E-05	5.40E-06	2.31E-07	0.00E+00	5.98E-07	5.53E-07	2.15E-10	1.67E-08	0.2	6.98E-05	8.14E-07
S16	60	8	5	5	6.44E-04	3.48E-04	1.12E-06	4.58E-05	7.56E-06	3.24E-07	0.00E+00	8.37E-07	7.75E-07	3.01E-10	2.34E-08	0.3	9.78E-05	1.14E-06
S16	60	8	6	5	1.56E-03	8.45E-04	2.71E-06	1.11E-04	1.84E-05	7.86E-07	0.00E+00	2.03E-06	1.88E-06	7.31E-10	5.68E-08	0.7	2.37E-04	2.77E-06
S16	60	8	7	5	4.69E-03	2.53E-03	8.13E-06	3.33E-04	5.51E-05	2.36E-06	0.00E+00	6.10E-06	5.64E-06	2.19E-09	1.70E-07	2.0	7.12E-04	8.30E-06
S16	60	8	8	5	7.18E-03	3.88E-03	1.24E-05	5.10E-04	8.43E-05	3.61E-06	0.00E+00	9.33E-06	8.63E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S16	60	8	9	5	5.80E-03	3.13E-03	1.00E-05	4.12E-04	6.81E-05	2.91E-06	0.00E+00	7.53E-06	6.97E-06	2.71E-09	2.11E-07	2.5	8.80E-04	1.03E-05
S16	60	8	10	5	4.79E-03	2.58E-03	8.29E-06	3.40E-04	5.62E-05	2.41E-06	0.00E+00	6.22E-06	5.75E-06	2.24E-09	1.74E-07	2.0	7.26E-04	8.47E-06
S16	60	8	11	5	4.33E-03	2.34E-03	7.50E-06	3.07E-04	5.08E-05	2.18E-06	0.00E+00	5.62E-06	5.20E-06	2.02E-09	1.57E-07	1.8	6.57E-04	7.65E-06
S16	60	8	12	5	4.88E-03	2.63E-03	8.45E-06	3.46E-04	5.72E-05	2.46E-06	0.00E+00	6.34E-06	5.86E-06	2.28E-09	1.77E-07	2.1	7.40E-04	8.63E-06
S16	60	8	13	5	5.15E-03	2.78E-03	8.93E-06	3.66E-04	6.05E-05	2.60E-06	0.00E+00	6.70E-06	6.20E-06	2.41E-09	1.87E-07	2.2	7.82E-04	9.12E-06
S16	60	8	14	5	5.25E-03	2.83E-03	9.09E-06	3.73E-04	6.16E-05	2.65E-06	0.00E+00	6.82E-06	6.31E-06	2.45E-09	1.91E-07	2.2	7.96E-04	9.28E-06
S16	60	8	15	5	5.43E-03	2.93E-03	9.41E-06	3.86E-04	6.37E-05	2.74E-06	0.00E+00	7.06E-06	6.53E-06	2.54E-09	1.97E-07	2.3	8.24E-04	9.61E-06
S16	60	8	16	5	5.89E-03	3.18E-03	1.02E-05	4.18E-04	6.91E-05	2.97E-06	0.00E+00	7.65E-06	7.08E-06	2.75E-09	2.14E-07	2.5	8.94E-04	1.04E-05
S16	60	8	17	5	7.27E-03	3.93E-03	1.26E-05	5.16E-04	8.53E-05	3.66E-06	0.00E+00	9.45E-06	8.74E-06	3.40E-09	2.64E-07	3.1	1.10E-03	1.29E-05
S16	60	8	18	5	7.82E-03	4.22E-03	1.36E-05	5.56E-04	9.18E-05	3.94E-06	0.00E+00	1.02E-05	9.41E-06	3.66E-09	2.84E-07	3.3	1.19E-03	1.38E-05
S16	60	8	19	5	5.43E-03	2.93E-03	9.41E-06	3.86E-04	6.37E-05	2.73E-06	0.00E+00	7.06E-06	6.53E-06	2.54E-09	1.97E-07	2.3	8.24E-04	9.61E-06
S16	60	8	20	5	3.59E-03	1.94E-03	6.22E-06	2.55E-04	4.21E-05	1.80E-06	0.00E+00	4.66E-06	4.32E-06	1.68E-09	1.30E-07	1.5	5.45E-04	6.35E-06
S16	60	8	21	5	3.04E-03	1.64E-03	5.26E-06	2.16E-04	3.56E-05	1.53E-06	0.00E+00	3.95E-06	3.65E-06	1.42E-09	1.10E-07	1.3	4.61E-04	5.37E-06
S16	60	8	22	5	2.58E-03	1.39E-03	4.47E-06	1.83E-04	3.02E-05	1.30E-06	0.00E+00	3.35E-06	3.10E-06	1.20E-09	9.36E-08	1.1	3.91E-04	4.56E-06
S16	60	8	23	5	2.12E-03	1.14E-03	3.67E-06	1.50E-04	2.48E-05	1.06E-06	0.00E+00	2.75E-06	2.55E-06	9.89E-10	7.69E-08	0.9	3.21E-04	3.75E-06
S16	60	8	24	5	1.56E-03	8.45E-04	2.71E-06	1.11E-04	1.84E-05	7.86E-07	0.00E+00	2.03E-06	1.88E-06	7.31E-10	5.68E-08	0.7	2.37E-04	2.77E-06
S17	60	8	1	5	2.28E-03	1.23E-03	3.96E-06	1.62E-04	2.68E-05	1.15E-06	0.00E+00	2.97E-06	2.75E-06	1.07E-09	8.29E-08	1.0	3.47E-04	4.04E-06
S17	60	8	2	5	1.52E-03	8.22E-04	2.64E-06	1.08E-04	1.79E-05	7.65E-07	0.00E+00	1.98E-06	1.83E-06	7.11E-10	5.53E-08	0.7	2.31E-04	2.69E-06
S17	60	8	3	5	1.33E-03	7.19E-04	2.31E-06	9.46E-05	1.56E-05	6.69E-07	0.00E+00	1.73E-06	1.60E-06	6.22E-10	4.84E-08	0.6	2.02E-04	2.36E-06
S17	60	8	4	5	9.51E-04	5.14E-04	1.65E-06	6.76E-05	1.12E-05	4.78E-07	0.00E+00	1.24E-06	1.14E-06	4.45E-10	3.46E-08	0.4	1.44E-04	1.68E-06
S17	60	8	5	5	1.33E-03	7.19E-04	2.31E-06	9.46E-05	1.56E-05	6.69E-07	0.00E+00	1.73E-06	1.60E-06	6.22E-10	4.84E-08	0.6	2.02E-04	2.36E-06
S17	60	8	6	5	3.23E-03	1.75E-03	5.61E-06	2.30E-04	3.80E-05	1.63E-06	0.00E+00	4.20E-06	3.89E-06	1.51E-09	1.17E-07	1.4	4.91E-04	5.72E-06
S17	60	8	7	5	9.70E-03	5.24E-03	1.68E-05	6.89E-04	1.14E-04	4.88E-06	0.00E+00	1.26E-05	1.17E-05	4.54E-09	3.52E-07	4.1	1.47E-03	1.72E-05
S17	60	8	8	5	1.48E-02	8.01E-03	2.57E-05	1.05E-03	1.74E-04	7.46E-06	0.00E+00	1.93E-05	1.78E-05	6.94E-09	5.39E-07	6.3	2.25E-03	2.63E-05
S17	60	8	9	5	1.20E-02	6.47E-03	2.08E-05	8.51E-04	1.41E-04	6.03E-06	0.00E+00	1.56E-05	1.44E-05	5.60E-09	4.35E-07	5.1	1.82E-03	2.12E-05
S17	60	8	10	5	9.89E-03	5.34E-03	1.71E-05	7.03E-04	1.16E-04	4.98E-06	0.00E+00	1.29E-05	1.19E-05	4.62E-09	3.59E-07	4.2	1.50E-03	1.75E-05
S17	60	8	11	5	8.94E-03	4.83E-03	1.55E-05	6.35E-04	1.05E-04	4.50E-06	0.00E+00	1.16E-05	1.08E-05	4.18E-09	3.25E-07	3.8	1.36E-03	1.58E-05
S17	60	8	12	5	1.01E-02	5.45E-03	1.75E-05	7.16E-04	1.18E-04	5.08E-06	0.00E+00	1.31E-05	1.21E-05	4.71E-09	3.66E-07	4.3	1.53E-03	1.78E-05
S17	60	8	13	5	1.07E-02	5.75E-03	1.85E-05	7.57E-04	1.25E-04	5.37E-06	0.00E+00	1.38E-05	1.28E-05	4.98E-09	3.87E-07	4.6	1.62E-03	1.89E-05
S17	60	8	14	5	1.08E-02	5.86E-03	1.88E-05	7.70E-04	1.27E-04	5.47E-06	0.00E+00	1.41E-05	1.30E-05	5.07E-09	3.94E-07	4.6	1.65E-03	1.92E-05
S17	60	8	15	5	1.12E-02	6.06E-03	1.95E-05	7.97E-04	1.32E-04	5.66E-06	0.00E+00	1.46E-05	1.35E-05	5.25E-09	4.08E-07	4.8	1.70E-03	1.99E-05
S17	60	8	16	5	1.22E-02	6.58E-03	2.11E-05	8.65E-04	1.43E-04	6.14E-06	0.00E+00	1.58E-05	1.46E-05	5.69E-09	4.42E-07	5.2	1.85E-03	2.15E-05
S17	60	8	17	5	1.50E-02	8.12E-03	2.60E-05	1.07E-03	1.76E-04	7.57E-06	0.00E+00	1.95E-05	1.81E-05	7.03E-09	5.46E-07	6.4	2.28E-03	2.66E-05
S17	60	8	18	5	1.62E-02	8.73E-03	2.80E-05	1.15E-03	1.90E-04	8.15E-06	0.00E+00	2.10E-05	1.94E-05	7.56E-09	5.87E-07	6.9	2.45E-03	2.86E-05
S17	60	8	19	5	1.12E-02	6.06E-03	1.95E-05	7.97E-04	1.32E-04	5.65E-06	0.00E+00	1.46E-05	1.35E-05	5.25E-09	4.08E-07	4.8	1.70E-03	1.99E-05
S17	60	8	20	5	7.42E-03	4.01E-03	1.29E-05	5.27E-04	8.71E-05	3.73E-06	0.00E+00	9.64E-06	8.92E-06	3.47E-09	2.69E-07	3.2	1.13E-03	1.31E-05
S17	60	8	21	5	6.28E-03	3.39E-03	1.09E-05	4.46E-04	7.37E-05	3.16E-06	0.00E+00	8.16E-06	7.55E-06	2.93E-09	2.28E-07	2.7	9.53E-04	1.11E-05
S17	60	8	22	5	5.33E-03	2.88E-03	9.23E-06	3.78E-04	6.25E-05	2.68E-06	0.00E+00	6.92E-06	6.41E-06	2.49E-09	1.93E-07	2.3	8.09E-04	9.43E-06
S17	60	8	23	5	4.38E-03	2.36E-03	7.58E-06	3.11E-04	5.14E-05	2.20E-06	0.00E+00	5.69E-06	5.26E-06	2.05E-09	1.59E-07	1.9	6.64E-04	7.74E-06
S17	60	8	24	5	3.23E-03	1.75E-03	5.61E-06	2.30E-04	3.80E-05	1.63E-06	0.00E+00	4.20E-06	3.89E-06	1.51E-09	1.17E-07	1.4	4.91E-04	5.72E-06
S18	65	9	1	5	3.38E-03	1.48E-03	5.66E-06	1.81E-04	3.14E-05	1.47E-06	0.00E+00	3.66E-06	3.37E-06	1.51E-09	9.97E-08	1.4	4.29E-04	5.23E-06
S18	65	9	2	5	2.25E-03	9.88E-04	3.77E-06	1.21E-04	2.09E-05	9.77E-07	0.00E+00	2.44E-06	2.24E-06	1.01E-09	6.64E-08	0.9	2.86E-04	3.49E-06
S18	65	9	3	5	1.97E-03	8.65E-04	3.30E-06	1.06E-04	1.83E-05	8.55E-07	0.00E+00	2.14E-06	1.96E-06	8.81E-10	5.81E-08	0.8	2.50E-04	3.05E-06
S18	65	9	4	5	1.41E-03	6.18E-04	2.36E-06	7.56E-05	1.31E-05	6.11E-07	0.00E+00	1.53E-06	1.40E-06	6.29E-10	4.15E-08	0.6	1.79E-04	2.18E-06
S18	65	9	5	5	1.97E-03	8.65E-04	3.30E-06	1.06E-04	1.83E-05	8.55E-07	0.00E+00	2.14E-06	1.96E-06	8.81E-10	5.81E-08	0.8	2.50E-04	3.05E-06

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	6	5	4.79E-03	2.10E-03	8.01E-06	2.57E-04	4.44E-05	2.08E-06	0.00E+00	5.19E-06	4.77E-06	2.14E-09	1.41E-07	2.0	6.08E-04	7.41E-06
S18	65	9	7	5	1.44E-02	6.30E-03	2.40E-05	7.71E-04	1.33E-04	6.23E-06	0.00E+00	1.56E-05	1.43E-05	6.42E-09	4.24E-07	5.9	1.82E-03	2.22E-05
S18	65	9	8	5	2.20E-02	9.64E-03	3.68E-05	1.18E-03	2.04E-04	9.53E-06	0.00E+00	2.38E-05	2.19E-05	9.82E-09	6.48E-07	9.1	2.79E-03	3.40E-05
S18	65	9	9	5	1.77E-02	7.78E-03	2.97E-05	9.52E-04	1.65E-04	7.70E-06	0.00E+00	1.92E-05	1.77E-05	7.93E-09	5.23E-07	7.3	2.25E-03	2.75E-05
S18	65	9	10	5	1.46E-02	6.43E-03	2.45E-05	7.86E-04	1.36E-04	6.35E-06	0.00E+00	1.59E-05	1.46E-05	6.55E-09	4.32E-07	6.0	1.86E-03	2.27E-05
S18	65	9	11	5	1.32E-02	5.81E-03	2.22E-05	7.11E-04	1.23E-04	5.75E-06	0.00E+00	1.43E-05	1.32E-05	5.92E-09	3.90E-07	5.5	1.68E-03	2.05E-05
S18	65	9	12	5	1.49E-02	6.55E-03	2.50E-05	8.01E-04	1.39E-04	6.49E-06	0.00E+00	1.62E-05	1.49E-05	6.67E-09	4.40E-07	6.2	1.90E-03	2.31E-05
S18	65	9	13	5	1.58E-02	6.92E-03	2.64E-05	8.47E-04	1.46E-04	6.86E-06	0.00E+00	1.71E-05	1.57E-05	7.05E-09	4.65E-07	6.5	2.00E-03	2.44E-05
S18	65	9	14	5	1.60E-02	7.04E-03	2.69E-05	8.62E-04	1.49E-04	6.99E-06	0.00E+00	1.74E-05	1.60E-05	7.18E-09	4.73E-07	6.6	2.04E-03	2.49E-05
S18	65	9	15	5	1.66E-02	7.29E-03	2.78E-05	8.92E-04	1.54E-04	7.23E-06	0.00E+00	1.80E-05	1.65E-05	7.43E-09	4.90E-07	6.8	2.11E-03	2.57E-05
S18	65	9	16	5	1.80E-02	7.91E-03	3.02E-05	9.68E-04	1.67E-04	7.84E-06	0.00E+00	1.95E-05	1.79E-05	8.06E-09	5.31E-07	7.4	2.29E-03	2.79E-05
S18	65	9	17	5	2.22E-02	9.76E-03	3.72E-05	1.19E-03	2.07E-04	9.67E-06	0.00E+00	2.41E-05	2.22E-05	9.95E-09	6.56E-07	9.2	2.83E-03	3.44E-05
S18	65	9	18	5	2.39E-02	1.05E-02	4.01E-05	1.29E-03	2.22E-04	1.04E-05	0.00E+00	2.59E-05	2.38E-05	1.07E-08	7.06E-07	9.9	3.04E-03	3.71E-05
S18	65	9	19	5	1.66E-02	7.29E-03	2.78E-05	8.92E-04	1.54E-04	7.22E-06	0.00E+00	1.80E-05	1.65E-05	7.43E-09	4.90E-07	6.8	2.11E-03	2.57E-05
S18	65	9	20	5	1.10E-02	4.82E-03	1.84E-05	5.90E-04	1.02E-04	4.76E-06	0.00E+00	1.19E-05	1.09E-05	4.91E-09	3.24E-07	4.5	1.40E-03	1.70E-05
S18	65	9	21	5	9.29E-03	4.08E-03	1.56E-05	4.99E-04	8.63E-05	4.03E-06	0.00E+00	1.01E-05	9.26E-06	4.15E-09	2.74E-07	3.8	1.18E-03	1.44E-05
S18	65	9	22	5	7.88E-03	3.46E-03	1.32E-05	4.23E-04	7.32E-05	3.42E-06	0.00E+00	8.54E-06	7.85E-06	3.52E-09	2.33E-07	3.3	1.00E-03	1.22E-05
S18	65	9	23	5	6.47E-03	2.84E-03	1.08E-05	3.48E-04	6.01E-05	2.81E-06	0.00E+00	7.02E-06	6.45E-06	2.90E-09	1.91E-07	2.7	8.23E-04	1.00E-05
S18	65	9	24	5	4.79E-03	2.10E-03	8.01E-06	2.57E-04	4.44E-05	2.08E-06	0.00E+00	5.19E-06	4.77E-06	2.14E-09	1.41E-07	2.0	6.08E-04	7.41E-06
S19	65	9	1	5	4.00E-03	1.75E-03	6.69E-06	2.15E-04	3.71E-05	1.73E-06	0.00E+00	4.33E-06	3.98E-06	1.79E-09	1.18E-07	1.6	5.08E-04	6.19E-06
S19	65	9	2	5	2.67E-03	1.17E-03	4.46E-06	1.43E-04	2.48E-05	1.16E-06	0.00E+00	2.89E-06	2.66E-06	1.19E-09	7.86E-08	1.1	3.39E-04	4.13E-06
S19	65	9	3	5	2.33E-03	1.02E-03	3.90E-06	1.25E-04	2.17E-05	1.01E-06	0.00E+00	2.53E-06	2.32E-06	1.04E-09	6.88E-08	1.0	2.96E-04	3.61E-06
S19	65	9	4	5	1.67E-03	7.31E-04	2.79E-06	8.95E-05	1.55E-05	7.23E-07	0.00E+00	1.81E-06	1.66E-06	7.45E-10	4.91E-08	0.7	2.12E-04	2.58E-06
S19	65	9	5	5	2.33E-03	1.02E-03	3.90E-06	1.25E-04	2.17E-05	1.01E-06	0.00E+00	2.53E-06	2.32E-06	1.04E-09	6.88E-08	1.0	2.96E-04	3.61E-06
S19	65	9	6	5	5.66E-03	2.49E-03	9.48E-06	3.04E-04	5.26E-05	2.46E-06	0.00E+00	6.14E-06	5.64E-06	2.53E-09	1.67E-07	2.3	7.20E-04	8.77E-06
S19	65	9	7	5	1.70E-02	7.46E-03	2.84E-05	9.13E-04	1.58E-04	7.37E-06	0.00E+00	1.84E-05	1.69E-05	7.60E-09	5.01E-07	7.0	2.16E-03	2.63E-05
S19	65	9	8	5	2.60E-02	1.14E-02	4.35E-05	1.40E-03	2.41E-04	1.13E-05	0.00E+00	2.82E-05	2.59E-05	1.16E-08	7.67E-07	10.7	3.30E-03	4.03E-05
S19	65	9	9	5	2.10E-02	9.21E-03	3.51E-05	1.13E-03	1.95E-04	9.11E-06	0.00E+00	2.27E-05	2.09E-05	9.39E-09	6.19E-07	8.7	2.67E-03	3.25E-05
S19	65	9	10	5	1.73E-02	7.60E-03	2.90E-05	9.30E-04	1.61E-04	7.52E-06	0.00E+00	1.88E-05	1.73E-05	7.75E-09	5.11E-07	7.1	2.20E-03	2.68E-05
S19	65	9	11	5	1.57E-02	6.87E-03	2.62E-05	8.41E-04	1.45E-04	6.81E-06	0.00E+00	1.70E-05	1.56E-05	7.00E-09	4.62E-07	6.5	1.99E-03	2.43E-05
S19	65	9	12	5	1.77E-02	7.75E-03	2.96E-05	9.48E-04	1.64E-04	7.68E-06	0.00E+00	1.91E-05	1.76E-05	7.90E-09	5.21E-07	7.3	2.24E-03	2.74E-05
S19	65	9	13	5	1.87E-02	8.19E-03	3.12E-05	1.00E-03	1.73E-04	8.12E-06	0.00E+00	2.02E-05	1.86E-05	8.34E-09	5.50E-07	7.7	2.37E-03	2.89E-05
S19	65	9	14	5	1.90E-02	8.34E-03	3.18E-05	1.02E-03	1.76E-04	8.27E-06	0.00E+00	2.06E-05	1.89E-05	8.49E-09	5.60E-07	7.8	2.41E-03	2.94E-05
S19	65	9	15	5	1.97E-02	8.63E-03	3.29E-05	1.06E-03	1.83E-04	8.56E-06	0.00E+00	2.13E-05	1.96E-05	8.79E-09	5.80E-07	8.1	2.50E-03	3.05E-05
S19	65	9	16	5	2.13E-02	9.36E-03	3.57E-05	1.15E-03	1.98E-04	9.28E-06	0.00E+00	2.31E-05	2.12E-05	9.54E-09	6.29E-07	8.8	2.71E-03	3.30E-05
S19	65	9	17	5	2.63E-02	1.16E-02	4.41E-05	1.41E-03	2.44E-04	1.14E-05	0.00E+00	2.85E-05	2.62E-05	1.18E-08	7.76E-07	10.9	3.34E-03	4.08E-05
S19	65	9	18	5	2.83E-02	1.24E-02	4.74E-05	1.52E-03	2.63E-04	1.23E-05	0.00E+00	3.07E-05	2.82E-05	1.27E-08	8.35E-07	11.7	3.60E-03	4.39E-05
S19	65	9	19	5	1.97E-02	8.63E-03	3.29E-05	1.06E-03	1.83E-04	8.54E-06	0.00E+00	2.13E-05	1.96E-05	8.79E-09	5.80E-07	8.1	2.50E-03	3.05E-05
S19	65	9	20	5	1.30E-02	5.70E-03	2.18E-05	6.98E-04	1.21E-04	5.64E-06	0.00E+00	1.41E-05	1.29E-05	5.81E-09	3.83E-07	5.4	1.65E-03	2.01E-05
S19	65	9	21	5	1.10E-02	4.83E-03	1.84E-05	5.90E-04	1.02E-04	4.77E-06	0.00E+00	1.19E-05	1.10E-05	4.92E-09	3.24E-07	4.5	1.40E-03	1.70E-05
S19	65	9	22	5	9.33E-03	4.09E-03	1.56E-05	5.01E-04	8.66E-05	4.05E-06	0.00E+00	1.01E-05	9.29E-06	4.17E-09	2.75E-07	3.8	1.19E-03	1.45E-05
S19	65	9	23	5	7.66E-03	3.36E-03	1.28E-05	4.12E-04	7.12E-05	3.33E-06	0.00E+00	8.31E-06	7.63E-06	3.43E-09	2.26E-07	3.2	9.74E-04	1.19E-05
S19	65	9	24	5	5.66E-03	2.49E-03	9.48E-06	3.04E-04	5.26E-05	2.46E-06	0.00E+00	6.14E-06	5.64E-06	2.53E-09	1.67E-07	2.3	7.20E-04	8.77E-06
S20	60	8	1	5	3.37E-03	1.82E-03	5.84E-06	2.39E-04	3.95E-05	1.69E-06	0.00E+00	4.38E-06	4.05E-06	1.57E-09	1.22E-07	1.4	5.11E-04	5.96E-06
S20	60	8	2	5	2.25E-03	1.21E-03	3.89E-06	1.60E-04	2.64E-05	1.13E-06	0.00E+00	2.92E-06	2.70E-06	1.05E-09	8.16E-08	1.0	3.41E-04	3.97E-06
S20	60	8	3	5	1.97E-03	1.06E-03	3.41E-06	1.40E-04	2.31E-05	9.88E-07	0.00E+00	2.55E-06	2.36E-06	9.19E-10	7.14E-08	0.8	2.98E-04	3.48E-06
S20	60	8	4	5	1.40E-03	7.58E-04	2.43E-06	9.97E-05	1.65E-05	7.06E-07	0.00E+00	1.82E-06	1.69E-06	6.56E-10	5.10E-08	0.6	2.13E-04	2.48E-06
S20	60	8	5	5	1.97E-03	1.06E-03	3.41E-06	1.40E-04	2.31E-05	9.88E-07	0.00E+00	2.55E-06	2.36E-06	9.19E-10	7.14E-08	0.8	2.98E-04	3.48E-06
S20	60	8	6	5	4.77E-03	2.58E-03	8.27E-06	3.39E-04	5.60E-05	2.40E-06	0.00E+00	6.20E-06	5.74E-06	2.23E-09	1.73E-07	2.0	7.25E-04	8.45E-06
S20	60	8	7	5	1.43E-02	7.73E-03	2.48E-05	1.02E-03	1.68E-04	7.20E-06	0.00E+00	1.86E-05	1.72E-05	6.69E-09	5.20E-07	6.1	2.17E-03	2.53E-05
S20	60	8	8	5	2.19E-02	1.18E-02	3.80E-05	1.56E-03	2.57E-04	1.10E-05	0.00E+00	2.85E-05	2.63E-05	1.02E-08	7.95E-07	9.4	3.32E-03	3.88E-05
S20	60	8	9	5	1.77E-02	9.55E-03	3.07E-05	1.26E-03	2.08E-04	8.89E-06	0.00E+00	2.30E-05	2.13E-05	8.27E-09	6.42E-07	7.6	2.68E-03	3.13E-05
S20	60	8	10	5	1.46E-02	7.88E-03	2.53E-05	1.04E-03	1.71E-04	7.34E-06	0.00E+00	1.90E-05	1.76E-05	6.82E-09	5.30E-07	6.2	2.22E-03	2.58E-05
S20	60	8	11	5	1.32E-02	7.13E-03	2.29E-05	9.37E-04	1.55E-04	6.64E-06	0.00E+00	1.71E-05	1.59E-05	6.17E-09	4.79E-07	5.6	2.00E-03	2.33E-05
S20	60	8	12	5	1.49E-02	8.04E-03	2.58E-05	1.06E-03	1.75E-04	7.50E-06	0.00E+00	1.93E-05	1.79E-05	6.96E-09	5.40E-07	6.4	2.26E-03	2.63E-05
S20	60	8	13	5	1.57E-02	8.49E-03	2.73E-05	1.12E-03	1.85E-04	7.92E-06	0.00E+00	2.04E-05	1.89E-05	7.35E-09	5.71E-07	6.7	2.39E-03	2.78E-05
S20	60	8	14	5	1.60E-02	8.64E-03	2.77E-05	1.14E-03	1.88E-04	8.07E-06	0.00E+00	2.08E-05	1.92E-05	7.48E-09	5.81E-07	6.8	2.43E-03	2.83E-05
S20	60	8	15	5	1.66E-02	8.95E-03	2.87E-05	1.18E-03	1.94E-04	8.36E-06	0.00E+00	2.15E-05	1.99E-05	7.74E-09	6.02E-07	7.1	2.51E-03	2.93E-05
S20	60	8	16	5	1.80E-02	9.70E-03	3.11E-05	1.28E-03	2.11E-04	9.06E-06	0.00E+00	2.34E-05	2.16E-05	8.40E-09	6.53E-07	7.7	2.73E-03	3.18E-05
S20	60	8	17	5	2.22E-02	1.20E-02	3.84E-05	1.58E-03	2.60E-04	1.12E-05	0.00E+00	2.88E-05	2.67E-05	1.04E-08	8.06E-07	9.5	3.37E-03	3.92E-05
S20	60	8	18	5	2.39E-02	1.29E-02	4.14E-05	1.70E-03	2.80E-04	1.20E-05	0.00E+00	3.10E-05	2.87E-05	1.12E-08	8.67E-07	10.2	3.62E-03	4.22E-05
S20	60	8	19	5	1.66E-02	8.95E-03	2.87E-05	1.18E-03	1.94E-04	8.34E-06	0.00E+00	2.15E-05	1.99E-05	7.74E-09	6.02E-07	7.1	2.51E-03	2.93E-05
S20	60	8	20	5	1.10E-02	5.91E-03	1.90E-05	7.78E-04	1.29E-04	5.51E-06	0.00E+00	1.42E-05	1.32E-05	5.12E-09	3.98E-07	4.7	1.66E-03	1.94E-05
S20	60	8	21	5	9.27E-03	5.00E-03	1.61E-05	6.58E-04	1.09E-04	4.66E-06	0.00E+00	1.20E-05	1.11E-05	4.33E-09	3.37E-07	4.0	1.41E-03	1.64E-05
S20	60	8	22	5	7.86E-03	4.25E-03	1.36E-05	5.58E-04	9.23E-05	3.95E-06	0.00E+00	1.02E-05	9.45E-06	3.67E-09	2.86E-07	3.4	1.19E-03	1.39E-05
S20	60	8	23	5	6.46E-03	3.49E-03	1.12E-05	4.59E-04	7.58E-05	3.25E-06	0.00E+00	8.39E-06	7.76E-06	3.02E-09	2.35E-07	2.8	9.80E-04	1.14E-05
S20	60	8	24	5	4.77E-03	2.58E-03	8.27E-06	3.39E-04	5.60E-05	2.40E-06	0.00E+00	6.20E-06	5.74E-06	2.23E-09	1.73E-07	2.0	7.25E-04	8.45E-06
S21	60	8	1	5	5.97E-03	3.22E-03	1.03E-05	4.24E-04	7.00E-05	3.00E-06	0.00E+00	7.75E-06	7.17E-06	2.79E-09	2.17E-07	2.5	9.05E-04	1.06E-05
S21	60	8	2	5	3.98E-03	2.15E-03	6.89E-06	2.82E-04	4.67E-05	2.00E-06	0.00E+00	5.17E-06	4.78E-06	1.86E-09	1.44E-07	1.7	6.04E-04	7.04E-06

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	3	5	3.48E-03	1.88E-03	6.03E-06	2.47E-04	4.08E-05	1.75E-06	0.00E+00	4.52E-06	4.18E-06	1.63E-09	1.26E-07	1.5	5.28E-04	6.16E-06
S21	60	8	4	5	2.49E-03	1.34E-03	4.31E-06	1.77E-04	2.92E-05	1.25E-06	0.00E+00	3.23E-06	2.99E-06	1.16E-09	9.03E-08	1.1	3.77E-04	4.40E-06
S21	60	8	5	5	3.48E-03	1.88E-03	6.03E-06	2.47E-04	4.08E-05	1.75E-06	0.00E+00	4.52E-06	4.18E-06	1.63E-09	1.26E-07	1.5	5.28E-04	6.16E-06
S21	60	8	6	5	8.45E-03	4.56E-03	1.46E-05	6.00E-04	9.92E-05	4.25E-06	0.00E+00	1.10E-05	1.02E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.50E-05
S21	60	8	7	5	2.54E-02	1.37E-02	4.39E-05	1.80E-03	2.98E-04	1.27E-05	0.00E+00	3.29E-05	3.05E-05	1.19E-08	9.21E-07	10.8	3.85E-03	4.49E-05
S21	60	8	8	5	3.88E-02	2.09E-02	6.72E-05	2.75E-03	4.55E-04	1.95E-05	0.00E+00	5.04E-05	4.66E-05	1.81E-08	1.41E-06	16.6	5.89E-03	6.86E-05
S21	60	8	9	5	3.13E-02	1.69E-02	5.43E-05	2.22E-03	3.68E-04	1.57E-05	0.00E+00	4.07E-05	3.77E-05	1.46E-08	1.14E-06	13.4	4.75E-03	5.54E-05
S21	60	8	10	5	2.59E-02	1.40E-02	4.48E-05	1.84E-03	3.03E-04	1.30E-05	0.00E+00	3.36E-05	3.11E-05	1.21E-08	9.39E-07	11.0	3.92E-03	4.57E-05
S21	60	8	11	5	2.34E-02	1.26E-02	4.05E-05	1.66E-03	2.74E-04	1.18E-05	0.00E+00	3.04E-05	2.81E-05	1.09E-08	8.49E-07	10.0	3.55E-03	4.13E-05
S21	60	8	12	5	2.63E-02	1.42E-02	4.57E-05	1.87E-03	3.09E-04	1.33E-05	0.00E+00	3.42E-05	3.17E-05	1.23E-08	9.57E-07	11.3	4.00E-03	4.66E-05
S21	60	8	13	5	2.78E-02	1.50E-02	4.82E-05	1.98E-03	3.27E-04	1.40E-05	0.00E+00	3.62E-05	3.35E-05	1.30E-08	1.01E-06	11.9	4.23E-03	4.93E-05
S21	60	8	14	5	2.83E-02	1.53E-02	4.91E-05	2.01E-03	3.33E-04	1.43E-05	0.00E+00	3.68E-05	3.41E-05	1.32E-08	1.03E-06	12.1	4.30E-03	5.01E-05
S21	60	8	15	5	2.93E-02	1.58E-02	5.08E-05	2.08E-03	3.44E-04	1.48E-05	0.00E+00	3.81E-05	3.53E-05	1.37E-08	1.07E-06	12.5	4.45E-03	5.19E-05
S21	60	8	16	5	3.18E-02	1.72E-02	5.51E-05	2.26E-03	3.73E-04	1.60E-05	0.00E+00	4.13E-05	3.83E-05	1.49E-08	1.16E-06	13.6	4.83E-03	5.63E-05
S21	60	8	17	5	3.93E-02	2.12E-02	6.81E-05	2.79E-03	4.61E-04	1.98E-05	0.00E+00	5.10E-05	4.72E-05	1.84E-08	1.43E-06	16.8	5.96E-03	6.95E-05
S21	60	8	18	5	4.23E-02	2.28E-02	7.32E-05	3.00E-03	4.96E-04	2.13E-05	0.00E+00	5.49E-05	5.08E-05	1.98E-08	1.53E-06	18.0	6.41E-03	7.48E-05
S21	60	8	19	5	2.93E-02	1.58E-02	5.08E-05	2.08E-03	3.44E-04	1.48E-05	0.00E+00	3.81E-05	3.53E-05	1.37E-08	1.07E-06	12.5	4.45E-03	5.19E-05
S21	60	8	20	5	1.94E-02	1.05E-02	3.36E-05	1.38E-03	2.28E-04	9.75E-06	0.00E+00	2.52E-05	2.33E-05	9.06E-09	7.04E-07	8.3	2.94E-03	3.43E-05
S21	60	8	21	5	1.64E-02	8.86E-03	2.84E-05	1.17E-03	1.93E-04	8.25E-06	0.00E+00	2.13E-05	1.97E-05	7.67E-09	5.96E-07	7.0	2.49E-03	2.90E-05
S21	60	8	22	5	1.39E-02	7.52E-03	2.41E-05	9.89E-04	1.63E-04	7.00E-06	0.00E+00	1.81E-05	1.67E-05	6.51E-09	5.06E-07	5.9	2.11E-03	2.46E-05
S21	60	8	23	5	1.14E-02	6.17E-03	1.98E-05	8.12E-04	1.34E-04	5.75E-06	0.00E+00	1.49E-05	1.37E-05	5.34E-09	4.15E-07	4.9	1.74E-03	2.02E-05
S21	60	8	24	5	8.45E-03	4.56E-03	1.46E-05	6.00E-04	9.92E-05	4.25E-06	0.00E+00	1.10E-05	1.02E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.50E-05
S22	60	8	1	5	8.31E-03	4.49E-03	1.44E-05	5.90E-04	9.76E-05	4.18E-06	0.00E+00	1.08E-05	9.99E-06	3.89E-09	3.02E-07	3.6	1.26E-03	1.47E-05
S22	60	8	2	5	5.54E-03	2.99E-03	9.60E-06	3.94E-04	6.50E-05	2.79E-06	0.00E+00	7.20E-06	6.66E-06	2.59E-09	2.01E-07	2.4	8.41E-04	9.81E-06
S22	60	8	3	5	4.85E-03	2.62E-03	8.40E-06	3.44E-04	5.69E-05	2.44E-06	0.00E+00	6.30E-06	5.83E-06	2.27E-09	1.76E-07	2.1	7.36E-04	8.58E-06
S22	60	8	4	5	3.46E-03	1.87E-03	6.00E-06	2.46E-04	4.07E-05	1.74E-06	0.00E+00	4.50E-06	4.16E-06	1.62E-09	1.26E-07	1.5	5.26E-04	6.13E-06
S22	60	8	5	5	4.85E-03	2.62E-03	8.40E-06	3.44E-04	5.69E-05	2.44E-06	0.00E+00	6.30E-06	5.83E-06	2.27E-09	1.76E-07	2.1	7.36E-04	8.58E-06
S22	60	8	6	5	1.18E-02	6.36E-03	2.04E-05	8.37E-04	1.38E-04	5.92E-06	0.00E+00	1.53E-05	1.42E-05	5.50E-09	4.28E-07	5.0	1.79E-03	2.08E-05
S22	60	8	7	5	3.53E-02	1.91E-02	6.12E-05	2.51E-03	4.15E-04	1.78E-05	0.00E+00	4.59E-05	4.25E-05	1.65E-08	1.28E-06	15.1	5.36E-03	6.25E-05
S22	60	8	8	5	5.40E-02	2.92E-02	9.36E-05	3.84E-03	6.34E-04	2.72E-05	0.00E+00	7.02E-05	6.50E-05	2.53E-08	1.96E-06	23.1	8.20E-03	9.56E-05
S22	60	8	9	5	4.36E-02	2.36E-02	7.56E-05	3.10E-03	5.12E-04	2.19E-05	0.00E+00	5.67E-05	5.25E-05	2.04E-08	1.59E-06	18.6	6.62E-03	7.72E-05
S22	60	8	10	5	3.60E-02	1.95E-02	6.24E-05	2.56E-03	4.23E-04	1.81E-05	0.00E+00	4.68E-05	4.33E-05	1.68E-08	1.31E-06	15.4	5.47E-03	6.37E-05
S22	60	8	11	5	3.26E-02	1.76E-02	5.64E-05	2.31E-03	3.82E-04	1.64E-05	0.00E+00	4.23E-05	3.91E-05	1.52E-08	1.18E-06	13.9	4.94E-03	5.76E-05
S22	60	8	12	5	3.67E-02	1.98E-02	6.36E-05	2.61E-03	4.31E-04	1.85E-05	0.00E+00	4.77E-05	4.41E-05	1.72E-08	1.33E-06	15.7	5.57E-03	6.50E-05
S22	60	8	13	5	3.88E-02	2.09E-02	6.72E-05	2.76E-03	4.55E-04	1.95E-05	0.00E+00	5.04E-05	4.66E-05	1.81E-08	1.41E-06	16.6	5.89E-03	6.86E-05
S22	60	8	14	5	3.95E-02	2.13E-02	6.84E-05	2.80E-03	4.63E-04	1.99E-05	0.00E+00	5.13E-05	4.75E-05	1.85E-08	1.43E-06	16.9	5.99E-03	6.99E-05
S22	60	8	15	5	4.09E-02	2.21E-02	7.08E-05	2.90E-03	4.80E-04	2.06E-05	0.00E+00	5.31E-05	4.91E-05	1.91E-08	1.48E-06	17.5	6.20E-03	7.23E-05
S22	60	8	16	5	4.43E-02	2.39E-02	7.68E-05	3.15E-03	5.20E-04	2.23E-05	0.00E+00	5.76E-05	5.33E-05	2.07E-08	1.61E-06	18.9	6.73E-03	7.84E-05
S22	60	8	17	5	5.47E-02	2.96E-02	9.48E-05	3.89E-03	6.42E-04	2.76E-05	0.00E+00	7.11E-05	6.58E-05	2.56E-08	1.99E-06	23.4	8.31E-03	9.68E-05
S22	60	8	18	5	5.89E-02	3.18E-02	1.02E-04	4.18E-03	6.91E-04	2.97E-05	0.00E+00	7.65E-05	7.08E-05	2.75E-08	2.14E-06	25.2	8.94E-03	1.04E-04
S22	60	8	19	5	4.09E-02	2.21E-02	7.08E-05	2.90E-03	4.80E-04	2.06E-05	0.00E+00	5.31E-05	4.91E-05	1.91E-08	1.48E-06	17.5	6.20E-03	7.23E-05
S22	60	8	20	5	2.70E-02	1.46E-02	4.68E-05	1.92E-03	3.17E-04	1.36E-05	0.00E+00	3.51E-05	3.25E-05	1.26E-08	9.81E-07	11.5	4.10E-03	4.78E-05
S22	60	8	21	5	2.29E-02	1.23E-02	3.96E-05	1.62E-03	2.68E-04	1.15E-05	0.00E+00	2.97E-05	2.75E-05	1.07E-08	8.30E-07	9.8	3.47E-03	4.04E-05
S22	60	8	22	5	1.94E-02	1.05E-02	3.36E-05	1.38E-03	2.28E-04	9.75E-06	0.00E+00	2.52E-05	2.33E-05	9.07E-09	7.04E-07	8.3	2.94E-03	3.43E-05
S22	60	8	23	5	1.59E-02	8.60E-03	2.76E-05	1.13E-03	1.87E-04	8.01E-06	0.00E+00	2.07E-05	1.92E-05	7.45E-09	5.79E-07	6.8	2.42E-03	2.82E-05
S22	60	8	24	5	1.18E-02	6.36E-03	2.04E-05	8.37E-04	1.38E-04	5.92E-06	0.00E+00	1.53E-05	1.42E-05	5.50E-09	4.28E-07	5.0	1.79E-03	2.08E-05
S23	60	8	1	5	2.95E-03	1.59E-03	5.12E-06	2.10E-04	3.46E-05	1.48E-06	0.00E+00	3.84E-06	3.55E-06	1.38E-09	1.07E-07	1.3	4.48E-04	5.22E-06
S23	60	8	2	5	1.97E-03	1.06E-03	3.41E-06	1.40E-04	2.31E-05	9.89E-07	0.00E+00	2.56E-06	2.37E-06	9.20E-10	7.15E-08	0.8	2.99E-04	3.48E-06
S23	60	8	3	5	1.72E-03	9.30E-04	2.98E-06	1.22E-04	2.02E-05	8.65E-07	0.00E+00	2.24E-06	2.07E-06	8.05E-10	6.25E-08	0.7	2.61E-04	3.05E-06
S23	60	8	4	5	1.23E-03	6.64E-04	2.13E-06	8.74E-05	1.44E-05	6.18E-07	0.00E+00	1.60E-06	1.48E-06	5.75E-10	4.47E-08	0.5	1.87E-04	2.18E-06
S23	60	8	5	5	1.72E-03	9.30E-04	2.98E-06	1.22E-04	2.02E-05	8.65E-07	0.00E+00	2.24E-06	2.07E-06	8.05E-10	6.25E-08	0.7	2.61E-04	3.05E-06
S23	60	8	6	5	4.18E-03	2.26E-03	7.25E-06	2.97E-04	4.91E-05	2.10E-06	0.00E+00	5.43E-06	5.03E-06	1.95E-09	1.52E-07	1.8	6.35E-04	7.40E-06
S23	60	8	7	5	1.25E-02	6.78E-03	2.17E-05	8.91E-04	1.47E-04	6.30E-06	0.00E+00	1.63E-05	1.51E-05	5.86E-09	4.56E-07	5.4	1.90E-03	2.22E-05
S23	60	8	8	5	1.92E-02	1.04E-02	3.33E-05	1.36E-03	2.25E-04	9.65E-06	0.00E+00	2.49E-05	2.31E-05	8.97E-09	6.97E-07	8.2	2.91E-03	3.39E-05
S23	60	8	9	5	1.55E-02	8.37E-03	2.69E-05	1.10E-03	1.82E-04	7.79E-06	0.00E+00	2.01E-05	1.86E-05	7.24E-09	5.63E-07	6.6	2.35E-03	2.74E-05
S23	60	8	10	5	1.28E-02	6.91E-03	2.22E-05	9.09E-04	1.50E-04	6.43E-06	0.00E+00	1.66E-05	1.54E-05	5.98E-09	4.65E-07	5.5	1.94E-03	2.26E-05
S23	60	8	11	5	1.16E-02	6.24E-03	2.00E-05	8.21E-04	1.36E-04	5.82E-06	0.00E+00	1.50E-05	1.39E-05	5.40E-09	4.20E-07	4.9	1.75E-03	2.05E-05
S23	60	8	12	5	1.30E-02	7.04E-03	2.26E-05	9.26E-04	1.53E-04	6.57E-06	0.00E+00	1.69E-05	1.57E-05	6.09E-09	4.74E-07	5.6	1.98E-03	2.31E-05
S23	60	8	13	5	1.38E-02	7.44E-03	2.39E-05	9.78E-04	1.62E-04	6.94E-06	0.00E+00	1.79E-05	1.66E-05	6.44E-09	5.00E-07	5.9	2.09E-03	2.44E-05
S23	60	8	14	5	1.40E-02	7.57E-03	2.43E-05	9.96E-04	1.65E-04	7.07E-06	0.00E+00	1.82E-05	1.69E-05	6.55E-09	5.09E-07	6.0	2.13E-03	2.48E-05
S23	60	8	15	5	1.45E-02	7.84E-03	2.52E-05	1.03E-03	1.70E-04	7.32E-06	0.00E+00	1.89E-05	1.74E-05	6.78E-09	5.27E-07	6.2	2.20E-03	2.57E-05
S23	60	8	16	5	1.57E-02	8.50E-03	2.73E-05	1.12E-03	1.85E-04	7.94E-06	0.00E+00	2.05E-05	1.89E-05	7.36E-09	5.72E-07	6.7	2.39E-03	2.79E-05
S23	60	8	17	5	1.94E-02	1.05E-02	3.37E-05	1.38E-03	2.28E-04	9.79E-06	0.00E+00	2.53E-05	2.34E-05	9.08E-09	7.06E-07	8.3	2.95E-03	3.44E-05
S23	60	8	18	5	2.09E-02	1.13E-02	3.62E-05	1.49E-03	2.45E-04	1.05E-05	0.00E+00	2.72E-05	2.51E-05	9.77E-09	7.59E-07	8.9	3.17E-03	3.70E-05
S23	60	8	19	5	1.45E-02	7.84E-03	2.52E-05	1.03E-03	1.70E-04	7.31E-06	0.00E+00	1.89E-05	1.74E-05	6.78E-09	5.27E-07	6.2	2.20E-03	2.57E-05
S23	60	8	20	5	9.59E-03	5.18E-03	1.66E-05	6.81E-04	1.13E-04	4.82E-06	0.00E+00	1.25E-05	1.15E-05	4.48E-09	3.48E-07	4.1	1.46E-03	1.70E-05
S23	60	8	21	5	8.12E-03	4.38E-03	1.41E-05	5.77E-04	9.53E-05	4.08E-06	0.00E+00	1.05E-05	9.76E-06	3.79E-09	2.95E-07	3.5	1.23E-03	1.44E-05
S23	60	8	22	5	6.89E-03	3.72E-03	1.19E-05	4.89E-04	8.08E-05	3.46E-06	0.00E+00	8.95E-06	8.28E-06	3.22E-09	2.50E-07	2.9	1.05E-03	1.22E-05
S23	60	8	23	5	5.66E-03	3.06E-03	9.81E-06	4.02E-04	6.64E-05	2.84E-06	0.00E+00	7.35E-06	6.80E-06	2.64E-09	2.05E-07	2.4	8.59E-04	1.00E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	24	5	4.18E-03	2.26E-03	7.25E-06	2.97E-04	4.91E-05	2.10E-06	0.00E+00	5.43E-06	5.03E-06	1.95E-09	1.52E-07	1.8	6.35E-04	7.40E-06
S24	60	8	1	5	2.77E-03	1.49E-03	4.80E-06	1.97E-04	3.25E-05	1.39E-06	0.00E+00	3.60E-06	3.33E-06	1.29E-09	1.00E-07	1.2	4.20E-04	4.90E-06
S24	60	8	2	5	1.84E-03	9.96E-04	3.20E-06	1.31E-04	2.17E-05	9.27E-07	0.00E+00	2.40E-06	2.22E-06	8.62E-10	6.70E-08	0.8	2.80E-04	3.26E-06
S24	60	8	3	5	1.61E-03	8.72E-04	2.80E-06	1.15E-04	1.89E-05	8.11E-07	0.00E+00	2.10E-06	1.94E-06	7.54E-10	5.86E-08	0.7	2.45E-04	2.86E-06
S24	60	8	4	5	1.15E-03	6.23E-04	2.00E-06	8.19E-05	1.35E-05	5.79E-07	0.00E+00	1.50E-06	1.39E-06	5.39E-10	4.19E-08	0.5	1.75E-04	2.04E-06
S24	60	8	5	5	1.61E-03	8.72E-04	2.80E-06	1.15E-04	1.89E-05	8.11E-07	0.00E+00	2.10E-06	1.94E-06	7.54E-10	5.86E-08	0.7	2.45E-04	2.86E-06
S24	60	8	6	5	3.92E-03	2.12E-03	6.79E-06	2.78E-04	4.60E-05	1.97E-06	0.00E+00	5.09E-06	4.71E-06	1.83E-09	1.42E-07	1.7	5.95E-04	6.94E-06
S24	60	8	7	5	1.18E-02	6.35E-03	2.04E-05	8.35E-04	1.38E-04	5.91E-06	0.00E+00	1.53E-05	1.41E-05	5.50E-09	4.27E-07	5.0	1.78E-03	2.08E-05
S24	60	8	8	5	1.80E-02	9.71E-03	3.12E-05	1.28E-03	2.11E-04	9.04E-06	0.00E+00	2.34E-05	2.16E-05	8.41E-09	6.53E-07	7.7	2.73E-03	3.18E-05
S24	60	8	9	5	1.45E-02	7.85E-03	2.52E-05	1.03E-03	1.70E-04	7.30E-06	0.00E+00	1.89E-05	1.75E-05	6.79E-09	5.28E-07	6.2	2.20E-03	2.57E-05
S24	60	8	10	5	1.20E-02	6.48E-03	2.08E-05	8.52E-04	1.41E-04	6.03E-06	0.00E+00	1.56E-05	1.44E-05	5.60E-09	4.35E-07	5.1	1.82E-03	2.12E-05
S24	60	8	11	5	1.08E-02	5.85E-03	1.88E-05	7.70E-04	1.27E-04	5.46E-06	0.00E+00	1.41E-05	1.30E-05	5.07E-09	3.94E-07	4.6	1.64E-03	1.92E-05
S24	60	8	12	5	1.22E-02	6.60E-03	2.12E-05	8.68E-04	1.43E-04	6.16E-06	0.00E+00	1.59E-05	1.47E-05	5.71E-09	4.44E-07	5.2	1.85E-03	2.16E-05
S24	60	8	13	5	1.29E-02	6.97E-03	2.24E-05	9.17E-04	1.52E-04	6.51E-06	0.00E+00	1.68E-05	1.55E-05	6.04E-09	4.69E-07	5.5	1.96E-03	2.28E-05
S24	60	8	14	5	1.31E-02	7.10E-03	2.28E-05	9.34E-04	1.54E-04	6.63E-06	0.00E+00	1.71E-05	1.58E-05	6.14E-09	4.77E-07	5.6	1.99E-03	2.33E-05
S24	60	8	15	5	1.36E-02	7.35E-03	2.36E-05	9.66E-04	1.60E-04	6.86E-06	0.00E+00	1.77E-05	1.64E-05	6.36E-09	4.94E-07	5.8	2.06E-03	2.41E-05
S24	60	8	16	5	1.48E-02	7.97E-03	2.56E-05	1.05E-03	1.73E-04	7.44E-06	0.00E+00	1.92E-05	1.77E-05	6.90E-09	5.36E-07	6.3	2.24E-03	2.61E-05
S24	60	8	17	5	1.82E-02	9.84E-03	3.16E-05	1.29E-03	2.14E-04	9.18E-06	0.00E+00	2.37E-05	2.19E-05	8.51E-09	6.62E-07	7.8	2.76E-03	3.22E-05
S24	60	8	18	5	1.96E-02	1.06E-02	3.40E-05	1.39E-03	2.30E-04	9.88E-06	0.00E+00	2.55E-05	2.36E-05	9.16E-09	7.12E-07	8.4	2.97E-03	3.47E-05
S24	60	8	19	5	1.36E-02	7.35E-03	2.36E-05	9.66E-04	1.60E-04	6.85E-06	0.00E+00	1.77E-05	1.64E-05	6.36E-09	4.94E-07	5.8	2.06E-03	2.41E-05
S24	60	8	20	5	8.99E-03	4.86E-03	1.56E-05	6.39E-04	1.06E-04	4.52E-06	0.00E+00	1.17E-05	1.08E-05	4.20E-09	3.27E-07	3.8	1.36E-03	1.59E-05
S24	60	8	21	5	7.61E-03	4.11E-03	1.32E-05	5.41E-04	8.93E-05	3.83E-06	0.00E+00	9.89E-06	9.15E-06	3.56E-09	2.76E-07	3.3	1.15E-03	1.35E-05
S24	60	8	22	5	6.46E-03	3.49E-03	1.12E-05	4.59E-04	7.58E-05	3.25E-06	0.00E+00	8.39E-06	7.76E-06	3.02E-09	2.34E-07	2.8	9.80E-04	1.14E-05
S24	60	8	23	5	5.30E-03	2.86E-03	9.19E-06	3.77E-04	6.22E-05	2.67E-06	0.00E+00	6.89E-06	6.38E-06	2.48E-09	1.93E-07	2.3	8.05E-04	9.38E-06
S24	60	8	24	5	3.92E-03	2.12E-03	6.79E-06	2.78E-04	4.60E-05	1.97E-06	0.00E+00	5.09E-06	4.71E-06	1.83E-09	1.42E-07	1.7	5.95E-04	6.94E-06
S25	60	8	1	5	1.17E-03	6.33E-04	2.03E-06	8.33E-05	1.38E-05	5.89E-07	0.00E+00	1.52E-06	1.41E-06	5.48E-10	4.26E-08	0.5	1.78E-04	2.07E-06
S25	60	8	2	5	7.82E-04	4.22E-04	1.35E-06	5.55E-05	9.17E-06	3.93E-07	0.00E+00	1.02E-06	9.40E-07	3.65E-10	2.84E-08	0.3	1.19E-04	1.38E-06
S25	60	8	3	5	6.84E-04	3.69E-04	1.19E-06	4.86E-05	8.03E-06	3.44E-07	0.00E+00	8.89E-07	8.22E-07	3.20E-10	2.48E-08	0.3	1.04E-04	1.21E-06
S25	60	8	4	5	4.89E-04	2.64E-04	8.47E-07	3.47E-05	5.73E-06	2.46E-07	0.00E+00	6.35E-07	5.87E-07	2.28E-10	1.77E-08	0.2	7.42E-05	8.64E-07
S25	60	8	5	5	6.84E-04	3.69E-04	1.19E-06	4.86E-05	8.03E-06	3.44E-07	0.00E+00	8.89E-07	8.22E-07	3.20E-10	2.48E-08	0.3	1.04E-04	1.21E-06
S25	60	8	6	5	1.66E-03	8.97E-04	2.88E-06	1.18E-04	1.95E-05	8.35E-07	0.00E+00	2.16E-06	2.00E-06	7.76E-10	6.03E-08	0.7	2.52E-04	2.94E-06
S25	60	8	7	5	4.98E-03	2.69E-03	8.64E-06	3.54E-04	5.85E-05	2.50E-06	0.00E+00	6.48E-06	5.99E-06	2.33E-09	1.81E-07	2.1	7.56E-04	8.82E-06
S25	60	8	8	5	7.62E-03	4.12E-03	1.32E-05	5.41E-04	8.95E-05	3.83E-06	0.00E+00	9.90E-06	9.16E-06	3.56E-09	2.77E-07	3.3	1.16E-03	1.35E-05
S25	60	8	9	5	6.16E-03	3.32E-03	1.07E-05	4.37E-04	7.23E-05	3.09E-06	0.00E+00	8.00E-06	7.40E-06	2.88E-09	2.24E-07	2.6	9.34E-04	1.09E-05
S25	60	8	10	5	5.08E-03	2.74E-03	8.81E-06	3.61E-04	5.96E-05	2.56E-06	0.00E+00	6.60E-06	6.11E-06	2.37E-09	1.85E-07	2.2	7.71E-04	8.99E-06
S25	60	8	11	5	4.59E-03	2.48E-03	7.96E-06	3.26E-04	5.39E-05	2.31E-06	0.00E+00	5.97E-06	5.52E-06	2.15E-09	1.67E-07	2.0	6.97E-04	8.13E-06
S25	60	8	12	5	5.18E-03	2.80E-03	8.98E-06	3.68E-04	6.08E-05	2.61E-06	0.00E+00	6.73E-06	6.23E-06	2.42E-09	1.88E-07	2.2	7.86E-04	9.16E-06
S25	60	8	13	5	5.47E-03	2.96E-03	9.48E-06	3.89E-04	6.42E-05	2.76E-06	0.00E+00	7.11E-06	6.58E-06	2.56E-09	1.99E-07	2.3	8.31E-04	9.68E-06
S25	60	8	14	5	5.57E-03	3.01E-03	9.65E-06	3.96E-04	6.54E-05	2.81E-06	0.00E+00	7.24E-06	6.70E-06	2.60E-09	2.02E-07	2.4	8.45E-04	9.86E-06
S25	60	8	15	5	5.77E-03	3.11E-03	9.99E-06	4.10E-04	6.77E-05	2.91E-06	0.00E+00	7.49E-06	6.93E-06	2.69E-09	2.09E-07	2.5	8.75E-04	1.02E-05
S25	60	8	16	5	6.25E-03	3.38E-03	1.08E-05	4.44E-04	7.34E-05	3.15E-06	0.00E+00	8.13E-06	7.52E-06	2.92E-09	2.27E-07	2.7	9.49E-04	1.11E-05
S25	60	8	17	5	7.72E-03	4.17E-03	1.34E-05	5.48E-04	9.06E-05	3.89E-06	0.00E+00	1.00E-05	9.28E-06	3.61E-09	2.80E-07	3.3	1.17E-03	1.37E-05
S25	60	8	18	5	8.31E-03	4.49E-03	1.44E-05	5.90E-04	9.75E-05	4.19E-06	0.00E+00	1.08E-05	9.99E-06	3.88E-09	3.02E-07	3.5	1.26E-03	1.47E-05
S25	60	8	19	5	5.77E-03	3.11E-03	9.99E-06	4.10E-04	6.77E-05	2.90E-06	0.00E+00	7.49E-06	6.93E-06	2.69E-09	2.09E-07	2.5	8.75E-04	1.02E-05
S25	60	8	20	5	3.81E-03	2.06E-03	6.60E-06	2.71E-04	4.47E-05	1.92E-06	0.00E+00	4.95E-06	4.58E-06	1.78E-09	1.38E-07	1.6	5.78E-04	6.74E-06
S25	60	8	21	5	3.22E-03	1.74E-03	5.59E-06	2.29E-04	3.78E-05	1.62E-06	0.00E+00	4.19E-06	3.88E-06	1.51E-09	1.17E-07	1.4	4.89E-04	5.71E-06
S25	60	8	22	5	2.74E-03	1.48E-03	4.74E-06	1.94E-04	3.21E-05	1.38E-06	0.00E+00	3.56E-06	3.29E-06	1.28E-09	9.94E-08	1.2	4.15E-04	4.84E-06
S25	60	8	23	5	2.25E-03	1.21E-03	3.90E-06	1.60E-04	2.64E-05	1.13E-06	0.00E+00	2.92E-06	2.70E-06	1.05E-09	8.16E-08	1.0	3.41E-04	3.98E-06
S25	60	8	24	5	1.66E-03	8.97E-04	2.88E-06	1.18E-04	1.95E-05	8.35E-07	0.00E+00	2.16E-06	2.00E-06	7.76E-10	6.03E-08	0.7	2.52E-04	2.94E-06
S26	60	8	1	5	3.71E-03	2.00E-03	6.42E-06	2.63E-04	4.35E-05	1.86E-06	0.00E+00	4.82E-06	4.46E-06	1.73E-09	1.35E-07	1.6	5.62E-04	6.56E-06
S26	60	8	2	5	2.47E-03	1.33E-03	4.28E-06	1.75E-04	2.90E-05	1.24E-06	0.00E+00	3.21E-06	2.97E-06	1.15E-09	8.97E-08	1.1	3.75E-04	4.37E-06
S26	60	8	3	5	2.16E-03	1.17E-03	3.75E-06	1.54E-04	2.54E-05	1.09E-06	0.00E+00	2.81E-06	2.60E-06	1.01E-09	7.85E-08	0.9	3.28E-04	3.82E-06
S26	60	8	4	5	1.54E-03	8.34E-04	2.68E-06	1.10E-04	1.81E-05	7.76E-07	0.00E+00	2.01E-06	1.86E-06	7.22E-10	5.61E-08	0.7	2.34E-04	2.73E-06
S26	60	8	5	5	2.16E-03	1.17E-03	3.75E-06	1.54E-04	2.54E-05	1.09E-06	0.00E+00	2.81E-06	2.60E-06	1.01E-09	7.85E-08	0.9	3.28E-04	3.82E-06
S26	60	8	6	5	5.25E-03	2.84E-03	9.10E-06	3.73E-04	6.16E-05	2.64E-06	0.00E+00	6.82E-06	6.31E-06	2.45E-09	1.91E-07	2.2	7.97E-04	9.29E-06
S26	60	8	7	5	1.57E-02	8.51E-03	2.73E-05	1.12E-03	1.85E-04	7.91E-06	0.00E+00	2.05E-05	1.89E-05	7.36E-09	5.72E-07	6.7	2.39E-03	2.79E-05
S26	60	8	8	5	2.41E-02	1.30E-02	4.17E-05	1.71E-03	2.83E-04	1.21E-05	0.00E+00	3.13E-05	2.90E-05	1.13E-08	8.75E-07	10.3	3.66E-03	4.26E-05
S26	60	8	9	5	1.95E-02	1.05E-02	3.37E-05	1.38E-03	2.28E-04	9.78E-06	0.00E+00	2.53E-05	2.34E-05	9.09E-09	7.07E-07	8.3	2.95E-03	3.44E-05
S26	60	8	10	5	1.61E-02	8.67E-03	2.78E-05	1.14E-03	1.88E-04	8.08E-06	0.00E+00	2.09E-05	1.93E-05	7.51E-09	5.83E-07	6.9	2.44E-03	2.84E-05
S26	60	8	11	5	1.45E-02	7.84E-03	2.52E-05	1.03E-03	1.70E-04	7.31E-06	0.00E+00	1.89E-05	1.75E-05	6.78E-09	5.27E-07	6.2	2.20E-03	2.57E-05
S26	60	8	12	5	1.64E-02	8.84E-03	2.84E-05	1.16E-03	1.92E-04	8.25E-06	0.00E+00	2.13E-05	1.97E-05	7.65E-09	5.94E-07	7.0	2.48E-03	2.90E-05
S26	60	8	13	5	1.73E-02	9.34E-03	3.00E-05	1.23E-03	2.03E-04	8.71E-06	0.00E+00	2.25E-05	2.08E-05	8.08E-09	6.28E-07	7.4	2.62E-03	3.06E-05
S26	60	8	14	5	1.76E-02	9.51E-03	3.05E-05	1.25E-03	2.07E-04	8.88E-06	0.00E+00	2.29E-05	2.12E-05	8.23E-09	6.39E-07	7.5	2.67E-03	3.11E-05
S26	60	8	15	5	1.82E-02	9.84E-03	3.16E-05	1.29E-03	2.14E-04	9.19E-06	0.00E+00	2.37E-05	2.19E-05	8.52E-09	6.62E-07	7.8	2.77E-03	3.22E-05
S26	60	8	16	5	1.98E-02	1.07E-02	3.43E-05	1.40E-03	2.32E-04	9.96E-06	0.00E+00	2.57E-05	2.38E-05	9.24E-09	7.18E-07	8.4	3.00E-03	3.50E-05
S26	60	8	17	5	2.44E-02	1.32E-02	4.23E-05	1.73E-03	2.86E-04	1.23E-05	0.00E+00	3.17E-05	2.93E-05	1.14E-08	8.86E-07	10.4	3.70E-03	4.32E-05
S26	60	8	18	5	2.62E-02	1.42E-02	4.55E-05	1.86E-03	3.08E-04	1.32E-05	0.00E+00	3.41E-05	3.16E-05	1.23E-08	9.53E-07	11.2	3.98E-03	4.64E-05
S26	60	8	19	5	1.82E-02	9.84E-03	3.16E-05	1.29E-03	2.14E-04	9.17E-06	0.00E+00	2.37E-05	2.19E-05	8.52E-09	6.62E-07	7.8	2.77E-03	3.22E-05
S26	60	8	20	5	1.20E-02	6.50E-03	2.09E-05	8.55E-04	1.41E-04	6.06E-06	0.00E+00	1.56E-05	1.45E-05	5.63E-09	4.37E-07	5.1	1.83E-03	2.13E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	21	5	1.02E-02	5.50E-03	1.77E-05	7.24E-04	1.20E-04	5.12E-06	0.00E+00	1.32E-05	1.23E-05	4.76E-09	3.70E-07	4.4	1.55E-03	1.80E-05
S26	60	8	22	5	8.65E-03	4.67E-03	1.50E-05	6.14E-04	1.01E-04	4.35E-06	0.00E+00	1.12E-05	1.04E-05	4.04E-09	3.14E-07	3.7	1.31E-03	1.53E-05
S26	60	8	23	5	7.10E-03	3.84E-03	1.23E-05	5.05E-04	8.34E-05	3.57E-06	0.00E+00	9.23E-06	8.54E-06	3.32E-09	2.58E-07	3.0	1.08E-03	1.26E-05
S26	60	8	24	5	5.25E-03	2.84E-03	9.10E-06	3.73E-04	6.16E-05	2.64E-06	0.00E+00	6.82E-06	6.31E-06	2.45E-09	1.91E-07	2.2	7.97E-04	9.29E-06
S27	50	7	1	5	1.37E-03	9.09E-04	2.58E-06	1.19E-04	1.97E-05	7.73E-07	0.00E+00	1.93E-06	1.83E-06	6.97E-10	6.19E-08	0.6	2.17E-04	2.69E-06
S27	50	7	2	5	9.15E-04	6.06E-04	1.72E-06	7.96E-05	1.31E-05	5.16E-07	0.00E+00	1.29E-06	1.22E-06	4.64E-10	4.13E-08	0.4	1.45E-04	1.80E-06
S27	50	7	3	5	8.01E-04	5.30E-04	1.50E-06	6.97E-05	1.15E-05	4.51E-07	0.00E+00	1.13E-06	1.06E-06	4.06E-10	3.61E-08	0.4	1.27E-04	1.57E-06
S27	50	7	4	5	5.72E-04	3.79E-04	1.07E-06	4.98E-05	8.21E-06	3.22E-07	0.00E+00	8.06E-07	7.60E-07	2.90E-10	2.58E-08	0.3	9.04E-05	1.12E-06
S27	50	7	5	5	8.01E-04	5.30E-04	1.50E-06	6.97E-05	1.15E-05	4.51E-07	0.00E+00	1.13E-06	1.06E-06	4.06E-10	3.61E-08	0.4	1.27E-04	1.57E-06
S27	50	7	6	5	1.94E-03	1.29E-03	3.65E-06	1.69E-04	2.79E-05	1.10E-06	0.00E+00	2.74E-06	2.59E-06	9.87E-10	8.78E-08	0.9	3.07E-04	3.82E-06
S27	50	7	7	5	5.83E-03	3.86E-03	1.10E-05	5.08E-04	8.38E-05	3.29E-06	0.00E+00	8.22E-06	7.76E-06	2.96E-09	2.63E-07	2.7	9.22E-04	1.15E-05
S27	50	7	8	5	8.92E-03	5.91E-03	1.68E-05	7.76E-04	1.28E-04	5.03E-06	0.00E+00	1.26E-05	1.19E-05	4.53E-09	4.03E-07	4.2	1.41E-03	1.75E-05
S27	50	7	9	5	7.21E-03	4.77E-03	1.35E-05	6.27E-04	1.03E-04	4.06E-06	0.00E+00	1.01E-05	9.58E-06	3.66E-09	3.25E-07	3.4	1.14E-03	1.41E-05
S27	50	7	10	5	5.95E-03	3.94E-03	1.12E-05	5.18E-04	8.54E-05	3.35E-06	0.00E+00	8.38E-06	7.91E-06	3.02E-09	2.68E-07	2.8	9.41E-04	1.17E-05
S27	50	7	11	5	5.38E-03	3.56E-03	1.01E-05	4.68E-04	7.72E-05	3.03E-06	0.00E+00	7.57E-06	7.15E-06	2.73E-09	2.43E-07	2.5	8.50E-04	1.06E-05
S27	50	7	12	5	6.06E-03	4.01E-03	1.14E-05	5.28E-04	8.71E-05	3.42E-06	0.00E+00	8.54E-06	8.06E-06	3.08E-09	2.74E-07	2.8	9.59E-04	1.19E-05
S27	50	7	13	5	6.41E-03	4.24E-03	1.20E-05	5.57E-04	9.20E-05	3.62E-06	0.00E+00	9.02E-06	8.52E-06	3.25E-09	2.89E-07	3.0	1.01E-03	1.26E-05
S27	50	7	14	5	6.52E-03	4.32E-03	1.22E-05	5.67E-04	9.36E-05	3.69E-06	0.00E+00	9.18E-06	8.67E-06	3.31E-09	2.94E-07	3.0	1.03E-03	1.28E-05
S27	50	7	15	5	6.75E-03	4.47E-03	1.27E-05	5.87E-04	9.69E-05	3.82E-06	0.00E+00	9.51E-06	8.97E-06	3.43E-09	3.05E-07	3.1	1.07E-03	1.32E-05
S27	50	7	16	5	7.32E-03	4.85E-03	1.38E-05	6.37E-04	1.05E-04	4.14E-06	0.00E+00	1.03E-05	9.73E-06	3.72E-09	3.30E-07	3.4	1.16E-03	1.44E-05
S27	50	7	17	5	9.04E-03	5.98E-03	1.70E-05	7.86E-04	1.30E-04	5.10E-06	0.00E+00	1.27E-05	1.20E-05	4.59E-09	4.08E-07	4.2	1.43E-03	1.77E-05
S27	50	7	18	5	9.72E-03	6.44E-03	1.83E-05	8.46E-04	1.40E-04	5.49E-06	0.00E+00	1.37E-05	1.29E-05	4.93E-09	4.39E-07	4.5	1.54E-03	1.91E-05
S27	50	7	19	5	6.75E-03	4.47E-03	1.27E-05	5.87E-04	9.69E-05	3.81E-06	0.00E+00	9.51E-06	8.97E-06	3.43E-09	3.05E-07	3.1	1.07E-03	1.32E-05
S27	50	7	20	5	4.46E-03	2.95E-03	8.38E-06	3.88E-04	6.41E-05	2.51E-06	0.00E+00	6.28E-06	5.93E-06	2.26E-09	2.01E-07	2.1	7.05E-04	8.76E-06
S27	50	7	21	5	3.78E-03	2.50E-03	7.09E-06	3.29E-04	5.42E-05	2.13E-06	0.00E+00	5.32E-06	5.02E-06	1.92E-09	1.70E-07	1.8	5.97E-04	7.41E-06
S27	50	7	22	5	3.20E-03	2.12E-03	6.02E-06	2.79E-04	4.60E-05	1.81E-06	0.00E+00	4.51E-06	4.26E-06	1.63E-09	1.45E-07	1.5	5.06E-04	6.29E-06
S27	50	7	23	5	2.63E-03	1.74E-03	4.94E-06	2.29E-04	3.78E-05	1.48E-06	0.00E+00	3.71E-06	3.50E-06	1.34E-09	1.19E-07	1.2	4.16E-04	5.17E-06
S27	50	7	24	5	1.94E-03	1.29E-03	3.65E-06	1.69E-04	2.79E-05	1.10E-06	0.00E+00	2.74E-06	2.59E-06	9.87E-10	8.78E-08	0.9	3.07E-04	3.82E-06
S28	50	7	1	5	1.20E-03	7.96E-04	2.26E-06	1.05E-04	1.73E-05	6.77E-07	0.00E+00	1.69E-06	1.60E-06	6.10E-10	5.42E-08	0.6	1.90E-04	2.36E-06
S28	50	7	2	5	8.02E-04	5.31E-04	1.51E-06	6.97E-05	1.15E-05	4.51E-07	0.00E+00	1.13E-06	1.07E-06	4.07E-10	3.62E-08	0.4	1.27E-04	1.57E-06
S28	50	7	3	5	7.01E-04	4.64E-04	1.32E-06	6.10E-05	1.01E-05	3.95E-07	0.00E+00	9.88E-07	9.32E-07	3.56E-10	3.16E-08	0.3	1.11E-04	1.38E-06
S28	50	7	4	5	5.01E-04	3.32E-04	9.41E-07	4.36E-05	7.19E-06	2.82E-07	0.00E+00	7.05E-07	6.66E-07	2.54E-10	2.26E-08	0.2	7.92E-05	9.83E-07
S28	50	7	5	5	7.01E-04	4.64E-04	1.32E-06	6.10E-05	1.01E-05	3.95E-07	0.00E+00	9.88E-07	9.32E-07	3.56E-10	3.16E-08	0.3	1.11E-04	1.38E-06
S28	50	7	6	5	1.70E-03	1.13E-03	3.20E-06	1.48E-04	2.45E-05	9.59E-07	0.00E+00	2.40E-06	2.26E-06	8.64E-10	7.69E-08	0.8	2.69E-04	3.34E-06
S28	50	7	7	5	5.11E-03	3.38E-03	9.60E-06	4.45E-04	7.34E-05	2.88E-06	0.00E+00	7.20E-06	6.79E-06	2.59E-09	2.31E-07	2.4	8.08E-04	1.00E-05
S28	50	7	8	5	7.81E-03	5.17E-03	1.47E-05	6.80E-04	1.12E-04	4.40E-06	0.00E+00	1.10E-05	1.04E-05	3.97E-09	3.53E-07	3.6	1.24E-03	1.53E-05
S28	50	7	9	5	6.31E-03	4.18E-03	1.19E-05	5.49E-04	9.06E-05	3.56E-06	0.00E+00	8.89E-06	8.39E-06	3.20E-09	2.85E-07	2.9	9.98E-04	1.24E-05
S28	50	7	10	5	5.21E-03	3.45E-03	9.78E-06	4.53E-04	7.48E-05	2.94E-06	0.00E+00	7.34E-06	6.93E-06	2.64E-09	2.35E-07	2.4	8.24E-04	1.02E-05
S28	50	7	11	5	4.71E-03	3.12E-03	8.84E-06	4.10E-04	6.76E-05	2.66E-06	0.00E+00	6.63E-06	6.26E-06	2.39E-09	2.12E-07	2.2	7.44E-04	9.24E-06
S28	50	7	12	5	5.31E-03	3.52E-03	9.97E-06	4.62E-04	7.62E-05	3.00E-06	0.00E+00	7.48E-06	7.06E-06	2.69E-09	2.40E-07	2.5	8.40E-04	1.04E-05
S28	50	7	13	5	5.61E-03	3.71E-03	1.05E-05	4.88E-04	8.06E-05	3.17E-06	0.00E+00	7.90E-06	7.46E-06	2.85E-09	2.53E-07	2.6	8.87E-04	1.10E-05
S28	50	7	14	5	5.71E-03	3.78E-03	1.07E-05	4.97E-04	8.20E-05	3.23E-06	0.00E+00	8.04E-06	7.59E-06	2.90E-09	2.58E-07	2.7	9.03E-04	1.12E-05
S28	50	7	15	5	5.91E-03	3.91E-03	1.11E-05	5.14E-04	8.49E-05	3.34E-06	0.00E+00	8.32E-06	7.86E-06	3.00E-09	2.67E-07	2.8	9.35E-04	1.16E-05
S28	50	7	16	5	6.41E-03	4.25E-03	1.20E-05	5.58E-04	9.21E-05	3.62E-06	0.00E+00	9.03E-06	8.52E-06	3.25E-09	2.89E-07	3.0	1.01E-03	1.26E-05
S28	50	7	17	5	7.91E-03	5.24E-03	1.49E-05	6.89E-04	1.14E-04	4.47E-06	0.00E+00	1.11E-05	1.05E-05	4.02E-09	3.57E-07	3.7	1.25E-03	1.55E-05
S28	50	7	18	5	8.52E-03	5.64E-03	1.60E-05	7.41E-04	1.22E-04	4.81E-06	0.00E+00	1.20E-05	1.13E-05	4.32E-09	3.84E-07	4.0	1.35E-03	1.67E-05
S28	50	7	19	5	5.91E-03	3.91E-03	1.11E-05	5.14E-04	8.49E-05	3.34E-06	0.00E+00	8.32E-06	7.86E-06	3.00E-09	2.67E-07	2.8	9.35E-04	1.16E-05
S28	50	7	20	5	3.91E-03	2.59E-03	7.34E-06	3.40E-04	5.61E-05	2.20E-06	0.00E+00	5.50E-06	5.19E-06	1.98E-09	1.76E-07	1.8	6.18E-04	7.67E-06
S28	50	7	21	5	3.31E-03	2.19E-03	6.21E-06	2.88E-04	4.75E-05	1.86E-06	0.00E+00	4.66E-06	4.40E-06	1.68E-09	1.49E-07	1.5	5.23E-04	6.49E-06
S28	50	7	22	5	2.81E-03	1.86E-03	5.27E-06	2.44E-04	4.03E-05	1.58E-06	0.00E+00	3.95E-06	3.73E-06	1.42E-09	1.27E-07	1.3	4.44E-04	5.51E-06
S28	50	7	23	5	2.30E-03	1.53E-03	4.33E-06	2.01E-04	3.31E-05	1.30E-06	0.00E+00	3.24E-06	3.06E-06	1.17E-09	1.04E-07	1.1	3.64E-04	4.52E-06
S28	50	7	24	5	1.70E-03	1.13E-03	3.20E-06	1.48E-04	2.45E-05	9.59E-07	0.00E+00	2.40E-06	2.26E-06	8.64E-10	7.69E-08	0.8	2.69E-04	3.34E-06
S29	60	8	1	5	1.77E-03	9.53E-04	3.06E-06	1.25E-04	2.07E-05	8.87E-07	0.00E+00	2.29E-06	2.12E-06	8.25E-10	6.41E-08	0.8	2.68E-04	3.12E-06
S29	60	8	2	5	1.18E-03	6.36E-04	2.04E-06	8.36E-05	1.38E-05	5.92E-07	0.00E+00	1.53E-06	1.42E-06	5.50E-10	4.27E-08	0.5	1.79E-04	2.08E-06
S29	60	8	3	5	1.03E-03	5.56E-04	1.78E-06	7.31E-05	1.21E-05	5.18E-07	0.00E+00	1.34E-06	1.24E-06	4.81E-10	3.74E-08	0.4	1.56E-04	1.82E-06
S29	60	8	4	5	7.36E-04	3.97E-04	1.27E-06	5.22E-05	8.63E-06	3.70E-07	0.00E+00	9.56E-07	8.84E-07	3.44E-10	2.67E-08	0.3	1.12E-04	1.30E-06
S29	60	8	5	5	1.03E-03	5.56E-04	1.78E-06	7.31E-05	1.21E-05	5.17E-07	0.00E+00	1.34E-06	1.24E-06	4.81E-10	3.74E-08	0.4	1.56E-04	1.82E-06
S29	60	8	6	5	2.50E-03	1.35E-03	4.33E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.08E-08	1.1	3.80E-04	4.42E-06
S29	60	8	7	5	7.50E-03	4.05E-03	1.30E-05	5.33E-04	8.81E-05	3.77E-06	0.00E+00	9.75E-06	9.02E-06	3.51E-09	2.72E-07	3.2	1.14E-03	1.33E-05
S29	60	8	8	5	1.15E-02	6.20E-03	1.99E-05	8.15E-04	1.35E-04	5.77E-06	0.00E+00	1.49E-05	1.38E-05	5.36E-09	4.17E-07	4.9	1.74E-03	2.03E-05
S29	60	8	9	5	9.27E-03	5.01E-03	1.61E-05	6.58E-04	1.09E-04	4.66E-06	0.00E+00	1.20E-05	1.11E-05	4.33E-09	3.37E-07	4.0	1.41E-03	1.64E-05
S29	60	8	10	5	7.65E-03	4.13E-03	1.33E-05	5.43E-04	8.98E-05	3.85E-06	0.00E+00	9.94E-06	9.20E-06	3.58E-09	2.78E-07	3.3	1.16E-03	1.35E-05
S29	60	8	11	5	6.91E-03	3.73E-03	1.20E-05	4.91E-04	8.11E-05	3.48E-06	0.00E+00	8.98E-06	8.31E-06	3.23E-09	2.51E-07	3.0	1.05E-03	1.22E-05
S29	60	8	12	5	7.80E-03	4.21E-03	1.35E-05	5.54E-04	9.15E-05	3.93E-06	0.00E+00	1.01E-05	9.37E-06	3.64E-09	2.83E-07	3.3	1.18E-03	1.38E-05
S29	60	8	13	5	8.24E-03	4.45E-03	1.43E-05	5.85E-04	9.67E-05	4.15E-06	0.00E+00	1.07E-05	9.91E-06	3.85E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S29	60	8	14	5	8.39E-03	4.53E-03	1.45E-05	5.96E-04	9.84E-05	4.23E-06	0.00E+00	1.09E-05	1.01E-05	3.92E-09	3.05E-07	3.6	1.27E-03	1.48E-05
S29	60	8	15	5	8.68E-03	4.69E-03	1.50E-05	6.17E-04	1.02E-04	4.38E-06	0.00E+00	1.13E-05	1.04E-05	4.06E-09	3.15E-07	3.7	1.32E-03	1.54E-05
S29	60	8	16	5	9.42E-03	5.08E-03	1.63E-05	6.69E-04	1.10E-04	4.75E-06	0.00E+00	1.22E-05	1.13E-05	4.40E-09	3.42E-07	4.0	1.43E-03	1.67E-05
S29	60	8	17	5	1.16E-02	6.28E-03	2.01E-05	8.26E-04	1.36E-04	5.86E-06	0.00E+00	1.51E-05	1.40E-05	5.43E-09	4.22E-07	5.0	1.76E-03	2.06E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	18	5	1.25E-02	6.75E-03	2.17E-05	8.88E-04	1.47E-04	6.30E-06	0.00E+00	1.62E-05	1.50E-05	5.84E-09	4.54E-07	5.3	1.90E-03	2.21E-05
S29	60	8	19	5	8.68E-03	4.69E-03	1.50E-05	6.17E-04	1.02E-04	4.37E-06	0.00E+00	1.13E-05	1.04E-05	4.06E-09	3.15E-07	3.7	1.32E-03	1.54E-05
S29	60	8	20	5	5.74E-03	3.10E-03	9.94E-06	4.08E-04	6.73E-05	2.88E-06	0.00E+00	7.46E-06	6.90E-06	2.68E-09	2.08E-07	2.5	8.71E-04	1.02E-05
S29	60	8	21	5	4.85E-03	2.62E-03	8.41E-06	3.45E-04	5.70E-05	2.44E-06	0.00E+00	6.31E-06	5.84E-06	2.27E-09	1.76E-07	2.1	7.37E-04	8.59E-06
S29	60	8	22	5	4.12E-03	2.22E-03	7.14E-06	2.93E-04	4.83E-05	2.07E-06	0.00E+00	5.35E-06	4.95E-06	1.93E-09	1.50E-07	1.8	6.25E-04	7.29E-06
S29	60	8	23	5	3.38E-03	1.83E-03	5.86E-06	2.40E-04	3.97E-05	1.70E-06	0.00E+00	4.40E-06	4.07E-06	1.58E-09	1.23E-07	1.4	5.14E-04	5.99E-06
S29	60	8	24	5	2.50E-03	1.35E-03	4.33E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.08E-08	1.1	3.80E-04	4.42E-06
S30	60	8	1	5	2.20E-03	1.19E-03	3.80E-06	1.56E-04	2.58E-05	1.10E-06	0.00E+00	2.85E-06	2.64E-06	1.03E-09	7.97E-08	0.9	3.33E-04	3.88E-06
S30	60	8	2	5	1.46E-03	7.90E-04	2.54E-06	1.04E-04	1.72E-05	7.36E-07	0.00E+00	1.90E-06	1.76E-06	6.84E-10	5.32E-08	0.6	2.22E-04	2.59E-06
S30	60	8	3	5	1.28E-03	6.92E-04	2.22E-06	9.10E-05	1.50E-05	6.44E-07	0.00E+00	1.66E-06	1.54E-06	5.99E-10	4.65E-08	0.5	1.94E-04	2.27E-06
S30	60	8	4	5	9.15E-04	4.94E-04	1.59E-06	6.50E-05	1.07E-05	4.60E-07	0.00E+00	1.19E-06	1.10E-06	4.28E-10	3.32E-08	0.4	1.39E-04	1.62E-06
S30	60	8	5	5	1.28E-03	6.92E-04	2.22E-06	9.10E-05	1.50E-05	6.43E-07	0.00E+00	1.66E-06	1.54E-06	5.99E-10	4.65E-08	0.5	1.94E-04	2.27E-06
S30	60	8	6	5	3.11E-03	1.68E-03	5.39E-06	2.21E-04	3.65E-05	1.56E-06	0.00E+00	4.04E-06	3.74E-06	1.45E-09	1.13E-07	1.3	4.72E-04	5.50E-06
S30	60	8	7	5	9.33E-03	5.04E-03	1.62E-05	6.63E-04	1.09E-04	4.69E-06	0.00E+00	1.21E-05	1.12E-05	4.36E-09	3.39E-07	4.0	1.42E-03	1.65E-05
S30	60	8	8	5	1.43E-02	7.71E-03	2.47E-05	1.01E-03	1.67E-04	7.17E-06	0.00E+00	1.85E-05	1.72E-05	6.67E-09	5.18E-07	6.1	2.17E-03	2.52E-05
S30	60	8	9	5	1.15E-02	6.22E-03	2.00E-05	8.19E-04	1.35E-04	5.79E-06	0.00E+00	1.50E-05	1.39E-05	5.39E-09	4.19E-07	4.9	1.75E-03	2.04E-05
S30	60	8	10	5	9.51E-03	5.14E-03	1.65E-05	6.76E-04	1.12E-04	4.78E-06	0.00E+00	1.24E-05	1.14E-05	4.45E-09	3.45E-07	4.1	1.44E-03	1.68E-05
S30	60	8	11	5	8.60E-03	4.64E-03	1.49E-05	6.11E-04	1.01E-04	4.33E-06	0.00E+00	1.12E-05	1.03E-05	4.02E-09	3.12E-07	3.7	1.30E-03	1.52E-05
S30	60	8	12	5	9.70E-03	5.24E-03	1.68E-05	6.89E-04	1.14E-04	4.88E-06	0.00E+00	1.26E-05	1.17E-05	4.53E-09	3.52E-07	4.1	1.47E-03	1.72E-05
S30	60	8	13	5	1.02E-02	5.53E-03	1.78E-05	7.28E-04	1.20E-04	5.16E-06	0.00E+00	1.33E-05	1.23E-05	4.79E-09	3.72E-07	4.4	1.55E-03	1.81E-05
S30	60	8	14	5	1.04E-02	5.63E-03	1.81E-05	7.41E-04	1.22E-04	5.26E-06	0.00E+00	1.35E-05	1.25E-05	4.87E-09	3.79E-07	4.5	1.58E-03	1.84E-05
S30	60	8	15	5	1.08E-02	5.83E-03	1.87E-05	7.67E-04	1.27E-04	5.44E-06	0.00E+00	1.40E-05	1.30E-05	5.04E-09	3.92E-07	4.6	1.64E-03	1.91E-05
S30	60	8	16	5	1.17E-02	6.32E-03	2.03E-05	8.32E-04	1.37E-04	5.90E-06	0.00E+00	1.52E-05	1.41E-05	5.47E-09	4.25E-07	5.0	1.78E-03	2.07E-05
S30	60	8	17	5	1.45E-02	7.80E-03	2.50E-05	1.03E-03	1.70E-04	7.28E-06	0.00E+00	1.88E-05	1.74E-05	6.75E-09	5.25E-07	6.2	2.19E-03	2.56E-05
S30	60	8	18	5	1.55E-02	8.40E-03	2.69E-05	1.10E-03	1.82E-04	7.84E-06	0.00E+00	2.02E-05	1.87E-05	7.27E-09	5.65E-07	6.6	2.36E-03	2.75E-05
S30	60	8	19	5	1.08E-02	5.83E-03	1.87E-05	7.67E-04	1.27E-04	5.43E-06	0.00E+00	1.40E-05	1.30E-05	5.04E-09	3.92E-07	4.6	1.64E-03	1.91E-05
S30	60	8	20	5	7.13E-03	3.85E-03	1.24E-05	5.07E-04	8.37E-05	3.59E-06	0.00E+00	9.27E-06	8.58E-06	3.33E-09	2.59E-07	3.0	1.08E-03	1.26E-05
S30	60	8	21	5	6.04E-03	3.26E-03	1.05E-05	4.29E-04	7.08E-05	3.04E-06	0.00E+00	7.84E-06	7.26E-06	2.82E-09	2.19E-07	2.6	9.16E-04	1.07E-05
S30	60	8	22	5	5.12E-03	2.77E-03	8.88E-06	3.64E-04	6.01E-05	2.58E-06	0.00E+00	6.66E-06	6.16E-06	2.39E-09	1.86E-07	2.2	7.77E-04	9.06E-06
S30	60	8	23	5	4.21E-03	2.27E-03	7.29E-06	2.99E-04	4.94E-05	2.12E-06	0.00E+00	5.47E-06	5.06E-06	1.97E-09	1.53E-07	1.8	6.39E-04	7.44E-06
S30	60	8	24	5	3.11E-03	1.68E-03	5.39E-06	2.21E-04	3.65E-05	1.56E-06	0.00E+00	4.04E-06	3.74E-06	1.45E-09	1.13E-07	1.3	4.72E-04	5.50E-06
S31	60	8	1	5	4.14E-03	2.23E-03	7.17E-06	2.94E-04	4.86E-05	2.08E-06	0.00E+00	5.38E-06	4.98E-06	1.93E-09	1.50E-07	1.8	6.28E-04	7.32E-06
S31	60	8	2	5	2.76E-03	1.49E-03	4.78E-06	1.96E-04	3.24E-05	1.39E-06	0.00E+00	3.58E-06	3.32E-06	1.29E-09	1.00E-07	1.2	4.19E-04	4.88E-06
S31	60	8	3	5	2.41E-03	1.30E-03	4.18E-06	1.71E-04	2.83E-05	1.21E-06	0.00E+00	3.14E-06	2.90E-06	1.13E-09	8.77E-08	1.0	3.66E-04	4.27E-06
S31	60	8	4	5	1.72E-03	9.31E-04	2.99E-06	1.22E-04	2.02E-05	8.67E-07	0.00E+00	2.24E-06	2.07E-06	8.06E-10	6.26E-08	0.7	2.62E-04	3.05E-06
S31	60	8	5	5	2.41E-03	1.30E-03	4.18E-06	1.71E-04	2.83E-05	1.21E-06	0.00E+00	3.14E-06	2.90E-06	1.13E-09	8.77E-08	1.0	3.66E-04	4.27E-06
S31	60	8	6	5	5.86E-03	3.17E-03	1.02E-05	4.16E-04	6.88E-05	2.95E-06	0.00E+00	7.62E-06	7.05E-06	2.74E-09	2.13E-07	2.5	8.90E-04	1.04E-05
S31	60	8	7	5	1.76E-02	9.50E-03	3.05E-05	1.25E-03	2.06E-04	8.84E-06	0.00E+00	2.29E-05	2.11E-05	8.22E-09	6.39E-07	7.5	2.67E-03	3.11E-05
S31	60	8	8	5	2.69E-02	1.45E-02	4.66E-05	1.91E-03	3.16E-04	1.35E-05	0.00E+00	3.50E-05	3.23E-05	1.26E-08	9.77E-07	11.5	4.08E-03	4.76E-05
S31	60	8	9	5	2.17E-02	1.17E-02	3.76E-05	1.54E-03	2.55E-04	1.09E-05	0.00E+00	2.82E-05	2.61E-05	1.02E-08	7.89E-07	9.3	3.30E-03	3.84E-05
S31	60	8	10	5	1.79E-02	9.68E-03	3.11E-05	1.27E-03	2.10E-04	9.02E-06	0.00E+00	2.33E-05	2.16E-05	8.38E-09	6.51E-07	7.7	2.72E-03	3.17E-05
S31	60	8	11	5	1.62E-02	8.75E-03	2.81E-05	1.15E-03	1.90E-04	8.16E-06	0.00E+00	2.11E-05	1.95E-05	7.58E-09	5.89E-07	6.9	2.46E-03	2.87E-05
S31	60	8	12	5	1.83E-02	9.87E-03	3.17E-05	1.30E-03	2.14E-04	9.21E-06	0.00E+00	2.37E-05	2.20E-05	8.54E-09	6.64E-07	7.8	2.77E-03	3.23E-05
S31	60	8	13	5	1.93E-02	1.04E-02	3.35E-05	1.37E-03	2.27E-04	9.73E-06	0.00E+00	2.51E-05	2.32E-05	9.03E-09	7.01E-07	8.2	2.93E-03	3.42E-05
S31	60	8	14	5	1.97E-02	1.06E-02	3.41E-05	1.40E-03	2.31E-04	9.91E-06	0.00E+00	2.55E-05	2.36E-05	9.19E-09	7.14E-07	8.4	2.98E-03	3.48E-05
S31	60	8	15	5	2.03E-02	1.10E-02	3.53E-05	1.45E-03	2.39E-04	1.03E-05	0.00E+00	2.64E-05	2.45E-05	9.51E-09	7.39E-07	8.7	3.09E-03	3.60E-05
S31	60	8	16	5	2.21E-02	1.19E-02	3.82E-05	1.57E-03	2.59E-04	1.11E-05	0.00E+00	2.87E-05	2.65E-05	1.03E-08	8.02E-07	9.4	3.35E-03	3.90E-05
S31	60	8	17	5	2.72E-02	1.47E-02	4.72E-05	1.94E-03	3.20E-04	1.37E-05	0.00E+00	3.54E-05	3.28E-05	1.27E-08	9.89E-07	11.6	4.13E-03	4.82E-05
S31	60	8	18	5	2.93E-02	1.58E-02	5.08E-05	2.08E-03	3.44E-04	1.48E-05	0.00E+00	3.81E-05	3.52E-05	1.37E-08	1.06E-06	12.5	4.45E-03	5.19E-05
S31	60	8	19	5	2.03E-02	1.10E-02	3.53E-05	1.45E-03	2.39E-04	1.02E-05	0.00E+00	2.64E-05	2.45E-05	9.51E-09	7.39E-07	8.7	3.09E-03	3.60E-05
S31	60	8	20	5	1.34E-02	7.26E-03	2.33E-05	9.55E-04	1.58E-04	6.76E-06	0.00E+00	1.75E-05	1.62E-05	6.29E-09	4.88E-07	5.7	2.04E-03	2.38E-05
S31	60	8	21	5	1.14E-02	6.15E-03	1.97E-05	8.08E-04	1.34E-04	5.72E-06	0.00E+00	1.48E-05	1.37E-05	5.32E-09	4.13E-07	4.9	1.73E-03	2.01E-05
S31	60	8	22	5	9.66E-03	5.21E-03	1.67E-05	6.86E-04	1.13E-04	4.85E-06	0.00E+00	1.25E-05	1.16E-05	4.51E-09	3.51E-07	4.1	1.47E-03	1.71E-05
S31	60	8	23	5	7.93E-03	4.28E-03	1.37E-05	5.63E-04	9.31E-05	3.99E-06	0.00E+00	1.03E-05	9.54E-06	3.71E-09	2.88E-07	3.4	1.20E-03	1.40E-05
S31	60	8	24	5	5.86E-03	3.17E-03	1.02E-05	4.16E-04	6.88E-05	2.95E-06	0.00E+00	7.62E-06	7.05E-06	2.74E-09	2.13E-07	2.5	8.90E-04	1.04E-05
S32	50	7	1	5	5.80E-03	3.84E-03	1.09E-05	5.04E-04	8.33E-05	3.27E-06	0.00E+00	8.16E-06	7.71E-06	2.94E-09	2.62E-07	2.7	9.17E-04	1.14E-05
S32	50	7	2	5	3.87E-03	2.56E-03	7.26E-06	3.36E-04	5.55E-05	2.18E-06	0.00E+00	5.44E-06	5.14E-06	1.96E-09	1.74E-07	1.8	6.11E-04	7.59E-06
S32	50	7	3	5	3.38E-03	2.24E-03	6.35E-06	2.94E-04	4.86E-05	1.90E-06	0.00E+00	4.76E-06	4.50E-06	1.72E-09	1.53E-07	1.6	5.35E-04	6.64E-06
S32	50	7	4	5	2.42E-03	1.60E-03	4.54E-06	2.10E-04	3.47E-05	1.36E-06	0.00E+00	3.40E-06	3.21E-06	1.23E-09	1.09E-07	1.1	3.82E-04	4.74E-06
S32	50	7	5	5	3.38E-03	2.24E-03	6.35E-06	2.94E-04	4.86E-05	1.90E-06	0.00E+00	4.76E-06	4.50E-06	1.72E-09	1.53E-07	1.6	5.35E-04	6.64E-06
S32	50	7	6	5	8.21E-03	5.44E-03	1.54E-05	7.15E-04	1.18E-04	4.63E-06	0.00E+00	1.16E-05	1.09E-05	4.17E-09	3.71E-07	3.8	1.30E-03	1.61E-05
S32	50	7	7	5	2.46E-02	1.63E-02	4.63E-05	2.14E-03	3.54E-04	1.39E-05	0.00E+00	3.47E-05	3.28E-05	1.25E-08	1.11E-06	11.5	3.90E-03	4.84E-05
S32	50	7	8	5	3.77E-02	2.50E-02	7.08E-05	3.28E-03	5.41E-04	2.12E-05	0.00E+00	5.31E-05	5.01E-05	1.91E-08	1.70E-06	17.6	5.96E-03	7.40E-05
S32	50	7	9	5	3.04E-02	2.02E-02	5.72E-05	2.65E-03	4.37E-04	1.71E-05	0.00E+00	4.29E-05	4.05E-05	1.54E-08	1.37E-06	14.2	4.81E-03	5.97E-05
S32	50	7	10	5	2.51E-02	1.66E-02	4.72E-05	2.19E-03	3.61E-04	1.42E-05	0.00E+00	3.54E-05	3.34E-05	1.27E-08	1.13E-06	11.7	3.97E-03	4.93E-05
S32	50	7	11	5	2.27E-02	1.50E-02	4.26E-05	1.98E-03	3.26E-04	1.28E-05	0.00E+00	3.20E-05	3.02E-05	1.15E-08	1.02E-06	10.6	3.59E-03	4.46E-05
S32	50	7	12	5	2.56E-02	1.70E-02	4.81E-05	2.23E-03	3.68E-04	1.45E-05	0.00E+00	3.61E-05	3.40E-05	1.30E-08	1.16E-06	11.9	4.05E-03	5.03E-05
S32	50	7	13	5	2.71E-02	1.79E-02	5.08E-05	2.35E-03	3.89E-04	1.53E-05	0.00E+00	3.81E-05	3.60E-05	1.37E-08	1.22E-06	12.6	4.28E-03	5.31E-05
S32	50	7	14	5	2.75E-02	1.82E-02	5.17E-05	2.40E-03	3.95E-04	1.56E-05	0.00E+00	3.88E-05	3.66E-05	1.40E-08	1.24E-06	12.8	4.35E-03	5.41E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	50	7	15	5	2.85E-02	1.89E-02	5.35E-05	2.48E-03	4.09E-04	1.61E-05	0.00E+00	4.01E-05	3.79E-05	1.45E-08	1.29E-06	13.3	4.51E-03	5.60E-05
S32	50	7	16	5	3.09E-02	2.05E-02	5.81E-05	2.69E-03	4.44E-04	1.75E-05	0.00E+00	4.35E-05	4.11E-05	1.57E-08	1.40E-06	14.4	4.89E-03	6.07E-05
S32	50	7	17	5	3.82E-02	2.53E-02	7.17E-05	3.32E-03	5.48E-04	2.16E-05	0.00E+00	5.37E-05	5.07E-05	1.94E-08	1.72E-06	17.8	6.03E-03	7.49E-05
S32	50	7	18	5	4.11E-02	2.72E-02	7.71E-05	3.57E-03	5.90E-04	2.32E-05	0.00E+00	5.78E-05	5.46E-05	2.08E-08	1.85E-06	19.1	6.49E-03	8.06E-05
S32	50	7	19	5	2.85E-02	1.89E-02	5.35E-05	2.48E-03	4.09E-04	1.61E-05	0.00E+00	4.01E-05	3.79E-05	1.45E-08	1.29E-06	13.3	4.51E-03	5.60E-05
S32	50	7	20	5	1.88E-02	1.25E-02	3.54E-05	1.64E-03	2.71E-04	1.06E-05	0.00E+00	2.65E-05	2.50E-05	9.56E-09	8.50E-07	8.8	2.98E-03	3.70E-05
S32	50	7	21	5	1.59E-02	1.06E-02	2.99E-05	1.39E-03	2.29E-04	8.99E-06	0.00E+00	2.25E-05	2.12E-05	8.09E-09	7.19E-07	7.4	2.52E-03	3.13E-05
S32	50	7	22	5	1.35E-02	8.96E-03	2.54E-05	1.18E-03	1.94E-04	7.62E-06	0.00E+00	1.90E-05	1.80E-05	6.87E-09	6.10E-07	6.3	2.14E-03	2.66E-05
S32	50	7	23	5	1.11E-02	7.36E-03	2.09E-05	9.67E-04	1.60E-04	6.26E-06	0.00E+00	1.56E-05	1.48E-05	5.64E-09	5.01E-07	5.2	1.76E-03	2.18E-05
S32	50	7	24	5	8.21E-03	5.44E-03	1.54E-05	7.15E-04	1.18E-04	4.63E-06	0.00E+00	1.16E-05	1.09E-05	4.17E-09	3.71E-07	3.8	1.30E-03	1.61E-05
S33	50	7	1	5	5.15E-03	3.41E-03	9.67E-06	4.48E-04	7.40E-05	2.90E-06	0.00E+00	7.25E-06	6.85E-06	2.61E-09	2.32E-07	2.4	8.14E-04	1.01E-05
S33	50	7	2	5	3.43E-03	2.27E-03	6.45E-06	2.99E-04	4.93E-05	1.93E-06	0.00E+00	4.84E-06	4.56E-06	1.74E-09	1.55E-07	1.6	5.43E-04	6.74E-06
S33	50	7	3	5	3.00E-03	1.99E-03	5.64E-06	2.61E-04	4.31E-05	1.69E-06	0.00E+00	4.23E-06	3.99E-06	1.52E-09	1.36E-07	1.4	4.75E-04	5.90E-06
S33	50	7	4	5	2.15E-03	1.42E-03	4.03E-06	1.87E-04	3.08E-05	1.21E-06	0.00E+00	3.02E-06	2.85E-06	1.09E-09	9.68E-08	1.0	3.39E-04	4.21E-06
S33	50	7	5	5	3.00E-03	1.99E-03	5.64E-06	2.61E-04	4.31E-05	1.69E-06	0.00E+00	4.23E-06	3.99E-06	1.52E-09	1.36E-07	1.4	4.75E-04	5.90E-06
S33	50	7	6	5	7.30E-03	4.83E-03	1.37E-05	6.35E-04	1.05E-04	4.11E-06	0.00E+00	1.03E-05	9.70E-06	3.70E-09	3.29E-07	3.4	1.15E-03	1.43E-05
S33	50	7	7	5	2.19E-02	1.45E-02	4.11E-05	1.90E-03	3.14E-04	1.23E-05	0.00E+00	3.08E-05	2.91E-05	1.11E-08	9.88E-07	10.2	3.46E-03	4.30E-05
S33	50	7	8	5	3.35E-02	2.22E-02	6.29E-05	2.91E-03	4.81E-04	1.89E-05	0.00E+00	4.71E-05	4.45E-05	1.70E-08	1.51E-06	15.6	5.29E-03	6.57E-05
S33	50	7	9	5	2.70E-02	1.79E-02	5.08E-05	2.35E-03	3.88E-04	1.52E-05	0.00E+00	3.81E-05	3.59E-05	1.37E-08	1.22E-06	12.6	4.28E-03	5.31E-05
S33	50	7	10	5	2.23E-02	1.48E-02	4.19E-05	1.94E-03	3.20E-04	1.26E-05	0.00E+00	3.14E-05	2.97E-05	1.13E-08	1.01E-06	10.4	3.53E-03	4.38E-05
S33	50	7	11	5	2.02E-02	1.34E-02	3.79E-05	1.76E-03	2.90E-04	1.14E-05	0.00E+00	2.84E-05	2.68E-05	1.02E-08	9.10E-07	9.4	3.19E-03	3.96E-05
S33	50	7	12	5	2.27E-02	1.51E-02	4.27E-05	1.98E-03	3.27E-04	1.28E-05	0.00E+00	3.20E-05	3.02E-05	1.15E-08	1.03E-06	10.6	3.60E-03	4.47E-05
S33	50	7	13	5	2.40E-02	1.59E-02	4.51E-05	2.09E-03	3.45E-04	1.36E-05	0.00E+00	3.38E-05	3.20E-05	1.22E-08	1.08E-06	11.2	3.80E-03	4.72E-05
S33	50	7	14	5	2.45E-02	1.62E-02	4.60E-05	2.13E-03	3.51E-04	1.38E-05	0.00E+00	3.45E-05	3.25E-05	1.24E-08	1.10E-06	11.4	3.87E-03	4.80E-05
S33	50	7	15	5	2.53E-02	1.68E-02	4.76E-05	2.20E-03	3.64E-04	1.43E-05	0.00E+00	3.57E-05	3.37E-05	1.29E-08	1.14E-06	11.8	4.00E-03	4.97E-05
S33	50	7	16	5	2.75E-02	1.82E-02	5.16E-05	2.39E-03	3.94E-04	1.55E-05	0.00E+00	3.87E-05	3.65E-05	1.39E-08	1.24E-06	12.8	4.34E-03	5.39E-05
S33	50	7	17	5	3.39E-02	2.25E-02	6.37E-05	2.95E-03	4.87E-04	1.91E-05	0.00E+00	4.77E-05	4.51E-05	1.72E-08	1.53E-06	15.8	5.36E-03	6.66E-05
S33	50	7	18	5	3.65E-02	2.42E-02	6.85E-05	3.17E-03	5.24E-04	2.06E-05	0.00E+00	5.14E-05	4.85E-05	1.85E-08	1.65E-06	17.0	5.77E-03	7.16E-05
S33	50	7	19	5	2.53E-02	1.68E-02	4.76E-05	2.20E-03	3.64E-04	1.43E-05	0.00E+00	3.57E-05	3.37E-05	1.29E-08	1.14E-06	11.8	4.00E-03	4.97E-05
S33	50	7	20	5	1.67E-02	1.11E-02	3.14E-05	1.46E-03	2.40E-04	9.43E-06	0.00E+00	2.36E-05	2.23E-05	8.49E-09	7.55E-07	7.8	2.65E-03	3.29E-05
S33	50	7	21	5	1.42E-02	9.38E-03	2.66E-05	1.23E-03	2.03E-04	7.98E-06	0.00E+00	1.99E-05	1.88E-05	7.19E-09	6.39E-07	6.6	2.24E-03	2.78E-05
S33	50	7	22	5	1.20E-02	7.96E-03	2.26E-05	1.05E-03	1.73E-04	6.77E-06	0.00E+00	1.69E-05	1.60E-05	6.10E-09	5.42E-07	5.6	1.90E-03	2.36E-05
S33	50	7	23	5	9.87E-03	6.54E-03	1.85E-05	8.59E-04	1.42E-04	5.56E-06	0.00E+00	1.39E-05	1.31E-05	5.01E-09	4.45E-07	4.6	1.56E-03	1.94E-05
S33	50	7	24	5	7.30E-03	4.83E-03	1.37E-05	6.35E-04	1.05E-04	4.11E-06	0.00E+00	1.03E-05	9.70E-06	3.70E-09	3.29E-07	3.4	1.15E-03	1.43E-05
S34	60	8	1	5	1.27E-03	6.83E-04	2.19E-06	8.99E-05	1.49E-05	6.36E-07	0.00E+00	1.64E-06	1.52E-06	5.91E-10	4.60E-08	0.5	1.92E-04	2.24E-06
S34	60	8	2	5	8.44E-04	4.56E-04	1.46E-06	5.99E-05	9.90E-06	4.24E-07	0.00E+00	1.10E-06	1.01E-06	3.94E-10	3.06E-08	0.4	1.28E-04	1.49E-06
S34	60	8	3	5	7.38E-04	3.99E-04	1.28E-06	5.24E-05	8.66E-06	3.71E-07	0.00E+00	9.59E-07	8.87E-07	3.45E-10	2.68E-08	0.3	1.12E-04	1.31E-06
S34	60	8	4	5	5.27E-04	2.85E-04	9.14E-07	3.75E-05	6.19E-06	2.65E-07	0.00E+00	6.85E-07	6.34E-07	2.46E-10	1.91E-08	0.2	8.00E-05	9.33E-07
S34	60	8	5	5	7.38E-04	3.99E-04	1.28E-06	5.24E-05	8.66E-06	3.71E-07	0.00E+00	9.59E-07	8.87E-07	3.45E-10	2.68E-08	0.3	1.12E-04	1.31E-06
S34	60	8	6	5	1.79E-03	9.68E-04	3.11E-06	1.27E-04	2.10E-05	9.01E-07	0.00E+00	2.33E-06	2.16E-06	8.38E-10	6.51E-08	0.8	2.72E-04	3.17E-06
S34	60	8	7	5	5.38E-03	2.90E-03	9.32E-06	3.82E-04	6.31E-05	2.70E-06	0.00E+00	6.99E-06	6.47E-06	2.51E-09	1.95E-07	2.3	8.16E-04	9.51E-06
S34	60	8	8	5	8.22E-03	4.44E-03	1.43E-05	5.84E-04	9.65E-05	4.13E-06	0.00E+00	1.07E-05	9.89E-06	3.84E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S34	60	8	9	5	6.64E-03	3.59E-03	1.15E-05	4.72E-04	7.80E-05	3.34E-06	0.00E+00	8.63E-06	7.99E-06	3.10E-09	2.41E-07	2.8	1.01E-03	1.18E-05
S34	60	8	10	5	5.48E-03	2.96E-03	9.50E-06	3.89E-04	6.44E-05	2.76E-06	0.00E+00	7.13E-06	6.59E-06	2.56E-09	1.99E-07	2.3	8.32E-04	9.70E-06
S34	60	8	11	5	4.96E-03	2.68E-03	8.59E-06	3.52E-04	5.82E-05	2.50E-06	0.00E+00	6.44E-06	5.96E-06	2.32E-09	1.80E-07	2.1	7.52E-04	8.77E-06
S34	60	8	12	5	5.59E-03	3.02E-03	9.69E-06	3.97E-04	6.56E-05	2.82E-06	0.00E+00	7.26E-06	6.72E-06	2.61E-09	2.03E-07	2.4	8.48E-04	9.89E-06
S34	60	8	13	5	5.90E-03	3.19E-03	1.02E-05	4.19E-04	6.93E-05	2.98E-06	0.00E+00	7.67E-06	7.10E-06	2.76E-09	2.14E-07	2.5	8.96E-04	1.04E-05
S34	60	8	14	5	6.01E-03	3.25E-03	1.04E-05	4.27E-04	7.05E-05	3.03E-06	0.00E+00	7.81E-06	7.23E-06	2.81E-09	2.18E-07	2.6	9.12E-04	1.06E-05
S34	60	8	15	5	6.22E-03	3.36E-03	1.08E-05	4.42E-04	7.30E-05	3.14E-06	0.00E+00	8.08E-06	7.48E-06	2.91E-09	2.26E-07	2.7	9.44E-04	1.10E-05
S34	60	8	16	5	6.75E-03	3.64E-03	1.17E-05	4.79E-04	7.92E-05	3.40E-06	0.00E+00	8.77E-06	8.11E-06	3.15E-09	2.45E-07	2.9	1.02E-03	1.19E-05
S34	60	8	17	5	8.33E-03	4.50E-03	1.44E-05	5.92E-04	9.78E-05	4.20E-06	0.00E+00	1.08E-05	1.00E-05	3.89E-09	3.03E-07	3.6	1.26E-03	1.47E-05
S34	60	8	18	5	8.96E-03	4.84E-03	1.55E-05	6.37E-04	1.05E-04	4.52E-06	0.00E+00	1.16E-05	1.08E-05	4.19E-09	3.26E-07	3.8	1.36E-03	1.59E-05
S34	60	8	19	5	6.22E-03	3.36E-03	1.08E-05	4.42E-04	7.30E-05	3.13E-06	0.00E+00	8.08E-06	7.48E-06	2.91E-09	2.26E-07	2.7	9.44E-04	1.10E-05
S34	60	8	20	5	4.11E-03	2.22E-03	7.13E-06	2.92E-04	4.83E-05	2.07E-06	0.00E+00	5.34E-06	4.94E-06	1.92E-09	1.49E-07	1.8	6.24E-04	7.28E-06
S34	60	8	21	5	3.48E-03	1.88E-03	6.03E-06	2.47E-04	4.08E-05	1.75E-06	0.00E+00	4.52E-06	4.18E-06	1.63E-09	1.26E-07	1.5	5.28E-04	6.16E-06
S34	60	8	22	5	2.95E-03	1.59E-03	5.12E-06	2.10E-04	3.47E-05	1.48E-06	0.00E+00	3.84E-06	3.55E-06	1.38E-09	1.07E-07	1.3	4.48E-04	5.22E-06
S34	60	8	23	5	2.43E-03	1.31E-03	4.20E-06	1.72E-04	2.85E-05	1.22E-06	0.00E+00	3.15E-06	2.92E-06	1.13E-09	8.81E-08	1.0	3.68E-04	4.29E-06
S34	60	8	24	5	1.79E-03	9.68E-04	3.11E-06	1.27E-04	2.10E-05	9.01E-07	0.00E+00	2.33E-06	2.16E-06	8.38E-10	6.51E-08	0.8	2.72E-04	3.17E-06
S35	60	8	1	5	1.24E-03	6.71E-04	2.15E-06	8.83E-05	1.46E-05	6.25E-07	0.00E+00	1.62E-06	1.49E-06	5.81E-10	4.52E-08	0.5	1.89E-04	2.20E-06
S35	60	8	2	5	8.29E-04	4.48E-04	1.44E-06	5.89E-05	9.73E-06	4.17E-07	0.00E+00	1.08E-06	9.97E-07	3.87E-10	3.01E-08	0.4	1.26E-04	1.47E-06
S35	60	8	3	5	7.25E-04	3.92E-04	1.26E-06	5.15E-05	8.51E-06	3.64E-07	0.00E+00	9.42E-07	8.72E-07	3.39E-10	2.63E-08	0.3	1.10E-04	1.28E-06
S35	60	8	4	5	5.18E-04	2.80E-04	8.98E-07	3.68E-05	6.08E-06	2.60E-07	0.00E+00	6.73E-07	6.23E-07	2.42E-10	1.88E-08	0.2	7.86E-05	9.17E-07
S35	60	8	5	5	7.25E-04	3.92E-04	1.26E-06	5.15E-05	8.51E-06	3.64E-07	0.00E+00	9.42E-07	8.72E-07	3.39E-10	2.63E-08	0.3	1.10E-04	1.28E-06
S35	60	8	6	5	1.76E-03	9.51E-04	3.05E-06	1.25E-04	2.07E-05	8.85E-07	0.00E+00	2.29E-06	2.12E-06	8.23E-10	6.40E-08	0.8	2.67E-04	3.12E-06
S35	60	8	7	5	5.28E-03	2.85E-03	9.16E-06	3.75E-04	6.20E-05	2.66E-06	0.00E+00	6.87E-06	6.35E-06	2.47E-09	1.92E-07	2.3	8.02E-04	9.35E-06
S35	60	8	8	5	8.08E-03	4.36E-03	1.40E-05	5.74E-04	9.48E-05	4.06E-06	0.00E+00	1.05E-05	9.72E-06	3.78E-09	2.93E-07	3.5	1.23E-03	1.43E-05
S35	60	8	9	5	6.53E-03	3.52E-03	1.13E-05	4.64E-04	7.66E-05	3.28E-06	0.00E+00	8.48E-06	7.85E-06	3.05E-09	2.37E-07	2.8	9.91E-04	1.15E-05
S35	60	8	10	5	5.39E-03	2.91E-03	9.34E-06	3.83E-04	6.32E-05	2.71E-06	0.00E+00	7.00E-06	6.48E-06	2.52E-09	1.96E-07	2.3	8.18E-04	9.53E-06
S35	60	8	11	5	4.87E-03	2.63E-03	8.44E-06	3.46E-04	5.71E-05	2.45E-06	0.00E+00	6.33E-06	5.85E-06	2.28E-09	1.77E-07	2.1	7.39E-04	8.62E-06

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	12	5	5.49E-03	2.97E-03	9.52E-06	3.90E-04	6.44E-05	2.77E-06	0.00E+00	7.14E-06	6.60E-06	2.57E-09	1.99E-07	2.3	8.33E-04	9.72E-06
S35	60	8	13	5	5.80E-03	3.13E-03	1.01E-05	4.12E-04	6.81E-05	2.92E-06	0.00E+00	7.54E-06	6.98E-06	2.71E-09	2.11E-07	2.5	8.81E-04	1.03E-05
S35	60	8	14	5	5.91E-03	3.19E-03	1.02E-05	4.19E-04	6.93E-05	2.98E-06	0.00E+00	7.67E-06	7.10E-06	2.76E-09	2.14E-07	2.5	8.96E-04	1.04E-05
S35	60	8	15	5	6.11E-03	3.30E-03	1.06E-05	4.34E-04	7.17E-05	3.08E-06	0.00E+00	7.94E-06	7.35E-06	2.86E-09	2.22E-07	2.6	9.28E-04	1.08E-05
S35	60	8	16	5	6.63E-03	3.58E-03	1.15E-05	4.71E-04	7.78E-05	3.34E-06	0.00E+00	8.62E-06	7.97E-06	3.10E-09	2.41E-07	2.8	1.01E-03	1.17E-05
S35	60	8	17	5	8.18E-03	4.42E-03	1.42E-05	5.81E-04	9.61E-05	4.12E-06	0.00E+00	1.06E-05	9.84E-06	3.83E-09	2.97E-07	3.5	1.24E-03	1.45E-05
S35	60	8	18	5	8.81E-03	4.76E-03	1.53E-05	6.26E-04	1.03E-04	4.44E-06	0.00E+00	1.14E-05	1.06E-05	4.12E-09	3.20E-07	3.8	1.34E-03	1.56E-05
S35	60	8	19	5	6.11E-03	3.30E-03	1.06E-05	4.34E-04	7.17E-05	3.08E-06	0.00E+00	7.94E-06	7.35E-06	2.86E-09	2.22E-07	2.6	9.28E-04	1.08E-05
S35	60	8	20	5	4.04E-03	2.18E-03	7.00E-06	2.87E-04	4.74E-05	2.03E-06	0.00E+00	5.25E-06	4.86E-06	1.89E-09	1.47E-07	1.7	6.13E-04	7.15E-06
S35	60	8	21	5	3.42E-03	1.85E-03	5.93E-06	2.43E-04	4.01E-05	1.72E-06	0.00E+00	4.44E-06	4.11E-06	1.60E-09	1.24E-07	1.5	5.19E-04	6.05E-06
S35	60	8	22	5	2.90E-03	1.57E-03	5.03E-06	2.06E-04	3.40E-05	1.46E-06	0.00E+00	3.77E-06	3.49E-06	1.36E-09	1.05E-07	1.2	4.40E-04	5.13E-06
S35	60	8	23	5	2.38E-03	1.29E-03	4.13E-06	1.69E-04	2.80E-05	1.20E-06	0.00E+00	3.10E-06	2.86E-06	1.11E-09	8.65E-08	1.0	3.62E-04	4.22E-06
S35	60	8	24	5	1.76E-03	9.51E-04	3.05E-06	1.25E-04	2.07E-05	8.85E-07	0.00E+00	2.29E-06	2.12E-06	8.23E-10	6.40E-08	0.8	2.67E-04	3.12E-06
S36	60	8	1	5	1.99E-03	1.07E-03	3.44E-06	1.41E-04	2.33E-05	9.99E-07	0.00E+00	2.58E-06	2.39E-06	9.29E-10	7.22E-08	0.8	3.02E-04	3.52E-06
S36	60	8	2	5	1.33E-03	7.16E-04	2.30E-06	9.41E-05	1.56E-05	6.66E-07	0.00E+00	1.72E-06	1.59E-06	6.19E-10	4.81E-08	0.6	2.01E-04	2.34E-06
S36	60	8	3	5	1.16E-03	6.26E-04	2.01E-06	8.24E-05	1.36E-05	5.83E-07	0.00E+00	1.51E-06	1.39E-06	5.42E-10	4.21E-08	0.5	1.76E-04	2.05E-06
S36	60	8	4	5	8.28E-04	4.47E-04	1.44E-06	5.88E-05	9.72E-06	4.16E-07	0.00E+00	1.08E-06	9.96E-07	3.87E-10	3.01E-08	0.4	1.26E-04	1.47E-06
S36	60	8	5	5	1.16E-03	6.26E-04	2.01E-06	8.24E-05	1.36E-05	5.83E-07	0.00E+00	1.51E-06	1.39E-06	5.42E-10	4.21E-08	0.5	1.76E-04	2.05E-06
S36	60	8	6	5	2.82E-03	1.52E-03	4.88E-06	2.00E-04	3.30E-05	1.42E-06	0.00E+00	3.66E-06	3.39E-06	1.32E-09	1.02E-07	1.2	4.27E-04	4.98E-06
S36	60	8	7	5	8.45E-03	4.56E-03	1.46E-05	6.00E-04	9.91E-05	4.25E-06	0.00E+00	1.10E-05	1.02E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.49E-05
S36	60	8	8	5	1.29E-02	6.98E-03	2.24E-05	9.18E-04	1.52E-04	6.50E-06	0.00E+00	1.68E-05	1.55E-05	6.04E-09	4.69E-07	5.5	1.96E-03	2.29E-05
S36	60	8	9	5	1.04E-02	5.64E-03	1.81E-05	7.41E-04	1.22E-04	5.25E-06	0.00E+00	1.36E-05	1.25E-05	4.88E-09	3.79E-07	4.5	1.58E-03	1.85E-05
S36	60	8	10	5	8.61E-03	4.65E-03	1.49E-05	6.12E-04	1.01E-04	4.33E-06	0.00E+00	1.12E-05	1.04E-05	4.03E-09	3.13E-07	3.7	1.31E-03	1.52E-05
S36	60	8	11	5	7.79E-03	4.20E-03	1.35E-05	5.53E-04	9.14E-05	3.92E-06	0.00E+00	1.01E-05	9.36E-06	3.64E-09	2.83E-07	3.3	1.18E-03	1.38E-05
S36	60	8	12	5	8.78E-03	4.74E-03	1.52E-05	6.24E-04	1.03E-04	4.42E-06	0.00E+00	1.14E-05	1.06E-05	4.10E-09	3.19E-07	3.7	1.33E-03	1.55E-05
S36	60	8	13	5	9.28E-03	5.01E-03	1.61E-05	6.59E-04	1.09E-04	4.67E-06	0.00E+00	1.21E-05	1.12E-05	4.34E-09	3.37E-07	4.0	1.41E-03	1.64E-05
S36	60	8	14	5	9.44E-03	5.10E-03	1.64E-05	6.71E-04	1.11E-04	4.76E-06	0.00E+00	1.23E-05	1.14E-05	4.41E-09	3.43E-07	4.0	1.43E-03	1.67E-05
S36	60	8	15	5	9.77E-03	5.28E-03	1.69E-05	6.94E-04	1.15E-04	4.93E-06	0.00E+00	1.27E-05	1.18E-05	4.57E-09	3.55E-07	4.2	1.48E-03	1.73E-05
S36	60	8	16	5	1.06E-02	5.73E-03	1.84E-05	7.53E-04	1.24E-04	5.34E-06	0.00E+00	1.38E-05	1.27E-05	4.96E-09	3.85E-07	4.5	1.61E-03	1.88E-05
S36	60	8	17	5	1.31E-02	7.07E-03	2.27E-05	9.30E-04	1.54E-04	6.59E-06	0.00E+00	1.70E-05	1.57E-05	6.12E-09	4.75E-07	5.6	1.99E-03	2.32E-05
S36	60	8	18	5	1.41E-02	7.60E-03	2.44E-05	1.00E-03	1.65E-04	7.10E-06	0.00E+00	1.83E-05	1.69E-05	6.58E-09	5.11E-07	6.0	2.14E-03	2.49E-05
S36	60	8	19	5	9.77E-03	5.28E-03	1.69E-05	6.94E-04	1.15E-04	4.92E-06	0.00E+00	1.27E-05	1.18E-05	4.57E-09	3.55E-07	4.2	1.48E-03	1.73E-05
S36	60	8	20	5	6.46E-03	3.49E-03	1.12E-05	4.59E-04	7.58E-05	3.25E-06	0.00E+00	8.39E-06	7.77E-06	3.02E-09	2.35E-07	2.8	9.81E-04	1.14E-05
S36	60	8	21	5	5.47E-03	2.95E-03	9.47E-06	3.88E-04	6.42E-05	2.75E-06	0.00E+00	7.10E-06	6.57E-06	2.55E-09	1.99E-07	2.3	8.30E-04	9.67E-06
S36	60	8	22	5	4.64E-03	2.50E-03	8.04E-06	3.29E-04	5.44E-05	2.33E-06	0.00E+00	6.03E-06	5.58E-06	2.17E-09	1.68E-07	2.0	7.04E-04	8.21E-06
S36	60	8	23	5	3.81E-03	2.06E-03	6.60E-06	2.71E-04	4.47E-05	1.92E-06	0.00E+00	4.95E-06	4.58E-06	1.78E-09	1.38E-07	1.6	5.78E-04	6.74E-06
S36	60	8	24	5	2.82E-03	1.52E-03	4.88E-06	2.00E-04	3.30E-05	1.42E-06	0.00E+00	3.66E-06	3.39E-06	1.32E-09	1.02E-07	1.2	4.27E-04	4.98E-06
S37	60	8	1	5	5.60E-04	3.02E-04	9.70E-07	3.98E-05	6.57E-06	2.81E-07	0.00E+00	7.27E-07	6.73E-07	2.62E-10	2.03E-08	0.2	8.50E-05	9.90E-07
S37	60	8	2	5	3.73E-04	2.02E-04	6.47E-07	2.65E-05	4.38E-06	1.88E-07	0.00E+00	4.85E-07	4.49E-07	1.74E-10	1.36E-08	0.2	5.66E-05	6.60E-07
S37	60	8	3	5	3.27E-04	1.76E-04	5.66E-07	2.32E-05	3.83E-06	1.64E-07	0.00E+00	4.24E-07	3.93E-07	1.53E-10	1.19E-08	0.1	4.96E-05	5.78E-07
S37	60	8	4	5	2.33E-04	1.26E-04	4.04E-07	1.66E-05	2.74E-06	1.17E-07	0.00E+00	3.03E-07	2.80E-07	1.09E-10	8.47E-09	0.1	3.54E-05	4.13E-07
S37	60	8	5	5	3.27E-04	1.76E-04	5.66E-07	2.32E-05	3.83E-06	1.64E-07	0.00E+00	4.24E-07	3.93E-07	1.53E-10	1.19E-08	0.1	4.96E-05	5.78E-07
S37	60	8	6	5	7.93E-04	4.28E-04	1.37E-06	5.63E-05	9.31E-06	3.98E-07	0.00E+00	1.03E-06	9.53E-07	3.71E-10	2.88E-08	0.3	1.20E-04	1.40E-06
S37	60	8	7	5	2.38E-03	1.28E-03	4.12E-06	1.69E-04	2.79E-05	1.20E-06	0.00E+00	3.09E-06	2.86E-06	1.11E-09	8.64E-08	1.0	3.61E-04	4.21E-06
S37	60	8	8	5	3.64E-03	1.96E-03	6.31E-06	2.58E-04	4.27E-05	1.83E-06	0.00E+00	4.73E-06	4.37E-06	1.70E-09	1.32E-07	1.6	5.52E-04	6.44E-06
S37	60	8	9	5	2.94E-03	1.59E-03	5.09E-06	2.09E-04	3.45E-05	1.48E-06	0.00E+00	3.82E-06	3.53E-06	1.37E-09	1.07E-07	1.3	4.46E-04	5.20E-06
S37	60	8	10	5	2.43E-03	1.31E-03	4.20E-06	1.72E-04	2.85E-05	1.22E-06	0.00E+00	3.15E-06	2.92E-06	1.13E-09	8.81E-08	1.0	3.68E-04	4.29E-06
S37	60	8	11	5	2.19E-03	1.18E-03	3.80E-06	1.56E-04	2.57E-05	1.10E-06	0.00E+00	2.85E-06	2.64E-06	1.02E-09	7.96E-08	0.9	3.33E-04	3.88E-06
S37	60	8	12	5	2.47E-03	1.34E-03	4.28E-06	1.76E-04	2.90E-05	1.25E-06	0.00E+00	3.21E-06	2.97E-06	1.16E-09	8.98E-08	1.1	3.75E-04	4.37E-06
S37	60	8	13	5	2.61E-03	1.41E-03	4.53E-06	1.86E-04	3.07E-05	1.32E-06	0.00E+00	3.39E-06	3.14E-06	1.22E-09	9.49E-08	1.1	3.96E-04	4.62E-06
S37	60	8	14	5	2.66E-03	1.44E-03	4.61E-06	1.89E-04	3.12E-05	1.34E-06	0.00E+00	3.46E-06	3.20E-06	1.24E-09	9.66E-08	1.1	4.04E-04	4.70E-06
S37	60	8	15	5	2.75E-03	1.49E-03	4.77E-06	1.95E-04	3.23E-05	1.39E-06	0.00E+00	3.58E-06	3.31E-06	1.29E-09	1.00E-07	1.2	4.18E-04	4.87E-06
S37	60	8	16	5	2.99E-03	1.61E-03	5.17E-06	2.12E-04	3.50E-05	1.50E-06	0.00E+00	3.88E-06	3.59E-06	1.40E-09	1.08E-07	1.3	4.53E-04	5.28E-06
S37	60	8	17	5	3.69E-03	1.99E-03	6.39E-06	2.62E-04	4.33E-05	1.86E-06	0.00E+00	4.79E-06	4.43E-06	1.72E-09	1.34E-07	1.6	5.59E-04	6.52E-06
S37	60	8	18	5	3.97E-03	2.14E-03	6.87E-06	2.82E-04	4.65E-05	2.00E-06	0.00E+00	5.15E-06	4.77E-06	1.85E-09	1.44E-07	1.7	6.02E-04	7.02E-06
S37	60	8	19	5	2.75E-03	1.49E-03	4.77E-06	1.95E-04	3.23E-05	1.39E-06	0.00E+00	3.58E-06	3.31E-06	1.29E-09	1.00E-07	1.2	4.18E-04	4.87E-06
S37	60	8	20	5	1.82E-03	9.82E-04	3.15E-06	1.29E-04	2.14E-05	9.15E-07	0.00E+00	2.36E-06	2.19E-06	8.50E-10	6.61E-08	0.8	2.76E-04	3.22E-06
S37	60	8	21	5	1.54E-03	8.31E-04	2.67E-06	1.09E-04	1.81E-05	7.74E-07	0.00E+00	2.00E-06	1.85E-06	7.19E-10	5.59E-08	0.7	2.34E-04	2.72E-06
S37	60	8	22	5	1.31E-03	7.05E-04	2.26E-06	9.28E-05	1.53E-05	6.57E-07	0.00E+00	1.70E-06	1.57E-06	6.10E-10	4.74E-08	0.6	1.98E-04	2.31E-06
S37	60	8	23	5	1.07E-03	5.79E-04	1.86E-06	7.62E-05	1.26E-05	5.39E-07	0.00E+00	1.39E-06	1.29E-06	5.01E-10	3.90E-08	0.5	1.63E-04	1.90E-06
S37	60	8	24	5	7.93E-04	4.28E-04	1.37E-06	5.63E-05	9.31E-06	3.99E-07	0.00E+00	1.03E-06	9.53E-07	3.71E-10	2.88E-08	0.3	1.20E-04	1.40E-06
S38	60	8	1	5	1.24E-03	6.68E-04	2.15E-06	8.79E-05	1.45E-05	6.22E-07	0.00E+00	1.61E-06	1.49E-06	5.79E-10	4.50E-08	0.5	1.88E-04	2.19E-06
S38	60	8	2	5	8.25E-04	4.46E-04	1.43E-06	5.86E-05	9.68E-06	4.15E-07	0.00E+00	1.07E-06	9.92E-07	3.86E-10	3.00E-08	0.4	1.25E-04	1.46E-06
S38	60	8	3	5	7.22E-04	3.90E-04	1.25E-06	5.13E-05	8.47E-06	3.63E-07	0.00E+00	9.38E-07	8.68E-07	3.37E-10	2.62E-08	0.3	1.10E-04	1.28E-06
S38	60	8	4	5	5.16E-04	2.79E-04	8.94E-07	3.66E-05	6.05E-06	2.59E-07	0.00E+00	6.70E-07	6.20E-07	2.41E-10	1.87E-08	0.2	7.83E-05	9.13E-07
S38	60	8	5	5	7.22E-04	3.90E-04	1.25E-06	5.13E-05	8.47E-06	3.63E-07	0.00E+00	9.38E-07	8.68E-07	3.37E-10	2.62E-08	0.3	1.10E-04	1.28E-06
S38	60	8	6	5	1.75E-03	9.47E-04	3.04E-06	1.25E-04	2.06E-05	8.81E-07	0.00E+00	2.28E-06	2.11E-06	8.20E-10	6.37E-08	0.7	2.66E-04	3.10E-06
S38	60	8	7	5	5.26E-03	2.84E-03	9.12E-06	3.74E-04	6.17E-05	2.64E-06	0.00E+00	6.84E-06	6.32E-06	2.46E-09	1.91E-07	2.2	7.98E-04	9.31E-06
S38	60	8	8	5	8.05E-03	4.34E-03	1.39E-05	5.71E-04	9.44E-05	4.04E-06	0.00E+00	1.05E-05	9.67E-06	3.76E-09	2.92E-07	3.4	1.22E-03	1.42E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	9	5	6.50E-03	3.51E-03	1.13E-05	4.62E-04	7.63E-05	3.27E-06	0.00E+00	8.44E-06	7.81E-06	3.04E-09	2.36E-07	2.8	9.86E-04	1.15E-05
S38	60	8	10	5	5.36E-03	2.90E-03	9.30E-06	3.81E-04	6.30E-05	2.70E-06	0.00E+00	6.97E-06	6.45E-06	2.51E-09	1.95E-07	2.3	8.14E-04	9.49E-06
S38	60	8	11	5	4.85E-03	2.62E-03	8.40E-06	3.44E-04	5.69E-05	2.44E-06	0.00E+00	6.30E-06	5.83E-06	2.27E-09	1.76E-07	2.1	7.36E-04	8.58E-06
S38	60	8	12	5	5.47E-03	2.95E-03	9.47E-06	3.88E-04	6.42E-05	2.75E-06	0.00E+00	7.10E-06	6.57E-06	2.56E-09	1.99E-07	2.3	8.30E-04	9.67E-06
S38	60	8	13	5	5.78E-03	3.12E-03	1.00E-05	4.10E-04	6.78E-05	2.91E-06	0.00E+00	7.51E-06	6.95E-06	2.70E-09	2.10E-07	2.5	8.77E-04	1.02E-05
S38	60	8	14	5	5.88E-03	3.18E-03	1.02E-05	4.18E-04	6.90E-05	2.97E-06	0.00E+00	7.64E-06	7.07E-06	2.75E-09	2.14E-07	2.5	8.92E-04	1.04E-05
S38	60	8	15	5	6.09E-03	3.29E-03	1.05E-05	4.32E-04	7.14E-05	3.07E-06	0.00E+00	7.91E-06	7.32E-06	2.84E-09	2.21E-07	2.6	9.24E-04	1.08E-05
S38	60	8	16	5	6.60E-03	3.57E-03	1.14E-05	4.69E-04	7.75E-05	3.33E-06	0.00E+00	8.58E-06	7.94E-06	3.09E-09	2.40E-07	2.8	1.00E-03	1.17E-05
S38	60	8	17	5	8.15E-03	4.40E-03	1.41E-05	5.79E-04	9.56E-05	4.11E-06	0.00E+00	1.06E-05	9.80E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S38	60	8	18	5	8.77E-03	4.73E-03	1.52E-05	6.23E-04	1.03E-04	4.42E-06	0.00E+00	1.14E-05	1.05E-05	4.10E-09	3.18E-07	3.7	1.33E-03	1.55E-05
S38	60	8	19	5	6.09E-03	3.29E-03	1.05E-05	4.32E-04	7.14E-05	3.06E-06	0.00E+00	7.91E-06	7.32E-06	2.84E-09	2.21E-07	2.6	9.24E-04	1.08E-05
S38	60	8	20	5	4.02E-03	2.17E-03	6.97E-06	2.86E-04	4.72E-05	2.02E-06	0.00E+00	5.23E-06	4.84E-06	1.88E-09	1.46E-07	1.7	6.11E-04	7.12E-06
S38	60	8	21	5	3.40E-03	1.84E-03	5.90E-06	2.42E-04	3.99E-05	1.71E-06	0.00E+00	4.42E-06	4.09E-06	1.59E-09	1.24E-07	1.5	5.17E-04	6.02E-06
S38	60	8	22	5	2.89E-03	1.56E-03	5.01E-06	2.05E-04	3.39E-05	1.45E-06	0.00E+00	3.75E-06	3.47E-06	1.35E-09	1.05E-07	1.2	4.38E-04	5.11E-06
S38	60	8	23	5	2.37E-03	1.28E-03	4.11E-06	1.69E-04	2.78E-05	1.19E-06	0.00E+00	3.08E-06	2.85E-06	1.11E-09	8.62E-08	1.0	3.60E-04	4.20E-06
S38	60	8	24	5	1.75E-03	9.47E-04	3.04E-06	1.25E-04	2.06E-05	8.81E-07	0.00E+00	2.28E-06	2.11E-06	8.20E-10	6.37E-08	0.7	2.66E-04	3.10E-06
S39	60	8	1	5	1.72E-03	9.27E-04	2.98E-06	1.22E-04	2.01E-05	8.63E-07	0.00E+00	2.23E-06	2.06E-06	8.02E-10	6.23E-08	0.7	2.61E-04	3.04E-06
S39	60	8	2	5	1.14E-03	6.18E-04	1.98E-06	8.13E-05	1.34E-05	5.75E-07	0.00E+00	1.49E-06	1.38E-06	5.35E-10	4.16E-08	0.5	1.74E-04	2.02E-06
S39	60	8	3	5	1.00E-03	5.41E-04	1.74E-06	7.11E-05	1.18E-05	5.03E-07	0.00E+00	1.30E-06	1.20E-06	4.68E-10	3.64E-08	0.4	1.52E-04	1.77E-06
S39	60	8	4	5	7.15E-04	3.86E-04	1.24E-06	5.08E-05	8.39E-06	3.59E-07	0.00E+00	9.29E-07	8.60E-07	3.34E-10	2.60E-08	0.3	1.09E-04	1.27E-06
S39	60	8	5	5	1.00E-03	5.41E-04	1.74E-06	7.11E-05	1.18E-05	5.03E-07	0.00E+00	1.30E-06	1.20E-06	4.68E-10	3.64E-08	0.4	1.52E-04	1.77E-06
S39	60	8	6	5	2.43E-03	1.31E-03	4.21E-06	1.73E-04	2.85E-05	1.22E-06	0.00E+00	3.16E-06	2.92E-06	1.14E-09	8.83E-08	1.0	3.69E-04	4.30E-06
S39	60	8	7	5	7.30E-03	3.94E-03	1.26E-05	5.18E-04	8.56E-05	3.67E-06	0.00E+00	9.48E-06	8.77E-06	3.41E-09	2.65E-07	3.1	1.11E-03	1.29E-05
S39	60	8	8	5	1.12E-02	6.03E-03	1.93E-05	7.93E-04	1.31E-04	5.61E-06	0.00E+00	1.45E-05	1.34E-05	5.22E-09	4.05E-07	4.8	1.69E-03	1.97E-05
S39	60	8	9	5	9.01E-03	4.87E-03	1.56E-05	6.40E-04	1.06E-04	4.53E-06	0.00E+00	1.17E-05	1.08E-05	4.21E-09	3.27E-07	3.8	1.37E-03	1.59E-05
S39	60	8	10	5	7.44E-03	4.02E-03	1.29E-05	5.28E-04	8.73E-05	3.74E-06	0.00E+00	9.67E-06	8.94E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S39	60	8	11	5	6.72E-03	3.63E-03	1.17E-05	4.78E-04	7.89E-05	3.39E-06	0.00E+00	8.74E-06	8.08E-06	3.14E-09	2.44E-07	2.9	1.02E-03	1.19E-05
S39	60	8	12	5	7.58E-03	4.09E-03	1.31E-05	5.39E-04	8.90E-05	3.82E-06	0.00E+00	9.85E-06	9.12E-06	3.54E-09	2.75E-07	3.2	1.15E-03	1.34E-05
S39	60	8	13	5	8.01E-03	4.33E-03	1.39E-05	5.69E-04	9.40E-05	4.04E-06	0.00E+00	1.04E-05	9.63E-06	3.74E-09	2.91E-07	3.4	1.22E-03	1.42E-05
S39	60	8	14	5	8.15E-03	4.40E-03	1.41E-05	5.79E-04	9.57E-05	4.11E-06	0.00E+00	1.06E-05	9.80E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S39	60	8	15	5	8.44E-03	4.56E-03	1.46E-05	6.00E-04	9.91E-05	4.26E-06	0.00E+00	1.10E-05	1.01E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.49E-05
S39	60	8	16	5	9.16E-03	4.94E-03	1.59E-05	6.50E-04	1.07E-04	4.61E-06	0.00E+00	1.19E-05	1.10E-05	4.28E-09	3.33E-07	3.9	1.39E-03	1.62E-05
S39	60	8	17	5	1.13E-02	6.10E-03	1.96E-05	8.03E-04	1.33E-04	5.69E-06	0.00E+00	1.47E-05	1.36E-05	5.28E-09	4.10E-07	4.8	1.72E-03	2.00E-05
S39	60	8	18	5	1.22E-02	6.57E-03	2.11E-05	8.64E-04	1.43E-04	6.13E-06	0.00E+00	1.58E-05	1.46E-05	5.68E-09	4.42E-07	5.2	1.85E-03	2.15E-05
S39	60	8	19	5	8.44E-03	4.56E-03	1.46E-05	6.00E-04	9.91E-05	4.25E-06	0.00E+00	1.10E-05	1.01E-05	3.95E-09	3.07E-07	3.6	1.28E-03	1.49E-05
S39	60	8	20	5	5.58E-03	3.01E-03	9.67E-06	3.96E-04	6.55E-05	2.81E-06	0.00E+00	7.25E-06	6.71E-06	2.61E-09	2.03E-07	2.4	8.47E-04	9.87E-06
S39	60	8	21	5	4.72E-03	2.55E-03	8.18E-06	3.35E-04	5.54E-05	2.37E-06	0.00E+00	6.13E-06	5.68E-06	2.21E-09	1.71E-07	2.0	7.17E-04	8.35E-06
S39	60	8	22	5	4.01E-03	2.16E-03	6.94E-06	2.85E-04	4.70E-05	2.01E-06	0.00E+00	5.21E-06	4.82E-06	1.87E-09	1.45E-07	1.7	6.08E-04	7.09E-06
S39	60	8	23	5	3.29E-03	1.78E-03	5.70E-06	2.34E-04	3.86E-05	1.65E-06	0.00E+00	4.28E-06	3.96E-06	1.54E-09	1.20E-07	1.4	4.99E-04	5.82E-06
S39	60	8	24	5	2.43E-03	1.31E-03	4.21E-06	1.73E-04	2.85E-05	1.22E-06	0.00E+00	3.16E-06	2.92E-06	1.14E-09	8.83E-08	1.0	3.69E-04	4.30E-06
S40	80	11	1	5	2.23E-03	6.53E-04	3.55E-06	6.61E-05	1.31E-05	7.39E-07	0.00E+00	1.70E-06	1.53E-06	9.37E-10	4.27E-08	0.9	2.02E-04	2.74E-06
S40	80	11	2	5	1.48E-03	4.35E-04	2.37E-06	4.41E-05	8.76E-06	4.93E-07	0.00E+00	1.13E-06	1.02E-06	6.24E-10	2.84E-08	0.6	1.34E-04	1.82E-06
S40	80	11	3	5	1.30E-03	3.81E-04	2.07E-06	3.85E-05	7.66E-06	4.31E-07	0.00E+00	9.92E-07	8.95E-07	5.46E-10	2.49E-08	0.5	1.18E-04	1.60E-06
S40	80	11	4	5	9.28E-04	2.72E-04	1.48E-06	2.75E-05	5.47E-06	3.08E-07	0.00E+00	7.08E-07	6.40E-07	3.90E-10	1.78E-08	0.4	8.41E-05	1.14E-06
S40	80	11	5	5	1.30E-03	3.81E-04	2.07E-06	3.85E-05	7.66E-06	4.31E-07	0.00E+00	9.92E-07	8.95E-07	5.46E-10	2.49E-08	0.5	1.18E-04	1.60E-06
S40	80	11	6	5	3.16E-03	9.25E-04	5.03E-06	9.36E-05	1.86E-05	1.05E-06	0.00E+00	2.41E-06	2.17E-06	1.33E-09	6.04E-08	1.2	2.86E-04	3.88E-06
S40	80	11	7	5	9.47E-03	2.78E-03	1.51E-05	2.81E-04	5.58E-05	3.14E-06	0.00E+00	7.23E-06	6.52E-06	3.98E-09	1.81E-07	3.7	8.57E-04	1.16E-05
S40	80	11	8	5	1.45E-02	4.24E-03	2.31E-05	4.29E-04	8.54E-05	4.81E-06	0.00E+00	1.11E-05	9.98E-06	6.09E-09	2.77E-07	5.7	1.31E-03	1.78E-05
S40	80	11	9	5	1.17E-02	3.43E-03	1.87E-05	3.47E-04	6.89E-05	3.88E-06	0.00E+00	8.93E-06	8.06E-06	4.92E-09	2.24E-07	4.6	1.06E-03	1.44E-05
S40	80	11	10	5	9.65E-03	2.83E-03	1.54E-05	2.86E-04	5.69E-05	3.21E-06	0.00E+00	7.37E-06	6.65E-06	4.06E-09	1.85E-07	3.8	8.74E-04	1.19E-05
S40	80	11	11	5	8.72E-03	2.56E-03	1.39E-05	2.59E-04	5.14E-05	2.90E-06	0.00E+00	6.66E-06	6.01E-06	3.67E-09	1.67E-07	3.4	7.90E-04	1.07E-05
S40	80	11	12	5	9.84E-03	2.88E-03	1.57E-05	2.92E-04	5.80E-05	3.27E-06	0.00E+00	7.51E-06	6.78E-06	4.14E-09	1.88E-07	3.9	8.91E-04	1.21E-05
S40	80	11	13	5	1.04E-02	3.05E-03	1.66E-05	3.08E-04	6.13E-05	3.46E-06	0.00E+00	7.93E-06	7.16E-06	4.37E-09	1.99E-07	4.1	9.41E-04	1.28E-05
S40	80	11	14	5	1.06E-02	3.10E-03	1.69E-05	3.14E-04	6.24E-05	3.52E-06	0.00E+00	8.08E-06	7.29E-06	4.45E-09	2.03E-07	4.2	9.58E-04	1.30E-05
S40	80	11	15	5	1.10E-02	3.21E-03	1.75E-05	3.25E-04	6.46E-05	3.65E-06	0.00E+00	8.36E-06	7.55E-06	4.61E-09	2.10E-07	4.3	9.92E-04	1.35E-05
S40	80	11	16	5	1.19E-02	3.48E-03	1.90E-05	3.52E-04	7.00E-05	3.95E-06	0.00E+00	9.07E-06	8.19E-06	5.00E-09	2.27E-07	4.7	1.08E-03	1.46E-05
S40	80	11	17	5	1.47E-02	4.30E-03	2.34E-05	4.35E-04	8.65E-05	4.88E-06	0.00E+00	1.12E-05	1.01E-05	6.17E-09	2.81E-07	5.8	1.33E-03	1.80E-05
S40	80	11	18	5	1.58E-02	4.63E-03	2.52E-05	4.68E-04	9.30E-05	5.25E-06	0.00E+00	1.20E-05	1.09E-05	6.63E-09	3.02E-07	6.2	1.43E-03	1.94E-05
S40	80	11	19	5	1.10E-02	3.21E-03	1.75E-05	3.25E-04	6.46E-05	3.64E-06	0.00E+00	8.36E-06	7.55E-06	4.61E-09	2.10E-07	4.3	9.92E-04	1.35E-05
S40	80	11	20	5	7.24E-03	2.12E-03	1.16E-05	2.15E-04	4.27E-05	2.40E-06	0.00E+00	5.53E-06	4.99E-06	3.04E-09	1.39E-07	2.8	6.56E-04	8.90E-06
S40	80	11	21	5	6.13E-03	1.80E-03	9.77E-06	1.82E-04	3.61E-05	2.03E-06	0.00E+00	4.68E-06	4.22E-06	2.58E-09	1.17E-07	2.4	5.55E-04	7.53E-06
S40	80	11	22	5	5.20E-03	1.52E-03	8.29E-06	1.54E-04	3.06E-05	1.73E-06	0.00E+00	3.97E-06	3.58E-06	2.19E-09	9.95E-08	2.0	4.71E-04	6.39E-06
S40	80	11	23	5	4.27E-03	1.25E-03	6.81E-06	1.27E-04	2.52E-05	1.42E-06	0.00E+00	3.26E-06	2.94E-06	1.80E-09	8.18E-08	1.7	3.87E-04	5.25E-06
S40	80	11	24	5	3.16E-03	9.25E-04	5.03E-06	9.36E-05	1.86E-05	1.05E-06	0.00E+00	2.41E-06	2.17E-06	1.33E-09	6.04E-08	1.2	2.86E-04	3.88E-06

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O

Table F-4: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	12	0	1	2.62E-02	3.48E-02	4.45E-05	6.02E-05	5.46E-05	1.36E-05	0.00E+00	7.94E-05	7.94E-05	9.68E-09	2.77E-06	10.5	9.15E-03	2.38E-04
SI1_E	0.59	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.09E-06	0.00E+00	5.29E-05	5.30E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI1_E	0.59	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.18E-05	7.95E-06	0.00E+00	4.63E-05	4.63E-05	5.65E-09	1.61E-06	6.1	5.34E-03	1.39E-04
SI1_E	0.59	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.51E-05	2.27E-05	5.68E-06	0.00E+00	3.31E-05	3.31E-05	4.03E-09	1.15E-06	4.4	3.81E-03	9.92E-05
SI1_E	0.59	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.18E-05	7.95E-06	0.00E+00	4.63E-05	4.63E-05	5.65E-09	1.61E-06	6.1	5.34E-03	1.39E-04
SI1_E	0.59	17	0	1	3.71E-02	4.93E-02	6.31E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.13E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI1_E	0.59	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.56E-04	2.32E-04	5.79E-05	0.00E+00	3.37E-04	3.38E-04	4.11E-08	1.18E-05	44.6	3.89E-02	1.01E-03
SI1_E	0.59	78	0	1	1.70E-01	2.26E-01	2.89E-04	3.91E-04	3.55E-04	8.86E-05	0.00E+00	5.16E-04	5.16E-04	6.29E-08	1.80E-05	68.3	5.95E-02	1.55E-03
SI1_E	0.59	63	0	1	1.37E-01	1.83E-01	2.34E-04	3.16E-04	2.87E-04	7.16E-05	0.00E+00	4.17E-04	4.17E-04	5.08E-08	1.45E-05	55.1	4.80E-02	1.25E-03
SI1_E	0.59	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.91E-05	0.00E+00	3.44E-04	3.44E-04	4.20E-08	1.20E-05	45.5	3.97E-02	1.03E-03
SI1_E	0.59	47	0	1	1.03E-01	1.36E-01	1.74E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.1	3.58E-02	9.33E-04
SI1_E	0.59	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.50E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI1_E	0.59	56	0	1	1.22E-01	1.62E-01	2.08E-04	2.81E-04	2.55E-04	6.36E-05	0.00E+00	3.70E-04	3.71E-04	4.52E-08	1.29E-05	49.0	4.27E-02	1.11E-03
SI1_E	0.59	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.86E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.60E-08	1.31E-05	49.9	4.35E-02	1.13E-03
SI1_E	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.91E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI1_E	0.59	64	0	1	1.40E-01	1.86E-01	2.37E-04	3.21E-04	2.91E-04	7.27E-05	0.00E+00	4.23E-04	4.24E-04	5.16E-08	1.48E-05	56.0	4.88E-02	1.27E-03
SI1_E	0.59	79	0	1	1.72E-01	2.29E-01	2.93E-04	3.96E-04	3.59E-04	8.97E-05	0.00E+00	5.22E-04	5.23E-04	6.37E-08	1.82E-05	69.2	6.02E-02	1.57E-03
SI1_E	0.59	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.87E-04	9.66E-05	0.00E+00	5.62E-04	5.63E-04	6.86E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI1_E	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.91E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI1_E	0.59	39	0	1	8.51E-02	1.13E-01	1.45E-04	1.96E-04	1.77E-04	4.43E-05	0.00E+00	2.58E-04	2.58E-04	3.15E-08	9.00E-06	34.1	2.97E-02	7.74E-04
SI1_E	0.59	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.65E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.52E-02	6.55E-04
SI1_E	0.59	28	0	1	6.11E-02	8.12E-02	1.04E-04	1.40E-04	1.27E-04	3.18E-05	0.00E+00	1.85E-04	1.85E-04	2.26E-08	6.46E-06	24.5	2.14E-02	5.56E-04
SI1_E	0.59	23	0	1	5.02E-02	6.67E-02	8.53E-05	1.15E-04	1.05E-04	2.61E-05	0.00E+00	1.52E-04	1.52E-04	1.86E-08	5.31E-06	20.1	1.75E-02	4.57E-04
SI1_E	0.59	17	0	1	3.71E-02	4.93E-02	6.31E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.13E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI1_W	0.59	12	0	1	2.62E-02	3.48E-02	4.45E-05	6.02E-05	5.46E-05	1.36E-05	0.00E+00	7.94E-05	7.94E-05	9.68E-09	2.77E-06	10.5	9.15E-03	2.38E-04
SI1_W	0.59	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.09E-06	0.00E+00	5.29E-05	5.30E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI1_W	0.59	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.18E-05	7.95E-06	0.00E+00	4.63E-05	4.63E-05	5.65E-09	1.61E-06	6.1	5.34E-03	1.39E-04
SI1_W	0.59	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.51E-05	2.27E-05	5.68E-06	0.00E+00	3.31E-05	3.31E-05	4.03E-09	1.15E-06	4.4	3.81E-03	9.92E-05
SI1_W	0.59	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.18E-05	7.95E-06	0.00E+00	4.63E-05	4.63E-05	5.65E-09	1.61E-06	6.1	5.34E-03	1.39E-04
SI1_W	0.59	17	0	1	3.71E-02	4.93E-02	6.31E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.13E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI1_W	0.59	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.56E-04	2.32E-04	5.79E-05	0.00E+00	3.37E-04	3.38E-04	4.11E-08	1.18E-05	44.6	3.89E-02	1.01E-03
SI1_W	0.59	78	0	1	1.70E-01	2.26E-01	2.89E-04	3.91E-04	3.55E-04	8.86E-05	0.00E+00	5.16E-04	5.16E-04	6.29E-08	1.80E-05	68.3	5.95E-02	1.55E-03
SI1_W	0.59	63	0	1	1.37E-01	1.83E-01	2.34E-04	3.16E-04	2.87E-04	7.16E-05	0.00E+00	4.17E-04	4.17E-04	5.08E-08	1.45E-05	55.1	4.80E-02	1.25E-03
SI1_W	0.59	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.91E-05	0.00E+00	3.44E-04	3.44E-04	4.20E-08	1.20E-05	45.5	3.97E-02	1.03E-03
SI1_W	0.59	47	0	1	1.03E-01	1.36E-01	1.74E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.1	3.58E-02	9.33E-04
SI1_W	0.59	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.50E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI1_W	0.59	56	0	1	1.22E-01	1.62E-01	2.08E-04	2.81E-04	2.55E-04	6.36E-05	0.00E+00	3.70E-04	3.71E-04	4.52E-08	1.29E-05	49.0	4.27E-02	1.11E-03
SI1_W	0.59	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.86E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.60E-08	1.31E-05	49.9	4.35E-02	1.13E-03
SI1_W	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.91E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI1_W	0.59	64	0	1	1.40E-01	1.86E-01	2.37E-04	3.21E-04	2.91E-04	7.27E-05	0.00E+00	4.23E-04	4.24E-04	5.16E-08	1.48E-05	56.0	4.88E-02	1.27E-03
SI1_W	0.59	79	0	1	1.72E-01	2.29E-01	2.93E-04	3.96E-04	3.59E-04	8.97E-05	0.00E+00	5.22E-04	5.23E-04	6.37E-08	1.82E-05	69.2	6.02E-02	1.57E-03
SI1_W	0.59	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.87E-04	9.66E-05	0.00E+00	5.62E-04	5.63E-04	6.86E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI1_W	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.91E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI1_W	0.59	39	0	1	8.51E-02	1.13E-01	1.45E-04	1.96E-04	1.77E-04	4.43E-05	0.00E+00	2.58E-04	2.58E-04	3.15E-08	9.00E-06	34.1	2.97E-02	7.74E-04
SI1_W	0.59	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.65E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.52E-02	6.55E-04
SI1_W	0.59	28	0	1	6.11E-02	8.12E-02	1.04E-04	1.40E-04	1.27E-04	3.18E-05	0.00E+00	1.85E-04	1.85E-04	2.26E-08	6.46E-06	24.5	2.14E-02	5.56E-04
SI1_W	0.59	23	0	1	5.02E-02	6.67E-02	8.53E-05	1.15E-04	1.05E-04	2.61E-05	0.00E+00	1.52E-04	1.52E-04	1.86E-08	5.31E-06	20.1	1.75E-02	4.57E-04
SI1_W	0.59	17	0	1	3.71E-02	4.93E-02	6.31E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.13E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI2_E	0.51	9	0	1	1.94E-02	2.58E-02	3.30E-05	4.46E-05	4.05E-05	1.01E-05	0.00E+00	5.89E-05	5.89E-05	7.18E-09	2.05E-06	7.8	6.79E-03	1.77E-04
SI2_E	0.51	6	0	1	1.30E-02	1.72E-02	2.20E-05	2.98E-05	2.70E-05	6.74E-06	0.00E+00	3.93E-05	3.93E-05	4.79E-09	1.37E-06	5.2	4.53E-03	1.18E-04
SI2_E	0.51	5	0	1	1.13E-02	1.51E-02	1.93E-05	2.60E-05	2.36E-05	5.90E-06	0.00E+00	3.43E-05	3.44E-05	4.19E-09	1.20E-06	4.5	3.96E-03	1.03E-04
SI2_E	0.51	4	0	1	8.09E-03	1.08E-02	1.38E-05	1.86E-05	1.69E-05	4.21E-06	0.00E+00	2.45E-05	2.46E-05	2.99E-09	8.56E-07	3.2	2.83E-03	7.36E-05
SI2_E	0.51	5	0	1	1.13E-02	1.51E-02	1.93E-05	2.60E-05	2.36E-05	5.90E-06	0.00E+00	3.43E-05	3.44E-05	4.19E-09	1.20E-06	4.5	3.96E-03	1.03E-04
SI2_E	0.51	13	0	1	2.75E-02	3.66E-02	4.68E-05	6.32E-05	5.74E-05	1.43E-05	0.00E+00	8.34E-05	8.35E-05	1.02E-08	2.91E-06	11.0	9.62E-03	2.50E-04
SI2_E	0.51	38	0	1	8.26E-02	1.10E-01	1.40E-04	1.90E-04	1.72E-04	4.30E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.73E-06	33.1	2.89E-02	7.51E-04
SI2_E	0.51	58	0	1	1.26E-01	1.68E-01	2.15E-04	2.90E-04	2.63E-04	6.57E-05	0.00E+00	3.83E-04	3.83E-04	4.67E-08	1.34E-05	50.7	4.41E-02	1.15E-03
SI2_E	0.51	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.28E-04
SI2_E	0.51	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI2_E	0.51	35	0	1	7.61E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.31E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI2_E	0.51	39	0	1	8.58E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.47E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.07E-06	34.4	3.00E-02	7.81E-04
SI2_E	0.51	42	0	1	9.07E-02	1.20E-01	1.54E-04	2.08E-04	1.89E-04	4.72E-05	0.00E+00	2.75E-04	2.75E-04	3.35E-08	9.58E-06	36.4	3.17E-02	8.25E-04
SI2_E	0.51	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.80E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.76E-06	37.0	3.23E-02	8.39E-04
SI2_E	0.51	44	0	1	9.55E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.90E-04	3.53E-08	1.01E-05	38.3	3.34E-02	8.69E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.39E-05	0.00E+00	3.14E-04	3.14E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI2_E	0.51	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.67E-04	6.66E-05	0.00E+00	3.88E-04	3.88E-04	4.73E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI2_E	0.51	63	0	1	1.38E-01	1.83E-01	2.34E-04	3.16E-04	2.87E-04	7.16E-05	0.00E+00	4.17E-04	4.17E-04	5.09E-08	1.45E-05	55.2	4.81E-02	1.25E-03
SI2_E	0.51	44	0	1	9.55E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.90E-04	3.53E-08	1.01E-05	38.3	3.34E-02	8.69E-04
SI2_E	0.51	29	0	1	6.31E-02	8.39E-02	1.07E-04	1.45E-04	1.32E-04	3.29E-05	0.00E+00	1.91E-04	1.92E-04	2.33E-08	6.68E-06	25.3	2.21E-02	5.74E-04
SI2_E	0.51	25	0	1	5.34E-02	7.10E-02	9.08E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.65E-06	21.4	1.87E-02	4.86E-04
SI2_E	0.51	21	0	1	4.53E-02	6.02E-02	7.71E-05	1.04E-04	9.45E-05	2.36E-05	0.00E+00	1.37E-04	1.38E-04	1.68E-08	4.79E-06	18.2	1.58E-02	4.12E-04
SI2_E	0.51	17	0	1	3.72E-02	4.95E-02	6.33E-05	8.55E-05	7.76E-05	1.94E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.94E-06	14.9	1.30E-02	3.39E-04
SI2_E	0.51	13	0	1	2.75E-02	3.66E-02	4.68E-05	6.32E-05	5.74E-05	1.43E-05	0.00E+00	8.34E-05	8.35E-05	1.02E-08	2.91E-06	11.0	9.62E-03	2.50E-04
SI2_W	0.42	8	0	1	1.73E-02	2.30E-02	2.95E-05	3.98E-05	3.61E-05	9.02E-06	0.00E+00	5.25E-05	5.26E-05	6.41E-09	1.83E-06	7.0	6.06E-03	1.58E-04
SI2_W	0.42	5	0	1	1.16E-02	1.53E-02	1.96E-05	2.65E-05	2.41E-05	6.01E-06	0.00E+00	3.50E-05	3.51E-05	4.27E-09	1.22E-06	4.6	4.04E-03	1.05E-04
SI2_W	0.42	5	0	1	1.01E-02	1.34E-02	1.72E-05	2.32E-05	2.11E-05	5.26E-06	0.00E+00	3.06E-05	3.07E-05	3.74E-09	1.07E-06	4.1	3.53E-03	9.20E-05
SI2_W	0.42	3	0	1	7.22E-03	9.59E-03	1.23E-05	1.66E-05	1.51E-05	3.76E-06	0.00E+00	2.19E-05	2.19E-05	2.67E-09	7.63E-07	2.9	2.52E-03	6.57E-05
SI2_W	0.42	5	0	1	1.01E-02	1.34E-02	1.72E-05	2.32E-05	2.11E-05	5.26E-06	0.00E+00	3.06E-05	3.07E-05	3.74E-09	1.07E-06	4.1	3.53E-03	9.20E-05
SI2_W	0.42	11	0	1	2.46E-02	3.26E-02	4.17E-05	5.64E-05	5.12E-05	1.28E-05	0.00E+00	7.44E-05	7.45E-05	9.08E-09	2.60E-06	9.8	8.58E-03	2.23E-04
SI2_W	0.42	34	0	1	7.37E-02	9.78E-02	1.25E-04	1.69E-04	1.54E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.79E-06	29.5	2.57E-02	6.70E-04
SI2_W	0.42	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.59E-04	2.35E-04	5.86E-05	0.00E+00	3.41E-04	3.42E-04	4.17E-08	1.19E-05	45.2	3.94E-02	1.02E-03
SI2_W	0.42	42	0	1	9.10E-02	1.21E-01	1.55E-04	2.09E-04	1.90E-04	4.74E-05	0.00E+00	2.76E-04	2.76E-04	3.36E-08	9.62E-06	36.5	3.18E-02	8.28E-04
SI2_W	0.42	34	0	1	7.51E-02	9.98E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.94E-06	30.1	2.62E-02	6.83E-04
SI2_W	0.42	31	0	1	6.79E-02	9.02E-02	1.15E-04	1.56E-04	1.41E-04	3.53E-05	0.00E+00	2.06E-04	2.06E-04	2.51E-08	7.18E-06	27.2	2.37E-02	6.17E-04
SI2_W	0.42	35	0	1	7.65E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.98E-05	0.00E+00	2.32E-04	2.32E-04	2.83E-08	8.09E-06	30.7	2.68E-02	6.96E-04
SI2_W	0.42	37	0	1	8.09E-02	1.07E-01	1.37E-04	1.86E-04	1.69E-04	4.21E-05	0.00E+00	2.45E-04	2.45E-04	2.99E-08	8.55E-06	32.4	2.83E-02	7.36E-04
SI2_W	0.42	38	0	1	8.23E-02	1.09E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.49E-04	2.50E-04	3.04E-08	8.70E-06	33.0	2.88E-02	7.49E-04
SI2_W	0.42	39	0	1	8.52E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.58E-04	2.59E-04	3.15E-08	9.01E-06	34.2	2.98E-02	7.75E-04
SI2_W	0.42	42	0	1	9.24E-02	1.23E-01	1.57E-04	2.12E-04	1.93E-04	4.81E-05	0.00E+00	2.80E-04	2.80E-04	3.42E-08	9.77E-06	37.1	3.23E-02	8.41E-04
SI2_W	0.42	52	0	1	1.14E-01	1.52E-01	1.94E-04	2.62E-04	2.38E-04	5.94E-05	0.00E+00	3.46E-04	3.46E-04	4.22E-08	1.21E-05	45.8	3.99E-02	1.04E-03
SI2_W	0.42	56	0	1	1.23E-01	1.63E-01	2.09E-04	2.82E-04	2.56E-04	6.39E-05	0.00E+00	3.72E-04	3.72E-04	4.54E-08	1.30E-05	49.2	4.29E-02	1.12E-03
SI2_W	0.42	39	0	1	8.52E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.58E-04	2.59E-04	3.15E-08	9.01E-06	34.2	2.98E-02	7.75E-04
SI2_W	0.42	26	0	1	5.63E-02	7.48E-02	9.58E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.71E-04	1.71E-04	2.08E-08	5.95E-06	22.6	1.97E-02	5.12E-04
SI2_W	0.42	22	0	1	4.77E-02	6.33E-02	8.10E-05	1.10E-04	9.93E-05	2.48E-05	0.00E+00	1.44E-04	1.45E-04	1.76E-08	5.04E-06	19.1	1.67E-02	4.34E-04
SI2_W	0.42	19	0	1	4.04E-02	5.37E-02	6.87E-05	9.29E-05	8.43E-05	2.11E-05	0.00E+00	1.23E-04	1.23E-04	1.50E-08	4.28E-06	16.2	1.41E-02	3.68E-04
SI2_W	0.42	15	0	1	3.32E-02	4.41E-02	5.65E-05	7.63E-05	6.92E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.51E-06	13.3	1.16E-02	3.02E-04
SI2_W	0.42	11	0	1	2.46E-02	3.26E-02	4.17E-05	5.64E-05	5.12E-05	1.28E-05	0.00E+00	7.44E-05	7.45E-05	9.08E-09	2.60E-06	9.8	8.58E-03	2.23E-04
SI3_E	0.50	10	0	1	2.08E-02	2.76E-02	3.54E-05	4.78E-05	4.34E-05	1.08E-05	0.00E+00	6.30E-05	6.31E-05	7.69E-09	2.20E-06	8.3	7.27E-03	1.89E-04
SI3_E	0.50	6	0	1	1.39E-02	1.84E-02	2.36E-05	3.19E-05	2.89E-05	7.22E-06	0.00E+00	4.20E-05	4.21E-05	5.13E-09	1.47E-06	5.6	4.85E-03	1.26E-04
SI3_E	0.50	6	0	1	1.21E-02	1.61E-02	2.06E-05	2.79E-05	2.53E-05	6.32E-06	0.00E+00	3.68E-05	3.68E-05	4.49E-09	1.28E-06	4.9	4.24E-03	1.10E-04
SI3_E	0.50	4	0	1	8.66E-03	1.15E-02	1.47E-05	1.99E-05	1.81E-05	4.51E-06	0.00E+00	2.63E-05	2.63E-05	3.20E-09	9.16E-07	3.5	3.03E-03	7.88E-05
SI3_E	0.50	6	0	1	1.21E-02	1.61E-02	2.06E-05	2.79E-05	2.53E-05	6.32E-06	0.00E+00	3.68E-05	3.68E-05	4.49E-09	1.28E-06	4.9	4.24E-03	1.10E-04
SI3_E	0.50	14	0	1	2.95E-02	3.91E-02	5.01E-05	6.77E-05	6.14E-05	1.53E-05	0.00E+00	8.93E-05	8.94E-05	1.09E-08	3.11E-06	11.8	1.03E-02	2.68E-04
SI3_E	0.50	41	0	1	8.84E-02	1.17E-01	1.50E-04	2.03E-04	1.84E-04	4.60E-05	0.00E+00	2.68E-04	2.68E-04	3.27E-08	9.34E-06	35.5	3.09E-02	8.04E-04
SI3_E	0.50	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.04E-05	0.00E+00	4.10E-04	4.10E-04	5.00E-08	1.43E-05	54.2	4.72E-02	1.23E-03
SI3_E	0.50	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.51E-04	2.28E-04	5.68E-05	0.00E+00	3.31E-04	3.31E-04	4.04E-08	1.15E-05	43.8	3.82E-02	9.93E-04
SI3_E	0.50	41	0	1	9.01E-02	1.20E-01	1.53E-04	2.07E-04	1.88E-04	4.69E-05	0.00E+00	2.73E-04	2.73E-04	3.33E-08	9.53E-06	36.2	3.15E-02	8.20E-04
SI3_E	0.50	37	0	1	8.15E-02	1.08E-01	1.38E-04	1.87E-04	1.70E-04	4.24E-05	0.00E+00	2.47E-04	2.47E-04	3.01E-08	8.61E-06	32.7	2.85E-02	7.41E-04
SI3_E	0.50	42	0	1	9.18E-02	1.22E-01	1.56E-04	2.11E-04	1.91E-04	4.78E-05	0.00E+00	2.78E-04	2.79E-04	3.40E-08	9.71E-06	36.8	3.21E-02	8.36E-04
SI3_E	0.50	45	0	1	9.70E-02	1.29E-01	1.65E-04	2.23E-04	2.02E-04	5.05E-05	0.00E+00	2.94E-04	2.94E-04	3.59E-08	1.03E-05	38.9	3.39E-02	8.83E-04
SI3_E	0.50	45	0	1	9.88E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.14E-05	0.00E+00	2.99E-04	3.00E-04	3.65E-08	1.04E-05	39.6	3.45E-02	8.99E-04
SI3_E	0.50	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.30E-04
SI3_E	0.50	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.77E-05	0.00E+00	3.36E-04	3.36E-04	4.10E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI3_E	0.50	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.85E-04	7.13E-05	0.00E+00	4.15E-04	4.15E-04	5.06E-08	1.45E-05	54.9	4.79E-02	1.25E-03
SI3_E	0.50	68	0	1	1.47E-01	1.96E-01	2.50E-04	3.38E-04	3.07E-04	7.67E-05	0.00E+00	4.46E-04	4.47E-04	5.45E-08	1.56E-05	59.1	5.15E-02	1.34E-03
SI3_E	0.50	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.30E-04
SI3_E	0.50	31	0	1	6.76E-02	8.98E-02	1.15E-04	1.55E-04	1.41E-04	3.52E-05	0.00E+00	2.05E-04	2.05E-04	2.50E-08	7.15E-06	27.1	2.36E-02	6.15E-04
SI3_E	0.50	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI3_E	0.50	22	0	1	4.85E-02	6.45E-02	8.25E-05	1.11E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.47E-04	1.79E-08	5.13E-06	19.5	1.70E-02	4.41E-04
SI3_E	0.50	18	0	1	3.99E-02	5.30E-02	6.78E-05	9.16E-05	8.31E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.47E-08	4.21E-06	16.0	1.39E-02	3.63E-04
SI3_E	0.50	14	0	1	2.95E-02	3.91E-02	5.01E-05	6.77E-05	6.14E-05	1.53E-05	0.00E+00	8.93E-05	8.94E-05	1.09E-08	3.11E-06	11.8	1.03E-02	2.68E-04
SI3_W	0.38	8	0	1	1.66E-02	2.20E-02	2.82E-05	3.81E-05	3.46E-05	8.64E-06	0.00E+00	5.03E-05	5.03E-05	6.14E-09	1.75E-06	6.7	5.80E-03	1.51E-04
SI3_W	0.38	5	0	1	1.11E-02	1.47E-02	1.88E-05	2.54E-05	2.31E-05	5.76E-06	0.00E+00	3.35E-05	3.36E-05	4.09E-09	1.17E-06	4.4	3.87E-03	1.01E-04
SI3_W	0.38	4	0	1	9.68E-03	1.29E-02	1.65E-05	2.22E-05	2.02E-05	5.04E-06	0.00E+00	2.93E-05	2.94E-05	3.58E-09	1.02E-06	3.9	3.38E-03	8.81E-05
SI3_W	0.38	3	0	1	6.91E-03	9.19E-03	1.18E-05	1.59E-05	1.44E-05	3.60E-06	0.00E+00	2.10E-05	2.10E-05	2.56E-09	7.31E-07	2.8	2.42E-03	6.29E-05
SI3_W	0.38	4	0	1	9.68E-03	1.29E-02	1.65E-05	2.22E-05	2.02E-05	5.04E-06	0.00E+00	2.93E-05	2.94E-05	3.58E-09	1.02E-06	3.9	3.38E-03	8.81E-05
SI3_W	0.38	11	0	1	2.35E-02	3.12E-02	4.00E-05	5.40E-05	4.90E-05	1.22E-05	0.00E+00	7.13E-05	7.13E-05	8.69E-09	2.49E-06	9.4	8.22E-03	2.14E-04
SI3_W	0.38	32	0	1	7.05E-02	9.37E-02	1.20E-04	1.62E-04	1.47E-04	3.67E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.46E-06	28.3	2.46E-02	6.42E-04
SI3_W	0.38	50	0	1	1.08E-01	1.43E-01	1.83E-04	2.48E-04	2.25E-04	5.62E-05	0.00E+00	3.27E-04	3.27E-04	3.99E-08	1.14E-05	43.3	3.77E-02	9.81E-04
SI3_W	0.38	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.54E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	35.0	3.04E-02	7.93E-04
SI3_W	0.38	33	0	1	7.19E-02	9.55E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.60E-06	28.8	2.51E-02	6.54E-04
SI3_W	0.38	30	0	1	6.50E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.87E-06	26.1	2.27E-02	5.91E-04
SI3_W	0.38	34	0	1	7.33E-02	9.74E-02	1.25E-04	1.68E-04	1.53E-04	3.82E-05	0.00E+00	2.22E-04	2.22E-04	2.71E-08	7.75E-06	29.4	2.56E-02	6.67E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.19E-06	31.1	2.71E-02	7.04E-04
SI3_W	0.38	36	0	1	7.88E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.33E-06	31.6	2.75E-02	7.17E-04
SI3_W	0.38	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.87E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.48E-04	3.02E-08	8.63E-06	32.7	2.85E-02	7.42E-04
SI3_W	0.38	41	0	1	8.85E-02	1.18E-01	1.50E-04	2.03E-04	1.84E-04	4.61E-05	0.00E+00	2.68E-04	2.69E-04	3.27E-08	9.36E-06	35.5	3.09E-02	8.05E-04
SI3_W	0.38	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.51E-04	2.28E-04	5.69E-05	0.00E+00	3.31E-04	3.31E-04	4.04E-08	1.16E-05	43.8	3.82E-02	9.94E-04
SI3_W	0.38	54	0	1	1.18E-01	1.56E-01	2.00E-04	2.70E-04	2.45E-04	6.12E-05	0.00E+00	3.56E-04	3.57E-04	4.35E-08	1.24E-05	47.2	4.11E-02	1.07E-03
SI3_W	0.38	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.87E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.48E-04	3.02E-08	8.63E-06	32.7	2.85E-02	7.42E-04
SI3_W	0.38	25	0	1	5.39E-02	7.16E-02	9.17E-05	1.24E-04	1.12E-04	2.81E-05	0.00E+00	1.63E-04	1.64E-04	1.99E-08	5.70E-06	21.6	1.88E-02	4.91E-04
SI3_W	0.38	21	0	1	4.56E-02	6.06E-02	7.76E-05	1.05E-04	9.51E-05	2.38E-05	0.00E+00	1.38E-04	1.38E-04	1.69E-08	4.82E-06	18.3	1.59E-02	4.15E-04
SI3_W	0.38	18	0	1	3.87E-02	5.14E-02	6.58E-05	8.90E-05	8.07E-05	2.02E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.09E-06	15.5	1.35E-02	3.52E-04
SI3_W	0.38	15	0	1	3.18E-02	4.23E-02	5.41E-05	7.31E-05	6.63E-05	1.66E-05	0.00E+00	9.64E-05	9.65E-05	1.18E-08	3.36E-06	12.8	1.11E-02	2.89E-04
SI3_W	0.38	11	0	1	2.35E-02	3.12E-02	4.00E-05	5.40E-05	4.90E-05	1.22E-05	0.00E+00	7.13E-05	7.13E-05	8.69E-09	2.49E-06	9.4	8.22E-03	2.14E-04
SI4_E	0.32	6	0	1	1.40E-02	1.86E-02	2.38E-05	3.22E-05	2.92E-05	7.30E-06	0.00E+00	4.25E-05	4.25E-05	5.18E-09	1.48E-06	5.6	4.90E-03	1.27E-04
SI4_E	0.32	4	0	1	9.34E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.86E-06	0.00E+00	2.83E-05	2.83E-05	3.45E-09	9.88E-07	3.7	3.27E-03	8.50E-05
SI4_E	0.32	4	0	1	8.17E-03	1.09E-02	1.39E-05	1.88E-05	1.70E-05	4.26E-06	0.00E+00	2.48E-05	2.48E-05	3.02E-09	8.64E-07	3.3	2.86E-03	7.44E-05
SI4_E	0.32	3	0	1	5.84E-03	7.76E-03	9.93E-06	1.34E-05	1.22E-05	3.04E-06	0.00E+00	1.77E-05	1.77E-05	2.16E-09	6.17E-07	2.3	2.04E-03	5.31E-05
SI4_E	0.32	4	0	1	8.17E-03	1.09E-02	1.39E-05	1.88E-05	1.70E-05	4.26E-06	0.00E+00	2.48E-05	2.48E-05	3.02E-09	8.64E-07	3.3	2.86E-03	7.44E-05
SI4_E	0.32	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.02E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI4_E	0.32	27	0	1	5.96E-02	7.91E-02	1.01E-04	1.37E-04	1.24E-04	3.10E-05	0.00E+00	1.81E-04	1.81E-04	2.20E-08	6.30E-06	23.9	2.08E-02	5.42E-04
SI4_E	0.32	42	0	1	9.11E-02	1.21E-01	1.55E-04	2.09E-04	1.90E-04	4.74E-05	0.00E+00	2.76E-04	2.76E-04	3.37E-08	9.63E-06	36.5	3.18E-02	8.29E-04
SI4_E	0.32	34	0	1	7.36E-02	9.77E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI4_E	0.32	28	0	1	6.07E-02	8.07E-02	1.03E-04	1.40E-04	1.27E-04	3.16E-05	0.00E+00	1.84E-04	1.84E-04	2.25E-08	6.42E-06	24.4	2.12E-02	5.52E-04
SI4_E	0.32	25	0	1	5.49E-02	7.29E-02	9.33E-05	1.26E-04	1.14E-04	2.86E-05	0.00E+00	1.66E-04	1.67E-04	2.03E-08	5.80E-06	22.0	1.92E-02	4.99E-04
SI4_E	0.32	28	0	1	6.19E-02	8.22E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.88E-04	1.88E-04	2.29E-08	6.54E-06	24.8	2.16E-02	5.63E-04
SI4_E	0.32	30	0	1	6.54E-02	8.69E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.29E-02	5.95E-04
SI4_E	0.32	31	0	1	6.66E-02	8.84E-02	1.13E-04	1.53E-04	1.39E-04	3.47E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.04E-06	26.7	2.33E-02	6.06E-04
SI4_E	0.32	32	0	1	6.89E-02	9.15E-02	1.17E-04	1.58E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.28E-06	27.6	2.41E-02	6.27E-04
SI4_E	0.32	34	0	1	7.47E-02	9.93E-02	1.27E-04	1.72E-04	1.56E-04	3.89E-05	0.00E+00	2.27E-04	2.27E-04	2.76E-08	7.90E-06	30.0	2.61E-02	6.80E-04
SI4_E	0.32	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.80E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.75E-06	37.0	3.22E-02	8.39E-04
SI4_E	0.32	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI4_E	0.32	32	0	1	6.89E-02	9.15E-02	1.17E-04	1.58E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.28E-06	27.6	2.41E-02	6.27E-04
SI4_E	0.32	21	0	1	4.55E-02	6.05E-02	7.74E-05	1.05E-04	9.49E-05	2.37E-05	0.00E+00	1.38E-04	1.38E-04	1.68E-08	4.82E-06	18.3	1.59E-02	4.14E-04
SI4_E	0.32	18	0	1	3.85E-02	5.12E-02	6.55E-05	8.85E-05	8.03E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.42E-08	4.07E-06	15.5	1.35E-02	3.51E-04
SI4_E	0.32	15	0	1	3.27E-02	4.34E-02	5.56E-05	7.51E-05	6.82E-05	1.70E-05	0.00E+00	9.91E-05	9.92E-05	1.21E-08	3.46E-06	13.1	1.14E-02	2.97E-04
SI4_E	0.32	12	0	1	2.69E-02	3.57E-02	4.57E-05	6.17E-05	5.60E-05	1.40E-05	0.00E+00	8.14E-05	8.15E-05	9.93E-09	2.84E-06	10.8	9.39E-03	2.44E-04
SI4_E	0.32	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.02E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI4_W	0.32	8	0	1	1.66E-02	2.21E-02	2.83E-05	3.82E-05	3.47E-05	8.66E-06	0.00E+00	5.04E-05	5.04E-05	6.15E-09	1.76E-06	6.7	5.81E-03	1.51E-04
SI4_W	0.32	5	0	1	1.11E-02	1.47E-02	1.88E-05	2.55E-05	2.31E-05	5.77E-06	0.00E+00	3.36E-05	3.36E-05	4.10E-09	1.17E-06	4.4	3.87E-03	1.01E-04
SI4_W	0.32	4	0	1	9.70E-03	1.29E-02	1.65E-05	2.23E-05	2.02E-05	5.05E-06	0.00E+00	2.94E-05	2.94E-05	3.59E-09	1.03E-06	3.9	3.39E-03	8.82E-05
SI4_W	0.32	3	0	1	6.93E-03	9.20E-03	1.18E-05	1.59E-05	1.44E-05	3.61E-06	0.00E+00	2.10E-05	2.10E-05	2.56E-09	7.32E-07	2.8	2.42E-03	6.30E-05
SI4_W	0.32	4	0	1	9.70E-03	1.29E-02	1.65E-05	2.23E-05	2.02E-05	5.05E-06	0.00E+00	2.94E-05	2.94E-05	3.59E-09	1.03E-06	3.9	3.39E-03	8.82E-05
SI4_W	0.32	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI4_W	0.32	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI4_W	0.32	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.48E-04	2.25E-04	5.63E-05	0.00E+00	3.28E-04	3.28E-04	4.00E-08	1.14E-05	43.4	3.78E-02	9.83E-04
SI4_W	0.32	40	0	1	8.73E-02	1.16E-01	1.48E-04	2.01E-04	1.82E-04	4.54E-05	0.00E+00	2.65E-04	2.65E-04	3.23E-08	9.23E-06	35.0	3.05E-02	7.94E-04
SI4_W	0.32	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI4_W	0.32	30	0	1	6.51E-02	8.65E-02	1.11E-04	1.50E-04	1.36E-04	3.39E-05	0.00E+00	1.97E-04	1.98E-04	2.41E-08	6.89E-06	26.1	2.28E-02	5.92E-04
SI4_W	0.32	34	0	1	7.34E-02	9.76E-02	1.25E-04	1.69E-04	1.53E-04	3.82E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.76E-06	29.5	2.57E-02	6.68E-04
SI4_W	0.32	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.06E-04
SI4_W	0.32	36	0	1	7.90E-02	1.05E-01	1.34E-04	1.81E-04	1.65E-04	4.11E-05	0.00E+00	2.39E-04	2.40E-04	2.92E-08	8.35E-06	31.7	2.76E-02	7.18E-04
SI4_W	0.32	38	0	1	8.17E-02	1.09E-01	1.39E-04	1.88E-04	1.70E-04	4.26E-05	0.00E+00	2.48E-04	2.48E-04	3.02E-08	8.64E-06	32.8	2.86E-02	7.44E-04
SI4_W	0.32	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI4_W	0.32	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.52E-04	2.28E-04	5.70E-05	0.00E+00	3.32E-04	3.32E-04	4.05E-08	1.16E-05	43.9	3.83E-02	9.96E-04
SI4_W	0.32	54	0	1	1.18E-01	1.56E-01	2.00E-04	2.71E-04	2.46E-04	6.13E-05	0.00E+00	3.57E-04	3.57E-04	4.35E-08	1.25E-05	47.2	4.12E-02	1.07E-03
SI4_W	0.32	38	0	1	8.17E-02	1.09E-01	1.39E-04	1.88E-04	1.70E-04	4.26E-05	0.00E+00	2.48E-04	2.48E-04	3.02E-08	8.64E-06	32.8	2.86E-02	7.44E-04
SI4_W	0.32	25	0	1	5.40E-02	7.18E-02	9.19E-05	1.24E-04	1.13E-04	2.81E-05	0.00E+00	1.64E-04	1.64E-04	2.00E-08	5.71E-06	21.7	1.89E-02	4.92E-04
SI4_W	0.32	21	0	1	4.57E-02	6.07E-02	7.77E-05	1.05E-04	9.53E-05	2.38E-05	0.00E+00	1.39E-04	1.39E-04	1.69E-08	4.83E-06	18.3	1.60E-02	4.16E-04
SI4_W	0.32	18	0	1	3.88E-02	5.15E-02	6.60E-05	8.91E-05	8.09E-05	2.02E-05	0.00E+00	1.18E-04	1.18E-04	1.43E-08	4.10E-06	15.6	1.36E-02	3.53E-04
SI4_W	0.32	15	0	1	3.19E-02	4.23E-02	5.42E-05	7.32E-05	6.64E-05	1.66E-05	0.00E+00	9.66E-05	9.67E-05	1.18E-08	3.37E-06	12.8	1.11E-02	2.90E-04
SI4_W	0.32	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI5_E	0.58	14	0	1	3.06E-02	4.07E-02	5.21E-05	7.04E-05	6.38E-05	1.59E-05	0.00E+00	9.28E-05	9.29E-05	1.13E-08	3.24E-06	12.3	1.07E-02	2.79E-04
SI5_E	0.58	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.26E-05	1.06E-05	0.00E+00	6.19E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.14E-03	1.86E-04
SI5_E	0.58	8	0	1	1.79E-02	2.37E-02	3.04E-05	4.11E-05	3.72E-05	9.30E-06	0.00E+00	5.41E-05	5.42E-05	6.61E-09	1.89E-06	7.2	6.24E-03	1.63E-04
SI5_E	0.58	6	0	1	1.28E-02	1.70E-02	2.17E-05	2.93E-05	2.66E-05	6.64E-06	0.00E+00	3.87E-05	3.87E-05	4.72E-09	1.35E-06	5.1	4.46E-03	1.16E-04
SI5_E	0.58	8	0	1	1.79E-02	2.37E-02	3.04E-05	4.11E-05	3.72E-05	9.30E-06	0.00E+00	5.41E-05	5.42E-05	6.61E-09	1.89E-06	7.2	6.24E-03	1.63E-04
SI5_E	0.58	20	0	1	4.34E-02	5.76E-02	7.38E-05	9.97E-05	9.04E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.60E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI5_E	0.58	60	0	1	1.30E-01	1.73E-01	2.21E-04	2.99E-04	2.71E-04	6.78E-05	0.00E+00	3.95E-04	3.95E-04	4.81E-08	1.38E-05	52.2	4.55E-02	1.18E-03
SI5_E	0.58	91	0	1	1.99E-01	2.64E-01	3.38E-04	4.57E-04	4.15E-04	1.04E-04	0.00E+00	6.03E-04	6.04E-04	7.36E-08	2.10E-05	79.9	6.96E-02	1.81E-03
SI5_E	0.58	74	0	1	1.61E-01	2.14E-01	2.73E-04	3.69E-04	3.35E-04	8.37E-05	0.00E+00	4.87E-04	4.88E-04	5.95E-08	1.70E-05	64.5	5.62E-02	1.46E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	61	0	1	1.33E-01	1.76E-01	2.26E-04	3.05E-04	2.77E-04	6.91E-05	0.00E+00	4.02E-04	4.03E-04	4.91E-08	1.40E-05	53.2	4.64E-02	1.21E-03
SI5_E	0.58	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI5_E	0.58	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.04E-05	0.00E+00	4.10E-04	4.10E-04	5.00E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI5_E	0.58	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.44E-05	0.00E+00	4.33E-04	4.34E-04	5.28E-08	1.51E-05	57.3	5.00E-02	1.30E-03
SI5_E	0.58	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.57E-05	0.00E+00	4.41E-04	4.41E-04	5.38E-08	1.54E-05	58.4	5.08E-02	1.32E-03
SI5_E	0.58	69	0	1	1.51E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.84E-05	0.00E+00	4.56E-04	4.57E-04	5.57E-08	1.59E-05	60.4	5.26E-02	1.37E-03
SI5_E	0.58	75	0	1	1.63E-01	2.17E-01	2.78E-04	3.75E-04	3.41E-04	8.50E-05	0.00E+00	4.95E-04	4.96E-04	6.04E-08	1.73E-05	65.5	5.71E-02	1.49E-03
SI5_E	0.58	93	0	1	2.02E-01	2.68E-01	3.43E-04	4.63E-04	4.20E-04	1.05E-04	0.00E+00	6.11E-04	6.12E-04	7.46E-08	2.13E-05	80.9	7.05E-02	1.83E-03
SI5_E	0.58	100	0	1	2.17E-01	2.88E-01	3.69E-04	4.98E-04	4.52E-04	1.13E-04	0.00E+00	6.58E-04	6.58E-04	8.02E-08	2.29E-05	87.0	7.58E-02	1.97E-03
SI5_E	0.58	69	0	1	1.51E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.84E-05	0.00E+00	4.56E-04	4.57E-04	5.57E-08	1.59E-05	60.4	5.26E-02	1.37E-03
SI5_E	0.58	46	0	1	9.95E-02	1.32E-01	1.69E-04	2.29E-04	2.08E-04	5.18E-05	0.00E+00	3.02E-04	3.02E-04	3.68E-08	1.05E-05	39.9	3.48E-02	9.06E-04
SI5_E	0.58	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.94E-04	1.76E-04	4.38E-05	0.00E+00	2.55E-04	2.56E-04	3.11E-08	8.91E-06	33.8	2.94E-02	7.66E-04
SI5_E	0.58	33	0	1	7.15E-02	9.49E-02	1.21E-04	1.64E-04	1.49E-04	3.72E-05	0.00E+00	2.17E-04	2.17E-04	2.64E-08	7.56E-06	28.7	2.50E-02	6.50E-04
SI5_E	0.58	27	0	1	5.87E-02	7.80E-02	9.98E-05	1.35E-04	1.22E-04	3.06E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.21E-06	23.6	2.05E-02	5.34E-04
SI5_E	0.58	20	0	1	4.34E-02	5.76E-02	7.38E-05	9.97E-05	9.04E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.60E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI5_W	0.59	18	0	1	3.97E-02	5.27E-02	6.75E-05	9.12E-05	8.27E-05	2.07E-05	0.00E+00	1.20E-04	1.20E-04	1.47E-08	4.20E-06	15.9	1.39E-02	3.61E-04
SI5_W	0.59	12	0	1	2.65E-02	3.52E-02	4.50E-05	6.08E-05	5.52E-05	1.38E-05	0.00E+00	8.02E-05	8.03E-05	9.78E-09	2.80E-06	10.6	9.25E-03	2.41E-04
SI5_W	0.59	11	0	1	2.32E-02	3.08E-02	3.94E-05	5.32E-05	4.83E-05	1.21E-05	0.00E+00	7.02E-05	7.02E-05	8.56E-09	2.45E-06	9.3	8.09E-03	2.11E-04
SI5_W	0.59	8	0	1	1.65E-02	2.20E-02	2.81E-05	3.80E-05	3.45E-05	8.61E-06	0.00E+00	5.01E-05	5.02E-05	6.11E-09	1.75E-06	6.6	5.78E-03	1.50E-04
SI5_W	0.59	11	0	1	2.32E-02	3.08E-02	3.94E-05	5.32E-05	4.83E-05	1.21E-05	0.00E+00	7.02E-05	7.02E-05	8.56E-09	2.45E-06	9.3	8.09E-03	2.11E-04
SI5_W	0.59	26	0	1	5.62E-02	7.47E-02	9.56E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.70E-04	1.71E-04	2.08E-08	5.94E-06	22.6	1.97E-02	5.12E-04
SI5_W	0.59	77	0	1	1.69E-01	2.24E-01	2.87E-04	3.88E-04	3.52E-04	8.78E-05	0.00E+00	5.11E-04	5.12E-04	6.24E-08	1.78E-05	67.7	5.90E-02	1.53E-03
SI5_W	0.59	119	0	1	2.58E-01	3.43E-01	4.39E-04	5.93E-04	5.38E-04	1.34E-04	0.00E+00	7.82E-04	7.83E-04	9.54E-08	2.73E-05	103.5	9.02E-02	2.35E-03
SI5_W	0.59	96	0	1	2.08E-01	2.77E-01	3.54E-04	4.79E-04	4.34E-04	1.08E-04	0.00E+00	6.32E-04	6.32E-04	7.70E-08	2.20E-05	83.6	7.28E-02	1.90E-03
SI5_W	0.59	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI5_W	0.59	71	0	1	1.55E-01	2.07E-01	2.64E-04	3.57E-04	3.24E-04	8.09E-05	0.00E+00	4.71E-04	4.72E-04	5.75E-08	1.64E-05	62.4	5.43E-02	1.41E-03
SI5_W	0.59	81	0	1	1.75E-01	2.33E-01	2.98E-04	4.03E-04	3.65E-04	9.13E-05	0.00E+00	5.31E-04	5.32E-04	6.48E-08	1.85E-05	70.3	6.13E-02	1.59E-03
SI5_W	0.59	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.64E-05	0.00E+00	5.61E-04	5.62E-04	6.85E-08	1.96E-05	74.3	6.47E-02	1.68E-03
SI5_W	0.59	87	0	1	1.89E-01	2.50E-01	3.21E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.59E-02	1.72E-03
SI5_W	0.59	90	0	1	1.95E-01	2.59E-01	3.32E-04	4.48E-04	4.07E-04	1.02E-04	0.00E+00	5.91E-04	5.92E-04	7.22E-08	2.06E-05	78.3	6.82E-02	1.78E-03
SI5_W	0.59	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.86E-04	4.41E-04	1.10E-04	0.00E+00	6.42E-04	6.42E-04	7.83E-08	2.24E-05	84.9	7.40E-02	1.93E-03
SI5_W	0.59	120	0	1	2.61E-01	3.47E-01	4.44E-04	6.00E-04	5.45E-04	1.36E-04	0.00E+00	7.92E-04	7.93E-04	9.66E-08	2.76E-05	104.8	9.13E-02	2.38E-03
SI5_W	0.59	129	0	1	2.81E-01	3.73E-01	4.78E-04	6.46E-04	5.86E-04	1.46E-04	0.00E+00	8.52E-04	8.53E-04	1.04E-07	2.97E-05	112.8	9.83E-02	2.56E-03
SI5_W	0.59	90	0	1	1.95E-01	2.59E-01	3.32E-04	4.48E-04	4.07E-04	1.02E-04	0.00E+00	5.91E-04	5.92E-04	7.22E-08	2.06E-05	78.3	6.82E-02	1.78E-03
SI5_W	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.69E-04	6.72E-05	0.00E+00	3.91E-04	3.91E-04	4.77E-08	1.36E-05	51.7	4.51E-02	1.17E-03
SI5_W	0.59	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.51E-04	2.28E-04	5.68E-05	0.00E+00	3.31E-04	3.31E-04	4.04E-08	1.15E-05	43.8	3.81E-02	9.93E-04
SI5_W	0.59	43	0	1	9.26E-02	1.23E-01	1.57E-04	2.13E-04	1.93E-04	4.82E-05	0.00E+00	2.81E-04	2.81E-04	3.42E-08	9.79E-06	37.2	3.24E-02	8.42E-04
SI5_W	0.59	35	0	1	7.61E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.31E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI5_W	0.59	26	0	1	5.62E-02	7.47E-02	9.56E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.70E-04	1.71E-04	2.08E-08	5.94E-06	22.6	1.97E-02	5.12E-04
SI6_E	0.43	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.07E-08	3.07E-06	11.7	1.02E-02	2.64E-04
SI6_E	0.43	9	0	1	1.94E-02	2.57E-02	3.29E-05	4.45E-05	4.04E-05	1.01E-05	0.00E+00	5.87E-05	5.88E-05	7.17E-09	2.05E-06	7.8	6.77E-03	1.76E-04
SI6_E	0.43	8	0	1	1.70E-02	2.25E-02	2.88E-05	3.90E-05	3.53E-05	8.83E-06	0.00E+00	5.14E-05	5.14E-05	6.27E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI6_E	0.43	6	0	1	1.21E-02	1.61E-02	2.06E-05	2.78E-05	2.52E-05	6.31E-06	0.00E+00	3.67E-05	3.67E-05	4.48E-09	1.28E-06	4.9	4.23E-03	1.10E-04
SI6_E	0.43	8	0	1	1.70E-02	2.25E-02	2.88E-05	3.90E-05	3.53E-05	8.83E-06	0.00E+00	5.14E-05	5.14E-05	6.27E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI6_E	0.43	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.75E-04
SI6_E	0.43	57	0	1	1.24E-01	1.64E-01	2.10E-04	2.84E-04	2.58E-04	6.43E-05	0.00E+00	3.74E-04	3.75E-04	4.57E-08	1.31E-05	49.6	4.32E-02	1.12E-03
SI6_E	0.43	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.60E-02	1.72E-03
SI6_E	0.43	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.94E-05	0.00E+00	4.63E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI6_E	0.43	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.63E-04	6.56E-05	0.00E+00	3.82E-04	3.82E-04	4.66E-08	1.33E-05	50.5	4.40E-02	1.15E-03
SI6_E	0.43	52	0	1	1.14E-01	1.51E-01	1.94E-04	2.62E-04	2.37E-04	5.93E-05	0.00E+00	3.45E-04	3.45E-04	4.21E-08	1.20E-05	45.7	3.98E-02	1.04E-03
SI6_E	0.43	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.90E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI6_E	0.43	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.06E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.43E-05	54.4	4.74E-02	1.23E-03
SI6_E	0.43	63	0	1	1.38E-01	1.83E-01	2.35E-04	3.17E-04	2.88E-04	7.19E-05	0.00E+00	4.18E-04	4.19E-04	5.11E-08	1.46E-05	55.4	4.83E-02	1.26E-03
SI6_E	0.43	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.44E-05	0.00E+00	4.33E-04	4.34E-04	5.28E-08	1.51E-05	57.3	5.00E-02	1.30E-03
SI6_E	0.43	71	0	1	1.55E-01	2.06E-01	2.64E-04	3.56E-04	3.23E-04	8.07E-05	0.00E+00	4.70E-04	4.70E-04	5.73E-08	1.64E-05	62.2	5.42E-02	1.41E-03
SI6_E	0.43	88	0	1	1.91E-01	2.54E-01	3.25E-04	4.40E-04	3.99E-04	9.96E-05	0.00E+00	5.80E-04	5.81E-04	7.08E-08	2.02E-05	76.8	6.69E-02	1.74E-03
SI6_E	0.43	95	0	1	2.06E-01	2.74E-01	3.50E-04	4.73E-04	4.29E-04	1.07E-04	0.00E+00	6.24E-04	6.25E-04	7.61E-08	2.18E-05	82.6	7.20E-02	1.87E-03
SI6_E	0.43	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.44E-05	0.00E+00	4.33E-04	4.34E-04	5.28E-08	1.51E-05	57.3	5.00E-02	1.30E-03
SI6_E	0.43	43	0	1	9.45E-02	1.26E-01	1.61E-04	2.17E-04	1.97E-04	4.92E-05	0.00E+00	2.86E-04	2.87E-04	3.49E-08	9.99E-06	37.9	3.30E-02	8.59E-04
SI6_E	0.43	37	0	1	7.99E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.16E-05	0.00E+00	2.42E-04	2.43E-04	2.96E-08	8.45E-06	32.1	2.79E-02	7.27E-04
SI6_E	0.43	31	0	1	6.78E-02	9.01E-02	1.15E-04	1.56E-04	1.41E-04	3.53E-05	0.00E+00	2.06E-04	2.06E-04	2.51E-08	7.17E-06	27.2	2.37E-02	6.17E-04
SI6_E	0.43	26	0	1	5.57E-02	7.40E-02	9.47E-05	1.28E-04	1.16E-04	2.90E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.89E-06	22.4	1.95E-02	5.07E-04
SI6_E	0.43	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.75E-04
SI6_W	0.43	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.07E-08	3.07E-06	11.7	1.02E-02	2.64E-04
SI6_W	0.43	9	0	1	1.94E-02	2.57E-02	3.29E-05	4.45E-05	4.04E-05	1.01E-05	0.00E+00	5.87E-05	5.88E-05	7.16E-09	2.05E-06	7.8	6.77E-03	1.76E-04
SI6_W	0.43	8	0	1	1.70E-02	2.25E-02	2.88E-05	3.90E-05	3.53E-05	8.83E-06	0.00E+00	5.14E-05	5.14E-05	6.27E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI6_W	0.43	6	0	1	1.21E-02	1.61E-02	2.06E-05	2.78E-05	2.52E-05	6.30E-06	0.00E+00	3.67E-05	3.67E-05	4.48E-09	1.28E-06	4.9	4.23E-03	1.10E-04
SI6_W	0.43	8	0	1	1.70E-02	2.25E-02	2.88E-05	3.90E-05	3.53E-05	8.83E-06	0.00E+00	5.14E-05	5.14E-05	6.27E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI6_W	0.43	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.75E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	57	0	1	1.24E-01	1.64E-01	2.10E-04	2.84E-04	2.57E-04	6.43E-05	0.00E+00	3.74E-04	3.75E-04	4.57E-08	1.31E-05	49.6	4.32E-02	1.12E-03
SI6_W	0.43	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.83E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.60E-02	1.72E-03
SI6_W	0.43	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.94E-05	0.00E+00	4.62E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI6_W	0.43	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.63E-04	6.56E-05	0.00E+00	3.82E-04	3.82E-04	4.66E-08	1.33E-05	50.5	4.40E-02	1.15E-03
SI6_W	0.43	52	0	1	1.14E-01	1.51E-01	1.94E-04	2.62E-04	2.37E-04	5.93E-05	0.00E+00	3.45E-04	3.45E-04	4.21E-08	1.20E-05	45.7	3.98E-02	1.04E-03
SI6_W	0.43	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI6_W	0.43	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.06E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.43E-05	54.4	4.74E-02	1.23E-03
SI6_W	0.43	63	0	1	1.38E-01	1.83E-01	2.35E-04	3.17E-04	2.88E-04	7.19E-05	0.00E+00	4.18E-04	4.19E-04	5.10E-08	1.46E-05	55.4	4.83E-02	1.26E-03
SI6_W	0.43	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.44E-05	0.00E+00	4.33E-04	4.34E-04	5.28E-08	1.51E-05	57.3	4.99E-02	1.30E-03
SI6_W	0.43	71	0	1	1.55E-01	2.06E-01	2.64E-04	3.56E-04	3.23E-04	8.07E-05	0.00E+00	4.70E-04	4.70E-04	5.73E-08	1.64E-05	62.2	5.42E-02	1.41E-03
SI6_W	0.43	88	0	1	1.91E-01	2.54E-01	3.25E-04	4.40E-04	3.99E-04	9.96E-05	0.00E+00	5.80E-04	5.81E-04	7.07E-08	2.02E-05	76.8	6.69E-02	1.74E-03
SI6_W	0.43	95	0	1	2.06E-01	2.73E-01	3.50E-04	4.73E-04	4.29E-04	1.07E-04	0.00E+00	6.24E-04	6.25E-04	7.61E-08	2.18E-05	82.6	7.20E-02	1.87E-03
SI6_W	0.43	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.44E-05	0.00E+00	4.33E-04	4.34E-04	5.28E-08	1.51E-05	57.3	4.99E-02	1.30E-03
SI6_W	0.43	43	0	1	9.45E-02	1.25E-01	1.61E-04	2.17E-04	1.97E-04	4.92E-05	0.00E+00	2.86E-04	2.87E-04	3.49E-08	9.99E-06	37.9	3.30E-02	8.59E-04
SI6_W	0.43	37	0	1	7.99E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.16E-05	0.00E+00	2.42E-04	2.42E-04	2.96E-08	8.45E-06	32.1	2.79E-02	7.27E-04
SI6_W	0.43	31	0	1	6.78E-02	9.01E-02	1.15E-04	1.56E-04	1.41E-04	3.53E-05	0.00E+00	2.06E-04	2.06E-04	2.51E-08	7.17E-06	27.2	2.37E-02	6.17E-04
SI6_W	0.43	26	0	1	5.57E-02	7.40E-02	9.47E-05	1.28E-04	1.16E-04	2.90E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.89E-06	22.3	1.95E-02	5.07E-04
SI6_W	0.43	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.75E-04
SI7_E	0.47	14	0	1	3.13E-02	4.16E-02	5.32E-05	7.19E-05	6.52E-05	1.63E-05	0.00E+00	9.49E-05	9.50E-05	1.16E-08	3.31E-06	12.6	1.09E-02	2.85E-04
SI7_E	0.47	10	0	1	2.09E-02	2.77E-02	3.55E-05	4.79E-05	4.35E-05	1.09E-05	0.00E+00	6.32E-05	6.33E-05	7.72E-09	2.21E-06	8.4	7.29E-03	1.90E-04
SI7_E	0.47	8	0	1	1.83E-02	2.43E-02	3.10E-05	4.20E-05	3.81E-05	9.51E-06	0.00E+00	5.53E-05	5.54E-05	6.75E-09	1.93E-06	7.3	6.38E-03	1.66E-04
SI7_E	0.47	6	0	1	1.30E-02	1.73E-02	2.22E-05	3.00E-05	2.72E-05	6.79E-06	0.00E+00	3.95E-05	3.96E-05	4.82E-09	1.38E-06	5.2	4.56E-03	1.19E-04
SI7_E	0.47	8	0	1	1.83E-02	2.43E-02	3.10E-05	4.20E-05	3.81E-05	9.51E-06	0.00E+00	5.53E-05	5.54E-05	6.75E-09	1.93E-06	7.3	6.38E-03	1.66E-04
SI7_E	0.47	20	0	1	4.43E-02	5.89E-02	7.54E-05	1.02E-04	9.24E-05	2.31E-05	0.00E+00	1.34E-04	1.35E-04	1.64E-08	4.69E-06	17.8	1.55E-02	4.03E-04
SI7_E	0.47	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.77E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI7_E	0.47	93	0	1	2.03E-01	2.70E-01	3.46E-04	4.67E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.17E-04	7.52E-08	2.15E-05	81.6	7.11E-02	1.85E-03
SI7_E	0.47	75	0	1	1.64E-01	2.18E-01	2.79E-04	3.78E-04	3.43E-04	8.55E-05	0.00E+00	4.98E-04	4.99E-04	6.08E-08	1.74E-05	65.9	5.74E-02	1.49E-03
SI7_E	0.47	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.06E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.43E-05	54.4	4.74E-02	1.23E-03
SI7_E	0.47	56	0	1	1.23E-01	1.63E-01	2.08E-04	2.82E-04	2.56E-04	6.38E-05	0.00E+00	3.72E-04	3.72E-04	4.53E-08	1.30E-05	49.2	4.28E-02	1.12E-03
SI7_E	0.47	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.88E-04	7.20E-05	0.00E+00	4.19E-04	4.19E-04	5.11E-08	1.46E-05	55.5	4.83E-02	1.26E-03
SI7_E	0.47	67	0	1	1.46E-01	1.94E-01	2.48E-04	3.36E-04	3.04E-04	7.60E-05	0.00E+00	4.43E-04	4.43E-04	5.40E-08	1.54E-05	58.6	5.11E-02	1.33E-03
SI7_E	0.47	68	0	1	1.49E-01	1.98E-01	2.53E-04	3.42E-04	3.10E-04	7.74E-05	0.00E+00	4.51E-04	4.51E-04	5.50E-08	1.57E-05	59.6	5.20E-02	1.35E-03
SI7_E	0.47	71	0	1	1.54E-01	2.04E-01	2.62E-04	3.54E-04	3.21E-04	8.01E-05	0.00E+00	4.66E-04	4.67E-04	5.69E-08	1.63E-05	61.7	5.38E-02	1.40E-03
SI7_E	0.47	77	0	1	1.67E-01	2.22E-01	2.84E-04	3.84E-04	3.48E-04	8.69E-05	0.00E+00	5.06E-04	5.06E-04	6.17E-08	1.77E-05	67.0	5.83E-02	1.52E-03
SI7_E	0.47	95	0	1	2.06E-01	2.74E-01	3.50E-04	4.73E-04	4.30E-04	1.07E-04	0.00E+00	6.25E-04	6.25E-04	7.62E-08	2.18E-05	82.7	7.20E-02	1.87E-03
SI7_E	0.47	102	0	1	2.22E-01	2.95E-01	3.77E-04	5.09E-04	4.62E-04	1.15E-04	0.00E+00	6.72E-04	6.73E-04	8.20E-08	2.34E-05	88.9	7.75E-02	2.02E-03
SI7_E	0.47	71	0	1	1.54E-01	2.04E-01	2.62E-04	3.54E-04	3.21E-04	8.01E-05	0.00E+00	4.66E-04	4.67E-04	5.69E-08	1.63E-05	61.7	5.38E-02	1.40E-03
SI7_E	0.47	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.25E-04
SI7_E	0.47	40	0	1	8.61E-02	1.14E-01	1.46E-04	1.98E-04	1.79E-04	4.48E-05	0.00E+00	2.61E-04	2.61E-04	3.18E-08	9.10E-06	34.5	3.01E-02	7.83E-04
SI7_E	0.47	34	0	1	7.30E-02	9.70E-02	1.24E-04	1.68E-04	1.52E-04	3.80E-05	0.00E+00	2.21E-04	2.22E-04	2.70E-08	7.72E-06	29.3	2.55E-02	6.64E-04
SI7_E	0.47	28	0	1	6.00E-02	7.97E-02	1.02E-04	1.38E-04	1.25E-04	3.12E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.34E-06	24.1	2.10E-02	5.46E-04
SI7_E	0.47	20	0	1	4.43E-02	5.89E-02	7.54E-05	1.02E-04	9.24E-05	2.31E-05	0.00E+00	1.34E-04	1.35E-04	1.64E-08	4.69E-06	17.8	1.55E-02	4.03E-04
SI7_W	0.47	13	0	1	2.78E-02	3.69E-02	4.73E-05	6.39E-05	5.79E-05	1.45E-05	0.00E+00	8.42E-05	8.43E-05	1.03E-08	2.94E-06	11.2	9.71E-03	2.53E-04
SI7_W	0.47	9	0	1	1.85E-02	2.46E-02	3.15E-05	4.26E-05	3.86E-05	9.65E-06	0.00E+00	5.62E-05	5.62E-05	6.85E-09	1.96E-06	7.4	6.48E-03	1.69E-04
SI7_W	0.47	7	0	1	1.62E-02	2.15E-02	2.76E-05	3.73E-05	3.38E-05	8.44E-06	0.00E+00	4.91E-05	4.92E-05	6.00E-09	1.71E-06	6.5	5.67E-03	1.48E-04
SI7_W	0.47	5	0	1	1.16E-02	1.54E-02	1.97E-05	2.66E-05	2.41E-05	6.03E-06	0.00E+00	3.51E-05	3.51E-05	4.28E-09	1.22E-06	4.6	4.05E-03	1.05E-04
SI7_W	0.47	7	0	1	1.62E-02	2.15E-02	2.76E-05	3.73E-05	3.38E-05	8.44E-06	0.00E+00	4.91E-05	4.92E-05	6.00E-09	1.71E-06	6.5	5.67E-03	1.48E-04
SI7_W	0.47	18	0	1	3.94E-02	5.23E-02	6.69E-05	9.05E-05	8.21E-05	2.05E-05	0.00E+00	1.19E-04	1.19E-04	1.46E-08	4.16E-06	15.8	1.38E-02	3.58E-04
SI7_W	0.47	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.37E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI7_W	0.47	83	0	1	1.81E-01	2.40E-01	3.07E-04	4.15E-04	3.77E-04	9.41E-05	0.00E+00	5.48E-04	5.48E-04	6.68E-08	1.91E-05	72.5	6.31E-02	1.64E-03
SI7_W	0.47	67	0	1	1.46E-01	1.94E-01	2.48E-04	3.35E-04	3.04E-04	7.60E-05	0.00E+00	4.42E-04	4.43E-04	5.40E-08	1.54E-05	58.5	5.10E-02	1.33E-03
SI7_W	0.47	55	0	1	1.20E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.27E-05	0.00E+00	3.65E-04	3.65E-04	4.45E-08	1.27E-05	48.3	4.21E-02	1.10E-03
SI7_W	0.47	50	0	1	1.09E-01	1.45E-01	1.85E-04	2.50E-04	2.27E-04	5.67E-05	0.00E+00	3.30E-04	3.30E-04	4.03E-08	1.15E-05	43.7	3.81E-02	9.90E-04
SI7_W	0.47	56	0	1	1.23E-01	1.63E-01	2.09E-04	2.82E-04	2.56E-04	6.39E-05	0.00E+00	3.72E-04	3.72E-04	4.54E-08	1.30E-05	49.3	4.29E-02	1.12E-03
SI7_W	0.47	60	0	1	1.30E-01	1.72E-01	2.21E-04	2.98E-04	2.70E-04	6.75E-05	0.00E+00	3.93E-04	3.94E-04	4.80E-08	1.37E-05	52.0	4.53E-02	1.18E-03
SI7_W	0.47	61	0	1	1.32E-01	1.75E-01	2.24E-04	3.03E-04	2.75E-04	6.87E-05	0.00E+00	4.00E-04	4.01E-04	4.88E-08	1.40E-05	53.0	4.61E-02	1.20E-03
SI7_W	0.47	63	0	1	1.37E-01	1.82E-01	2.32E-04	3.14E-04	2.85E-04	7.11E-05	0.00E+00	4.14E-04	4.15E-04	5.05E-08	1.44E-05	54.8	4.78E-02	1.24E-03
SI7_W	0.47	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.72E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI7_W	0.47	84	0	1	1.83E-01	2.43E-01	3.11E-04	4.20E-04	3.81E-04	9.53E-05	0.00E+00	5.55E-04	5.55E-04	6.77E-08	1.93E-05	73.4	6.40E-02	1.66E-03
SI7_W	0.47	90	0	1	1.97E-01	2.62E-01	3.35E-04	4.52E-04	4.10E-04	1.02E-04	0.00E+00	5.97E-04	5.97E-04	7.28E-08	2.08E-05	79.0	6.88E-02	1.79E-03
SI7_W	0.47	63	0	1	1.37E-01	1.82E-01	2.32E-04	3.14E-04	2.85E-04	7.11E-05	0.00E+00	4.14E-04	4.15E-04	5.05E-08	1.44E-05	54.8	4.78E-02	1.24E-03
SI7_W	0.47	41	0	1	9.03E-02	1.20E-01	1.54E-04	2.08E-04	1.88E-04	4.70E-05	0.00E+00	2.74E-04	2.74E-04	3.34E-08	9.55E-06	36.2	3.16E-02	8.22E-04
SI7_W	0.47	35	0	1	7.64E-02	1.02E-01	1.30E-04	1.76E-04	1.59E-04	3.98E-05	0.00E+00	2.32E-04	2.32E-04	2.83E-08	8.08E-06	30.7	2.67E-02	6.95E-04
SI7_W	0.47	30	0	1	6.49E-02	8.62E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.90E-04
SI7_W	0.47	24	0	1	5.33E-02	7.08E-02	9.06E-05	1.22E-04	1.11E-04	2.77E-05	0.00E+00	1.61E-04	1.62E-04	1.97E-08	5.63E-06	21.4	1.86E-02	4.85E-04
SI7_W	0.47	18	0	1	3.94E-02	5.23E-02	6.69E-05	9.05E-05	8.21E-05	2.05E-05	0.00E+00	1.19E-04	1.19E-04	1.46E-08	4.16E-06	15.8	1.38E-02	3.58E-04
SI8_E	0.55	15	0	1	3.28E-02	4.35E-02	5.57E-05	7.53E-05	6.83E-05	1.71E-05	0.00E+00	9.93E-05	9.94E-05	1.21E-08	3.46E-06	13.1	1.14E-02	2.98E-04
SI8_E	0.55	10	0	1	2.18E-02	2.90E-02	3.71E-05	5.02E-05	4.55E-05	1.14E-05	0.00E+00	6.62E-05	6.63E-05	8.08E-09	2.31E-06	8.8	7.63E-03	1.99E-04
SI8_E	0.55	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	6	0	1	1.36E-02	1.81E-02	2.32E-05	3.14E-05	2.85E-05	7.11E-06	0.00E+00	4.14E-05	4.14E-05	5.05E-09	1.44E-06	5.5	4.77E-03	1.24E-04
SI8_E	0.55	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI8_E	0.55	21	0	1	4.64E-02	6.17E-02	7.89E-05	1.07E-04	9.67E-05	2.42E-05	0.00E+00	1.41E-04	1.41E-04	1.72E-08	4.91E-06	18.6	1.62E-02	4.22E-04
SI8_E	0.55	64	0	1	1.39E-01	1.85E-01	2.37E-04	3.20E-04	2.90E-04	7.25E-05	0.00E+00	4.22E-04	4.22E-04	5.15E-08	1.47E-05	55.9	4.87E-02	1.27E-03
SI8_E	0.55	98	0	1	2.13E-01	2.83E-01	3.62E-04	4.89E-04	4.44E-04	1.11E-04	0.00E+00	6.45E-04	6.46E-04	7.87E-08	2.25E-05	85.4	7.44E-02	1.94E-03
SI8_E	0.55	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI8_E	0.55	65	0	1	1.42E-01	1.89E-01	2.41E-04	3.26E-04	2.96E-04	7.39E-05	0.00E+00	4.30E-04	4.31E-04	5.25E-08	1.50E-05	57.0	4.96E-02	1.29E-03
SI8_E	0.55	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.95E-04	2.67E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.74E-08	1.36E-05	51.5	4.48E-02	1.17E-03
SI8_E	0.55	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.32E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.0	5.06E-02	1.32E-03
SI8_E	0.55	70	0	1	1.53E-01	2.03E-01	2.60E-04	3.51E-04	3.19E-04	7.96E-05	0.00E+00	4.63E-04	4.64E-04	5.65E-08	1.62E-05	61.3	5.34E-02	1.39E-03
SI8_E	0.55	71	0	1	1.56E-01	2.07E-01	2.65E-04	3.58E-04	3.24E-04	8.10E-05	0.00E+00	4.72E-04	4.72E-04	5.75E-08	1.65E-05	62.4	5.44E-02	1.42E-03
SI8_E	0.55	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.38E-05	0.00E+00	4.88E-04	4.89E-04	5.96E-08	1.70E-05	64.6	5.63E-02	1.47E-03
SI8_E	0.55	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.01E-04	3.64E-04	9.10E-05	0.00E+00	5.30E-04	5.30E-04	6.46E-08	1.85E-05	70.1	6.11E-02	1.59E-03
SI8_E	0.55	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.96E-04	4.50E-04	1.12E-04	0.00E+00	6.54E-04	6.54E-04	7.97E-08	2.28E-05	86.5	7.54E-02	1.96E-03
SI8_E	0.55	107	0	1	2.32E-01	3.08E-01	3.95E-04	5.33E-04	4.84E-04	1.21E-04	0.00E+00	7.03E-04	7.04E-04	8.58E-08	2.45E-05	93.1	8.11E-02	2.11E-03
SI8_E	0.55	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.38E-05	0.00E+00	4.88E-04	4.89E-04	5.96E-08	1.70E-05	64.6	5.63E-02	1.47E-03
SI8_E	0.55	49	0	1	1.06E-01	1.41E-01	1.81E-04	2.45E-04	2.22E-04	5.54E-05	0.00E+00	3.23E-04	3.23E-04	3.94E-08	1.13E-05	42.7	3.72E-02	9.69E-04
SI8_E	0.55	41	0	1	9.01E-02	1.20E-01	1.53E-04	2.07E-04	1.88E-04	4.69E-05	0.00E+00	2.73E-04	2.73E-04	3.33E-08	9.52E-06	36.1	3.15E-02	8.20E-04
SI8_E	0.55	35	0	1	7.64E-02	1.02E-01	1.30E-04	1.76E-04	1.59E-04	3.98E-05	0.00E+00	2.32E-04	2.32E-04	2.83E-08	8.08E-06	30.7	2.67E-02	6.95E-04
SI8_E	0.55	29	0	1	6.28E-02	8.34E-02	1.07E-04	1.44E-04	1.31E-04	3.27E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.64E-06	25.2	2.19E-02	5.71E-04
SI8_E	0.55	21	0	1	4.64E-02	6.17E-02	7.89E-05	1.07E-04	9.67E-05	2.42E-05	0.00E+00	1.41E-04	1.41E-04	1.72E-08	4.91E-06	18.6	1.62E-02	4.22E-04
SI8_W	0.48	19	0	1	4.20E-02	5.58E-02	7.14E-05	9.65E-05	8.76E-05	2.19E-05	0.00E+00	1.27E-04	1.27E-04	1.55E-08	4.44E-06	16.9	1.47E-02	3.82E-04
SI8_W	0.48	13	0	1	2.80E-02	3.72E-02	4.76E-05	6.43E-05	5.84E-05	1.46E-05	0.00E+00	8.49E-05	8.50E-05	1.04E-08	2.96E-06	11.2	9.79E-03	2.55E-04
SI8_W	0.48	11	0	1	2.45E-02	3.26E-02	4.17E-05	5.63E-05	5.11E-05	1.28E-05	0.00E+00	7.43E-05	7.43E-05	9.06E-09	2.59E-06	9.8	8.56E-03	2.23E-04
SI8_W	0.48	8	0	1	1.75E-02	2.33E-02	2.98E-05	4.02E-05	3.65E-05	9.11E-06	0.00E+00	5.30E-05	5.31E-05	6.47E-09	1.85E-06	7.0	6.12E-03	1.59E-04
SI8_W	0.48	11	0	1	2.45E-02	3.26E-02	4.17E-05	5.63E-05	5.11E-05	1.28E-05	0.00E+00	7.43E-05	7.43E-05	9.06E-09	2.59E-06	9.8	8.56E-03	2.23E-04
SI8_W	0.48	27	0	1	5.95E-02	7.91E-02	1.01E-04	1.37E-04	1.24E-04	3.10E-05	0.00E+00	1.80E-04	1.81E-04	2.20E-08	6.29E-06	23.9	2.08E-02	5.41E-04
SI8_W	0.48	82	0	1	1.79E-01	2.37E-01	3.04E-04	4.10E-04	3.72E-04	9.29E-05	0.00E+00	5.41E-04	5.42E-04	6.60E-08	1.89E-05	71.6	6.24E-02	1.62E-03
SI8_W	0.48	125	0	1	2.73E-01	3.63E-01	4.64E-04	6.27E-04	5.69E-04	1.42E-04	0.00E+00	8.28E-04	8.28E-04	1.01E-07	2.89E-05	109.5	9.54E-02	2.48E-03
SI8_W	0.48	101	0	1	2.21E-01	2.93E-01	3.75E-04	5.07E-04	4.60E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.5	7.71E-02	2.01E-03
SI8_W	0.48	84	0	1	1.82E-01	2.42E-01	3.09E-04	4.18E-04	3.79E-04	9.48E-05	0.00E+00	5.52E-04	5.52E-04	6.73E-08	1.92E-05	73.0	6.36E-02	1.66E-03
SI8_W	0.48	76	0	1	1.65E-01	2.19E-01	2.80E-04	3.78E-04	3.43E-04	8.56E-05	0.00E+00	4.99E-04	4.99E-04	6.08E-08	1.74E-05	66.0	5.75E-02	1.50E-03
SI8_W	0.48	85	0	1	1.86E-01	2.46E-01	3.15E-04	4.26E-04	3.87E-04	9.66E-05	0.00E+00	5.62E-04	5.63E-04	6.86E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI8_W	0.48	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.09E-04	1.02E-04	0.00E+00	5.94E-04	5.95E-04	7.25E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI8_W	0.48	92	0	1	2.00E-01	2.65E-01	3.39E-04	4.58E-04	4.16E-04	1.04E-04	0.00E+00	6.05E-04	6.05E-04	7.38E-08	2.11E-05	80.0	6.97E-02	1.82E-03
SI8_W	0.48	95	0	1	2.07E-01	2.74E-01	3.51E-04	4.75E-04	4.31E-04	1.08E-04	0.00E+00	6.26E-04	6.27E-04	7.64E-08	2.18E-05	82.9	7.22E-02	1.88E-03
SI8_W	0.48	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.28E-08	2.37E-05	89.9	7.83E-02	2.04E-03
SI8_W	0.48	127	0	1	2.77E-01	3.67E-01	4.70E-04	6.35E-04	5.76E-04	1.44E-04	0.00E+00	8.38E-04	8.39E-04	1.02E-07	2.92E-05	110.9	9.67E-02	2.52E-03
SI8_W	0.48	137	0	1	2.98E-01	3.95E-01	5.06E-04	6.84E-04	6.20E-04	1.55E-04	0.00E+00	9.02E-04	9.03E-04	1.10E-07	3.15E-05	119.4	1.04E-01	2.71E-03
SI8_W	0.48	95	0	1	2.07E-01	2.74E-01	3.51E-04	4.75E-04	4.31E-04	1.08E-04	0.00E+00	6.26E-04	6.27E-04	7.64E-08	2.18E-05	82.9	7.22E-02	1.88E-03
SI8_W	0.48	63	0	1	1.37E-01	1.81E-01	2.32E-04	3.14E-04	2.85E-04	7.11E-05	0.00E+00	4.14E-04	4.14E-04	5.05E-08	1.44E-05	54.8	4.77E-02	1.24E-03
SI8_W	0.48	53	0	1	1.16E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.04E-02	1.05E-03
SI8_W	0.48	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.43E-02	8.92E-04
SI8_W	0.48	37	0	1	8.05E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.98E-08	8.51E-06	32.3	2.81E-02	7.32E-04
SI8_W	0.48	27	0	1	5.95E-02	7.91E-02	1.01E-04	1.37E-04	1.24E-04	3.10E-05	0.00E+00	1.80E-04	1.81E-04	2.20E-08	6.29E-06	23.9	2.08E-02	5.41E-04
SI9_E	0.75	30	0	1	6.52E-02	8.66E-02	1.11E-04	1.50E-04	1.36E-04	3.39E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.89E-06	26.2	2.28E-02	5.93E-04
SI9_E	0.75	20	0	1	4.35E-02	5.77E-02	7.39E-05	9.98E-05	9.06E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI9_E	0.75	17	0	1	3.80E-02	5.05E-02	6.46E-05	8.74E-05	7.93E-05	1.98E-05	0.00E+00	1.15E-04	1.15E-04	1.41E-08	4.02E-06	15.3	1.33E-02	3.46E-04
SI9_E	0.75	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.23E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.49E-03	2.47E-04
SI9_E	0.75	17	0	1	3.80E-02	5.05E-02	6.46E-05	8.74E-05	7.93E-05	1.98E-05	0.00E+00	1.15E-04	1.15E-04	1.41E-08	4.02E-06	15.3	1.33E-02	3.46E-04
SI9_E	0.75	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.81E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.76E-06	37.0	3.23E-02	8.40E-04
SI9_E	0.75	127	0	1	2.77E-01	3.68E-01	4.71E-04	6.37E-04	5.77E-04	1.44E-04	0.00E+00	8.40E-04	8.40E-04	1.02E-07	2.93E-05	111.1	9.68E-02	2.52E-03
SI9_E	0.75	195	0	1	4.24E-01	5.63E-01	7.20E-04	9.74E-04	8.83E-04	2.21E-04	0.00E+00	1.28E-03	1.29E-03	1.57E-07	4.48E-05	170.0	1.48E-01	3.85E-03
SI9_E	0.75	157	0	1	3.42E-01	4.55E-01	5.82E-04	7.86E-04	7.13E-04	1.78E-04	0.00E+00	1.04E-03	1.04E-03	1.27E-07	3.62E-05	137.3	1.20E-01	3.11E-03
SI9_E	0.75	130	0	1	2.82E-01	3.75E-01	4.80E-04	6.49E-04	5.89E-04	1.47E-04	0.00E+00	8.56E-04	8.57E-04	1.04E-07	2.99E-05	113.3	9.87E-02	2.57E-03
SI9_E	0.75	117	0	1	2.55E-01	3.39E-01	4.34E-04	5.87E-04	5.32E-04	1.33E-04	0.00E+00	7.74E-04	7.75E-04	9.44E-08	2.70E-05	102.4	8.92E-02	2.32E-03
SI9_E	0.75	132	0	1	2.88E-01	3.82E-01	4.89E-04	6.61E-04	6.00E-04	1.50E-04	0.00E+00	8.73E-04	8.73E-04	1.06E-07	3.04E-05	115.5	1.01E-01	2.62E-03
SI9_E	0.75	140	0	1	3.04E-01	4.04E-01	5.17E-04	6.99E-04	6.34E-04	1.58E-04	0.00E+00	9.22E-04	9.23E-04	1.12E-07	3.22E-05	122.0	1.06E-01	2.77E-03
SI9_E	0.75	142	0	1	3.10E-01	4.11E-01	5.26E-04	7.11E-04	6.45E-04	1.61E-04	0.00E+00	9.38E-04	9.39E-04	1.14E-07	3.27E-05	124.2	1.08E-01	2.82E-03
SI9_E	0.75	147	0	1	3.20E-01	4.26E-01	5.45E-04	7.36E-04	6.68E-04	1.67E-04	0.00E+00	9.71E-04	9.72E-04	1.18E-07	3.39E-05	128.6	1.12E-01	2.92E-03
SI9_E	0.75	160	0	1	3.48E-01	4.62E-01	5.91E-04	7.99E-04	7.25E-04	1.81E-04	0.00E+00	1.05E-03	1.05E-03	1.29E-07	3.68E-05	139.5	1.22E-01	3.16E-03
SI9_E	0.75	197	0	1	4.29E-01	5.70E-01	7.30E-04	9.86E-04	8.95E-04	2.23E-04	0.00E+00	1.30E-03	1.30E-03	1.59E-07	4.54E-05	172.2	1.50E-01	3.90E-03
SI9_E	0.75	212	0	1	4.62E-01	6.13E-01	7.85E-04	1.06E-03	9.62E-04	2.40E-04	0.00E+00	1.40E-03	1.40E-03	1.71E-07	4.88E-05	185.2	1.61E-01	4.20E-03
SI9_E	0.75	147	0	1	3.20E-01	4.26E-01	5.45E-04	7.36E-04	6.68E-04	1.67E-04	0.00E+00	9.71E-04	9.72E-04	1.18E-07	3.39E-05	128.6	1.12E-01	2.92E-03
SI9_E	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI9_E	0.75	82	0	1	1.79E-01	2.38E-01	3.05E-04	4.12E-04	3.74E-04	9.33E-05	0.00E+00	5.43E-04	5.44E-04	6.63E-08	1.90E-05	71.9	6.27E-02	1.63E-03
SI9_E	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI9_E	0.75	57	0	1	1.25E-01	1.66E-01	2.12E-04	2.87E-04	2.60E-04	6.50E-05	0.00E+00	3.79E-04	3.79E-04	4.62E-08	1.32E-05	50.1	4.37E-02	1.14E-03
SI9_E	0.75	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.81E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.76E-06	37.0	3.23E-02	8.40E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI9_W	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI9_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI9_W	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI9_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI9_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI9_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI9_W	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI9_W	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI9_W	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI9_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI9_W	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI9_W	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI9_W	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI9_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI9_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI9_W	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI9_W	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03
SI9_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI9_W	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI9_W	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI9_W	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI9_W	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI9_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI10_E	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI10_E	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI10_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI10_E	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI10_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI10_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI10_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI10_E	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI10_E	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI10_E	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI10_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI10_E	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI10_E	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI10_E	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI10_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI10_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI10_E	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI10_E	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03
SI10_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI10_E	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI10_E	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI10_E	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI10_E	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI10_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI10_W	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI10_W	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI10_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI10_W	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI10_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI10_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI10_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI10_W	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI10_W	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI10_W	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI10_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI10_W	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI10_W	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI10_W	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI10_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI10_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI10_W	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI10_W	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03
SI10_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI10_W	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI10_W	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI10_W	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI10_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI11_E	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI11_E	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI11_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI11_E	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI11_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI11_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI11_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI11_E	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI11_E	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI11_E	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI11_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI11_E	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI11_E	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI11_E	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI11_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI11_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI11_E	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI11_E	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03
SI11_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI11_E	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI11_E	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI11_E	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI11_E	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI11_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI11_W	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI11_W	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI11_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI11_W	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI11_W	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI11_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI11_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI11_W	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI11_W	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI11_W	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI11_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI11_W	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI11_W	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI11_W	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI11_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI11_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI11_W	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI11_W	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03
SI11_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI11_W	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI11_W	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI11_W	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI11_W	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI11_W	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI12_E	0.75	19	0	1	4.04E-02	5.36E-02	6.86E-05	9.28E-05	8.42E-05	2.10E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.27E-06	16.2	1.41E-02	3.67E-04
SI12_E	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.18E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.95E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI12_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI12_E	0.75	8	0	1	1.68E-02	2.23E-02	2.86E-05	3.87E-05	3.51E-05	8.76E-06	0.00E+00	5.10E-05	5.10E-05	6.22E-09	1.78E-06	6.7	5.88E-03	1.53E-04
SI12_E	0.75	11	0	1	2.36E-02	3.13E-02	4.00E-05	5.41E-05	4.91E-05	1.23E-05	0.00E+00	7.14E-05	7.15E-05	8.71E-09	2.49E-06	9.4	8.23E-03	2.14E-04
SI12_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI12_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.93E-05	0.00E+00	5.20E-04	5.21E-04	6.34E-08	1.81E-05	68.8	6.00E-02	1.56E-03
SI12_E	0.75	121	0	1	2.62E-01	3.49E-01	4.46E-04	6.03E-04	5.47E-04	1.37E-04	0.00E+00	7.95E-04	7.96E-04	9.70E-08	2.77E-05	105.3	9.17E-02	2.39E-03
SI12_E	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI12_E	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.11E-02	1.59E-03
SI12_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI12_E	0.75	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.89E-05	71.5	6.23E-02	1.62E-03
SI12_E	0.75	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.58E-02	1.71E-03
SI12_E	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.41E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI12_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI12_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI12_E	0.75	122	0	1	2.66E-01	3.53E-01	4.52E-04	6.11E-04	5.54E-04	1.38E-04	0.00E+00	8.06E-04	8.06E-04	9.83E-08	2.81E-05	106.6	9.29E-02	2.42E-03
SI12_E	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.02E-05	114.7	1.00E-01	2.60E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.02E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI12_E	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.74E-04	6.83E-05	0.00E+00	3.98E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.59E-02	1.19E-03
SI12_E	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.11E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI12_E	0.75	43	0	1	9.42E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.90E-05	0.00E+00	2.86E-04	2.86E-04	3.48E-08	9.96E-06	37.8	3.29E-02	8.57E-04
SI12_E	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI12_E	0.75	26	0	1	5.72E-02	7.60E-02	9.72E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.11E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI12_W	0.75	16	0	1	3.45E-02	4.59E-02	5.87E-05	7.94E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.9	1.21E-02	3.14E-04
SI12_W	0.75	11	0	1	2.30E-02	3.06E-02	3.92E-05	5.29E-05	4.80E-05	1.20E-05	0.00E+00	6.98E-05	6.99E-05	8.52E-09	2.44E-06	9.2	8.05E-03	2.10E-04
SI12_W	0.75	9	0	1	2.02E-02	2.68E-02	3.43E-05	4.63E-05	4.20E-05	1.05E-05	0.00E+00	6.11E-05	6.11E-05	7.45E-09	2.13E-06	8.1	7.04E-03	1.83E-04
SI12_W	0.75	7	0	1	1.44E-02	1.91E-02	2.45E-05	3.31E-05	3.00E-05	7.49E-06	0.00E+00	4.36E-05	4.37E-05	5.32E-09	1.52E-06	5.8	5.03E-03	1.31E-04
SI12_W	0.75	9	0	1	2.02E-02	2.68E-02	3.43E-05	4.63E-05	4.20E-05	1.05E-05	0.00E+00	6.11E-05	6.11E-05	7.45E-09	2.13E-06	8.1	7.04E-03	1.83E-04
SI12_W	0.75	22	0	1	4.89E-02	6.50E-02	8.32E-05	1.12E-04	1.02E-04	2.55E-05	0.00E+00	1.48E-04	1.48E-04	1.81E-08	5.17E-06	19.6	1.71E-02	4.45E-04
SI12_W	0.75	67	0	1	1.47E-01	1.95E-01	2.50E-04	3.37E-04	3.06E-04	7.64E-05	0.00E+00	4.45E-04	4.45E-04	5.43E-08	1.55E-05	58.9	5.13E-02	1.34E-03
SI12_W	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.30E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI12_W	0.75	83	0	1	1.81E-01	2.41E-01	3.08E-04	4.17E-04	3.78E-04	9.44E-05	0.00E+00	5.50E-04	5.50E-04	6.71E-08	1.92E-05	72.8	6.34E-02	1.65E-03
SI12_W	0.75	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.44E-04	3.12E-04	7.79E-05	0.00E+00	4.54E-04	4.54E-04	5.54E-08	1.58E-05	60.1	5.23E-02	1.36E-03
SI12_W	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.04E-05	0.00E+00	4.10E-04	4.11E-04	5.00E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI12_W	0.75	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.94E-05	0.00E+00	4.62E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI12_W	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.39E-05	0.00E+00	4.89E-04	4.89E-04	5.96E-08	1.70E-05	64.7	5.64E-02	1.47E-03
SI12_W	0.75	75	0	1	1.64E-01	2.18E-01	2.79E-04	3.77E-04	3.42E-04	8.54E-05	0.00E+00	4.97E-04	4.98E-04	6.07E-08	1.74E-05	65.8	5.74E-02	1.49E-03
SI12_W	0.75	78	0	1	1.70E-01	2.26E-01	2.89E-04	3.90E-04	3.54E-04	8.84E-05	0.00E+00	5.15E-04	5.15E-04	6.28E-08	1.80E-05	68.1	5.94E-02	1.55E-03
SI12_W	0.75	85	0	1	1.84E-01	2.45E-01	3.13E-04	4.23E-04	3.84E-04	9.59E-05	0.00E+00	5.58E-04	5.59E-04	6.81E-08	1.95E-05	73.9	6.44E-02	1.68E-03
SI12_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.3	7.95E-02	2.07E-03
SI12_W	0.75	112	0	1	2.45E-01	3.25E-01	4.16E-04	5.62E-04	5.10E-04	1.27E-04	0.00E+00	7.42E-04	7.42E-04	9.05E-08	2.59E-05	98.2	8.55E-02	2.23E-03
SI12_W	0.75	78	0	1	1.70E-01	2.26E-01	2.89E-04	3.90E-04	3.54E-04	8.84E-05	0.00E+00	5.15E-04	5.15E-04	6.28E-08	1.80E-05	68.1	5.94E-02	1.55E-03
SI12_W	0.75	52	0	1	1.12E-01	1.49E-01	1.91E-04	2.58E-04	2.34E-04	5.85E-05	0.00E+00	3.40E-04	3.41E-04	4.15E-08	1.19E-05	45.0	3.92E-02	1.02E-03
SI12_W	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.64E-04
SI12_W	0.75	37	0	1	8.06E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.20E-05	0.00E+00	2.44E-04	2.45E-04	2.98E-08	8.52E-06	32.3	2.82E-02	7.33E-04
SI12_W	0.75	30	0	1	6.62E-02	8.80E-02	1.13E-04	1.52E-04	1.38E-04	3.45E-05	0.00E+00	2.01E-04	2.01E-04	2.45E-08	7.00E-06	26.6	2.31E-02	6.02E-04
SI12_W	0.75	22	0	1	4.89E-02	6.50E-02	8.32E-05	1.12E-04	1.02E-04	2.55E-05	0.00E+00	1.48E-04	1.48E-04	1.81E-08	5.17E-06	19.6	1.71E-02	4.45E-04
SI13_E	0.75	16	0	1	3.38E-02	4.49E-02	5.75E-05	7.77E-05	7.05E-05	1.76E-05	0.00E+00	1.02E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.18E-02	3.08E-04
SI13_E	0.75	10	0	1	2.25E-02	2.99E-02	3.83E-05	5.18E-05	4.70E-05	1.17E-05	0.00E+00	6.83E-05	6.84E-05	8.33E-09	2.38E-06	9.0	7.88E-03	2.05E-04
SI13_E	0.75	9	0	1	1.97E-02	2.62E-02	3.35E-05	4.53E-05	4.11E-05	1.03E-05	0.00E+00	5.98E-05	5.98E-05	7.29E-09	2.09E-06	7.9	6.89E-03	1.79E-04
SI13_E	0.75	6	0	1	1.41E-02	1.87E-02	2.40E-05	3.24E-05	2.94E-05	7.33E-06	0.00E+00	4.27E-05	4.27E-05	5.21E-09	1.49E-06	5.7	4.92E-03	1.28E-04
SI13_E	0.75	9	0	1	1.97E-02	2.62E-02	3.35E-05	4.53E-05	4.11E-05	1.03E-05	0.00E+00	5.98E-05	5.98E-05	7.29E-09	2.09E-06	7.9	6.89E-03	1.79E-04
SI13_E	0.75	22	0	1	4.79E-02	6.36E-02	8.14E-05	1.10E-04	9.99E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.36E-04
SI13_E	0.75	66	0	1	1.44E-01	1.91E-01	2.44E-04	3.30E-04	3.00E-04	7.48E-05	0.00E+00	4.36E-04	4.36E-04	5.31E-08	1.52E-05	57.7	5.02E-02	1.31E-03
SI13_E	0.75	101	0	1	2.20E-01	2.92E-01	3.74E-04	5.05E-04	4.58E-04	1.14E-04	0.00E+00	6.66E-04	6.67E-04	8.13E-08	2.32E-05	88.2	7.68E-02	2.00E-03
SI13_E	0.75	82	0	1	1.78E-01	2.36E-01	3.02E-04	4.08E-04	3.70E-04	9.24E-05	0.00E+00	5.38E-04	5.39E-04	6.56E-08	1.88E-05	71.2	6.20E-02	1.61E-03
SI13_E	0.75	67	0	1	1.47E-01	1.95E-01	2.49E-04	3.37E-04	3.05E-04	7.63E-05	0.00E+00	4.44E-04	4.45E-04	5.42E-08	1.55E-05	58.8	5.12E-02	1.33E-03
SI13_E	0.75	61	0	1	1.32E-01	1.76E-01	2.25E-04	3.04E-04	2.76E-04	6.89E-05	0.00E+00	4.01E-04	4.02E-04	4.90E-08	1.40E-05	53.1	4.63E-02	1.20E-03
SI13_E	0.75	69	0	1	1.49E-01	1.98E-01	2.54E-04	3.43E-04	3.11E-04	7.77E-05	0.00E+00	4.53E-04	4.53E-04	5.52E-08	1.58E-05	59.9	5.22E-02	1.36E-03
SI13_E	0.75	72	0	1	1.58E-01	2.10E-01	2.68E-04	3.63E-04	3.29E-04	8.21E-05	0.00E+00	4.78E-04	4.79E-04	5.83E-08	1.67E-05	63.3	5.52E-02	1.44E-03
SI13_E	0.75	74	0	1	1.61E-01	2.13E-01	2.73E-04	3.69E-04	3.35E-04	8.36E-05	0.00E+00	4.87E-04	4.87E-04	5.94E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI13_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI13_E	0.75	83	0	1	1.80E-01	2.40E-01	3.07E-04	4.14E-04	3.76E-04	9.39E-05	0.00E+00	5.47E-04	5.47E-04	6.67E-08	1.91E-05	72.3	6.30E-02	1.64E-03
SI13_E	0.75	102	0	1	2.23E-01	2.96E-01	3.78E-04	5.11E-04	4.64E-04	1.16E-04	0.00E+00	6.75E-04	6.75E-04	8.23E-08	2.35E-05	89.3	7.78E-02	2.03E-03
SI13_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI13_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI13_E	0.75	50	0	1	1.10E-01	1.46E-01	1.87E-04	2.53E-04	2.29E-04	5.72E-05	0.00E+00	3.33E-04	3.33E-04	4.06E-08	1.16E-05	44.1	3.84E-02	1.00E-03
SI13_E	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI13_E	0.75	36	0	1	7.89E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.11E-05	0.00E+00	2.39E-04	2.39E-04	2.92E-08	8.34E-06	31.7	2.76E-02	7.18E-04
SI13_E	0.75	30	0	1	6.48E-02	8.61E-02	1.10E-04	1.49E-04	1.35E-04	3.37E-05	0.00E+00	1.96E-04	1.97E-04	2.40E-08	6.85E-06	26.0	2.27E-02	5.90E-04
SI13_E	0.75	22	0	1	4.79E-02	6.36E-02	8.14E-05	1.10E-04	9.99E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.36E-04
SI13_W	0.75	14	0	1	3.09E-02	4.11E-02	5.25E-05	7.10E-05	6.44E-05	1.61E-05	0.00E+00	9.37E-05	9.38E-05	1.14E-08	3.27E-06	12.4	1.08E-02	2.81E-04
SI13_W	0.75	9	0	1	2.06E-02	2.74E-02	3.50E-05	4.73E-05	4.29E-05	1.07E-05	0.00E+00	6.24E-05	6.25E-05	7.62E-09	2.18E-06	8.3	7.20E-03	1.87E-04
SI13_W	0.75	8	0	1	1.80E-02	2.39E-02	3.06E-05	4.14E-05	3.76E-05	9.38E-06	0.00E+00	5.46E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.30E-03	1.64E-04
SI13_W	0.75	6	0	1	1.29E-02	1.71E-02	2.19E-05	2.96E-05	2.68E-05	6.70E-06	0.00E+00	3.90E-05	3.91E-05	4.76E-09	1.36E-06	5.2	4.50E-03	1.17E-04
SI13_W	0.75	8	0	1	1.80E-02	2.39E-02	3.06E-05	4.14E-05	3.76E-05	9.38E-06	0.00E+00	5.46E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.30E-03	1.64E-04
SI13_W	0.75	20	0	1	4.38E-02	5.82E-02	7.44E-05	1.01E-04	9.13E-05	2.28E-05	0.00E+00	1.33E-04	1.33E-04	1.62E-08	4.63E-06	17.6	1.53E-02	3.98E-04
SI13_W	0.75	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.02E-04	2.74E-04	6.84E-05	0.00E+00	3.98E-04	3.98E-04	4.86E-08	1.39E-05	52.7	4.59E-02	1.19E-03
SI13_W	0.75	92	0	1	2.01E-01	2.67E-01	3.41E-04	4.62E-04	4.19E-04	1.05E-04	0.00E+00	6.09E-04	6.09E-04	7.43E-08	2.12E-05	80.6	7.02E-02	1.83E-03
SI13_W	0.75	75	0	1	1.62E-01	2.16E-01	2.76E-04	3.73E-04	3.38E-04	8.45E-05	0.00E+00	4.92E-04	4.92E-04	6.00E-08	1.72E-05	65.1	5.67E-02	1.48E-03
SI13_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.97E-05	0.00E+00	4.06E-04	4.06E-04	4.95E-08	1.42E-05	53.7	4.68E-02	1.22E-03
SI13_W	0.75	56	0	1	1.21E-01	1.61E-01	2.06E-04	2.78E-04	2.52E-04	6.30E-05	0.00E+00	3.67E-04	3.67E-04	4.48E-08	1.28E-05	48.6	4.23E-02	1.10E-03
SI13_W	0.75	63	0	1	1.36E-01	1.81E-01	2.32E-04	3.14E-04	2.85E-04	7.11E-05	0.00E+00	4.14E-04	4.14E-04	5.05E-08	1.44E-05	54.8	4.77E-02	1.24E-03
SI13_W	0.75	66	0	1	1.44E-01	1.92E-01	2.45E-04	3.31E-04	3.01E-04	7.51E-05	0.00E+00	4.37E-04	4.38E-04	5.33E-08	1.52E-05	57.9	5.04E-02	1.31E-03
SI13_W	0.75	67	0	1	1.47E-01	1.95E-01	2.50E-04	3.37E-04	3.06E-04	7.64E-05	0.00E+00	4.45E-04	4.45E-04	5.43E-08	1.55E-05	58.9	5.13E-02	1.34E-03
SI13_W	0.75	70	0	1	1.52E-01	2.02E-01	2.58E-04	3.49E-04	3.17E-04	7.91E-05	0.00E+00	4.60E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.31E-02	1.38E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	76	0	1	1.65E-01	2.19E-01	2.80E-04	3.79E-04	3.44E-04	8.58E-05	0.00E+00	5.00E-04	5.00E-04	6.09E-08	1.74E-05	66.1	5.76E-02	1.50E-03
SI13_W	0.75	93	0	1	2.03E-01	2.70E-01	3.46E-04	4.67E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.17E-04	7.52E-08	2.15E-05	81.6	7.11E-02	1.85E-03
SI13_W	0.75	101	0	1	2.19E-01	2.91E-01	3.72E-04	5.03E-04	4.56E-04	1.14E-04	0.00E+00	6.63E-04	6.64E-04	8.09E-08	2.31E-05	87.8	7.65E-02	1.99E-03
SI13_W	0.75	70	0	1	1.52E-01	2.02E-01	2.58E-04	3.49E-04	3.17E-04	7.91E-05	0.00E+00	4.60E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.31E-02	1.38E-03
SI13_W	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.23E-05	0.00E+00	3.04E-04	3.05E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.14E-04
SI13_W	0.75	39	0	1	8.50E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.58E-04	2.58E-04	3.14E-08	8.98E-06	34.1	2.97E-02	7.73E-04
SI13_W	0.75	33	0	1	7.21E-02	9.58E-02	1.23E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.62E-06	28.9	2.52E-02	6.56E-04
SI13_W	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.80E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI13_W	0.75	20	0	1	4.38E-02	5.82E-02	7.44E-05	1.01E-04	9.13E-05	2.28E-05	0.00E+00	1.33E-04	1.33E-04	1.62E-08	4.63E-06	17.6	1.53E-02	3.98E-04
SI14_E	0.75	13	0	1	2.73E-02	3.62E-02	4.63E-05	6.26E-05	5.68E-05	1.42E-05	0.00E+00	8.26E-05	8.27E-05	1.01E-08	2.88E-06	10.9	9.53E-03	2.48E-04
SI14_E	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.17E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI14_E	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI14_E	0.75	5	0	1	1.14E-02	1.51E-02	1.93E-05	2.61E-05	2.37E-05	5.91E-06	0.00E+00	3.44E-05	3.45E-05	4.20E-09	1.20E-06	4.6	3.97E-03	1.03E-04
SI14_E	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI14_E	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI14_E	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.03E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.5	4.05E-02	1.05E-03
SI14_E	0.75	81	0	1	1.77E-01	2.35E-01	3.01E-04	4.07E-04	3.69E-04	9.22E-05	0.00E+00	5.37E-04	5.37E-04	6.55E-08	1.87E-05	71.1	6.19E-02	1.61E-03
SI14_E	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI14_E	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.37E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI14_E	0.75	49	0	1	1.07E-01	1.42E-01	1.81E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.71E-04
SI14_E	0.75	55	0	1	1.20E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.27E-05	0.00E+00	3.65E-04	3.65E-04	4.45E-08	1.27E-05	48.3	4.21E-02	1.10E-03
SI14_E	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.62E-05	0.00E+00	3.85E-04	3.86E-04	4.70E-08	1.34E-05	51.0	4.45E-02	1.16E-03
SI14_E	0.75	59	0	1	1.29E-01	1.72E-01	2.20E-04	2.97E-04	2.70E-04	6.74E-05	0.00E+00	3.92E-04	3.93E-04	4.79E-08	1.37E-05	51.9	4.52E-02	1.18E-03
SI14_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI14_E	0.75	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.57E-05	0.00E+00	4.41E-04	4.41E-04	5.37E-08	1.54E-05	58.3	5.08E-02	1.32E-03
SI14_E	0.75	82	0	1	1.79E-01	2.38E-01	3.05E-04	4.12E-04	3.74E-04	9.34E-05	0.00E+00	5.44E-04	5.44E-04	6.63E-08	1.90E-05	72.0	6.27E-02	1.63E-03
SI14_E	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.44E-04	4.02E-04	1.00E-04	0.00E+00	5.85E-04	5.86E-04	7.14E-08	2.04E-05	77.4	6.75E-02	1.76E-03
SI14_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI14_E	0.75	41	0	1	8.86E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.61E-05	0.00E+00	2.68E-04	2.69E-04	3.28E-08	9.36E-06	35.5	3.10E-02	8.06E-04
SI14_E	0.75	34	0	1	7.49E-02	9.96E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.1	2.62E-02	6.82E-04
SI14_E	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI14_E	0.75	24	0	1	5.22E-02	6.94E-02	8.88E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.52E-06	21.0	1.83E-02	4.75E-04
SI14_E	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI14_W	0.75	13	0	1	2.73E-02	3.62E-02	4.63E-05	6.26E-05	5.68E-05	1.42E-05	0.00E+00	8.26E-05	8.27E-05	1.01E-08	2.88E-06	10.9	9.53E-03	2.48E-04
SI14_W	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.17E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI14_W	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI14_W	0.75	5	0	1	1.14E-02	1.51E-02	1.93E-05	2.61E-05	2.37E-05	5.91E-06	0.00E+00	3.44E-05	3.45E-05	4.20E-09	1.20E-06	4.6	3.97E-03	1.03E-04
SI14_W	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI14_W	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI14_W	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.03E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.5	4.05E-02	1.05E-03
SI14_W	0.75	81	0	1	1.77E-01	2.35E-01	3.01E-04	4.07E-04	3.69E-04	9.22E-05	0.00E+00	5.37E-04	5.37E-04	6.55E-08	1.87E-05	71.1	6.19E-02	1.61E-03
SI14_W	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI14_W	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.37E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI14_W	0.75	49	0	1	1.07E-01	1.42E-01	1.81E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.71E-04
SI14_W	0.75	55	0	1	1.20E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.27E-05	0.00E+00	3.65E-04	3.65E-04	4.45E-08	1.27E-05	48.3	4.21E-02	1.10E-03
SI14_W	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.62E-05	0.00E+00	3.85E-04	3.86E-04	4.70E-08	1.34E-05	51.0	4.45E-02	1.16E-03
SI14_W	0.75	59	0	1	1.29E-01	1.72E-01	2.20E-04	2.97E-04	2.70E-04	6.74E-05	0.00E+00	3.92E-04	3.93E-04	4.79E-08	1.37E-05	51.9	4.52E-02	1.18E-03
SI14_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI14_W	0.75	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.57E-05	0.00E+00	4.41E-04	4.41E-04	5.37E-08	1.54E-05	58.3	5.08E-02	1.32E-03
SI14_W	0.75	82	0	1	1.79E-01	2.38E-01	3.05E-04	4.12E-04	3.74E-04	9.34E-05	0.00E+00	5.44E-04	5.44E-04	6.63E-08	1.90E-05	72.0	6.27E-02	1.63E-03
SI14_W	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.44E-04	4.02E-04	1.00E-04	0.00E+00	5.85E-04	5.86E-04	7.14E-08	2.04E-05	77.4	6.75E-02	1.76E-03
SI14_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI14_W	0.75	41	0	1	8.86E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.61E-05	0.00E+00	2.68E-04	2.69E-04	3.28E-08	9.36E-06	35.5	3.10E-02	8.06E-04
SI14_W	0.75	34	0	1	7.49E-02	9.96E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.1	2.62E-02	6.82E-04
SI14_W	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI14_W	0.75	24	0	1	5.22E-02	6.94E-02	8.88E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.52E-06	21.0	1.83E-02	4.75E-04
SI14_W	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI15_E	0.75	13	0	1	2.73E-02	3.62E-02	4.63E-05	6.26E-05	5.68E-05	1.42E-05	0.00E+00	8.26E-05	8.27E-05	1.01E-08	2.88E-06	10.9	9.53E-03	2.48E-04
SI15_E	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.17E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI15_E	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI15_E	0.75	5	0	1	1.14E-02	1.51E-02	1.93E-05	2.61E-05	2.37E-05	5.91E-06	0.00E+00	3.44E-05	3.45E-05	4.20E-09	1.20E-06	4.6	3.97E-03	1.03E-04
SI15_E	0.75	7	0	1	1.59E-02	2.11E-02	2.70E-05	3.65E-05	3.31E-05	8.28E-06	0.00E+00	4.82E-05	4.82E-05	5.88E-09	1.68E-06	6.4	5.56E-03	1.45E-04
SI15_E	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI15_E	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.03E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.5	4.05E-02	1.05E-03
SI15_E	0.75	81	0	1	1.77E-01	2.35E-01	3.01E-04	4.07E-04	3.69E-04	9.22E-05	0.00E+00	5.37E-04	5.37E-04	6.55E-08	1.87E-05	71.1	6.19E-02	1.61E-03
SI15_E	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI15_E	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.37E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI15_E	0.75	49	0	1	1.07E-01	1.42E-01	1.81E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.71E-04
SI15_E	0.75	55	0	1	1.20E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.27E-05	0.00E+00	3.65E-04	3.65E-04	4.45E-08	1.27E-05	48.3	4.21E-02	1.10E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.62E-05	0.00E+00	3.85E-04	3.86E-04	4.70E-08	1.34E-05	51.0	4.45E-02	1.16E-03
SI15_E	0.75	59	0	1	1.29E-01	1.72E-01	2.20E-04	2.97E-04	2.70E-04	6.74E-05	0.00E+00	3.92E-04	3.93E-04	4.79E-08	1.37E-05	51.9	4.52E-02	1.18E-03
SI15_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI15_E	0.75	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.57E-05	0.00E+00	4.41E-04	4.41E-04	5.37E-08	1.54E-05	58.3	5.08E-02	1.32E-03
SI15_E	0.75	82	0	1	1.79E-01	2.38E-01	3.05E-04	4.12E-04	3.74E-04	9.34E-05	0.00E+00	5.44E-04	5.44E-04	6.63E-08	1.90E-05	72.0	6.27E-02	1.63E-03
SI15_E	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.44E-04	4.02E-04	1.00E-04	0.00E+00	5.85E-04	5.86E-04	7.14E-08	2.04E-05	77.4	6.75E-02	1.76E-03
SI15_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI15_E	0.75	41	0	1	8.86E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.61E-05	0.00E+00	2.68E-04	2.69E-04	3.28E-08	9.36E-06	35.5	3.10E-02	8.06E-04
SI15_E	0.75	34	0	1	7.49E-02	9.96E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.1	2.62E-02	6.82E-04
SI15_E	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI15_E	0.75	24	0	1	5.22E-02	6.94E-02	8.88E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.52E-06	21.0	1.83E-02	4.75E-04
SI15_E	0.75	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.87E-05	8.05E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI15_W	0.75	25	0	1	5.35E-02	7.11E-02	9.09E-05	1.23E-04	1.12E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.66E-06	21.5	1.87E-02	4.87E-04
SI15_W	0.75	16	0	1	3.57E-02	4.74E-02	6.06E-05	8.19E-05	7.43E-05	1.86E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.77E-06	14.3	1.25E-02	3.24E-04
SI15_W	0.75	14	0	1	3.12E-02	4.15E-02	5.31E-05	7.17E-05	6.50E-05	1.62E-05	0.00E+00	9.46E-05	9.47E-05	1.15E-08	3.30E-06	12.5	1.09E-02	2.84E-04
SI15_W	0.75	10	0	1	2.23E-02	2.96E-02	3.79E-05	5.12E-05	4.65E-05	1.16E-05	0.00E+00	6.76E-05	6.76E-05	8.24E-09	2.36E-06	8.9	7.79E-03	2.03E-04
SI15_W	0.75	14	0	1	3.12E-02	4.15E-02	5.31E-05	7.17E-05	6.50E-05	1.62E-05	0.00E+00	9.46E-05	9.47E-05	1.15E-08	3.30E-06	12.5	1.09E-02	2.84E-04
SI15_W	0.75	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.89E-04
SI15_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.22E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI15_W	0.75	160	0	1	3.48E-01	4.62E-01	5.91E-04	7.99E-04	7.25E-04	1.81E-04	0.00E+00	1.05E-03	1.05E-03	1.29E-07	3.68E-05	139.5	1.22E-01	3.16E-03
SI15_W	0.75	129	0	1	2.81E-01	3.73E-01	4.77E-04	6.45E-04	5.85E-04	1.46E-04	0.00E+00	8.51E-04	8.52E-04	1.04E-07	2.97E-05	112.7	9.82E-02	2.55E-03
SI15_W	0.75	106	0	1	2.32E-01	3.08E-01	3.94E-04	5.33E-04	4.83E-04	1.21E-04	0.00E+00	7.03E-04	7.03E-04	8.57E-08	2.45E-05	93.0	8.10E-02	2.11E-03
SI15_W	0.75	96	0	1	2.10E-01	2.78E-01	3.56E-04	4.81E-04	4.37E-04	1.09E-04	0.00E+00	6.35E-04	6.36E-04	7.75E-08	2.22E-05	84.1	7.32E-02	1.91E-03
SI15_W	0.75	109	0	1	2.36E-01	3.14E-01	4.02E-04	5.43E-04	4.93E-04	1.23E-04	0.00E+00	7.16E-04	7.17E-04	8.74E-08	2.50E-05	94.8	8.26E-02	2.15E-03
SI15_W	0.75	115	0	1	2.50E-01	3.32E-01	4.24E-04	5.74E-04	5.20E-04	1.30E-04	0.00E+00	7.57E-04	7.57E-04	9.23E-08	2.64E-05	100.1	8.73E-02	2.27E-03
SI15_W	0.75	117	0	1	2.54E-01	3.38E-01	4.32E-04	5.84E-04	5.30E-04	1.32E-04	0.00E+00	7.70E-04	7.71E-04	9.40E-08	2.69E-05	101.9	8.88E-02	2.31E-03
SI15_W	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.97E-04	7.98E-04	9.72E-08	2.78E-05	105.5	9.19E-02	2.39E-03
SI15_W	0.75	131	0	1	2.85E-01	3.79E-01	4.85E-04	6.56E-04	5.95E-04	1.49E-04	0.00E+00	8.65E-04	8.66E-04	1.05E-07	3.02E-05	114.5	9.97E-02	2.60E-03
SI15_W	0.75	162	0	1	3.52E-01	4.68E-01	5.99E-04	8.09E-04	7.34E-04	1.83E-04	0.00E+00	1.07E-03	1.07E-03	1.30E-07	3.72E-05	141.3	1.23E-01	3.20E-03
SI15_W	0.75	174	0	1	3.79E-01	5.03E-01	6.44E-04	8.71E-04	7.90E-04	1.97E-04	0.00E+00	1.15E-03	1.15E-03	1.40E-07	4.01E-05	152.0	1.32E-01	3.45E-03
SI15_W	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.97E-04	7.98E-04	9.72E-08	2.78E-05	105.5	9.19E-02	2.39E-03
SI15_W	0.75	80	0	1	1.74E-01	2.31E-01	2.96E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.08E-02	1.58E-03
SI15_W	0.75	68	0	1	1.47E-01	1.95E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.46E-04	5.44E-08	1.56E-05	59.0	5.14E-02	1.34E-03
SI15_W	0.75	57	0	1	1.25E-01	1.66E-01	2.12E-04	2.87E-04	2.60E-04	6.50E-05	0.00E+00	3.78E-04	3.79E-04	4.62E-08	1.32E-05	50.1	4.36E-02	1.14E-03
SI15_W	0.75	47	0	1	1.03E-01	1.36E-01	1.74E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.1	3.58E-02	9.33E-04
SI15_W	0.75	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.89E-04
SI16_E	0.75	25	0	1	5.35E-02	7.11E-02	9.09E-05	1.23E-04	1.12E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.66E-06	21.5	1.87E-02	4.87E-04
SI16_E	0.75	16	0	1	3.57E-02	4.74E-02	6.06E-05	8.19E-05	7.43E-05	1.86E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.77E-06	14.3	1.25E-02	3.24E-04
SI16_E	0.75	14	0	1	3.12E-02	4.15E-02	5.31E-05	7.17E-05	6.50E-05	1.62E-05	0.00E+00	9.46E-05	9.47E-05	1.15E-08	3.30E-06	12.5	1.09E-02	2.84E-04
SI16_E	0.75	10	0	1	2.23E-02	2.96E-02	3.79E-05	5.12E-05	4.65E-05	1.16E-05	0.00E+00	6.76E-05	6.76E-05	8.24E-09	2.36E-06	8.9	7.79E-03	2.03E-04
SI16_E	0.75	14	0	1	3.12E-02	4.15E-02	5.31E-05	7.17E-05	6.50E-05	1.62E-05	0.00E+00	9.46E-05	9.47E-05	1.15E-08	3.30E-06	12.5	1.09E-02	2.84E-04
SI16_E	0.75	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.89E-04
SI16_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.22E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI16_E	0.75	160	0	1	3.48E-01	4.62E-01	5.91E-04	7.99E-04	7.25E-04	1.81E-04	0.00E+00	1.05E-03	1.05E-03	1.29E-07	3.68E-05	139.5	1.22E-01	3.16E-03
SI16_E	0.75	129	0	1	2.81E-01	3.73E-01	4.77E-04	6.45E-04	5.85E-04	1.46E-04	0.00E+00	8.51E-04	8.52E-04	1.04E-07	2.97E-05	112.7	9.82E-02	2.55E-03
SI16_E	0.75	106	0	1	2.32E-01	3.08E-01	3.94E-04	5.33E-04	4.83E-04	1.21E-04	0.00E+00	7.03E-04	7.03E-04	8.57E-08	2.45E-05	93.0	8.10E-02	2.11E-03
SI16_E	0.75	96	0	1	2.10E-01	2.78E-01	3.56E-04	4.81E-04	4.37E-04	1.09E-04	0.00E+00	6.35E-04	6.36E-04	7.75E-08	2.22E-05	84.1	7.32E-02	1.91E-03
SI16_E	0.75	109	0	1	2.36E-01	3.14E-01	4.02E-04	5.43E-04	4.93E-04	1.23E-04	0.00E+00	7.16E-04	7.17E-04	8.74E-08	2.50E-05	94.8	8.26E-02	2.15E-03
SI16_E	0.75	115	0	1	2.50E-01	3.32E-01	4.24E-04	5.74E-04	5.20E-04	1.30E-04	0.00E+00	7.57E-04	7.57E-04	9.23E-08	2.64E-05	100.1	8.73E-02	2.27E-03
SI16_E	0.75	117	0	1	2.54E-01	3.38E-01	4.32E-04	5.84E-04	5.30E-04	1.32E-04	0.00E+00	7.70E-04	7.71E-04	9.40E-08	2.69E-05	101.9	8.88E-02	2.31E-03
SI16_E	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.97E-04	7.98E-04	9.72E-08	2.78E-05	105.5	9.19E-02	2.39E-03
SI16_E	0.75	131	0	1	2.85E-01	3.79E-01	4.85E-04	6.56E-04	5.95E-04	1.49E-04	0.00E+00	8.65E-04	8.66E-04	1.05E-07	3.02E-05	114.5	9.97E-02	2.60E-03
SI16_E	0.75	162	0	1	3.52E-01	4.68E-01	5.99E-04	8.09E-04	7.34E-04	1.83E-04	0.00E+00	1.07E-03	1.07E-03	1.30E-07	3.72E-05	141.3	1.23E-01	3.20E-03
SI16_E	0.75	174	0	1	3.79E-01	5.03E-01	6.44E-04	8.71E-04	7.90E-04	1.97E-04	0.00E+00	1.15E-03	1.15E-03	1.40E-07	4.01E-05	152.0	1.32E-01	3.45E-03
SI16_E	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.97E-04	7.98E-04	9.72E-08	2.78E-05	105.5	9.19E-02	2.39E-03
SI16_E	0.75	80	0	1	1.74E-01	2.31E-01	2.96E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.08E-02	1.58E-03
SI16_E	0.75	68	0	1	1.47E-01	1.95E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.46E-04	5.44E-08	1.56E-05	59.0	5.14E-02	1.34E-03
SI16_E	0.75	57	0	1	1.25E-01	1.66E-01	2.12E-04	2.87E-04	2.60E-04	6.50E-05	0.00E+00	3.78E-04	3.79E-04	4.62E-08	1.32E-05	50.1	4.36E-02	1.14E-03
SI16_E	0.75	47	0	1	1.03E-01	1.36E-01	1.74E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.1	3.58E-02	9.33E-04
SI16_E	0.75	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.89E-04
SI16_W	0.75	25	0	1	5.50E-02	7.31E-02	9.36E-05	1.26E-04	1.15E-04	2.87E-05	0.00E+00	1.67E-04	1.67E-04	2.04E-08	5.82E-06	22.1	1.92E-02	5.01E-04
SI16_W	0.75	17	0	1	3.67E-02	4.87E-02	6.24E-05	8.43E-05	7.65E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.36E-08	3.88E-06	14.7	1.28E-02	3.34E-04
SI16_W	0.75	15	0	1	3.21E-02	4.27E-02	5.46E-05	7.38E-05	6.69E-05	1.67E-05	0.00E+00	9.73E-05	9.74E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI16_W	0.75	11	0	1	2.29E-02	3.05E-02	3.90E-05	5.27E-05	4.78E-05	1.19E-05	0.00E+00	6.95E-05	6.96E-05	8.48E-09	2.42E-06	9.2	8.02E-03	2.09E-04
SI16_W	0.75	15	0	1	3.21E-02	4.27E-02	5.46E-05	7.38E-05	6.69E-05	1.67E-05	0.00E+00	9.73E-05	9.74E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI16_W	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.88E-08	8.24E-06	31.3	2.73E-02	7.09E-04
SI16_W	0.75	107	0	1	2.34E-01	3.11E-01	3.98E-04	5.38E-04	4.88E-04	1.22E-04	0.00E+00	7.09E-04	7.10E-04	8.65E-08	2.47E-05	93.9	8.18E-02	2.13E-03
SI16_W	0.75	164	0	1	3.58E-01	4.75E-01	6.08E-04	8.22E-04	7.46E-04	1.86E-04	0.00E+00	1.08E-03	1.09E-03	1.32E-07	3.78E-05	143.5	1.25E-01	3.25E-03
SI16_W	0.75	133	0	1	2.89E-01	3.84E-01	4.91E-04	6.64E-04	6.02E-04	1.50E-04	0.00E+00	8.76E-04	8.77E-04	1.07E-07	3.06E-05	115.9	1.01E-01	2.63E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	110	0	1	2.39E-01	3.17E-01	4.06E-04	5.48E-04	4.97E-04	1.24E-04	0.00E+00	7.23E-04	7.24E-04	8.82E-08	2.52E-05	95.7	8.34E-02	2.17E-03
SI16_W	0.75	99	0	1	2.16E-01	2.86E-01	3.67E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.54E-04	7.97E-08	2.28E-05	86.5	7.54E-02	1.96E-03
SI16_W	0.75	112	0	1	2.43E-01	3.23E-01	4.13E-04	5.59E-04	5.07E-04	1.27E-04	0.00E+00	7.37E-04	7.38E-04	8.99E-08	2.57E-05	97.5	8.50E-02	2.21E-03
SI16_W	0.75	118	0	1	2.57E-01	3.41E-01	4.37E-04	5.90E-04	5.35E-04	1.34E-04	0.00E+00	7.79E-04	7.79E-04	9.50E-08	2.72E-05	103.1	8.98E-02	2.34E-03
SI16_W	0.75	120	0	1	2.61E-01	3.47E-01	4.45E-04	6.01E-04	5.45E-04	1.36E-04	0.00E+00	7.92E-04	7.93E-04	9.67E-08	2.76E-05	104.9	9.14E-02	2.38E-03
SI16_W	0.75	124	0	1	2.71E-01	3.60E-01	4.60E-04	6.22E-04	5.64E-04	1.41E-04	0.00E+00	8.20E-04	8.21E-04	1.00E-07	2.86E-05	108.6	9.46E-02	2.46E-03
SI16_W	0.75	135	0	1	2.94E-01	3.90E-01	4.99E-04	6.75E-04	6.12E-04	1.53E-04	0.00E+00	8.90E-04	8.91E-04	1.09E-07	3.10E-05	117.8	1.03E-01	2.67E-03
SI16_W	0.75	166	0	1	3.62E-01	4.81E-01	6.16E-04	8.33E-04	7.55E-04	1.89E-04	0.00E+00	1.10E-03	1.10E-03	1.34E-07	3.83E-05	145.4	1.27E-01	3.30E-03
SI16_W	0.75	179	0	1	3.90E-01	5.18E-01	6.63E-04	8.96E-04	8.13E-04	2.03E-04	0.00E+00	1.18E-03	1.18E-03	1.44E-07	4.12E-05	156.4	1.36E-01	3.55E-03
SI16_W	0.75	124	0	1	2.71E-01	3.60E-01	4.60E-04	6.22E-04	5.64E-04	1.41E-04	0.00E+00	8.20E-04	8.21E-04	1.00E-07	2.86E-05	108.6	9.46E-02	2.46E-03
SI16_W	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.43E-04	6.61E-08	1.89E-05	71.8	6.25E-02	1.63E-03
SI16_W	0.75	70	0	1	1.51E-01	2.01E-01	2.57E-04	3.48E-04	3.16E-04	7.88E-05	0.00E+00	4.59E-04	4.59E-04	5.60E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI16_W	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.69E-05	0.00E+00	3.89E-04	3.90E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI16_W	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.20E-04	3.20E-04	3.90E-08	1.12E-05	42.3	3.69E-02	9.60E-04
SI16_W	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.88E-08	8.24E-06	31.3	2.73E-02	7.09E-04
SI17_E	0.75	25	0	1	5.50E-02	7.31E-02	9.36E-05	1.26E-04	1.15E-04	2.87E-05	0.00E+00	1.67E-04	1.67E-04	2.04E-08	5.82E-06	22.1	1.92E-02	5.01E-04
SI17_E	0.75	17	0	1	3.67E-02	4.87E-02	6.24E-05	8.43E-05	7.65E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.36E-08	3.88E-06	14.7	1.28E-02	3.34E-04
SI17_E	0.75	15	0	1	3.21E-02	4.27E-02	5.46E-05	7.38E-05	6.69E-05	1.67E-05	0.00E+00	9.73E-05	9.74E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI17_E	0.75	11	0	1	2.29E-02	3.05E-02	3.90E-05	5.27E-05	4.78E-05	1.19E-05	0.00E+00	6.95E-05	6.96E-05	8.48E-09	2.42E-06	9.2	8.02E-03	2.09E-04
SI17_E	0.75	15	0	1	3.21E-02	4.27E-02	5.46E-05	7.38E-05	6.69E-05	1.67E-05	0.00E+00	9.73E-05	9.74E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI17_E	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.88E-08	8.24E-06	31.3	2.73E-02	7.09E-04
SI17_E	0.75	107	0	1	2.34E-01	3.11E-01	3.98E-04	5.38E-04	4.88E-04	1.22E-04	0.00E+00	7.09E-04	7.10E-04	8.65E-08	2.47E-05	93.9	8.18E-02	2.13E-03
SI17_E	0.75	164	0	1	3.58E-01	4.75E-01	6.08E-04	8.22E-04	7.46E-04	1.86E-04	0.00E+00	1.08E-03	1.09E-03	1.32E-07	3.78E-05	143.5	1.25E-01	3.25E-03
SI17_E	0.75	133	0	1	2.89E-01	3.84E-01	4.91E-04	6.64E-04	6.02E-04	1.50E-04	0.00E+00	8.76E-04	8.77E-04	1.07E-07	3.06E-05	115.9	1.01E-01	2.63E-03
SI17_E	0.75	110	0	1	2.39E-01	3.17E-01	4.06E-04	5.48E-04	4.97E-04	1.24E-04	0.00E+00	7.23E-04	7.24E-04	8.82E-08	2.52E-05	95.7	8.34E-02	2.17E-03
SI17_E	0.75	99	0	1	2.16E-01	2.86E-01	3.67E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.54E-04	7.97E-08	2.28E-05	86.5	7.54E-02	1.96E-03
SI17_E	0.75	112	0	1	2.43E-01	3.23E-01	4.13E-04	5.59E-04	5.07E-04	1.27E-04	0.00E+00	7.37E-04	7.38E-04	8.99E-08	2.57E-05	97.5	8.50E-02	2.21E-03
SI17_E	0.75	118	0	1	2.57E-01	3.41E-01	4.37E-04	5.90E-04	5.35E-04	1.34E-04	0.00E+00	7.79E-04	7.79E-04	9.50E-08	2.72E-05	103.1	8.98E-02	2.34E-03
SI17_E	0.75	120	0	1	2.61E-01	3.47E-01	4.45E-04	6.01E-04	5.45E-04	1.36E-04	0.00E+00	7.92E-04	7.93E-04	9.67E-08	2.76E-05	104.9	9.14E-02	2.38E-03
SI17_E	0.75	124	0	1	2.71E-01	3.60E-01	4.60E-04	6.22E-04	5.64E-04	1.41E-04	0.00E+00	8.20E-04	8.21E-04	1.00E-07	2.86E-05	108.6	9.46E-02	2.46E-03
SI17_E	0.75	135	0	1	2.94E-01	3.90E-01	4.99E-04	6.75E-04	6.12E-04	1.53E-04	0.00E+00	8.90E-04	8.91E-04	1.09E-07	3.10E-05	117.8	1.03E-01	2.67E-03
SI17_E	0.75	166	0	1	3.62E-01	4.81E-01	6.16E-04	8.33E-04	7.55E-04	1.89E-04	0.00E+00	1.10E-03	1.10E-03	1.34E-07	3.83E-05	145.4	1.27E-01	3.30E-03
SI17_E	0.75	179	0	1	3.90E-01	5.18E-01	6.63E-04	8.96E-04	8.13E-04	2.03E-04	0.00E+00	1.18E-03	1.18E-03	1.44E-07	4.12E-05	156.4	1.36E-01	3.55E-03
SI17_E	0.75	124	0	1	2.71E-01	3.60E-01	4.60E-04	6.22E-04	5.64E-04	1.41E-04	0.00E+00	8.20E-04	8.21E-04	1.00E-07	2.86E-05	108.6	9.46E-02	2.46E-03
SI17_E	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.43E-04	6.61E-08	1.89E-05	71.8	6.25E-02	1.63E-03
SI17_E	0.75	70	0	1	1.51E-01	2.01E-01	2.57E-04	3.48E-04	3.16E-04	7.88E-05	0.00E+00	4.59E-04	4.59E-04	5.60E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI17_E	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.69E-05	0.00E+00	3.89E-04	3.90E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI17_E	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.20E-04	3.20E-04	3.90E-08	1.12E-05	42.3	3.69E-02	9.60E-04
SI17_E	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.88E-08	8.24E-06	31.3	2.73E-02	7.09E-04
SI17_W	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI17_W	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI17_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI17_W	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI17_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI17_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI17_W	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI17_W	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI17_W	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI17_W	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI17_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI17_W	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI17_W	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI17_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI17_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI17_W	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI17_W	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI17_W	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI17_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI17_W	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI17_W	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI17_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI17_W	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI17_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI18_E	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI18_E	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI18_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI18_E	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI18_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI18_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI18_E	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI18_E	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI18_E	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI18_E	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI18_E	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI18_E	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI18_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI18_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI18_E	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI18_E	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI18_E	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI18_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI18_E	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI18_E	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI18_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI18_E	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI18_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI18_W	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI18_W	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI18_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI18_W	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI18_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI18_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI18_W	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI18_W	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI18_W	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI18_W	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI18_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI18_W	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI18_W	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI18_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI18_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI18_W	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI18_W	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI18_W	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI18_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI18_W	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI18_W	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI18_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI18_W	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI18_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI19_E	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI19_E	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI19_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI19_E	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI19_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI19_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI19_E	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI19_E	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI19_E	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI19_E	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI19_E	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI19_E	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI19_E	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI19_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI19_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI19_E	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI19_E	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI19_E	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI19_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI19_E	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI19_E	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI19_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI19_E	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI19_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI19_W	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI19_W	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI19_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_W	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI19_W	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI19_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI19_W	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI19_W	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI19_W	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI19_W	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI19_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI19_W	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI19_W	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI19_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI19_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI19_W	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI19_W	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI19_W	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI19_W	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI19_W	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI19_W	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI19_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI19_W	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI19_W	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI20_E	0.75	20	0	1	4.36E-02	5.80E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI20_E	0.75	13	0	1	2.91E-02	3.86E-02	4.94E-05	6.68E-05	6.06E-05	1.51E-05	0.00E+00	8.81E-05	8.82E-05	1.08E-08	3.07E-06	11.7	1.02E-02	2.65E-04
SI20_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI20_E	0.75	8	0	1	1.82E-02	2.41E-02	3.09E-05	4.18E-05	3.79E-05	9.46E-06	0.00E+00	5.51E-05	5.51E-05	6.72E-09	1.92E-06	7.3	6.35E-03	1.65E-04
SI20_E	0.75	12	0	1	2.54E-02	3.38E-02	4.33E-05	5.85E-05	5.30E-05	1.32E-05	0.00E+00	7.71E-05	7.72E-05	9.41E-09	2.69E-06	10.2	8.89E-03	2.31E-04
SI20_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI20_E	0.75	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.4	6.48E-02	1.69E-03
SI20_E	0.75	130	0	1	2.84E-01	3.77E-01	4.82E-04	6.52E-04	5.91E-04	1.48E-04	0.00E+00	8.59E-04	8.60E-04	1.05E-07	3.00E-05	113.8	9.91E-02	2.58E-03
SI20_E	0.75	105	0	1	2.29E-01	3.04E-01	3.89E-04	5.26E-04	4.77E-04	1.19E-04	0.00E+00	6.94E-04	6.95E-04	8.47E-08	2.42E-05	91.9	8.00E-02	2.08E-03
SI20_E	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.73E-04	6.99E-08	2.00E-05	75.8	6.61E-02	1.72E-03
SI20_E	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.93E-04	3.56E-04	8.89E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.5	5.97E-02	1.55E-03
SI20_E	0.75	89	0	1	1.93E-01	2.56E-01	3.28E-04	4.43E-04	4.02E-04	1.00E-04	0.00E+00	5.84E-04	5.85E-04	7.12E-08	2.04E-05	77.3	6.73E-02	1.75E-03
SI20_E	0.75	94	0	1	2.04E-01	2.70E-01	3.46E-04	4.68E-04	4.24E-04	1.06E-04	0.00E+00	6.17E-04	6.18E-04	7.53E-08	2.15E-05	81.7	7.12E-02	1.85E-03
SI20_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.29E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI20_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI20_E	0.75	107	0	1	2.33E-01	3.09E-01	3.96E-04	5.35E-04	4.85E-04	1.21E-04	0.00E+00	7.05E-04	7.06E-04	8.60E-08	2.46E-05	93.3	8.13E-02	2.12E-03
SI20_E	0.75	132	0	1	2.87E-01	3.82E-01	4.88E-04	6.60E-04	5.99E-04	1.50E-04	0.00E+00	8.70E-04	8.71E-04	1.06E-07	3.04E-05	115.2	1.00E-01	2.61E-03
SI20_E	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.10E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.27E-05	124.0	1.08E-01	2.81E-03
SI20_E	0.75	99	0	1	2.14E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.0	7.50E-02	1.95E-03
SI20_E	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.96E-04	7.38E-05	0.00E+00	4.30E-04	4.30E-04	5.24E-08	1.50E-05	56.9	4.96E-02	1.29E-03
SI20_E	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.76E-04	2.50E-04	6.24E-05	0.00E+00	3.64E-04	3.64E-04	4.44E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI20_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI20_E	0.75	38	0	1	8.36E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.54E-04	3.09E-08	8.84E-06	33.5	2.92E-02	7.61E-04
SI20_E	0.75	28	0	1	6.18E-02	8.21E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI20_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI20_W	0.75	14	0	1	3.08E-02	4.09E-02	5.23E-05	7.07E-05	6.41E-05	1.60E-05	0.00E+00	9.33E-05	9.34E-05	1.14E-08	3.25E-06	12.3	1.08E-02	2.80E-04
SI20_W	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.19E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.96E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI20_W	0.75	9	0	1	1.92E-02	2.55E-02	3.27E-05	4.42E-05	4.01E-05	1.00E-05	0.00E+00	5.83E-05	5.83E-05	7.11E-09	2.03E-06	7.7	6.72E-03	1.75E-04
SI20_W	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.19E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.96E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI20_W	0.75	30	0	1	6.54E-02	8.69E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.29E-02	5.95E-04
SI20_W	0.75	90	0	1	1.96E-01	2.61E-01	3.33E-04	4.51E-04	4.09E-04	1.02E-04	0.00E+00	5.95E-04	5.95E-04	7.25E-08	2.07E-05	78.7	6.86E-02	1.78E-03
SI20_W	0.75	138	0	1	3.00E-01	3.99E-01	5.10E-04	6.89E-04	6.25E-04	1.56E-04	0.00E+00	9.09E-04	9.10E-04	1.11E-07	3.17E-05	120.4	1.05E-01	2.73E-03
SI20_W	0.75	111	0	1	2.42E-01	3.22E-01	4.12E-04	5.57E-04	5.05E-04	1.26E-04	0.00E+00	7.34E-04	7.35E-04	8.96E-08	2.56E-05	97.2	8.47E-02	2.20E-03
SI20_W	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.06E-04	6.07E-04	7.40E-08	2.11E-05	80.2	6.99E-02	1.82E-03
SI20_W	0.75	83	0	1	1.81E-01	2.40E-01	3.07E-04	4.15E-04	3.77E-04	9.41E-05	0.00E+00	5.48E-04	5.48E-04	6.68E-08	1.91E-05	72.5	6.32E-02	1.64E-03
SI20_W	0.75	94	0	1	2.04E-01	2.71E-01	3.47E-04	4.68E-04	4.25E-04	1.06E-04	0.00E+00	6.18E-04	6.18E-04	7.54E-08	2.16E-05	81.8	7.12E-02	1.85E-03
SI20_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI20_W	0.75	101	0	1	2.19E-01	2.91E-01	3.73E-04	5.04E-04	4.57E-04	1.14E-04	0.00E+00	6.64E-04	6.65E-04	8.11E-08	2.32E-05	88.0	7.66E-02	1.99E-03
SI20_W	0.75	104	0	1	2.27E-01	3.01E-01	3.86E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.88E-04	6.88E-04	8.39E-08	2.40E-05	91.0	7.93E-02	2.06E-03
SI20_W	0.75	113	0	1	2.46E-01	3.27E-01	4.19E-04	5.66E-04	5.13E-04	1.28E-04	0.00E+00	7.46E-04	7.47E-04	9.10E-08	2.60E-05	98.8	8.60E-02	2.24E-03
SI20_W	0.75	140	0	1	3.04E-01	4.04E-01	5.17E-04	6.98E-04	6.33E-04	1.58E-04	0.00E+00	9.21E-04	9.22E-04	1.12E-07	3.21E-05	121.9	1.06E-01	2.76E-03
SI20_W	0.75	150	0	1	3.27E-01	4.34E-01	5.56E-04	7.51E-04	6.82E-04	1.70E-04	0.00E+00	9.91E-04	9.92E-04	1.21E-07	3.46E-05	131.2	1.14E-01	2.97E-03
SI20_W	0.75	104	0	1	2.27E-01	3.01E-01	3.86E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.88E-04	6.88E-04	8.39E-08	2.40E-05	91.0	7.93E-02	2.06E-03
SI20_W	0.75	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.45E-04	3.13E-04	7.81E-05	0.00E+00	4.55E-04	4.55E-04	5.55E-08	1.59E-05	60.2	5.24E-02	1.36E-03
SI20_W	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.61E-05	0.00E+00	3.85E-04	3.85E-04	4.69E-08	1.34E-05	50.9	4.44E-02	1.15E-03
SI20_W	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.25E-04	5.61E-05	0.00E+00	3.26E-04	3.27E-04	3.98E-08	1.14E-05	43.2	3.76E-02	9.80E-04
SI20_W	0.75	41	0	1	8.85E-02	1.18E-01	1.50E-04	2.03E-04	1.84E-04	4.61E-05	0.00E+00	2.68E-04	2.68E-04	3.27E-08	9.35E-06	35.5	3.09E-02	8.05E-04
SI20_W	0.75	30	0	1	6.54E-02	8.69E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.29E-02	5.95E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI21_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI21_E	0.75	14	0	1	3.08E-02	4.09E-02	5.23E-05	7.07E-05	6.41E-05	1.60E-05	0.00E+00	9.33E-05	9.34E-05	1.14E-08	3.25E-06	12.3	1.08E-02	2.80E-04
SI21_E	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.19E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.96E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI21_E	0.75	9	0	1	1.92E-02	2.55E-02	3.27E-05	4.42E-05	4.01E-05	1.00E-05	0.00E+00	5.83E-05	5.83E-05	7.11E-09	2.03E-06	7.7	6.72E-03	1.75E-04
SI21_E	0.75	12	0	1	2.69E-02	3.58E-02	4.58E-05	6.19E-05	5.61E-05	1.40E-05	0.00E+00	8.16E-05	8.17E-05	9.96E-09	2.85E-06	10.8	9.41E-03	2.45E-04
SI21_E	0.75	30	0	1	6.54E-02	8.69E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.29E-02	5.95E-04
SI21_E	0.75	90	0	1	1.96E-01	2.61E-01	3.33E-04	4.51E-04	4.09E-04	1.02E-04	0.00E+00	5.95E-04	5.95E-04	7.25E-08	2.07E-05	78.7	6.86E-02	1.78E-03
SI21_E	0.75	138	0	1	3.00E-01	3.99E-01	5.10E-04	6.89E-04	6.25E-04	1.56E-04	0.00E+00	9.09E-04	9.10E-04	1.11E-07	3.17E-05	120.4	1.05E-01	2.73E-03
SI21_E	0.75	111	0	1	2.42E-01	3.22E-01	4.12E-04	5.57E-04	5.05E-04	1.26E-04	0.00E+00	7.34E-04	7.35E-04	8.96E-08	2.56E-05	97.2	8.47E-02	2.20E-03
SI21_E	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.06E-04	6.07E-04	7.40E-08	2.11E-05	80.2	6.99E-02	1.82E-03
SI21_E	0.75	83	0	1	1.81E-01	2.40E-01	3.07E-04	4.15E-04	3.77E-04	9.41E-05	0.00E+00	5.48E-04	5.48E-04	6.68E-08	1.91E-05	72.5	6.32E-02	1.64E-03
SI21_E	0.75	94	0	1	2.04E-01	2.71E-01	3.47E-04	4.68E-04	4.25E-04	1.06E-04	0.00E+00	6.18E-04	6.18E-04	7.54E-08	2.16E-05	81.8	7.12E-02	1.85E-03
SI21_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.53E-04	6.53E-04	7.96E-08	2.28E-05	86.4	7.53E-02	1.96E-03
SI21_E	0.75	101	0	1	2.19E-01	2.91E-01	3.73E-04	5.04E-04	4.57E-04	1.14E-04	0.00E+00	6.64E-04	6.65E-04	8.11E-08	2.32E-05	88.0	7.66E-02	1.99E-03
SI21_E	0.75	104	0	1	2.27E-01	3.01E-01	3.86E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.88E-04	6.88E-04	8.39E-08	2.40E-05	91.0	7.93E-02	2.06E-03
SI21_E	0.75	113	0	1	2.46E-01	3.27E-01	4.19E-04	5.66E-04	5.13E-04	1.28E-04	0.00E+00	7.46E-04	7.47E-04	9.10E-08	2.60E-05	98.8	8.60E-02	2.24E-03
SI21_E	0.75	140	0	1	3.04E-01	4.04E-01	5.17E-04	6.98E-04	6.33E-04	1.58E-04	0.00E+00	9.21E-04	9.22E-04	1.12E-07	3.21E-05	121.9	1.06E-01	2.76E-03
SI21_E	0.75	150	0	1	3.27E-01	4.34E-01	5.56E-04	7.51E-04	6.82E-04	1.70E-04	0.00E+00	9.91E-04	9.92E-04	1.21E-07	3.46E-05	131.2	1.14E-01	2.97E-03
SI21_E	0.75	104	0	1	2.27E-01	3.01E-01	3.86E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.88E-04	6.88E-04	8.39E-08	2.40E-05	91.0	7.93E-02	2.06E-03
SI21_E	0.75	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.45E-04	3.13E-04	7.81E-05	0.00E+00	4.55E-04	4.55E-04	5.55E-08	1.59E-05	60.2	5.24E-02	1.36E-03
SI21_E	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.61E-05	0.00E+00	3.85E-04	3.85E-04	4.69E-08	1.34E-05	50.9	4.44E-02	1.15E-03
SI21_E	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.25E-04	5.61E-05	0.00E+00	3.26E-04	3.27E-04	3.98E-08	1.14E-05	43.2	3.76E-02	9.80E-04
SI21_E	0.75	41	0	1	8.85E-02	1.18E-01	1.50E-04	2.03E-04	1.84E-04	4.61E-05	0.00E+00	2.68E-04	2.68E-04	3.27E-08	9.35E-06	35.5	3.09E-02	8.05E-04
SI21_E	0.75	30	0	1	6.54E-02	8.69E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.29E-02	5.95E-04
SI21_W	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI21_W	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI21_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI21_W	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI21_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI21_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI21_W	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI21_W	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI21_W	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI21_W	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI21_W	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI21_W	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI21_W	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI21_W	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI21_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI21_W	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI21_W	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI21_W	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03
SI21_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI21_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI21_W	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI21_W	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI21_W	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI21_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI22_E	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI22_E	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI22_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI22_E	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI22_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI22_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI22_E	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI22_E	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI22_E	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI22_E	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI22_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI22_E	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI22_E	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI22_E	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI22_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI22_E	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI22_E	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI22_E	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03
SI22_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI22_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI22_E	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI22_E	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI22_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI22_W	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI22_W	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI22_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI22_W	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI22_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI22_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI22_W	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI22_W	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI22_W	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI22_W	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI22_W	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI22_W	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI22_W	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI22_W	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI22_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI22_W	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI22_W	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI22_W	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03
SI22_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI22_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI22_W	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI22_W	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI22_W	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI22_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI23_E	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI23_E	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI23_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI23_E	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI23_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI23_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI23_E	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI23_E	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI23_E	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI23_E	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI23_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI23_E	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI23_E	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI23_E	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI23_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI23_E	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI23_E	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI23_E	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03
SI23_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI23_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI23_E	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI23_E	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI23_E	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI23_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI23_W	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI23_W	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI23_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI23_W	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI23_W	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI23_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI23_W	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI23_W	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI23_W	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI23_W	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI23_W	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI23_W	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI23_W	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI23_W	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI23_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI23_W	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI23_W	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI23_W	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI23_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI23_W	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI23_W	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI23_W	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI23_W	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI24_E	0.75	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI24_E	0.75	10	0	1	2.17E-02	2.89E-02	3.69E-05	4.99E-05	4.53E-05	1.13E-05	0.00E+00	6.58E-05	6.59E-05	8.03E-09	2.30E-06	8.7	7.59E-03	1.98E-04
SI24_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI24_E	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.07E-06	0.00E+00	4.12E-05	4.12E-05	5.02E-09	1.44E-06	5.4	4.75E-03	1.24E-04
SI24_E	0.75	9	0	1	1.90E-02	2.53E-02	3.23E-05	4.37E-05	3.96E-05	9.90E-06	0.00E+00	5.76E-05	5.77E-05	7.03E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI24_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI24_E	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.89E-04	7.21E-05	0.00E+00	4.20E-04	4.20E-04	5.12E-08	1.46E-05	55.6	4.84E-02	1.26E-03
SI24_E	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.83E-08	2.24E-05	85.0	7.40E-02	1.93E-03
SI24_E	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.57E-04	8.91E-05	0.00E+00	5.19E-04	5.19E-04	6.33E-08	1.81E-05	68.6	5.98E-02	1.56E-03
SI24_E	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.7	4.94E-02	1.28E-03
SI24_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.87E-04	3.87E-04	4.72E-08	1.35E-05	51.2	4.46E-02	1.16E-03
SI24_E	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI24_E	0.75	70	0	1	1.52E-01	2.02E-01	2.59E-04	3.49E-04	3.17E-04	7.92E-05	0.00E+00	4.61E-04	4.61E-04	5.62E-08	1.61E-05	61.0	5.32E-02	1.38E-03
SI24_E	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.72E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI24_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI24_E	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.05E-05	0.00E+00	5.27E-04	5.27E-04	6.43E-08	1.84E-05	69.7	6.07E-02	1.58E-03
SI24_E	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.51E-04	7.93E-08	2.27E-05	86.1	7.50E-02	1.95E-03
SI24_E	0.75	106	0	1	2.31E-01	3.07E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	7.00E-04	7.00E-04	8.53E-08	2.44E-05	92.6	8.07E-02	2.10E-03
SI24_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.92E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI24_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.63E-04
SI24_E	0.75	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI24_E	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI24_E	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.1	2.18E-02	5.68E-04
SI24_E	0.75	21	0	1	4.62E-02	6.13E-02	7.85E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI24_W	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI24_W	0.75	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI24_W	0.75	13	0	1	2.89E-02	3.84E-02	4.92E-05	6.64E-05	6.03E-05	1.51E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI24_W	0.75	9	0	1	2.07E-02	2.74E-02	3.51E-05	4.75E-05	4.30E-05	1.08E-05	0.00E+00	6.26E-05	6.27E-05	7.64E-09	2.18E-06	8.3	7.22E-03	1.88E-04
SI24_W	0.75	13	0	1	2.89E-02	3.84E-02	4.92E-05	6.64E-05	6.03E-05	1.51E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI24_W	0.75	32	0	1	7.02E-02	9.33E-02	1.19E-04	1.61E-04	1.46E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.39E-04
SI24_W	0.75	97	0	1	2.11E-01	2.80E-01	3.58E-04	4.84E-04	4.39E-04	1.10E-04	0.00E+00	6.38E-04	6.39E-04	7.79E-08	2.23E-05	84.5	7.36E-02	1.92E-03
SI24_W	0.75	148	0	1	3.22E-01	4.28E-01	5.48E-04	7.40E-04	6.72E-04	1.68E-04	0.00E+00	9.76E-04	9.77E-04	1.19E-07	3.41E-05	129.2	1.13E-01	2.93E-03
SI24_W	0.75	120	0	1	2.60E-01	3.46E-01	4.42E-04	5.98E-04	5.42E-04	1.35E-04	0.00E+00	7.89E-04	7.89E-04	9.62E-08	2.75E-05	104.4	9.09E-02	2.37E-03
SI24_W	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.48E-04	1.12E-04	0.00E+00	6.51E-04	6.52E-04	7.94E-08	2.27E-05	86.2	7.51E-02	1.95E-03
SI24_W	0.75	89	0	1	1.94E-01	2.58E-01	3.30E-04	4.46E-04	4.05E-04	1.01E-04	0.00E+00	5.88E-04	5.89E-04	7.18E-08	2.05E-05	77.9	6.78E-02	1.77E-03
SI24_W	0.75	101	0	1	2.19E-01	2.91E-01	3.72E-04	5.03E-04	4.56E-04	1.14E-04	0.00E+00	6.63E-04	6.64E-04	8.09E-08	2.31E-05	87.8	7.65E-02	1.99E-03
SI24_W	0.75	106	0	1	2.31E-01	3.07E-01	3.93E-04	5.31E-04	4.82E-04	1.20E-04	0.00E+00	7.01E-04	7.02E-04	8.55E-08	2.45E-05	92.8	8.08E-02	2.10E-03
SI24_W	0.75	108	0	1	2.35E-01	3.13E-01	4.00E-04	5.41E-04	4.91E-04	1.23E-04	0.00E+00	7.14E-04	7.14E-04	8.70E-08	2.49E-05	94.4	8.23E-02	2.14E-03
SI24_W	0.75	112	0	1	2.44E-01	3.24E-01	4.14E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.39E-04	9.01E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI24_W	0.75	121	0	1	2.64E-01	3.51E-01	4.49E-04	6.07E-04	5.51E-04	1.38E-04	0.00E+00	8.01E-04	8.02E-04	9.77E-08	2.79E-05	106.0	9.24E-02	2.40E-03
SI24_W	0.75	150	0	1	3.26E-01	4.33E-01	5.55E-04	7.50E-04	6.80E-04	1.70E-04	0.00E+00	9.89E-04	9.90E-04	1.21E-07	3.45E-05	130.9	1.14E-01	2.97E-03
SI24_W	0.75	161	0	1	3.51E-01	4.66E-01	5.97E-04	8.07E-04	7.32E-04	1.83E-04	0.00E+00	1.06E-03	1.07E-03	1.30E-07	3.71E-05	140.8	1.23E-01	3.19E-03
SI24_W	0.75	112	0	1	2.44E-01	3.24E-01	4.14E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.39E-04	9.01E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI24_W	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.39E-05	0.00E+00	4.88E-04	4.89E-04	5.96E-08	1.70E-05	64.6	5.63E-02	1.47E-03
SI24_W	0.75	63	0	1	1.36E-01	1.81E-01	2.32E-04	3.13E-04	2.84E-04	7.10E-05	0.00E+00	4.13E-04	4.14E-04	5.04E-08	1.44E-05	54.7	4.76E-02	1.24E-03
SI24_W	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI24_W	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.64E-04
SI24_W	0.75	32	0	1	7.02E-02	9.33E-02	1.19E-04	1.61E-04	1.46E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.39E-04
SI25_E	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI25_E	0.75	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI25_E	0.75	13	0	1	2.89E-02	3.84E-02	4.92E-05	6.64E-05	6.03E-05	1.51E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI25_E	0.75	9	0	1	2.07E-02	2.74E-02	3.51E-05	4.75E-05	4.30E-05	1.08E-05	0.00E+00	6.26E-05	6.27E-05	7.64E-09	2.18E-06	8.3	7.22E-03	1.88E-04
SI25_E	0.75	13	0	1	2.89E-02	3.84E-02	4.92E-05	6.64E-05	6.03E-05	1.51E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI25_E	0.75	32	0	1	7.02E-02	9.33E-02	1.19E-04	1.61E-04	1.46E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.39E-04
SI25_E	0.75	97	0	1	2.11E-01	2.80E-01	3.58E-04	4.84E-04	4.39E-04	1.10E-04	0.00E+00	6.38E-04	6.39E-04	7.79E-08	2.23E-05	84.5	7.36E-02	1.92E-03
SI25_E	0.75	148	0	1	3.22E-01	4.28E-01	5.48E-04	7.40E-04	6.72E-04	1.68E-04	0.00E+00	9.76E-04	9.77E-04	1.19E-07	3.41E-05	129.2	1.13E-01	2.93E-03
SI25_E	0.75	120	0	1	2.60E-01	3.46E-01	4.42E-04	5.98E-04	5.42E-04	1.35E-04	0.00E+00	7.89E-04	7.89E-04	9.62E-08	2.75E-05	104.4	9.09E-02	2.37E-03
SI25_E	0.75	99	0	1	2.15E-01	2.85E-01	3.65E-04	4.93E-04	4.48E-04	1.12E-04	0.00E+00	6.51E-04	6.52E-04	7.94E-08	2.27E-05	86.2	7.51E-02	1.95E-03
SI25_E	0.75	89	0	1	1.94E-01	2.58E-01	3.30E-04	4.46E-04	4.05E-04	1.01E-04	0.00E+00	5.88E-04	5.89E-04	7.18E-08	2.05E-05	77.9	6.78E-02	1.77E-03
SI25_E	0.75	101	0	1	2.19E-01	2.91E-01	3.72E-04	5.03E-04	4.56E-04	1.14E-04	0.00E+00	6.63E-04	6.64E-04	8.09E-08	2.31E-05	87.8	7.65E-02	1.99E-03
SI25_E	0.75	106	0	1	2.31E-01	3.07E-01	3.93E-04	5.31E-04	4.82E-04	1.20E-04	0.00E+00	7.01E-04	7.02E-04	8.55E-08	2.45E-05	92.8	8.08E-02	2.10E-03
SI25_E	0.75	108	0	1	2.35E-01	3.13E-01	4.00E-04	5.41E-04	4.91E-04	1.23E-04	0.00E+00	7.14E-04	7.14E-04	8.70E-08	2.49E-05	94.4	8.23E-02	2.14E-03
SI25_E	0.75	112	0	1	2.44E-01	3.24E-01	4.14E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.39E-04	9.01E-08	2.58E-05	97.8	8.52E-02	2.22E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	121	0	1	2.64E-01	3.51E-01	4.49E-04	6.07E-04	5.51E-04	1.38E-04	0.00E+00	8.01E-04	8.02E-04	9.77E-08	2.79E-05	106.0	9.24E-02	2.40E-03
SI25_E	0.75	150	0	1	3.26E-01	4.33E-01	5.55E-04	7.50E-04	6.80E-04	1.70E-04	0.00E+00	9.89E-04	9.90E-04	1.21E-07	3.45E-05	130.9	1.14E-01	2.97E-03
SI25_E	0.75	161	0	1	3.51E-01	4.66E-01	5.97E-04	8.07E-04	7.32E-04	1.83E-04	0.00E+00	1.06E-03	1.07E-03	1.30E-07	3.71E-05	140.8	1.23E-01	3.19E-03
SI25_E	0.75	112	0	1	2.44E-01	3.24E-01	4.14E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.39E-04	9.01E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI25_E	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.39E-05	0.00E+00	4.88E-04	4.89E-04	5.96E-08	1.70E-05	64.6	5.63E-02	1.47E-03
SI25_E	0.75	63	0	1	1.36E-01	1.81E-01	2.32E-04	3.13E-04	2.84E-04	7.10E-05	0.00E+00	4.13E-04	4.14E-04	5.04E-08	1.44E-05	54.7	4.76E-02	1.24E-03
SI25_E	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI25_E	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.64E-04
SI25_E	0.75	32	0	1	7.02E-02	9.33E-02	1.19E-04	1.61E-04	1.46E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.39E-04
SI25_W	0.75	12	0	1	2.70E-02	3.59E-02	4.59E-05	6.20E-05	5.63E-05	1.40E-05	0.00E+00	8.18E-05	8.19E-05	9.98E-09	2.85E-06	10.8	9.43E-03	2.46E-04
SI25_W	0.75	8	0	1	1.80E-02	2.39E-02	3.06E-05	4.13E-05	3.75E-05	9.37E-06	0.00E+00	5.45E-05	5.46E-05	6.65E-09	1.90E-06	7.2	6.29E-03	1.64E-04
SI25_W	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.20E-06	0.00E+00	4.77E-05	4.78E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI25_W	0.75	5	0	1	1.12E-02	1.49E-02	1.91E-05	2.58E-05	2.34E-05	5.85E-06	0.00E+00	3.41E-05	3.41E-05	4.16E-09	1.19E-06	4.5	3.93E-03	1.02E-04
SI25_W	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.20E-06	0.00E+00	4.77E-05	4.78E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI25_W	0.75	18	0	1	3.82E-02	5.08E-02	6.50E-05	8.79E-05	7.97E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.41E-08	4.04E-06	15.3	1.34E-02	3.48E-04
SI25_W	0.75	53	0	1	1.15E-01	1.52E-01	1.95E-04	2.64E-04	2.39E-04	5.97E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.0	4.01E-02	1.04E-03
SI25_W	0.75	81	0	1	1.75E-01	2.33E-01	2.98E-04	4.03E-04	3.66E-04	9.13E-05	0.00E+00	5.32E-04	5.32E-04	6.49E-08	1.85E-05	70.4	6.13E-02	1.60E-03
SI25_W	0.75	65	0	1	1.42E-01	1.88E-01	2.41E-04	3.26E-04	2.95E-04	7.38E-05	0.00E+00	4.29E-04	4.30E-04	5.24E-08	1.50E-05	56.8	4.95E-02	1.29E-03
SI25_W	0.75	54	0	1	1.17E-01	1.55E-01	1.99E-04	2.69E-04	2.44E-04	6.09E-05	0.00E+00	3.54E-04	3.55E-04	4.32E-08	1.24E-05	46.9	4.09E-02	1.06E-03
SI25_W	0.75	49	0	1	1.06E-01	1.40E-01	1.80E-04	2.43E-04	2.20E-04	5.50E-05	0.00E+00	3.20E-04	3.21E-04	3.91E-08	1.12E-05	42.4	3.69E-02	9.62E-04
SI25_W	0.75	55	0	1	1.19E-01	1.58E-01	2.03E-04	2.74E-04	2.48E-04	6.21E-05	0.00E+00	3.61E-04	3.62E-04	4.41E-08	1.26E-05	47.8	4.17E-02	1.08E-03
SI25_W	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.63E-04	6.56E-05	0.00E+00	3.82E-04	3.82E-04	4.66E-08	1.33E-05	50.5	4.40E-02	1.15E-03
SI25_W	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.95E-04	2.67E-04	6.67E-05	0.00E+00	3.89E-04	3.89E-04	4.74E-08	1.36E-05	51.4	4.48E-02	1.17E-03
SI25_W	0.75	61	0	1	1.33E-01	1.76E-01	2.26E-04	3.05E-04	2.77E-04	6.91E-05	0.00E+00	4.02E-04	4.03E-04	4.91E-08	1.40E-05	53.2	4.64E-02	1.21E-03
SI25_W	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.7	5.03E-02	1.31E-03
SI25_W	0.75	82	0	1	1.78E-01	2.36E-01	3.02E-04	4.08E-04	3.70E-04	9.25E-05	0.00E+00	5.39E-04	5.39E-04	6.57E-08	1.88E-05	71.3	6.21E-02	1.62E-03
SI25_W	0.75	88	0	1	1.91E-01	2.54E-01	3.25E-04	4.39E-04	3.99E-04	9.95E-05	0.00E+00	5.79E-04	5.80E-04	7.07E-08	2.02E-05	76.7	6.68E-02	1.74E-03
SI25_W	0.75	61	0	1	1.33E-01	1.76E-01	2.26E-04	3.05E-04	2.77E-04	6.91E-05	0.00E+00	4.02E-04	4.03E-04	4.91E-08	1.40E-05	53.2	4.64E-02	1.21E-03
SI25_W	0.75	40	0	1	8.77E-02	1.17E-01	1.49E-04	2.02E-04	1.83E-04	4.57E-05	0.00E+00	2.66E-04	2.66E-04	3.24E-08	9.27E-06	35.2	3.07E-02	7.98E-04
SI25_W	0.75	34	0	1	7.42E-02	9.86E-02	1.26E-04	1.71E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.85E-06	29.8	2.59E-02	6.75E-04
SI25_W	0.75	29	0	1	6.30E-02	8.37E-02	1.07E-04	1.45E-04	1.31E-04	3.28E-05	0.00E+00	1.91E-04	1.91E-04	2.33E-08	6.66E-06	25.3	2.20E-02	5.73E-04
SI25_W	0.75	24	0	1	5.17E-02	6.87E-02	8.79E-05	1.19E-04	1.08E-04	2.69E-05	0.00E+00	1.57E-04	1.57E-04	1.91E-08	5.47E-06	20.8	1.81E-02	4.71E-04
SI25_W	0.75	18	0	1	3.82E-02	5.08E-02	6.50E-05	8.79E-05	7.97E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.41E-08	4.04E-06	15.3	1.34E-02	3.48E-04
SI26_E	0.52	9	0	1	1.88E-02	2.49E-02	3.19E-05	4.31E-05	3.91E-05	9.77E-06	0.00E+00	5.69E-05	5.69E-05	6.94E-09	1.98E-06	7.5	6.56E-03	1.71E-04
SI26_E	0.52	6	0	1	1.25E-02	1.66E-02	2.13E-05	2.87E-05	2.61E-05	6.51E-06	0.00E+00	3.79E-05	3.80E-05	4.63E-09	1.32E-06	5.0	4.37E-03	1.14E-04
SI26_E	0.52	5	0	1	1.09E-02	1.45E-02	1.86E-05	2.51E-05	2.28E-05	5.70E-06	0.00E+00	3.32E-05	3.32E-05	4.05E-09	1.16E-06	4.4	3.83E-03	9.96E-05
SI26_E	0.52	4	0	1	7.82E-03	1.04E-02	1.33E-05	1.80E-05	1.63E-05	4.07E-06	0.00E+00	2.37E-05	2.37E-05	2.89E-09	8.27E-07	3.1	2.73E-03	7.11E-05
SI26_E	0.52	5	0	1	1.09E-02	1.45E-02	1.86E-05	2.51E-05	2.28E-05	5.70E-06	0.00E+00	3.32E-05	3.32E-05	4.05E-09	1.16E-06	4.4	3.83E-03	9.96E-05
SI26_E	0.52	12	0	1	2.66E-02	3.53E-02	4.52E-05	6.11E-05	5.54E-05	1.38E-05	0.00E+00	8.06E-05	8.06E-05	9.83E-09	2.81E-06	10.7	9.29E-03	2.42E-04
SI26_E	0.52	37	0	1	7.97E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.25E-04
SI26_E	0.52	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.35E-05	0.00E+00	3.70E-04	3.70E-04	4.51E-08	1.29E-05	48.9	4.26E-02	1.11E-03
SI26_E	0.52	45	0	1	9.85E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.96E-04
SI26_E	0.52	37	0	1	8.13E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.47E-04	3.01E-08	8.60E-06	32.6	2.84E-02	7.40E-04
SI26_E	0.52	34	0	1	7.35E-02	9.76E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.77E-06	29.5	2.57E-02	6.69E-04
SI26_E	0.52	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI26_E	0.52	40	0	1	8.76E-02	1.16E-01	1.49E-04	2.01E-04	1.83E-04	4.56E-05	0.00E+00	2.65E-04	2.66E-04	3.24E-08	9.26E-06	35.1	3.06E-02	7.97E-04
SI26_E	0.52	41	0	1	8.91E-02	1.18E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.30E-08	9.42E-06	35.8	3.12E-02	8.11E-04
SI26_E	0.52	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.80E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.75E-06	37.0	3.22E-02	8.39E-04
SI26_E	0.52	46	0	1	1.00E-01	1.33E-01	1.70E-04	2.30E-04	2.09E-04	5.21E-05	0.00E+00	3.03E-04	3.04E-04	3.70E-08	1.06E-05	40.1	3.50E-02	9.10E-04
SI26_E	0.52	57	0	1	1.24E-01	1.64E-01	2.10E-04	2.84E-04	2.58E-04	6.43E-05	0.00E+00	3.74E-04	3.75E-04	4.57E-08	1.31E-05	49.6	4.32E-02	1.12E-03
SI26_E	0.52	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.05E-04	2.77E-04	6.92E-05	0.00E+00	4.03E-04	4.03E-04	4.91E-08	1.41E-05	53.3	4.65E-02	1.21E-03
SI26_E	0.52	42	0	1	9.23E-02	1.23E-01	1.57E-04	2.12E-04	1.92E-04	4.80E-05	0.00E+00	2.80E-04	2.80E-04	3.41E-08	9.75E-06	37.0	3.22E-02	8.39E-04
SI26_E	0.52	28	0	1	6.10E-02	8.10E-02	1.04E-04	1.40E-04	1.27E-04	3.17E-05	0.00E+00	1.85E-04	1.85E-04	2.25E-08	6.45E-06	24.5	2.13E-02	5.55E-04
SI26_E	0.52	24	0	1	5.16E-02	6.85E-02	8.77E-05	1.19E-04	1.08E-04	2.69E-05	0.00E+00	1.56E-04	1.57E-04	1.91E-08	5.46E-06	20.7	1.80E-02	4.69E-04
SI26_E	0.52	20	0	1	4.38E-02	5.82E-02	7.44E-05	1.01E-04	9.13E-05	2.28E-05	0.00E+00	1.33E-04	1.33E-04	1.62E-08	4.63E-06	17.6	1.53E-02	3.98E-04
SI26_E	0.52	17	0	1	3.60E-02	4.78E-02	6.11E-05	8.26E-05	7.50E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.80E-06	14.4	1.26E-02	3.27E-04
SI26_E	0.52	12	0	1	2.66E-02	3.53E-02	4.52E-05	6.11E-05	5.54E-05	1.38E-05	0.00E+00	8.06E-05	8.06E-05	9.83E-09	2.81E-06	10.7	9.29E-03	2.42E-04
SI26_W	0.49	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.75E-05	4.31E-05	1.08E-05	0.00E+00	6.27E-05	6.28E-05	7.65E-09	2.19E-06	8.3	7.23E-03	1.88E-04
SI26_W	0.49	6	0	1	1.38E-02	1.83E-02	2.34E-05	3.17E-05	2.87E-05	7.18E-06	0.00E+00	4.18E-05	4.18E-05	5.10E-09	1.46E-06	5.5	4.82E-03	1.25E-04
SI26_W	0.49	6	0	1	1.21E-02	1.60E-02	2.05E-05	2.77E-05	2.52E-05	6.28E-06	0.00E+00	3.66E-05	3.66E-05	4.46E-09	1.28E-06	4.8	4.22E-03	1.10E-04
SI26_W	0.49	4	0	1	8.62E-03	1.14E-02	1.47E-05	1.98E-05	1.80E-05	4.49E-06	0.00E+00	2.61E-05	2.61E-05	3.19E-09	9.11E-07	3.5	3.01E-03	7.84E-05
SI26_W	0.49	6	0	1	1.21E-02	1.60E-02	2.05E-05	2.77E-05	2.52E-05	6.28E-06	0.00E+00	3.66E-05	3.66E-05	4.46E-09	1.28E-06	4.8	4.22E-03	1.10E-04
SI26_W	0.49	13	0	1	2.93E-02	3.89E-02	4.98E-05	6.73E-05	6.11E-05	1.53E-05	0.00E+00	8.88E-05	8.89E-05	1.08E-08	3.10E-06	11.8	1.02E-02	2.67E-04
SI26_W	0.49	40	0	1	8.79E-02	1.17E-01	1.49E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.66E-04	2.67E-04	3.25E-08	9.29E-06	35.3	3.07E-02	8.00E-04
SI26_W	0.49	62	0	1	1.34E-01	1.79E-01	2.29E-04	3.09E-04	2.80E-04	7.00E-05	0.00E+00	4.07E-04	4.08E-04	4.97E-08	1.42E-05	53.9	4.70E-02	1.22E-03
SI26_W	0.49	50	0	1	1.09E-01	1.44E-01	1.85E-04	2.50E-04	2.26E-04	5.65E-05	0.00E+00	3.29E-04	3.29E-04	4.02E-08	1.15E-05	43.6	3.80E-02	9.88E-04
SI26_W	0.49	41	0	1	8.96E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.31E-08	9.48E-06	36.0	3.13E-02	8.15E-04
SI26_W	0.49	37	0	1	8.10E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.22E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.57E-06	32.5	2.83E-02	7.37E-04
SI26_W	0.49	42	0	1	9.14E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.76E-05	0.00E+00	2.77E-04	2.77E-04	3.38E-08	9.66E-06	36.7	3.19E-02	8.31E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	44	0	1	9.65E-02	1.28E-01	1.64E-04	2.22E-04	2.01E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.57E-08	1.02E-05	38.7	3.37E-02	8.78E-04
SI26_W	0.49	45	0	1	9.83E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.11E-05	0.00E+00	2.98E-04	2.98E-04	3.63E-08	1.04E-05	39.4	3.43E-02	8.94E-04
SI26_W	0.49	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.29E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.55E-02	9.25E-04
SI26_W	0.49	51	0	1	1.10E-01	1.47E-01	1.88E-04	2.53E-04	2.30E-04	5.74E-05	0.00E+00	3.34E-04	3.35E-04	4.08E-08	1.17E-05	44.3	3.86E-02	1.00E-03
SI26_W	0.49	63	0	1	1.36E-01	1.81E-01	2.32E-04	3.13E-04	2.84E-04	7.09E-05	0.00E+00	4.13E-04	4.13E-04	5.04E-08	1.44E-05	54.6	4.76E-02	1.24E-03
SI26_W	0.49	67	0	1	1.47E-01	1.95E-01	2.49E-04	3.37E-04	3.05E-04	7.63E-05	0.00E+00	4.44E-04	4.45E-04	5.42E-08	1.55E-05	58.8	5.12E-02	1.33E-03
SI26_W	0.49	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.29E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.55E-02	9.25E-04
SI26_W	0.49	31	0	1	6.72E-02	8.93E-02	1.14E-04	1.54E-04	1.40E-04	3.50E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.11E-06	27.0	2.35E-02	6.12E-04
SI26_W	0.49	26	0	1	5.69E-02	7.56E-02	9.67E-05	1.31E-04	1.19E-04	2.96E-05	0.00E+00	1.72E-04	1.73E-04	2.10E-08	6.01E-06	22.8	1.99E-02	5.17E-04
SI26_W	0.49	22	0	1	4.83E-02	6.41E-02	8.21E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI26_W	0.49	18	0	1	3.96E-02	5.27E-02	6.74E-05	9.11E-05	8.26E-05	2.06E-05	0.00E+00	1.20E-04	1.20E-04	1.47E-08	4.19E-06	15.9	1.39E-02	3.61E-04
SI26_W	0.49	13	0	1	2.93E-02	3.89E-02	4.98E-05	6.73E-05	6.11E-05	1.53E-05	0.00E+00	8.88E-05	8.89E-05	1.08E-08	3.10E-06	11.8	1.02E-02	2.67E-04
SI27_E	0.61	12	0	1	2.62E-02	3.48E-02	4.45E-05	6.01E-05	5.45E-05	1.36E-05	0.00E+00	7.93E-05	7.94E-05	9.67E-09	2.77E-06	10.5	9.14E-03	2.38E-04
SI27_E	0.61	8	0	1	1.74E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.08E-06	0.00E+00	5.29E-05	5.29E-05	6.45E-09	1.84E-06	7.0	6.10E-03	1.59E-04
SI27_E	0.61	7	0	1	1.53E-02	2.03E-02	2.59E-05	3.51E-05	3.18E-05	7.94E-06	0.00E+00	4.63E-05	4.63E-05	5.64E-09	1.61E-06	6.1	5.33E-03	1.39E-04
SI27_E	0.61	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.67E-06	0.00E+00	3.30E-05	3.31E-05	4.03E-09	1.15E-06	4.4	3.81E-03	9.92E-05
SI27_E	0.61	7	0	1	1.53E-02	2.03E-02	2.59E-05	3.51E-05	3.18E-05	7.94E-06	0.00E+00	4.63E-05	4.63E-05	5.64E-09	1.61E-06	6.1	5.33E-03	1.39E-04
SI27_E	0.61	17	0	1	3.71E-02	4.92E-02	6.30E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI27_E	0.61	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.55E-04	2.32E-04	5.79E-05	0.00E+00	3.37E-04	3.37E-04	4.11E-08	1.18E-05	44.6	3.89E-02	1.01E-03
SI27_E	0.61	78	0	1	1.70E-01	2.26E-01	2.89E-04	3.91E-04	3.54E-04	8.85E-05	0.00E+00	5.15E-04	5.16E-04	6.29E-08	1.80E-05	68.2	5.94E-02	1.55E-03
SI27_E	0.61	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.16E-04	2.86E-04	7.15E-05	0.00E+00	4.16E-04	4.17E-04	5.08E-08	1.45E-05	55.1	4.80E-02	1.25E-03
SI27_E	0.61	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.60E-04	2.36E-04	5.90E-05	0.00E+00	3.44E-04	3.44E-04	4.19E-08	1.20E-05	45.5	3.96E-02	1.03E-03
SI27_E	0.61	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.14E-04	5.33E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.1	3.58E-02	9.32E-04
SI27_E	0.61	53	0	1	1.16E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.51E-04	4.27E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI27_E	0.61	56	0	1	1.22E-01	1.62E-01	2.08E-04	2.81E-04	2.54E-04	6.36E-05	0.00E+00	3.70E-04	3.70E-04	4.51E-08	1.29E-05	49.0	4.27E-02	1.11E-03
SI27_E	0.61	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.86E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.9	4.34E-02	1.13E-03
SI27_E	0.61	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.90E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI27_E	0.61	64	0	1	1.40E-01	1.85E-01	2.37E-04	3.21E-04	2.91E-04	7.26E-05	0.00E+00	4.23E-04	4.23E-04	5.16E-08	1.48E-05	56.0	4.88E-02	1.27E-03
SI27_E	0.61	79	0	1	1.72E-01	2.29E-01	2.93E-04	3.96E-04	3.59E-04	8.97E-05	0.00E+00	5.22E-04	5.22E-04	6.37E-08	1.82E-05	69.1	6.02E-02	1.57E-03
SI27_E	0.61	85	0	1	1.85E-01	2.46E-01	3.15E-04	4.26E-04	3.86E-04	9.65E-05	0.00E+00	5.62E-04	5.62E-04	6.85E-08	1.96E-05	74.3	6.48E-02	1.69E-03
SI27_E	0.61	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.68E-04	6.70E-05	0.00E+00	3.90E-04	3.90E-04	4.76E-08	1.36E-05	51.6	4.50E-02	1.17E-03
SI27_E	0.61	39	0	1	8.50E-02	1.13E-01	1.45E-04	1.95E-04	1.77E-04	4.43E-05	0.00E+00	2.58E-04	2.58E-04	3.14E-08	8.99E-06	34.1	2.97E-02	7.73E-04
SI27_E	0.61	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI27_E	0.61	28	0	1	6.10E-02	8.11E-02	1.04E-04	1.40E-04	1.27E-04	3.18E-05	0.00E+00	1.85E-04	1.85E-04	2.26E-08	6.45E-06	24.5	2.13E-02	5.55E-04
SI27_E	0.61	23	0	1	5.01E-02	6.66E-02	8.52E-05	1.15E-04	1.05E-04	2.61E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.30E-06	20.1	1.75E-02	4.56E-04
SI27_E	0.61	17	0	1	3.71E-02	4.92E-02	6.30E-05	8.52E-05	7.73E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.92E-06	14.9	1.30E-02	3.37E-04
SI27_W	0.66	7	0	1	1.52E-02	2.02E-02	2.59E-05	3.50E-05	3.17E-05	7.93E-06	0.00E+00	4.61E-05	4.62E-05	5.63E-09	1.61E-06	6.1	5.32E-03	1.39E-04
SI27_W	0.66	5	0	1	1.02E-02	1.35E-02	1.73E-05	2.33E-05	2.12E-05	5.28E-06	0.00E+00	3.08E-05	3.08E-05	3.75E-09	1.07E-06	4.1	3.55E-03	9.23E-05
SI27_W	0.66	4	0	1	8.88E-03	1.18E-02	1.51E-05	2.04E-05	1.85E-05	4.62E-06	0.00E+00	2.69E-05	2.69E-05	3.28E-09	9.39E-07	3.6	3.10E-03	8.08E-05
SI27_W	0.66	3	0	1	6.34E-03	8.43E-03	1.08E-05	1.46E-05	1.32E-05	3.30E-06	0.00E+00	1.92E-05	1.92E-05	2.35E-09	6.71E-07	2.5	2.22E-03	5.77E-05
SI27_W	0.66	4	0	1	8.88E-03	1.18E-02	1.51E-05	2.04E-05	1.85E-05	4.62E-06	0.00E+00	2.69E-05	2.69E-05	3.28E-09	9.39E-07	3.6	3.10E-03	8.08E-05
SI27_W	0.66	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.54E-05	6.54E-05	7.98E-09	2.28E-06	8.7	7.54E-03	1.96E-04
SI27_W	0.66	30	0	1	6.47E-02	8.60E-02	1.10E-04	1.49E-04	1.35E-04	3.37E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.84E-06	26.0	2.26E-02	5.89E-04
SI27_W	0.66	45	0	1	9.90E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.15E-05	0.00E+00	3.00E-04	3.00E-04	3.66E-08	1.05E-05	39.7	3.46E-02	9.00E-04
SI27_W	0.66	37	0	1	7.99E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.16E-05	0.00E+00	2.42E-04	2.43E-04	2.96E-08	8.45E-06	32.1	2.79E-02	7.27E-04
SI27_W	0.66	30	0	1	6.60E-02	8.77E-02	1.12E-04	1.52E-04	1.38E-04	3.43E-05	0.00E+00	2.00E-04	2.00E-04	2.44E-08	6.98E-06	26.5	2.31E-02	6.00E-04
SI27_W	0.66	27	0	1	5.96E-02	7.92E-02	1.01E-04	1.37E-04	1.24E-04	3.10E-05	0.00E+00	1.81E-04	1.81E-04	2.21E-08	6.31E-06	23.9	2.08E-02	5.43E-04
SI27_W	0.66	31	0	1	6.72E-02	8.93E-02	1.14E-04	1.55E-04	1.40E-04	3.50E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.11E-06	27.0	2.35E-02	6.12E-04
SI27_W	0.66	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.51E-06	28.5	2.48E-02	6.46E-04
SI27_W	0.66	33	0	1	7.23E-02	9.61E-02	1.23E-04	1.66E-04	1.51E-04	3.77E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.65E-06	29.0	2.53E-02	6.58E-04
SI27_W	0.66	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI27_W	0.66	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI27_W	0.66	46	0	1	1.00E-01	1.33E-01	1.70E-04	2.30E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.2	3.50E-02	9.12E-04
SI27_W	0.66	50	0	1	1.08E-01	1.43E-01	1.83E-04	2.48E-04	2.25E-04	5.61E-05	0.00E+00	3.27E-04	3.27E-04	3.99E-08	1.14E-05	43.3	3.77E-02	9.81E-04
SI27_W	0.66	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI27_W	0.66	23	0	1	4.95E-02	6.57E-02	8.41E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.23E-06	19.9	1.73E-02	4.50E-04
SI27_W	0.66	19	0	1	4.19E-02	5.56E-02	7.12E-05	9.62E-05	8.73E-05	2.18E-05	0.00E+00	1.27E-04	1.27E-04	1.55E-08	4.43E-06	16.8	1.46E-02	3.81E-04
SI27_W	0.66	16	0	1	3.55E-02	4.72E-02	6.04E-05	8.16E-05	7.41E-05	1.85E-05	0.00E+00	1.08E-04	1.08E-04	1.31E-08	3.76E-06	14.3	1.24E-02	3.23E-04
SI27_W	0.66	13	0	1	2.92E-02	3.88E-02	4.96E-05	6.71E-05	6.08E-05	1.52E-05	0.00E+00	8.85E-05	8.85E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.65E-04
SI27_W	0.66	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.54E-05	6.54E-05	7.98E-09	2.28E-06	8.7	7.54E-03	1.96E-04
SI28_E	0.55	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI28_E	0.55	4	0	1	8.50E-03	1.13E-02	1.44E-05	1.95E-05	1.77E-05	4.42E-06	0.00E+00	2.57E-05	2.58E-05	3.14E-09	8.98E-07	3.4	2.97E-03	7.73E-05
SI28_E	0.55	3	0	1	7.43E-03	9.88E-03	1.26E-05	1.71E-05	1.55E-05	3.87E-06	0.00E+00	2.25E-05	2.26E-05	2.75E-09	7.86E-07	3.0	2.60E-03	6.76E-05
SI28_E	0.55	2	0	1	5.31E-03	7.05E-03	9.03E-06	1.22E-05	1.11E-05	2.76E-06	0.00E+00	1.61E-05	1.61E-05	1.96E-09	5.61E-07	2.1	1.86E-03	4.83E-05
SI28_E	0.55	3	0	1	7.43E-03	9.88E-03	1.26E-05	1.71E-05	1.55E-05	3.87E-06	0.00E+00	2.25E-05	2.26E-05	2.75E-09	7.86E-07	3.0	2.60E-03	6.76E-05
SI28_E	0.55	8	0	1	1.81E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.40E-06	0.00E+00	5.47E-05	5.48E-05	6.68E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI28_E	0.55	25	0	1	5.42E-02	7.20E-02	9.21E-05	1.24E-04	1.13E-04	2.82E-05	0.00E+00	1.64E-04	1.64E-04	2.00E-08	5.73E-06	21.7	1.89E-02	4.93E-04
SI28_E	0.55	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI28_E	0.55	31	0	1	6.69E-02	8.89E-02	1.14E-04	1.54E-04	1.39E-04	3.48E-05	0.00E+00	2.03E-04	2.03E-04	2.47E-08	7.07E-06	26.8	2.34E-02	6.09E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI28_E	0.55	25	0	1	5.52E-02	7.34E-02	9.39E-05	1.27E-04	1.15E-04	2.87E-05	0.00E+00	1.67E-04	1.68E-04	2.04E-08	5.84E-06	22.2	1.93E-02	5.02E-04
SI28_E	0.55	23	0	1	4.99E-02	6.63E-02	8.49E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.51E-04	1.51E-04	1.85E-08	5.28E-06	20.0	1.74E-02	4.54E-04
SI28_E	0.55	26	0	1	5.63E-02	7.48E-02	9.57E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.71E-04	1.71E-04	2.08E-08	5.95E-06	22.6	1.97E-02	5.12E-04
SI28_E	0.55	27	0	1	5.95E-02	7.90E-02	1.01E-04	1.37E-04	1.24E-04	3.10E-05	0.00E+00	1.80E-04	1.80E-04	2.20E-08	6.29E-06	23.9	2.08E-02	5.41E-04
SI28_E	0.55	28	0	1	6.05E-02	8.04E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.83E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.12E-02	5.51E-04
SI28_E	0.55	29	0	1	6.27E-02	8.32E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.62E-06	25.1	2.19E-02	5.70E-04
SI28_E	0.55	31	0	1	6.80E-02	9.03E-02	1.16E-04	1.56E-04	1.42E-04	3.54E-05	0.00E+00	2.06E-04	2.06E-04	2.51E-08	7.19E-06	27.3	2.38E-02	6.18E-04
SI28_E	0.55	39	0	1	8.39E-02	1.11E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.54E-04	2.55E-04	3.10E-08	8.87E-06	33.7	2.93E-02	7.63E-04
SI28_E	0.55	41	0	1	9.03E-02	1.20E-01	1.53E-04	2.07E-04	1.88E-04	4.70E-05	0.00E+00	2.74E-04	2.74E-04	3.34E-08	9.54E-06	36.2	3.15E-02	8.21E-04
SI28_E	0.55	29	0	1	6.27E-02	8.32E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.62E-06	25.1	2.19E-02	5.70E-04
SI28_E	0.55	19	0	1	4.14E-02	5.50E-02	7.04E-05	9.52E-05	8.63E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.53E-08	4.38E-06	16.6	1.45E-02	3.77E-04
SI28_E	0.55	16	0	1	3.50E-02	4.66E-02	5.96E-05	8.05E-05	7.31E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.30E-08	3.71E-06	14.1	1.22E-02	3.19E-04
SI28_E	0.55	14	0	1	2.97E-02	3.95E-02	5.06E-05	6.83E-05	6.20E-05	1.55E-05	0.00E+00	9.01E-05	9.02E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.71E-04
SI28_E	0.55	11	0	1	2.44E-02	3.24E-02	4.15E-05	5.61E-05	5.09E-05	1.27E-05	0.00E+00	7.40E-05	7.41E-05	9.03E-09	2.58E-06	9.8	8.54E-03	2.22E-04
SI28_E	0.55	8	0	1	1.81E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.40E-06	0.00E+00	5.47E-05	5.48E-05	6.68E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI28_W	0.63	7	0	1	1.60E-02	2.13E-02	2.72E-05	3.68E-05	3.34E-05	8.34E-06	0.00E+00	4.86E-05	4.86E-05	5.92E-09	1.69E-06	6.4	5.60E-03	1.46E-04
SI28_W	0.63	5	0	1	1.07E-02	1.42E-02	1.82E-05	2.45E-05	2.23E-05	5.56E-06	0.00E+00	3.24E-05	3.24E-05	3.95E-09	1.13E-06	4.3	3.73E-03	9.72E-05
SI28_W	0.63	4	0	1	9.35E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.87E-06	0.00E+00	2.83E-05	2.84E-05	3.46E-09	9.88E-07	3.7	3.27E-03	8.50E-05
SI28_W	0.63	3	0	1	6.68E-03	8.87E-03	1.13E-05	1.53E-05	1.39E-05	3.48E-06	0.00E+00	2.02E-05	2.03E-05	2.47E-09	7.06E-07	2.7	2.33E-03	6.07E-05
SI28_W	0.63	4	0	1	9.35E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.87E-06	0.00E+00	2.83E-05	2.84E-05	3.46E-09	9.88E-07	3.7	3.27E-03	8.50E-05
SI28_W	0.63	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI28_W	0.63	31	0	1	6.81E-02	9.05E-02	1.16E-04	1.56E-04	1.42E-04	3.54E-05	0.00E+00	2.06E-04	2.07E-04	2.52E-08	7.20E-06	27.3	2.38E-02	6.19E-04
SI28_W	0.63	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.42E-05	0.00E+00	3.16E-04	3.16E-04	3.85E-08	1.10E-05	41.8	3.64E-02	9.47E-04
SI28_W	0.63	39	0	1	8.41E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.89E-06	33.7	2.94E-02	7.65E-04
SI28_W	0.63	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.60E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.11E-04	2.57E-08	7.34E-06	27.9	2.43E-02	6.32E-04
SI28_W	0.63	29	0	1	6.27E-02	8.34E-02	1.07E-04	1.44E-04	1.31E-04	3.27E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.2	2.19E-02	5.71E-04
SI28_W	0.63	33	0	1	7.08E-02	9.40E-02	1.20E-04	1.63E-04	1.48E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.62E-08	7.48E-06	28.4	2.47E-02	6.44E-04
SI28_W	0.63	34	0	1	7.48E-02	9.93E-02	1.27E-04	1.72E-04	1.56E-04	3.89E-05	0.00E+00	2.27E-04	2.27E-04	2.76E-08	7.90E-06	30.0	2.61E-02	6.80E-04
SI28_W	0.63	35	0	1	7.61E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.31E-04	2.31E-04	2.81E-08	8.05E-06	30.5	2.66E-02	6.92E-04
SI28_W	0.63	36	0	1	7.88E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.33E-06	31.6	2.75E-02	7.17E-04
SI28_W	0.63	39	0	1	8.54E-02	1.14E-01	1.45E-04	1.96E-04	1.78E-04	4.45E-05	0.00E+00	2.59E-04	2.59E-04	3.16E-08	9.03E-06	34.3	2.99E-02	7.77E-04
SI28_W	0.63	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.20E-04	3.20E-04	3.90E-08	1.12E-05	42.3	3.69E-02	9.59E-04
SI28_W	0.63	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.91E-05	0.00E+00	3.44E-04	3.44E-04	4.20E-08	1.20E-05	45.5	3.97E-02	1.03E-03
SI28_W	0.63	36	0	1	7.88E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.33E-06	31.6	2.75E-02	7.17E-04
SI28_W	0.63	24	0	1	5.21E-02	6.92E-02	8.85E-05	1.20E-04	1.09E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.51E-06	20.9	1.82E-02	4.74E-04
SI28_W	0.63	20	0	1	4.41E-02	5.85E-02	7.49E-05	1.01E-04	9.18E-05	2.29E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.66E-06	17.7	1.54E-02	4.01E-04
SI28_W	0.63	17	0	1	3.74E-02	4.97E-02	6.36E-05	8.59E-05	7.79E-05	1.95E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.95E-06	15.0	1.31E-02	3.40E-04
SI28_W	0.63	14	0	1	3.07E-02	4.08E-02	5.22E-05	7.06E-05	6.40E-05	1.60E-05	0.00E+00	9.31E-05	9.32E-05	1.14E-08	3.25E-06	12.3	1.07E-02	2.79E-04
SI28_W	0.63	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI29_E	0.75	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI29_E	0.75	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI29_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI29_E	0.75	4	0	1	7.96E-03	1.06E-02	1.35E-05	1.83E-05	1.66E-05	4.15E-06	0.00E+00	2.41E-05	2.42E-05	2.95E-09	8.42E-07	3.2	2.78E-03	7.25E-05
SI29_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI29_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI29_E	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI29_E	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.8	4.34E-02	1.13E-03
SI29_E	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.13E-04
SI29_E	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI29_E	0.75	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI29_E	0.75	39	0	1	8.44E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.12E-08	8.93E-06	33.9	2.95E-02	7.68E-04
SI29_E	0.75	41	0	1	8.92E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.71E-04	3.30E-08	9.43E-06	35.8	3.12E-02	8.12E-04
SI29_E	0.75	42	0	1	9.08E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.75E-04	3.36E-08	9.60E-06	36.4	3.17E-02	8.26E-04
SI29_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI29_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.27E-04
SI29_E	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.5	4.40E-02	1.14E-03
SI29_E	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.05E-05	0.00E+00	4.10E-04	4.11E-04	5.01E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI29_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI29_E	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.30E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.65E-04
SI29_E	0.75	24	0	1	5.26E-02	6.98E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI29_E	0.75	20	0	1	4.46E-02	5.93E-02	7.58E-05	1.02E-04	9.30E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.72E-06	17.9	1.56E-02	4.06E-04
SI29_E	0.75	17	0	1	3.66E-02	4.87E-02	6.23E-05	8.42E-05	7.64E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI29_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI29_W	0.75	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI29_W	0.75	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI29_W	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI29_W	0.75	4	0	1	7.96E-03	1.06E-02	1.35E-05	1.83E-05	1.66E-05	4.15E-06	0.00E+00	2.41E-05	2.42E-05	2.95E-09	8.42E-07	3.2	2.78E-03	7.25E-05
SI29_W	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI29_W	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_W	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI29_W	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.8	4.34E-02	1.13E-03
SI29_W	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.13E-04
SI29_W	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI29_W	0.75	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI29_W	0.75	39	0	1	8.44E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.12E-08	8.93E-06	33.9	2.95E-02	7.68E-04
SI29_W	0.75	41	0	1	8.92E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.71E-04	3.30E-08	9.43E-06	35.8	3.12E-02	8.12E-04
SI29_W	0.75	42	0	1	9.08E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.75E-04	3.36E-08	9.60E-06	36.4	3.17E-02	8.26E-04
SI29_W	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI29_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.27E-04
SI29_W	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.5	4.40E-02	1.14E-03
SI29_W	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.05E-05	0.00E+00	4.10E-04	4.11E-04	5.01E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI29_W	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI29_W	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.30E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.65E-04
SI29_W	0.75	24	0	1	5.26E-02	6.98E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI29_W	0.75	20	0	1	4.46E-02	5.93E-02	7.58E-05	1.02E-04	9.30E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.72E-06	17.9	1.56E-02	4.06E-04
SI29_W	0.75	17	0	1	3.66E-02	4.87E-02	6.23E-05	8.42E-05	7.64E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI29_W	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI30_E	0.75	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI30_E	0.75	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI30_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI30_E	0.75	4	0	1	7.96E-03	1.06E-02	1.35E-05	1.83E-05	1.66E-05	4.15E-06	0.00E+00	2.41E-05	2.42E-05	2.95E-09	8.42E-07	3.2	2.78E-03	7.25E-05
SI30_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI30_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI30_E	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI30_E	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.8	4.34E-02	1.13E-03
SI30_E	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.13E-04
SI30_E	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI30_E	0.75	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI30_E	0.75	39	0	1	8.44E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.12E-08	8.93E-06	33.9	2.95E-02	7.68E-04
SI30_E	0.75	41	0	1	8.92E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.71E-04	3.30E-08	9.43E-06	35.8	3.12E-02	8.12E-04
SI30_E	0.75	42	0	1	9.08E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.75E-04	3.36E-08	9.60E-06	36.4	3.17E-02	8.26E-04
SI30_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI30_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.27E-04
SI30_E	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.5	4.40E-02	1.14E-03
SI30_E	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.05E-05	0.00E+00	4.10E-04	4.11E-04	5.01E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI30_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI30_E	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.30E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.65E-04
SI30_E	0.75	24	0	1	5.26E-02	6.98E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI30_E	0.75	20	0	1	4.46E-02	5.93E-02	7.58E-05	1.02E-04	9.30E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.72E-06	17.9	1.56E-02	4.06E-04
SI30_E	0.75	17	0	1	3.66E-02	4.87E-02	6.23E-05	8.42E-05	7.64E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI30_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI30_W	0.75	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI30_W	0.75	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI30_W	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI30_W	0.75	4	0	1	7.96E-03	1.06E-02	1.35E-05	1.83E-05	1.66E-05	4.15E-06	0.00E+00	2.41E-05	2.42E-05	2.95E-09	8.42E-07	3.2	2.78E-03	7.25E-05
SI30_W	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI30_W	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI30_W	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI30_W	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.8	4.34E-02	1.13E-03
SI30_W	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.13E-04
SI30_W	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI30_W	0.75	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI30_W	0.75	39	0	1	8.44E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.12E-08	8.93E-06	33.9	2.95E-02	7.68E-04
SI30_W	0.75	41	0	1	8.92E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.71E-04	3.30E-08	9.43E-06	35.8	3.12E-02	8.12E-04
SI30_W	0.75	42	0	1	9.08E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.75E-04	3.36E-08	9.60E-06	36.4	3.17E-02	8.26E-04
SI30_W	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI30_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.27E-04
SI30_W	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.5	4.40E-02	1.14E-03
SI30_W	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.05E-05	0.00E+00	4.10E-04	4.11E-04	5.01E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI30_W	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI30_W	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.30E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.65E-04
SI30_W	0.75	24	0	1	5.26E-02	6.98E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI30_W	0.75	20	0	1	4.46E-02	5.93E-02	7.58E-05	1.02E-04	9.30E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.72E-06	17.9	1.56E-02	4.06E-04
SI30_W	0.75	17	0	1	3.66E-02	4.87E-02	6.23E-05	8.42E-05	7.64E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI30_W	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI31_E	0.75	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.95E-06	0.00E+00	5.79E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.68E-03	1.74E-04
SI31_E	0.75	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI31_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI31_E	0.75	4	0	1	7.96E-03	1.06E-02	1.35E-05	1.83E-05	1.66E-05	4.15E-06	0.00E+00	2.41E-05	2.42E-05	2.95E-09	8.42E-07	3.2	2.78E-03	7.25E-05
SI31_E	0.75	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.56E-05	2.32E-05	5.81E-06	0.00E+00	3.38E-05	3.38E-05	4.12E-09	1.18E-06	4.5	3.90E-03	1.01E-04
SI31_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI31_E	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.87E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.59E-06	32.6	2.84E-02	7.39E-04
SI31_E	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.47E-05	0.00E+00	3.77E-04	3.77E-04	4.59E-08	1.31E-05	49.8	4.34E-02	1.13E-03
SI31_E	0.75	46	0	1	1.00E-01	1.33E-01	1.71E-04	2.31E-04	2.09E-04	5.22E-05	0.00E+00	3.04E-04	3.04E-04	3.71E-08	1.06E-05	40.3	3.51E-02	9.13E-04
SI31_E	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI31_E	0.75	34	0	1	7.49E-02	9.95E-02	1.27E-04	1.72E-04	1.56E-04	3.90E-05	0.00E+00	2.27E-04	2.27E-04	2.77E-08	7.92E-06	30.0	2.62E-02	6.81E-04
SI31_E	0.75	39	0	1	8.44E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.12E-08	8.93E-06	33.9	2.95E-02	7.68E-04
SI31_E	0.75	41	0	1	8.92E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.71E-04	3.30E-08	9.43E-06	35.8	3.12E-02	8.12E-04
SI31_E	0.75	42	0	1	9.08E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.75E-04	3.36E-08	9.60E-06	36.4	3.17E-02	8.26E-04
SI31_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI31_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.09E-04	3.77E-08	1.08E-05	40.9	3.56E-02	9.27E-04
SI31_E	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.5	4.40E-02	1.14E-03
SI31_E	0.75	62	0	1	1.35E-01	1.80E-01	2.30E-04	3.11E-04	2.82E-04	7.05E-05	0.00E+00	4.10E-04	4.11E-04	5.01E-08	1.43E-05	54.3	4.73E-02	1.23E-03
SI31_E	0.75	43	0	1	9.40E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.48E-08	9.94E-06	37.7	3.28E-02	8.55E-04
SI31_E	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.30E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.65E-04
SI31_E	0.75	24	0	1	5.26E-02	6.98E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI31_E	0.75	20	0	1	4.46E-02	5.93E-02	7.58E-05	1.02E-04	9.30E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.72E-06	17.9	1.56E-02	4.06E-04
SI31_E	0.75	17	0	1	3.66E-02	4.87E-02	6.23E-05	8.42E-05	7.64E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI31_E	0.75	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.47E-03	2.46E-04
SI31_W	0.75	5	0	1	1.06E-02	1.41E-02	1.81E-05	2.44E-05	2.22E-05	5.54E-06	0.00E+00	3.22E-05	3.23E-05	3.93E-09	1.12E-06	4.3	3.72E-03	9.67E-05
SI31_W	0.75	3	0	1	7.09E-03	9.42E-03	1.21E-05	1.63E-05	1.48E-05	3.69E-06	0.00E+00	2.15E-05	2.15E-05	2.62E-09	7.50E-07	2.8	2.48E-03	6.45E-05
SI31_W	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI31_W	0.75	2	0	1	4.43E-03	5.89E-03	7.53E-06	1.02E-05	9.24E-06	2.31E-06	0.00E+00	1.34E-05	1.34E-05	1.64E-09	4.68E-07	1.8	1.55E-03	4.03E-05
SI31_W	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI31_W	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI31_W	0.75	21	0	1	4.52E-02	6.00E-02	7.68E-05	1.04E-04	9.42E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.78E-06	18.1	1.58E-02	4.11E-04
SI31_W	0.75	32	0	1	6.91E-02	9.18E-02	1.18E-04	1.59E-04	1.44E-04	3.60E-05	0.00E+00	2.09E-04	2.10E-04	2.56E-08	7.31E-06	27.7	2.42E-02	6.29E-04
SI31_W	0.75	26	0	1	5.58E-02	7.42E-02	9.49E-05	1.28E-04	1.16E-04	2.91E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.90E-06	22.4	1.95E-02	5.08E-04
SI31_W	0.75	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI31_W	0.75	19	0	1	4.16E-02	5.53E-02	7.08E-05	9.57E-05	8.68E-05	2.17E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.40E-06	16.7	1.46E-02	3.79E-04
SI31_W	0.75	22	0	1	4.70E-02	6.24E-02	7.98E-05	1.08E-04	9.79E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.74E-08	4.97E-06	18.8	1.64E-02	4.27E-04
SI31_W	0.75	23	0	1	4.96E-02	6.59E-02	8.44E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI31_W	0.75	23	0	1	5.05E-02	6.71E-02	8.59E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.87E-08	5.34E-06	20.3	1.77E-02	4.60E-04
SI31_W	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI31_W	0.75	26	0	1	5.67E-02	7.53E-02	9.64E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.10E-08	6.00E-06	22.8	1.98E-02	5.16E-04
SI31_W	0.75	32	0	1	7.00E-02	9.30E-02	1.19E-04	1.61E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.59E-08	7.40E-06	28.1	2.45E-02	6.37E-04
SI31_W	0.75	35	0	1	7.53E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.92E-05	0.00E+00	2.28E-04	2.29E-04	2.79E-08	7.96E-06	30.2	2.63E-02	6.85E-04
SI31_W	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI31_W	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.9	1.21E-02	3.14E-04
SI31_W	0.75	13	0	1	2.92E-02	3.88E-02	4.97E-05	6.72E-05	6.10E-05	1.52E-05	0.00E+00	8.86E-05	8.87E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI31_W	0.75	11	0	1	2.48E-02	3.30E-02	4.22E-05	5.70E-05	5.17E-05	1.29E-05	0.00E+00	7.52E-05	7.53E-05	9.17E-09	2.62E-06	10.0	8.67E-03	2.26E-04
SI31_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.68E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.18E-05	7.54E-09	2.15E-06	8.2	7.12E-03	1.85E-04
SI31_W	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI32_E	0.75	5	0	1	1.06E-02	1.41E-02	1.81E-05	2.44E-05	2.22E-05	5.54E-06	0.00E+00	3.22E-05	3.23E-05	3.93E-09	1.12E-06	4.3	3.72E-03	9.67E-05
SI32_E	0.75	3	0	1	7.09E-03	9.42E-03	1.21E-05	1.63E-05	1.48E-05	3.69E-06	0.00E+00	2.15E-05	2.15E-05	2.62E-09	7.50E-07	2.8	2.48E-03	6.45E-05
SI32_E	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI32_E	0.75	2	0	1	4.43E-03	5.89E-03	7.53E-06	1.02E-05	9.24E-06	2.31E-06	0.00E+00	1.34E-05	1.34E-05	1.64E-09	4.68E-07	1.8	1.55E-03	4.03E-05
SI32_E	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI32_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI32_E	0.75	21	0	1	4.52E-02	6.00E-02	7.68E-05	1.04E-04	9.42E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.78E-06	18.1	1.58E-02	4.11E-04
SI32_E	0.75	32	0	1	6.91E-02	9.18E-02	1.18E-04	1.59E-04	1.44E-04	3.60E-05	0.00E+00	2.09E-04	2.10E-04	2.56E-08	7.31E-06	27.7	2.42E-02	6.29E-04
SI32_E	0.75	26	0	1	5.58E-02	7.42E-02	9.49E-05	1.28E-04	1.16E-04	2.91E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.90E-06	22.4	1.95E-02	5.08E-04
SI32_E	0.75	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI32_E	0.75	19	0	1	4.16E-02	5.53E-02	7.08E-05	9.57E-05	8.68E-05	2.17E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.40E-06	16.7	1.46E-02	3.79E-04
SI32_E	0.75	22	0	1	4.70E-02	6.24E-02	7.98E-05	1.08E-04	9.79E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.74E-08	4.97E-06	18.8	1.64E-02	4.27E-04
SI32_E	0.75	23	0	1	4.96E-02	6.59E-02	8.44E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI32_E	0.75	23	0	1	5.05E-02	6.71E-02	8.59E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.87E-08	5.34E-06	20.3	1.77E-02	4.60E-04
SI32_E	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI32_E	0.75	26	0	1	5.67E-02	7.53E-02	9.64E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.10E-08	6.00E-06	22.8	1.98E-02	5.16E-04
SI32_E	0.75	32	0	1	7.00E-02	9.30E-02	1.19E-04	1.61E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.59E-08	7.40E-06	28.1	2.45E-02	6.37E-04
SI32_E	0.75	35	0	1	7.53E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.92E-05	0.00E+00	2.28E-04	2.29E-04	2.79E-08	7.96E-06	30.2	2.63E-02	6.85E-04
SI32_E	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI32_E	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.9	1.21E-02	3.14E-04
SI32_E	0.75	13	0	1	2.92E-02	3.88E-02	4.97E-05	6.72E-05	6.10E-05	1.52E-05	0.00E+00	8.86E-05	8.87E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI32_E	0.75	11	0	1	2.48E-02	3.30E-02	4.22E-05	5.70E-05	5.17E-05	1.29E-05	0.00E+00	7.52E-05	7.53E-05	9.17E-09	2.62E-06	10.0	8.67E-03	2.26E-04
SI32_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.68E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.18E-05	7.54E-09	2.15E-06	8.2	7.12E-03	1.85E-04
SI32_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_W	0.75	5	0	1	1.06E-02	1.41E-02	1.81E-05	2.44E-05	2.22E-05	5.54E-06	0.00E+00	3.22E-05	3.23E-05	3.93E-09	1.12E-06	4.3	3.72E-03	9.67E-05
SI32_W	0.75	3	0	1	7.09E-03	9.42E-03	1.21E-05	1.63E-05	1.48E-05	3.69E-06	0.00E+00	2.15E-05	2.15E-05	2.62E-09	7.50E-07	2.8	2.48E-03	6.45E-05
SI32_W	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI32_W	0.75	2	0	1	4.43E-03	5.89E-03	7.53E-06	1.02E-05	9.24E-06	2.31E-06	0.00E+00	1.34E-05	1.34E-05	1.64E-09	4.68E-07	1.8	1.55E-03	4.03E-05
SI32_W	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI32_W	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI32_W	0.75	21	0	1	4.52E-02	6.00E-02	7.68E-05	1.04E-04	9.42E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.78E-06	18.1	1.58E-02	4.11E-04
SI32_W	0.75	32	0	1	6.91E-02	9.18E-02	1.18E-04	1.59E-04	1.44E-04	3.60E-05	0.00E+00	2.09E-04	2.10E-04	2.56E-08	7.31E-06	27.7	2.42E-02	6.29E-04
SI32_W	0.75	26	0	1	5.58E-02	7.42E-02	9.49E-05	1.28E-04	1.16E-04	2.91E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.90E-06	22.4	1.95E-02	5.08E-04
SI32_W	0.75	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI32_W	0.75	19	0	1	4.16E-02	5.53E-02	7.08E-05	9.57E-05	8.68E-05	2.17E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.40E-06	16.7	1.46E-02	3.79E-04
SI32_W	0.75	22	0	1	4.70E-02	6.24E-02	7.98E-05	1.08E-04	9.79E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.74E-08	4.97E-06	18.8	1.64E-02	4.27E-04
SI32_W	0.75	23	0	1	4.96E-02	6.59E-02	8.44E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI32_W	0.75	23	0	1	5.05E-02	6.71E-02	8.59E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.87E-08	5.34E-06	20.3	1.77E-02	4.60E-04
SI32_W	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI32_W	0.75	26	0	1	5.67E-02	7.53E-02	9.64E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.10E-08	6.00E-06	22.8	1.98E-02	5.16E-04
SI32_W	0.75	32	0	1	7.00E-02	9.30E-02	1.19E-04	1.61E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.59E-08	7.40E-06	28.1	2.45E-02	6.37E-04
SI32_W	0.75	35	0	1	7.53E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.92E-05	0.00E+00	2.28E-04	2.29E-04	2.79E-08	7.96E-06	30.2	2.63E-02	6.85E-04
SI32_W	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI32_W	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.9	1.21E-02	3.14E-04
SI32_W	0.75	13	0	1	2.92E-02	3.88E-02	4.97E-05	6.72E-05	6.10E-05	1.52E-05	0.00E+00	8.86E-05	8.87E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI32_W	0.75	11	0	1	2.48E-02	3.30E-02	4.22E-05	5.70E-05	5.17E-05	1.29E-05	0.00E+00	7.52E-05	7.53E-05	9.17E-09	2.62E-06	10.0	8.67E-03	2.26E-04
SI32_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.68E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.18E-05	7.54E-09	2.15E-06	8.2	7.12E-03	1.85E-04
SI32_W	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI33_E	0.75	5	0	1	1.06E-02	1.41E-02	1.81E-05	2.44E-05	2.22E-05	5.54E-06	0.00E+00	3.22E-05	3.23E-05	3.93E-09	1.12E-06	4.3	3.72E-03	9.67E-05
SI33_E	0.75	3	0	1	7.09E-03	9.42E-03	1.21E-05	1.63E-05	1.48E-05	3.69E-06	0.00E+00	2.15E-05	2.15E-05	2.62E-09	7.50E-07	2.8	2.48E-03	6.45E-05
SI33_E	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI33_E	0.75	2	0	1	4.43E-03	5.89E-03	7.53E-06	1.02E-05	9.24E-06	2.31E-06	0.00E+00	1.34E-05	1.34E-05	1.64E-09	4.68E-07	1.8	1.55E-03	4.03E-05
SI33_E	0.75	3	0	1	6.20E-03	8.24E-03	1.05E-05	1.43E-05	1.29E-05	3.23E-06	0.00E+00	1.88E-05	1.88E-05	2.29E-09	6.56E-07	2.5	2.17E-03	5.64E-05
SI33_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI33_E	0.75	21	0	1	4.52E-02	6.00E-02	7.68E-05	1.04E-04	9.42E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.78E-06	18.1	1.58E-02	4.11E-04
SI33_E	0.75	32	0	1	6.91E-02	9.18E-02	1.18E-04	1.59E-04	1.44E-04	3.60E-05	0.00E+00	2.09E-04	2.10E-04	2.56E-08	7.31E-06	27.7	2.42E-02	6.29E-04
SI33_E	0.75	26	0	1	5.58E-02	7.42E-02	9.49E-05	1.28E-04	1.16E-04	2.91E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.90E-06	22.4	1.95E-02	5.08E-04
SI33_E	0.75	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI33_E	0.75	19	0	1	4.16E-02	5.53E-02	7.08E-05	9.57E-05	8.68E-05	2.17E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.40E-06	16.7	1.46E-02	3.79E-04
SI33_E	0.75	22	0	1	4.70E-02	6.24E-02	7.98E-05	1.08E-04	9.79E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.74E-08	4.97E-06	18.8	1.64E-02	4.27E-04
SI33_E	0.75	23	0	1	4.96E-02	6.59E-02	8.44E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI33_E	0.75	23	0	1	5.05E-02	6.71E-02	8.59E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.87E-08	5.34E-06	20.3	1.77E-02	4.60E-04
SI33_E	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI33_E	0.75	26	0	1	5.67E-02	7.53E-02	9.64E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.10E-08	6.00E-06	22.8	1.98E-02	5.16E-04
SI33_E	0.75	32	0	1	7.00E-02	9.30E-02	1.19E-04	1.61E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.59E-08	7.40E-06	28.1	2.45E-02	6.37E-04
SI33_E	0.75	35	0	1	7.53E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.92E-05	0.00E+00	2.28E-04	2.29E-04	2.79E-08	7.96E-06	30.2	2.63E-02	6.85E-04
SI33_E	0.75	24	0	1	5.23E-02	6.95E-02	8.89E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.59E-04	1.93E-08	5.53E-06	21.0	1.83E-02	4.76E-04
SI33_E	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.9	1.21E-02	3.14E-04
SI33_E	0.75	13	0	1	2.92E-02	3.88E-02	4.97E-05	6.72E-05	6.10E-05	1.52E-05	0.00E+00	8.86E-05	8.87E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI33_E	0.75	11	0	1	2.48E-02	3.30E-02	4.22E-05	5.70E-05	5.17E-05	1.29E-05	0.00E+00	7.52E-05	7.53E-05	9.17E-09	2.62E-06	10.0	8.67E-03	2.26E-04
SI33_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.68E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.18E-05	7.54E-09	2.15E-06	8.2	7.12E-03	1.85E-04
SI33_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.84E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI33_W	0.75	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.19E-05	7.96E-06	0.00E+00	4.63E-05	4.64E-05	5.65E-09	1.62E-06	6.1	5.34E-03	1.39E-04
SI33_W	0.75	5	0	1	1.02E-02	1.35E-02	1.73E-05	2.34E-05	2.13E-05	5.31E-06	0.00E+00	3.09E-05	3.09E-05	3.77E-09	1.08E-06	4.1	3.56E-03	9.27E-05
SI33_W	0.75	4	0	1	8.92E-03	1.19E-02	1.52E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.71E-05	3.30E-09	9.43E-07	3.6	3.12E-03	8.12E-05
SI33_W	0.75	3	0	1	6.37E-03	8.46E-03	1.08E-05	1.46E-05	1.33E-05	3.32E-06	0.00E+00	1.93E-05	1.93E-05	2.36E-09	6.74E-07	2.6	2.23E-03	5.80E-05
SI33_W	0.75	4	0	1	8.92E-03	1.19E-02	1.52E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.71E-05	3.30E-09	9.43E-07	3.6	3.12E-03	8.12E-05
SI33_W	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI33_W	0.75	30	0	1	6.50E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.87E-06	26.1	2.27E-02	5.91E-04
SI33_W	0.75	46	0	1	9.94E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.02E-04	3.68E-08	1.05E-05	39.9	3.47E-02	9.04E-04
SI33_W	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI33_W	0.75	30	0	1	6.63E-02	8.80E-02	1.13E-04	1.52E-04	1.38E-04	3.45E-05	0.00E+00	2.01E-04	2.01E-04	2.45E-08	7.01E-06	26.6	2.32E-02	6.03E-04
SI33_W	0.75	28	0	1	5.99E-02	7.96E-02	1.02E-04	1.38E-04	1.25E-04	3.12E-05	0.00E+00	1.82E-04	1.82E-04	2.21E-08	6.33E-06	24.0	2.09E-02	5.45E-04
SI33_W	0.75	31	0	1	6.75E-02	8.97E-02	1.15E-04	1.55E-04	1.41E-04	3.52E-05	0.00E+00	2.05E-04	2.05E-04	2.50E-08	7.14E-06	27.1	2.36E-02	6.14E-04
SI33_W	0.75	33	0	1	7.14E-02	9.48E-02	1.21E-04	1.64E-04	1.49E-04	3.72E-05	0.00E+00	2.16E-04	2.17E-04	2.64E-08	7.55E-06	28.6	2.49E-02	6.49E-04
SI33_W	0.75	33	0	1	7.26E-02	9.65E-02	1.23E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.69E-08	7.68E-06	29.1	2.54E-02	6.61E-04
SI33_W	0.75	35	0	1	7.52E-02	9.99E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.95E-06	30.2	2.63E-02	6.84E-04
SI33_W	0.75	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.87E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.47E-04	3.02E-08	8.62E-06	32.7	2.85E-02	7.42E-04
SI33_W	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.24E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.4	3.52E-02	9.16E-04
SI33_W	0.75	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.49E-04	2.26E-04	5.64E-05	0.00E+00	3.28E-04	3.29E-04	4.01E-08	1.15E-05	43.5	3.79E-02	9.85E-04
SI33_W	0.75	35	0	1	7.52E-02	9.99E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.95E-06	30.2	2.63E-02	6.84E-04
SI33_W	0.75	23	0	1	4.97E-02	6.60E-02	8.45E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.25E-06	19.9	1.74E-02	4.52E-04
SI33_W	0.75	19	0	1	4.21E-02	5.59E-02	7.15E-05	9.66E-05	8.77E-05	2.19E-05	0.00E+00	1.27E-04	1.28E-04	1.55E-08	4.45E-06	16.9	1.47E-02	3.83E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	16	0	1	3.57E-02	4.74E-02	6.07E-05	8.20E-05	7.44E-05	1.86E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.77E-06	14.3	1.25E-02	3.25E-04
SI33_W	0.75	13	0	1	2.93E-02	3.89E-02	4.98E-05	6.73E-05	6.11E-05	1.53E-05	0.00E+00	8.88E-05	8.89E-05	1.08E-08	3.10E-06	11.8	1.02E-02	2.67E-04
SI33_W	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI34_E	0.75	7	0	1	1.53E-02	2.03E-02	2.60E-05	3.51E-05	3.19E-05	7.96E-06	0.00E+00	4.63E-05	4.64E-05	5.65E-09	1.62E-06	6.1	5.34E-03	1.39E-04
SI34_E	0.75	5	0	1	1.02E-02	1.35E-02	1.73E-05	2.34E-05	2.13E-05	5.31E-06	0.00E+00	3.09E-05	3.09E-05	3.77E-09	1.08E-06	4.1	3.56E-03	9.27E-05
SI34_E	0.75	4	0	1	8.92E-03	1.19E-02	1.52E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.71E-05	3.30E-09	9.43E-07	3.6	3.12E-03	8.12E-05
SI34_E	0.75	3	0	1	6.37E-03	8.46E-03	1.08E-05	1.46E-05	1.33E-05	3.32E-06	0.00E+00	1.93E-05	1.93E-05	2.36E-09	6.74E-07	2.6	2.23E-03	5.80E-05
SI34_E	0.75	4	0	1	8.92E-03	1.19E-02	1.52E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.71E-05	3.30E-09	9.43E-07	3.6	3.12E-03	8.12E-05
SI34_E	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI34_E	0.75	30	0	1	6.50E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.87E-06	26.1	2.27E-02	5.91E-04
SI34_E	0.75	46	0	1	9.94E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.02E-04	3.68E-08	1.05E-05	39.9	3.47E-02	9.04E-04
SI34_E	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI34_E	0.75	30	0	1	6.63E-02	8.80E-02	1.13E-04	1.52E-04	1.38E-04	3.45E-05	0.00E+00	2.01E-04	2.01E-04	2.45E-08	7.01E-06	26.6	2.32E-02	6.03E-04
SI34_E	0.75	28	0	1	5.99E-02	7.96E-02	1.02E-04	1.38E-04	1.25E-04	3.12E-05	0.00E+00	1.82E-04	1.82E-04	2.21E-08	6.33E-06	24.0	2.09E-02	5.45E-04
SI34_E	0.75	31	0	1	6.75E-02	8.97E-02	1.15E-04	1.55E-04	1.41E-04	3.52E-05	0.00E+00	2.05E-04	2.05E-04	2.50E-08	7.14E-06	27.1	2.36E-02	6.14E-04
SI34_E	0.75	33	0	1	7.14E-02	9.48E-02	1.21E-04	1.64E-04	1.49E-04	3.72E-05	0.00E+00	2.16E-04	2.17E-04	2.64E-08	7.55E-06	28.6	2.49E-02	6.49E-04
SI34_E	0.75	33	0	1	7.26E-02	9.65E-02	1.23E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.69E-08	7.68E-06	29.1	2.54E-02	6.61E-04
SI34_E	0.75	35	0	1	7.52E-02	9.99E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.95E-06	30.2	2.63E-02	6.84E-04
SI34_E	0.75	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.87E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.47E-04	3.02E-08	8.62E-06	32.7	2.85E-02	7.42E-04
SI34_E	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.24E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.4	3.52E-02	9.16E-04
SI34_E	0.75	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.49E-04	2.26E-04	5.64E-05	0.00E+00	3.28E-04	3.29E-04	4.01E-08	1.15E-05	43.5	3.79E-02	9.85E-04
SI34_E	0.75	35	0	1	7.52E-02	9.99E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.95E-06	30.2	2.63E-02	6.84E-04
SI34_E	0.75	23	0	1	4.97E-02	6.60E-02	8.45E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.25E-06	19.9	1.74E-02	4.52E-04
SI34_E	0.75	19	0	1	4.21E-02	5.59E-02	7.15E-05	9.66E-05	8.77E-05	2.19E-05	0.00E+00	1.27E-04	1.28E-04	1.55E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI34_E	0.75	16	0	1	3.57E-02	4.74E-02	6.07E-05	8.20E-05	7.44E-05	1.86E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.77E-06	14.3	1.25E-02	3.25E-04
SI34_E	0.75	13	0	1	2.93E-02	3.89E-02	4.98E-05	6.73E-05	6.11E-05	1.53E-05	0.00E+00	8.88E-05	8.89E-05	1.08E-08	3.10E-06	11.8	1.02E-02	2.67E-04
SI34_E	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI34_W	0.75	5	0	1	1.13E-02	1.50E-02	1.91E-05	2.59E-05	2.35E-05	5.86E-06	0.00E+00	3.41E-05	3.42E-05	4.16E-09	1.19E-06	4.5	3.94E-03	1.02E-04
SI34_W	0.75	3	0	1	7.51E-03	9.97E-03	1.28E-05	1.72E-05	1.56E-05	3.91E-06	0.00E+00	2.27E-05	2.28E-05	2.78E-09	7.94E-07	3.0	2.62E-03	6.83E-05
SI34_W	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI34_W	0.75	2	0	1	4.69E-03	6.23E-03	7.98E-06	1.08E-05	9.78E-06	2.44E-06	0.00E+00	1.42E-05	1.42E-05	1.73E-09	4.96E-07	1.9	1.64E-03	4.27E-05
SI34_W	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI34_W	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI34_W	0.75	22	0	1	4.78E-02	6.36E-02	8.14E-05	1.10E-04	9.97E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.35E-04
SI34_W	0.75	34	0	1	7.32E-02	9.72E-02	1.24E-04	1.68E-04	1.53E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.71E-08	7.74E-06	29.4	2.56E-02	6.66E-04
SI34_W	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.79E-04	2.19E-08	6.25E-06	23.7	2.07E-02	5.38E-04
SI34_W	0.75	22	0	1	4.88E-02	6.48E-02	8.29E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.16E-06	19.6	1.71E-02	4.44E-04
SI34_W	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.19E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.66E-06	17.7	1.54E-02	4.01E-04
SI34_W	0.75	23	0	1	4.97E-02	6.61E-02	8.45E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.26E-06	19.9	1.74E-02	4.52E-04
SI34_W	0.75	24	0	1	5.25E-02	6.98E-02	8.93E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI34_W	0.75	25	0	1	5.35E-02	7.10E-02	9.09E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.65E-06	21.5	1.87E-02	4.87E-04
SI34_W	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI34_W	0.75	28	0	1	6.00E-02	7.98E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.35E-06	24.1	2.10E-02	5.46E-04
SI34_W	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI34_W	0.75	37	0	1	7.97E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.26E-04
SI34_W	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI34_W	0.75	17	0	1	3.66E-02	4.86E-02	6.22E-05	8.41E-05	7.63E-05	1.90E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI34_W	0.75	14	0	1	3.10E-02	4.11E-02	5.26E-05	7.11E-05	6.45E-05	1.61E-05	0.00E+00	9.38E-05	9.39E-05	1.14E-08	3.27E-06	12.4	1.08E-02	2.82E-04
SI34_W	0.75	12	0	1	2.63E-02	3.49E-02	4.47E-05	6.04E-05	5.48E-05	1.37E-05	0.00E+00	7.96E-05	7.97E-05	9.71E-09	2.78E-06	10.5	9.18E-03	2.39E-04
SI34_W	0.75	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.54E-05	6.55E-05	7.98E-09	2.28E-06	8.7	7.54E-03	1.96E-04
SI34_W	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI35_E	0.75	5	0	1	1.13E-02	1.50E-02	1.91E-05	2.59E-05	2.35E-05	5.86E-06	0.00E+00	3.41E-05	3.42E-05	4.16E-09	1.19E-06	4.5	3.94E-03	1.02E-04
SI35_E	0.75	3	0	1	7.51E-03	9.97E-03	1.28E-05	1.72E-05	1.56E-05	3.91E-06	0.00E+00	2.27E-05	2.28E-05	2.78E-09	7.94E-07	3.0	2.62E-03	6.83E-05
SI35_E	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI35_E	0.75	2	0	1	4.69E-03	6.23E-03	7.98E-06	1.08E-05	9.78E-06	2.44E-06	0.00E+00	1.42E-05	1.42E-05	1.73E-09	4.96E-07	1.9	1.64E-03	4.27E-05
SI35_E	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI35_E	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI35_E	0.75	22	0	1	4.78E-02	6.36E-02	8.14E-05	1.10E-04	9.97E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.35E-04
SI35_E	0.75	34	0	1	7.32E-02	9.72E-02	1.24E-04	1.68E-04	1.53E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.71E-08	7.74E-06	29.4	2.56E-02	6.66E-04
SI35_E	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.79E-04	2.19E-08	6.25E-06	23.7	2.07E-02	5.38E-04
SI35_E	0.75	22	0	1	4.88E-02	6.48E-02	8.29E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.16E-06	19.6	1.71E-02	4.44E-04
SI35_E	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.19E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.66E-06	17.7	1.54E-02	4.01E-04
SI35_E	0.75	23	0	1	4.97E-02	6.61E-02	8.45E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.26E-06	19.9	1.74E-02	4.52E-04
SI35_E	0.75	24	0	1	5.25E-02	6.98E-02	8.93E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI35_E	0.75	25	0	1	5.35E-02	7.10E-02	9.09E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.65E-06	21.5	1.87E-02	4.87E-04
SI35_E	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI35_E	0.75	28	0	1	6.00E-02	7.98E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.35E-06	24.1	2.10E-02	5.46E-04
SI35_E	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI35_E	0.75	37	0	1	7.97E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.26E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI35_E	0.75	17	0	1	3.66E-02	4.86E-02	6.22E-05	8.41E-05	7.63E-05	1.90E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI35_E	0.75	14	0	1	3.10E-02	4.11E-02	5.26E-05	7.11E-05	6.45E-05	1.61E-05	0.00E+00	9.38E-05	9.39E-05	1.14E-08	3.27E-06	12.4	1.08E-02	2.82E-04
SI35_E	0.75	12	0	1	2.63E-02	3.49E-02	4.47E-05	6.04E-05	5.48E-05	1.37E-05	0.00E+00	7.96E-05	7.97E-05	9.71E-09	2.78E-06	10.5	9.18E-03	2.39E-04
SI35_E	0.75	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.54E-05	6.55E-05	7.98E-09	2.28E-06	8.7	7.54E-03	1.96E-04
SI35_E	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI35_W	0.75	5	0	1	1.13E-02	1.50E-02	1.91E-05	2.59E-05	2.35E-05	5.86E-06	0.00E+00	3.41E-05	3.42E-05	4.16E-09	1.19E-06	4.5	3.94E-03	1.02E-04
SI35_W	0.75	3	0	1	7.51E-03	9.97E-03	1.28E-05	1.72E-05	1.56E-05	3.91E-06	0.00E+00	2.27E-05	2.28E-05	2.78E-09	7.94E-07	3.0	2.62E-03	6.83E-05
SI35_W	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI35_W	0.75	2	0	1	4.69E-03	6.23E-03	7.98E-06	1.08E-05	9.78E-06	2.44E-06	0.00E+00	1.42E-05	1.42E-05	1.73E-09	4.96E-07	1.9	1.64E-03	4.27E-05
SI35_W	0.75	3	0	1	6.57E-03	8.72E-03	1.12E-05	1.51E-05	1.37E-05	3.42E-06	0.00E+00	1.99E-05	1.99E-05	2.43E-09	6.94E-07	2.6	2.30E-03	5.97E-05
SI35_W	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI35_W	0.75	22	0	1	4.78E-02	6.36E-02	8.14E-05	1.10E-04	9.97E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.35E-04
SI35_W	0.75	34	0	1	7.32E-02	9.72E-02	1.24E-04	1.68E-04	1.53E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.71E-08	7.74E-06	29.4	2.56E-02	6.66E-04
SI35_W	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.79E-04	2.19E-08	6.25E-06	23.7	2.07E-02	5.38E-04
SI35_W	0.75	22	0	1	4.88E-02	6.48E-02	8.29E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.16E-06	19.6	1.71E-02	4.44E-04
SI35_W	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.19E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.66E-06	17.7	1.54E-02	4.01E-04
SI35_W	0.75	23	0	1	4.97E-02	6.61E-02	8.45E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.26E-06	19.9	1.74E-02	4.52E-04
SI35_W	0.75	24	0	1	5.25E-02	6.98E-02	8.93E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI35_W	0.75	25	0	1	5.35E-02	7.10E-02	9.09E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.65E-06	21.5	1.87E-02	4.87E-04
SI35_W	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI35_W	0.75	28	0	1	6.00E-02	7.98E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.35E-06	24.1	2.10E-02	5.46E-04
SI35_W	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI35_W	0.75	37	0	1	7.97E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.26E-04
SI35_W	0.75	25	0	1	5.54E-02	7.35E-02	9.41E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.85E-06	22.2	1.93E-02	5.04E-04
SI35_W	0.75	17	0	1	3.66E-02	4.86E-02	6.22E-05	8.41E-05	7.63E-05	1.90E-05	0.00E+00	1.11E-04	1.11E-04	1.35E-08	3.87E-06	14.7	1.28E-02	3.33E-04
SI35_W	0.75	14	0	1	3.10E-02	4.11E-02	5.26E-05	7.11E-05	6.45E-05	1.61E-05	0.00E+00	9.38E-05	9.39E-05	1.14E-08	3.27E-06	12.4	1.08E-02	2.82E-04
SI35_W	0.75	12	0	1	2.63E-02	3.49E-02	4.47E-05	6.04E-05	5.48E-05	1.37E-05	0.00E+00	7.96E-05	7.97E-05	9.71E-09	2.78E-06	10.5	9.18E-03	2.39E-04
SI35_W	0.75	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.54E-05	6.55E-05	7.98E-09	2.28E-06	8.7	7.54E-03	1.96E-04
SI35_W	0.75	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.30E-06	0.00E+00	4.83E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.57E-03	1.45E-04
SI36_E	0.75	7	0	1	1.46E-02	1.94E-02	2.49E-05	3.36E-05	3.05E-05	7.62E-06	0.00E+00	4.43E-05	4.44E-05	5.41E-09	1.55E-06	5.9	5.11E-03	1.33E-04
SI36_E	0.75	4	0	1	9.75E-03	1.30E-02	1.66E-05	2.24E-05	2.03E-05	5.08E-06	0.00E+00	2.96E-05	2.96E-05	3.61E-09	1.03E-06	3.9	3.41E-03	8.87E-05
SI36_E	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI36_E	0.75	3	0	1	6.10E-03	8.10E-03	1.04E-05	1.40E-05	1.27E-05	3.17E-06	0.00E+00	1.85E-05	1.85E-05	2.25E-09	6.45E-07	2.4	2.13E-03	5.55E-05
SI36_E	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI36_E	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI36_E	0.75	29	0	1	6.22E-02	8.26E-02	1.06E-04	1.43E-04	1.30E-04	3.24E-05	0.00E+00	1.88E-04	1.89E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.66E-04
SI36_E	0.75	44	0	1	9.51E-02	1.26E-01	1.62E-04	2.19E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.89E-04	3.52E-08	1.01E-05	38.2	3.32E-02	8.65E-04
SI36_E	0.75	35	0	1	7.68E-02	1.02E-01	1.31E-04	1.76E-04	1.60E-04	4.00E-05	0.00E+00	2.33E-04	2.33E-04	2.84E-08	8.12E-06	30.8	2.68E-02	6.99E-04
SI36_E	0.75	29	0	1	6.34E-02	8.42E-02	1.08E-04	1.46E-04	1.32E-04	3.30E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.70E-06	25.4	2.22E-02	5.77E-04
SI36_E	0.75	26	0	1	5.73E-02	7.61E-02	9.74E-05	1.32E-04	1.19E-04	2.98E-05	0.00E+00	1.74E-04	1.74E-04	2.12E-08	6.06E-06	23.0	2.00E-02	5.21E-04
SI36_E	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.88E-04
SI36_E	0.75	31	0	1	6.83E-02	9.07E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.22E-06	27.4	2.39E-02	6.21E-04
SI36_E	0.75	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI36_E	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI36_E	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI36_E	0.75	44	0	1	9.63E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.37E-02	8.76E-04
SI36_E	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.14E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI36_E	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI36_E	0.75	22	0	1	4.75E-02	6.32E-02	8.08E-05	1.09E-04	9.91E-05	2.48E-05	0.00E+00	1.44E-04	1.44E-04	1.76E-08	5.03E-06	19.1	1.66E-02	4.33E-04
SI36_E	0.75	18	0	1	4.02E-02	5.35E-02	6.84E-05	9.24E-05	8.39E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.25E-06	16.1	1.41E-02	3.66E-04
SI36_E	0.75	16	0	1	3.41E-02	4.54E-02	5.80E-05	7.84E-05	7.12E-05	1.78E-05	0.00E+00	1.03E-04	1.04E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.11E-04
SI36_E	0.75	13	0	1	2.80E-02	3.73E-02	4.77E-05	6.44E-05	5.85E-05	1.46E-05	0.00E+00	8.50E-05	8.51E-05	1.04E-08	2.96E-06	11.3	9.80E-03	2.55E-04
SI36_E	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI36_W	0.75	7	0	1	1.46E-02	1.94E-02	2.49E-05	3.36E-05	3.05E-05	7.62E-06	0.00E+00	4.43E-05	4.44E-05	5.41E-09	1.55E-06	5.9	5.11E-03	1.33E-04
SI36_W	0.75	4	0	1	9.75E-03	1.30E-02	1.66E-05	2.24E-05	2.03E-05	5.08E-06	0.00E+00	2.96E-05	2.96E-05	3.61E-09	1.03E-06	3.9	3.41E-03	8.87E-05
SI36_W	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI36_W	0.75	3	0	1	6.10E-03	8.10E-03	1.04E-05	1.40E-05	1.27E-05	3.17E-06	0.00E+00	1.85E-05	1.85E-05	2.25E-09	6.45E-07	2.4	2.13E-03	5.55E-05
SI36_W	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI36_W	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI36_W	0.75	29	0	1	6.22E-02	8.26E-02	1.06E-04	1.43E-04	1.30E-04	3.24E-05	0.00E+00	1.88E-04	1.89E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.66E-04
SI36_W	0.75	44	0	1	9.51E-02	1.26E-01	1.62E-04	2.19E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.89E-04	3.52E-08	1.01E-05	38.2	3.32E-02	8.65E-04
SI36_W	0.75	35	0	1	7.68E-02	1.02E-01	1.31E-04	1.76E-04	1.60E-04	4.00E-05	0.00E+00	2.33E-04	2.33E-04	2.84E-08	8.12E-06	30.8	2.68E-02	6.99E-04
SI36_W	0.75	29	0	1	6.34E-02	8.42E-02	1.08E-04	1.46E-04	1.32E-04	3.30E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.70E-06	25.4	2.22E-02	5.77E-04
SI36_W	0.75	26	0	1	5.73E-02	7.61E-02	9.74E-05	1.32E-04	1.19E-04	2.98E-05	0.00E+00	1.74E-04	1.74E-04	2.12E-08	6.06E-06	23.0	2.00E-02	5.21E-04
SI36_W	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.88E-04
SI36_W	0.75	31	0	1	6.83E-02	9.07E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.22E-06	27.4	2.39E-02	6.21E-04
SI36_W	0.75	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI36_W	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_W	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI36_W	0.75	44	0	1	9.63E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.37E-02	8.76E-04
SI36_W	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.14E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI36_W	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI36_W	0.75	22	0	1	4.75E-02	6.32E-02	8.08E-05	1.09E-04	9.91E-05	2.48E-05	0.00E+00	1.44E-04	1.44E-04	1.76E-08	5.03E-06	19.1	1.66E-02	4.33E-04
SI36_W	0.75	18	0	1	4.02E-02	5.35E-02	6.84E-05	9.24E-05	8.39E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.25E-06	16.1	1.41E-02	3.66E-04
SI36_W	0.75	16	0	1	3.41E-02	4.54E-02	5.80E-05	7.84E-05	7.12E-05	1.78E-05	0.00E+00	1.03E-04	1.04E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.11E-04
SI36_W	0.75	13	0	1	2.80E-02	3.73E-02	4.77E-05	6.44E-05	5.85E-05	1.46E-05	0.00E+00	8.50E-05	8.51E-05	1.04E-08	2.96E-06	11.3	9.80E-03	2.55E-04
SI36_W	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI37_E	0.75	7	0	1	1.46E-02	1.94E-02	2.49E-05	3.36E-05	3.05E-05	7.62E-06	0.00E+00	4.43E-05	4.44E-05	5.41E-09	1.55E-06	5.9	5.11E-03	1.33E-04
SI37_E	0.75	4	0	1	9.75E-03	1.30E-02	1.66E-05	2.24E-05	2.03E-05	5.08E-06	0.00E+00	2.96E-05	2.96E-05	3.61E-09	1.03E-06	3.9	3.41E-03	8.87E-05
SI37_E	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI37_E	0.75	3	0	1	6.10E-03	8.10E-03	1.04E-05	1.40E-05	1.27E-05	3.17E-06	0.00E+00	1.85E-05	1.85E-05	2.25E-09	6.45E-07	2.4	2.13E-03	5.55E-05
SI37_E	0.75	4	0	1	8.53E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.02E-07	3.4	2.98E-03	7.76E-05
SI37_E	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI37_E	0.75	29	0	1	6.22E-02	8.26E-02	1.06E-04	1.43E-04	1.30E-04	3.24E-05	0.00E+00	1.88E-04	1.89E-04	2.30E-08	6.57E-06	24.9	2.17E-02	5.66E-04
SI37_E	0.75	44	0	1	9.51E-02	1.26E-01	1.62E-04	2.19E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.89E-04	3.52E-08	1.01E-05	38.2	3.32E-02	8.65E-04
SI37_E	0.75	35	0	1	7.68E-02	1.02E-01	1.31E-04	1.76E-04	1.60E-04	4.00E-05	0.00E+00	2.33E-04	2.33E-04	2.84E-08	8.12E-06	30.8	2.68E-02	6.99E-04
SI37_E	0.75	29	0	1	6.34E-02	8.42E-02	1.08E-04	1.46E-04	1.32E-04	3.30E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.70E-06	25.4	2.22E-02	5.77E-04
SI37_E	0.75	26	0	1	5.73E-02	7.61E-02	9.74E-05	1.32E-04	1.19E-04	2.98E-05	0.00E+00	1.74E-04	1.74E-04	2.12E-08	6.06E-06	23.0	2.00E-02	5.21E-04
SI37_E	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.88E-04
SI37_E	0.75	31	0	1	6.83E-02	9.07E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.22E-06	27.4	2.39E-02	6.21E-04
SI37_E	0.75	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI37_E	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI37_E	0.75	36	0	1	7.80E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.36E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI37_E	0.75	44	0	1	9.63E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.37E-02	8.76E-04
SI37_E	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.14E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI37_E	0.75	33	0	1	7.19E-02	9.56E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.61E-06	28.9	2.51E-02	6.54E-04
SI37_E	0.75	22	0	1	4.75E-02	6.32E-02	8.08E-05	1.09E-04	9.91E-05	2.48E-05	0.00E+00	1.44E-04	1.44E-04	1.76E-08	5.03E-06	19.1	1.66E-02	4.33E-04
SI37_E	0.75	18	0	1	4.02E-02	5.35E-02	6.84E-05	9.24E-05	8.39E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.25E-06	16.1	1.41E-02	3.66E-04
SI37_E	0.75	16	0	1	3.41E-02	4.54E-02	5.80E-05	7.84E-05	7.12E-05	1.78E-05	0.00E+00	1.03E-04	1.04E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.11E-04
SI37_E	0.75	13	0	1	2.80E-02	3.73E-02	4.77E-05	6.44E-05	5.85E-05	1.46E-05	0.00E+00	8.50E-05	8.51E-05	1.04E-08	2.96E-06	11.3	9.80E-03	2.55E-04
SI37_E	0.75	10	0	1	2.07E-02	2.75E-02	3.52E-05	4.76E-05	4.32E-05	1.08E-05	0.00E+00	6.28E-05	6.29E-05	7.66E-09	2.19E-06	8.3	7.24E-03	1.89E-04
SI37_W	0.75	7	0	1	1.58E-02	2.10E-02	2.68E-05	3.63E-05	3.29E-05	8.22E-06	0.00E+00	4.79E-05	4.79E-05	5.84E-09	1.67E-06	6.3	5.52E-03	1.44E-04
SI37_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.58E-05
SI37_W	0.75	4	0	1	9.21E-03	1.22E-02	1.57E-05	2.12E-05	1.92E-05	4.80E-06	0.00E+00	2.79E-05	2.79E-05	3.41E-09	9.74E-07	3.7	3.22E-03	8.38E-05
SI37_W	0.75	3	0	1	6.58E-03	8.74E-03	1.12E-05	1.51E-05	1.37E-05	3.43E-06	0.00E+00	1.99E-05	2.00E-05	2.43E-09	6.96E-07	2.6	2.30E-03	5.99E-05
SI37_W	0.75	4	0	1	9.21E-03	1.22E-02	1.57E-05	2.12E-05	1.92E-05	4.80E-06	0.00E+00	2.79E-05	2.79E-05	3.41E-09	9.74E-07	3.7	3.22E-03	8.38E-05
SI37_W	0.75	10	0	1	2.24E-02	2.97E-02	3.80E-05	5.14E-05	4.66E-05	1.16E-05	0.00E+00	6.78E-05	6.79E-05	8.27E-09	2.37E-06	9.0	7.82E-03	2.04E-04
SI37_W	0.75	31	0	1	6.71E-02	8.92E-02	1.14E-04	1.54E-04	1.40E-04	3.49E-05	0.00E+00	2.03E-04	2.04E-04	2.48E-08	7.10E-06	26.9	2.35E-02	6.11E-04
SI37_W	0.75	47	0	1	1.03E-01	1.36E-01	1.75E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.80E-08	1.09E-05	41.2	3.59E-02	9.34E-04
SI37_W	0.75	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.91E-04	1.73E-04	4.32E-05	0.00E+00	2.51E-04	2.52E-04	3.07E-08	8.77E-06	33.3	2.90E-02	7.54E-04
SI37_W	0.75	31	0	1	6.84E-02	9.09E-02	1.16E-04	1.57E-04	1.43E-04	3.56E-05	0.00E+00	2.07E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI37_W	0.75	28	0	1	6.19E-02	8.22E-02	1.05E-04	1.42E-04	1.29E-04	3.22E-05	0.00E+00	1.87E-04	1.88E-04	2.29E-08	6.54E-06	24.8	2.16E-02	5.63E-04
SI37_W	0.75	32	0	1	6.98E-02	9.27E-02	1.19E-04	1.60E-04	1.45E-04	3.63E-05	0.00E+00	2.11E-04	2.12E-04	2.58E-08	7.37E-06	28.0	2.44E-02	6.35E-04
SI37_W	0.75	34	0	1	7.37E-02	9.79E-02	1.25E-04	1.69E-04	1.54E-04	3.84E-05	0.00E+00	2.23E-04	2.24E-04	2.73E-08	7.79E-06	29.6	2.58E-02	6.70E-04
SI37_W	0.75	34	0	1	7.50E-02	9.97E-02	1.28E-04	1.72E-04	1.56E-04	3.91E-05	0.00E+00	2.27E-04	2.28E-04	2.77E-08	7.93E-06	30.1	2.62E-02	6.82E-04
SI37_W	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.36E-04	2.87E-08	8.21E-06	31.2	2.71E-02	7.06E-04
SI37_W	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.94E-04	1.76E-04	4.38E-05	0.00E+00	2.55E-04	2.56E-04	3.11E-08	8.91E-06	33.8	2.94E-02	7.66E-04
SI37_W	0.75	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.41E-05	0.00E+00	3.15E-04	3.15E-04	3.84E-08	1.10E-05	41.7	3.63E-02	9.46E-04
SI37_W	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.33E-04	5.82E-05	0.00E+00	3.39E-04	3.39E-04	4.14E-08	1.18E-05	44.9	3.91E-02	1.02E-03
SI37_W	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.36E-04	2.87E-08	8.21E-06	31.2	2.71E-02	7.06E-04
SI37_W	0.75	24	0	1	5.13E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.79E-02	4.67E-04
SI37_W	0.75	20	0	1	4.34E-02	5.77E-02	7.38E-05	9.98E-05	9.05E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI37_W	0.75	17	0	1	3.68E-02	4.90E-02	6.26E-05	8.47E-05	7.68E-05	1.92E-05	0.00E+00	1.12E-04	1.12E-04	1.36E-08	3.90E-06	14.8	1.29E-02	3.35E-04
SI37_W	0.75	14	0	1	3.03E-02	4.02E-02	5.15E-05	6.96E-05	6.31E-05	1.58E-05	0.00E+00	9.17E-05	9.18E-05	1.12E-08	3.20E-06	12.1	1.06E-02	2.75E-04
SI37_W	0.75	10	0	1	2.24E-02	2.97E-02	3.80E-05	5.14E-05	4.66E-05	1.16E-05	0.00E+00	6.78E-05	6.79E-05	8.27E-09	2.37E-06	9.0	7.82E-03	2.04E-04
SI38_E	0.36	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI38_E	0.36	2	0	1	5.01E-03	6.66E-03	8.52E-06	1.15E-05	1.05E-05	2.61E-06	0.00E+00	1.52E-05	1.52E-05	1.85E-09	5.30E-07	2.0	1.75E-03	4.56E-05
SI38_E	0.36	2	0	1	4.39E-03	5.83E-03	7.46E-06	1.01E-05	9.14E-06	2.28E-06	0.00E+00	1.33E-05	1.33E-05	1.62E-09	4.64E-07	1.8	1.53E-03	3.99E-05
SI38_E	0.36	1	0	1	3.13E-03	4.16E-03	5.33E-06	7.20E-06	6.53E-06	1.63E-06	0.00E+00	9.50E-06	9.51E-06	1.16E-09	3.31E-07	1.3	1.10E-03	2.85E-05
SI38_E	0.36	2	0	1	4.39E-03	5.83E-03	7.46E-06	1.01E-05	9.14E-06	2.28E-06	0.00E+00	1.33E-05	1.33E-05	1.62E-09	4.64E-07	1.8	1.53E-03	3.99E-05
SI38_E	0.36	5	0	1	1.07E-02	1.42E-02	1.81E-05	2.45E-05	2.22E-05	5.55E-06	0.00E+00	3.23E-05	3.23E-05	3.94E-09	1.13E-06	4.3	3.72E-03	9.69E-05
SI38_E	0.36	15	0	1	3.20E-02	4.25E-02	5.43E-05	7.34E-05	6.66E-05	1.66E-05	0.00E+00	9.69E-05	9.70E-05	1.18E-08	3.38E-06	12.8	1.12E-02	2.91E-04
SI38_E	0.36	22	0	1	4.89E-02	6.49E-02	8.31E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.81E-08	5.17E-06	19.6	1.71E-02	4.45E-04
SI38_E	0.36	18	0	1	3.95E-02	5.24E-02	6.71E-05	9.07E-05	8.23E-05	2.06E-05	0.00E+00	1.20E-04	1.20E-04	1.46E-08	4.17E-06	15.8	1.38E-02	3.59E-04
SI38_E	0.36	15	0	1	3.26E-02	4.33E-02	5.54E-05	7.49E-05	6.79E-05	1.70E-05	0.00E+00	9.88E-05	9.89E-05	1.20E-08	3.45E-06	13.1	1.14E-02	2.96E-04
SI38_E	0.36	14	0	1	2.95E-02	3.91E-02	5.01E-05	6.77E-05	6.14E-05	1.53E-05	0.00E+00	8.93E-05	8.94E-05	1.09E-08	3.11E-06	11.8	1.03E-02	2.68E-04
SI38_E	0.36	15	0	1	3.32E-02	4.41E-02	5.65E-05	7.63E-05	6.92E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.51E-06	13.3	1.16E-02	3.02E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI38_E	0.36	16	0	1	3.51E-02	4.66E-02	5.97E-05	8.06E-05	7.32E-05	1.83E-05	0.00E+00	1.06E-04	1.06E-04	1.30E-08	3.71E-06	14.1	1.23E-02	3.19E-04
SI38_E	0.36	16	0	1	3.57E-02	4.75E-02	6.07E-05	8.21E-05	7.45E-05	1.86E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.78E-06	14.3	1.25E-02	3.25E-04
SI38_E	0.36	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.92E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI38_E	0.36	18	0	1	4.01E-02	5.33E-02	6.82E-05	9.22E-05	8.36E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.48E-08	4.24E-06	16.1	1.40E-02	3.65E-04
SI38_E	0.36	23	0	1	4.95E-02	6.58E-02	8.42E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.23E-06	19.9	1.73E-02	4.50E-04
SI38_E	0.36	24	0	1	5.33E-02	7.08E-02	9.06E-05	1.22E-04	1.11E-04	2.77E-05	0.00E+00	1.61E-04	1.62E-04	1.97E-08	5.63E-06	21.4	1.86E-02	4.85E-04
SI38_E	0.36	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.92E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI38_E	0.36	11	0	1	2.44E-02	3.25E-02	4.16E-05	5.62E-05	5.09E-05	1.27E-05	0.00E+00	7.41E-05	7.42E-05	9.04E-09	2.58E-06	9.8	8.54E-03	2.22E-04
SI38_E	0.36	9	0	1	2.07E-02	2.75E-02	3.52E-05	4.75E-05	4.31E-05	1.08E-05	0.00E+00	6.27E-05	6.27E-05	7.65E-09	2.19E-06	8.3	7.23E-03	1.88E-04
SI38_E	0.36	8	0	1	1.75E-02	2.33E-02	2.98E-05	4.03E-05	3.66E-05	9.13E-06	0.00E+00	5.32E-05	5.32E-05	6.49E-09	1.86E-06	7.0	6.13E-03	1.60E-04
SI38_E	0.36	7	0	1	1.44E-02	1.91E-02	2.45E-05	3.31E-05	3.00E-05	7.50E-06	0.00E+00	4.37E-05	4.37E-05	5.33E-09	1.52E-06	5.8	5.04E-03	1.31E-04
SI38_E	0.36	5	0	1	1.07E-02	1.42E-02	1.81E-05	2.45E-05	2.22E-05	5.55E-06	0.00E+00	3.23E-05	3.23E-05	3.94E-09	1.13E-06	4.3	3.72E-03	9.69E-05
SI38_W	0.39	4	0	1	8.12E-03	1.08E-02	1.38E-05	1.87E-05	1.69E-05	4.23E-06	0.00E+00	2.46E-05	2.46E-05	3.00E-09	8.59E-07	3.3	2.84E-03	7.39E-05
SI38_W	0.39	2	0	1	5.41E-03	7.19E-03	9.21E-06	1.24E-05	1.13E-05	2.82E-06	0.00E+00	1.64E-05	1.64E-05	2.00E-09	5.72E-07	2.2	1.89E-03	4.93E-05
SI38_W	0.39	2	0	1	4.74E-03	6.29E-03	8.05E-06	1.09E-05	9.88E-06	2.47E-06	0.00E+00	1.44E-05	1.44E-05	1.75E-09	5.01E-07	1.9	1.66E-03	4.31E-05
SI38_W	0.39	2	0	1	3.38E-03	4.50E-03	5.75E-06	7.78E-06	7.05E-06	1.76E-06	0.00E+00	1.03E-05	1.03E-05	1.25E-09	3.58E-07	1.4	1.18E-03	3.08E-05
SI38_W	0.39	2	0	1	4.74E-03	6.29E-03	8.05E-06	1.09E-05	9.88E-06	2.47E-06	0.00E+00	1.44E-05	1.44E-05	1.75E-09	5.01E-07	1.9	1.66E-03	4.31E-05
SI38_W	0.39	5	0	1	1.15E-02	1.53E-02	1.96E-05	2.64E-05	2.40E-05	5.99E-06	0.00E+00	3.49E-05	3.49E-05	4.25E-09	1.22E-06	4.6	4.02E-03	1.05E-04
SI38_W	0.39	16	0	1	3.45E-02	4.59E-02	5.87E-05	7.93E-05	7.20E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.65E-06	13.8	1.21E-02	3.14E-04
SI38_W	0.39	24	0	1	5.28E-02	7.01E-02	8.98E-05	1.21E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.95E-08	5.58E-06	21.2	1.85E-02	4.80E-04
SI38_W	0.39	20	0	1	4.26E-02	5.66E-02	7.25E-05	9.80E-05	8.89E-05	2.22E-05	0.00E+00	1.29E-04	1.29E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI38_W	0.39	16	0	1	3.52E-02	4.68E-02	5.98E-05	8.09E-05	7.34E-05	1.83E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.72E-06	14.1	1.23E-02	3.20E-04
SI38_W	0.39	15	0	1	3.18E-02	4.23E-02	5.41E-05	7.31E-05	6.63E-05	1.66E-05	0.00E+00	9.64E-05	9.65E-05	1.18E-08	3.36E-06	12.8	1.11E-02	2.89E-04
SI38_W	0.39	16	0	1	3.59E-02	4.77E-02	6.10E-05	8.24E-05	7.48E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.79E-06	14.4	1.25E-02	3.26E-04
SI38_W	0.39	17	0	1	3.79E-02	5.04E-02	6.44E-05	8.71E-05	7.90E-05	1.97E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.01E-06	15.2	1.32E-02	3.45E-04
SI38_W	0.39	18	0	1	3.86E-02	5.13E-02	6.56E-05	8.86E-05	8.04E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.08E-06	15.5	1.35E-02	3.51E-04
SI38_W	0.39	18	0	1	3.99E-02	5.30E-02	6.79E-05	9.18E-05	8.32E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.22E-06	16.0	1.40E-02	3.63E-04
SI38_W	0.39	20	0	1	4.33E-02	5.75E-02	7.36E-05	9.95E-05	9.03E-05	2.26E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI38_W	0.39	25	0	1	5.35E-02	7.10E-02	9.09E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.98E-08	5.65E-06	21.5	1.87E-02	4.86E-04
SI38_W	0.39	26	0	1	5.75E-02	7.64E-02	9.78E-05	1.32E-04	1.20E-04	2.99E-05	0.00E+00	1.74E-04	1.75E-04	2.13E-08	6.08E-06	23.1	2.01E-02	5.23E-04
SI38_W	0.39	18	0	1	3.99E-02	5.30E-02	6.79E-05	9.18E-05	8.32E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.22E-06	16.0	1.40E-02	3.63E-04
SI38_W	0.39	12	0	1	2.64E-02	3.51E-02	4.49E-05	6.07E-05	5.50E-05	1.37E-05	0.00E+00	8.00E-05	8.01E-05	9.76E-09	2.79E-06	10.6	9.23E-03	2.40E-04
SI38_W	0.39	10	0	1	2.23E-02	2.97E-02	3.80E-05	5.13E-05	4.66E-05	1.16E-05	0.00E+00	6.77E-05	6.78E-05	8.26E-09	2.36E-06	9.0	7.81E-03	2.03E-04
SI38_W	0.39	9	0	1	1.90E-02	2.52E-02	3.22E-05	4.35E-05	3.95E-05	9.87E-06	0.00E+00	5.74E-05	5.75E-05	7.01E-09	2.00E-06	7.6	6.62E-03	1.72E-04
SI38_W	0.39	7	0	1	1.56E-02	2.07E-02	2.65E-05	3.58E-05	3.25E-05	8.10E-06	0.00E+00	4.72E-05	4.72E-05	5.76E-09	1.65E-06	6.2	5.44E-03	1.42E-04
SI38_W	0.39	5	0	1	1.15E-02	1.53E-02	1.96E-05	2.64E-05	2.40E-05	5.99E-06	0.00E+00	3.49E-05	3.49E-05	4.25E-09	1.22E-06	4.6	4.02E-03	1.05E-04
SI39_E	0.25	3	0	1	6.94E-03	9.22E-03	1.18E-05	1.60E-05	1.45E-05	3.61E-06	0.00E+00	2.10E-05	2.11E-05	2.57E-09	7.34E-07	2.8	2.43E-03	6.32E-05
SI39_E	0.25	2	0	1	4.63E-03	6.15E-03	7.87E-06	1.06E-05	9.65E-06	2.41E-06	0.00E+00	1.40E-05	1.40E-05	1.71E-09	4.89E-07	1.9	1.62E-03	4.21E-05
SI39_E	0.25	2	0	1	4.05E-03	5.38E-03	6.89E-06	9.31E-06	8.44E-06	2.11E-06	0.00E+00	1.23E-05	1.23E-05	1.50E-09	4.28E-07	1.6	1.42E-03	3.68E-05
SI39_E	0.25	1	0	1	2.89E-03	3.84E-03	4.92E-06	6.65E-06	6.03E-06	1.51E-06	0.00E+00	8.77E-06	8.78E-06	1.07E-09	3.06E-07	1.2	1.01E-03	2.63E-05
SI39_E	0.25	2	0	1	4.05E-03	5.38E-03	6.89E-06	9.31E-06	8.44E-06	2.11E-06	0.00E+00	1.23E-05	1.23E-05	1.50E-09	4.28E-07	1.6	1.42E-03	3.68E-05
SI39_E	0.25	5	0	1	9.84E-03	1.31E-02	1.67E-05	2.26E-05	2.05E-05	5.12E-06	0.00E+00	2.98E-05	2.98E-05	3.64E-09	1.04E-06	3.9	3.44E-03	8.95E-05
SI39_E	0.25	14	0	1	2.95E-02	3.92E-02	5.02E-05	6.78E-05	6.15E-05	1.54E-05	0.00E+00	8.94E-05	8.95E-05	1.09E-08	3.12E-06	11.8	1.03E-02	2.68E-04
SI39_E	0.25	21	0	1	4.51E-02	6.00E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI39_E	0.25	17	0	1	3.65E-02	4.84E-02	6.20E-05	8.38E-05	7.60E-05	1.90E-05	0.00E+00	1.10E-04	1.11E-04	1.35E-08	3.85E-06	14.6	1.27E-02	3.32E-04
SI39_E	0.25	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.91E-05	6.27E-05	1.57E-05	0.00E+00	9.12E-05	9.13E-05	1.11E-08	3.18E-06	12.1	1.05E-02	2.74E-04
SI39_E	0.25	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.25E-05	5.67E-05	1.42E-05	0.00E+00	8.24E-05	8.25E-05	1.01E-08	2.88E-06	10.9	9.51E-03	2.47E-04
SI39_E	0.25	14	0	1	3.07E-02	4.07E-02	5.21E-05	7.05E-05	6.39E-05	1.60E-05	0.00E+00	9.29E-05	9.30E-05	1.13E-08	3.24E-06	12.3	1.07E-02	2.79E-04
SI39_E	0.25	15	0	1	3.24E-02	4.30E-02	5.51E-05	7.45E-05	6.75E-05	1.69E-05	0.00E+00	9.82E-05	9.83E-05	1.20E-08	3.43E-06	13.0	1.13E-02	2.95E-04
SI39_E	0.25	15	0	1	3.30E-02	4.38E-02	5.61E-05	7.58E-05	6.88E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.2	1.15E-02	3.00E-04
SI39_E	0.25	16	0	1	3.41E-02	4.54E-02	5.80E-05	7.84E-05	7.12E-05	1.78E-05	0.00E+00	1.03E-04	1.04E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.11E-04
SI39_E	0.25	17	0	1	3.70E-02	4.92E-02	6.30E-05	8.51E-05	7.72E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.92E-06	14.9	1.29E-02	3.37E-04
SI39_E	0.25	21	0	1	4.57E-02	6.07E-02	7.77E-05	1.05E-04	9.53E-05	2.38E-05	0.00E+00	1.39E-04	1.39E-04	1.69E-08	4.83E-06	18.3	1.60E-02	4.16E-04
SI39_E	0.25	23	0	1	4.92E-02	6.53E-02	8.36E-05	1.13E-04	1.03E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI39_E	0.25	16	0	1	3.41E-02	4.54E-02	5.80E-05	7.84E-05	7.12E-05	1.78E-05	0.00E+00	1.03E-04	1.04E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.11E-04
SI39_E	0.25	10	0	1	2.26E-02	3.00E-02	3.84E-05	5.19E-05	4.70E-05	1.17E-05	0.00E+00	6.84E-05	6.85E-05	8.34E-09	2.39E-06	9.1	7.89E-03	2.05E-04
SI39_E	0.25	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.39E-05	3.98E-05	9.94E-06	0.00E+00	5.79E-05	5.79E-05	7.06E-09	2.02E-06	7.7	6.67E-03	1.74E-04
SI39_E	0.25	7	0	1	1.62E-02	2.15E-02	2.75E-05	3.72E-05	3.38E-05	8.43E-06	0.00E+00	4.91E-05	4.92E-05	5.99E-09	1.71E-06	6.5	5.66E-03	1.47E-04
SI39_E	0.25	6	0	1	1.33E-02	1.77E-02	2.26E-05	3.06E-05	2.77E-05	6.93E-06	0.00E+00	4.03E-05	4.04E-05	4.92E-09	1.41E-06	5.3	4.65E-03	1.21E-04
SI39_E	0.25	5	0	1	9.84E-03	1.31E-02	1.67E-05	2.26E-05	2.05E-05	5.12E-06	0.00E+00	2.98E-05	2.98E-05	3.64E-09	1.04E-06	3.9	3.44E-03	8.95E-05
SI39_W	0.17	3	0	1	5.80E-03	7.71E-03	9.87E-06	1.33E-05	1.21E-05	3.02E-06	0.00E+00	1.76E-05	1.76E-05	2.15E-09	6.14E-07	2.3	2.03E-03	5.28E-05
SI39_W	0.17	2	0	1	3.87E-03	5.14E-03	6.58E-06	8.89E-06	8.06E-06	2.01E-06	0.00E+00	1.17E-05	1.17E-05	1.43E-09	4.09E-07	1.6	1.35E-03	3.52E-05
SI39_W	0.17	2	0	1	3.39E-03	4.50E-03	5.75E-06	7.78E-06	7.06E-06	1.76E-06	0.00E+00	1.03E-05	1.03E-05	1.25E-09	3.58E-07	1.4	1.18E-03	3.08E-05
SI39_W	0.17	1	0	1	2.42E-03	3.21E-03	4.11E-06	5.56E-06	5.04E-06	1.26E-06	0.00E+00	7.33E-06	7.34E-06	8.94E-10	2.56E-07	1.0	8.45E-04	2.20E-05
SI39_W	0.17	2	0	1	3.39E-03	4.50E-03	5.75E-06	7.78E-06	7.06E-06	1.76E-06	0.00E+00	1.03E-05	1.03E-05	1.25E-09	3.58E-07	1.4	1.18E-03	3.08E-05
SI39_W	0.17	4	0	1	8.22E-03	1.09E-02	1.40E-05	1.89E-05	1.71E-05	4.28E-06	0.00E+00	2.49E-05	2.49E-05	3.04E-09	8.69E-07	3.3	2.87E-03	7.48E-05
SI39_W	0.17	11	0	1	2.47E-02	3.28E-02	4.19E-05	5.67E-05	5.14E-05	1.28E-05	0.00E+00	7.47E-05	7.48E-05	9.12E-09	2.61E-06	9.9	8.62E-03	2.24E-04
SI39_W	0.17	17	0	1	3.77E-02	5.01E-02	6.41E-05	8.67E-05	7.86E-05	1.96E-05	0.00E+00	1.14E-04	1.14E-04	1.39E-08	3.99E-06	15.1	1.32E-02	3.43E-04
SI39_W	0.17	14	0	1	3.05E-02	4.05E-02	5.18E-05	7.00E-05	6.35E-05	1.59E-05	0.00E+00	9.23E-05	9.24E-05	1.13E-08	3.22E-06	12.2	1.06E-02	2.77E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_W	0.17	12	0	1	2.51E-02	3.34E-02	4.28E-05	5.78E-05	5.24E-05	1.31E-05	0.00E+00	7.62E-05	7.63E-05	9.30E-09	2.66E-06	10.1	8.79E-03	2.29E-04
SI39_W	0.17	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.74E-05	1.18E-05	0.00E+00	6.89E-05	6.90E-05	8.40E-09	2.40E-06	9.1	7.94E-03	2.07E-04
SI39_W	0.17	12	0	1	2.56E-02	3.40E-02	4.36E-05	5.89E-05	5.34E-05	1.33E-05	0.00E+00	7.77E-05	7.78E-05	9.48E-09	2.71E-06	10.3	8.96E-03	2.33E-04
SI39_W	0.17	12	0	1	2.71E-02	3.60E-02	4.60E-05	6.22E-05	5.65E-05	1.41E-05	0.00E+00	8.21E-05	8.22E-05	1.00E-08	2.86E-06	10.9	9.46E-03	2.46E-04
SI39_W	0.17	13	0	1	2.76E-02	3.66E-02	4.69E-05	6.33E-05	5.75E-05	1.43E-05	0.00E+00	8.35E-05	8.36E-05	1.02E-08	2.91E-06	11.1	9.63E-03	2.51E-04
SI39_W	0.17	13	0	1	2.85E-02	3.79E-02	4.85E-05	6.56E-05	5.95E-05	1.49E-05	0.00E+00	8.65E-05	8.66E-05	1.05E-08	3.02E-06	11.4	9.97E-03	2.60E-04
SI39_W	0.17	14	0	1	3.09E-02	4.11E-02	5.26E-05	7.11E-05	6.45E-05	1.61E-05	0.00E+00	9.38E-05	9.39E-05	1.14E-08	3.27E-06	12.4	1.08E-02	2.82E-04
SI39_W	0.17	18	0	1	3.82E-02	5.08E-02	6.49E-05	8.78E-05	7.96E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.41E-08	4.04E-06	15.3	1.34E-02	3.48E-04
SI39_W	0.17	19	0	1	4.11E-02	5.46E-02	6.99E-05	9.44E-05	8.57E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.74E-04
SI39_W	0.17	13	0	1	2.85E-02	3.79E-02	4.85E-05	6.56E-05	5.95E-05	1.49E-05	0.00E+00	8.65E-05	8.66E-05	1.05E-08	3.02E-06	11.4	9.97E-03	2.60E-04
SI39_W	0.17	9	0	1	1.89E-02	2.51E-02	3.21E-05	4.33E-05	3.93E-05	9.82E-06	0.00E+00	5.72E-05	5.72E-05	6.97E-09	1.99E-06	7.6	6.59E-03	1.72E-04
SI39_W	0.17	7	0	1	1.60E-02	2.12E-02	2.71E-05	3.67E-05	3.33E-05	8.31E-06	0.00E+00	4.84E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.58E-03	1.45E-04
SI39_W	0.17	6	0	1	1.35E-02	1.80E-02	2.30E-05	3.11E-05	2.82E-05	7.05E-06	0.00E+00	4.10E-05	4.11E-05	5.01E-09	1.43E-06	5.4	4.73E-03	1.23E-04
SI39_W	0.17	5	0	1	1.11E-02	1.48E-02	1.89E-05	2.56E-05	2.32E-05	5.79E-06	0.00E+00	3.37E-05	3.37E-05	4.11E-09	1.18E-06	4.5	3.89E-03	1.01E-04
SI39_W	0.17	4	0	1	8.22E-03	1.09E-02	1.40E-05	1.89E-05	1.71E-05	4.28E-06	0.00E+00	2.49E-05	2.49E-05	3.04E-09	8.69E-07	3.3	2.87E-03	7.48E-05
SI40_E	0.49	8	0	1	1.68E-02	2.23E-02	2.85E-05	3.85E-05	3.49E-05	8.72E-06	0.00E+00	5.08E-05	5.08E-05	6.19E-09	1.77E-06	6.7	5.86E-03	1.52E-04
SI40_E	0.49	5	0	1	1.12E-02	1.48E-02	1.90E-05	2.57E-05	2.33E-05	5.81E-06	0.00E+00	3.39E-05	3.39E-05	4.13E-09	1.18E-06	4.5	3.90E-03	1.02E-04
SI40_E	0.49	4	0	1	9.77E-03	1.30E-02	1.66E-05	2.25E-05	2.04E-05	5.09E-06	0.00E+00	2.96E-05	2.96E-05	3.61E-09	1.03E-06	3.9	3.42E-03	8.89E-05
SI40_E	0.49	3	0	1	6.98E-03	9.27E-03	1.19E-05	1.60E-05	1.46E-05	3.63E-06	0.00E+00	2.12E-05	2.12E-05	2.58E-09	7.38E-07	2.8	2.44E-03	6.35E-05
SI40_E	0.49	4	0	1	9.77E-03	1.30E-02	1.66E-05	2.25E-05	2.04E-05	5.09E-06	0.00E+00	2.96E-05	2.96E-05	3.61E-09	1.03E-06	3.9	3.42E-03	8.89E-05
SI40_E	0.49	11	0	1	2.37E-02	3.15E-02	4.03E-05	5.45E-05	4.95E-05	1.24E-05	0.00E+00	7.19E-05	7.20E-05	8.78E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI40_E	0.49	33	0	1	7.12E-02	9.46E-02	1.21E-04	1.64E-04	1.48E-04	3.71E-05	0.00E+00	2.16E-04	2.16E-04	2.63E-08	7.53E-06	28.6	2.49E-02	6.48E-04
SI40_E	0.49	50	0	1	1.09E-01	1.45E-01	1.85E-04	2.50E-04	2.27E-04	5.67E-05	0.00E+00	3.30E-04	3.30E-04	4.03E-08	1.15E-05	43.7	3.81E-02	9.91E-04
SI40_E	0.49	40	0	1	8.80E-02	1.17E-01	1.50E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.67E-04	2.67E-04	3.25E-08	9.30E-06	35.3	3.07E-02	8.00E-04
SI40_E	0.49	33	0	1	7.26E-02	9.64E-02	1.23E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.68E-08	7.68E-06	29.1	2.54E-02	6.60E-04
SI40_E	0.49	30	0	1	6.56E-02	8.72E-02	1.12E-04	1.51E-04	1.37E-04	3.42E-05	0.00E+00	1.99E-04	1.99E-04	2.43E-08	6.94E-06	26.3	2.29E-02	5.97E-04
SI40_E	0.49	34	0	1	7.40E-02	9.83E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.24E-04	2.74E-08	7.82E-06	29.7	2.59E-02	6.73E-04
SI40_E	0.49	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI40_E	0.49	37	0	1	7.96E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.41E-06	31.9	2.78E-02	7.24E-04
SI40_E	0.49	38	0	1	8.24E-02	1.09E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.71E-06	33.0	2.88E-02	7.49E-04
SI40_E	0.49	41	0	1	8.93E-02	1.19E-01	1.52E-04	2.05E-04	1.86E-04	4.65E-05	0.00E+00	2.71E-04	2.71E-04	3.30E-08	9.45E-06	35.8	3.12E-02	8.13E-04
SI40_E	0.49	51	0	1	1.10E-01	1.47E-01	1.88E-04	2.53E-04	2.30E-04	5.74E-05	0.00E+00	3.34E-04	3.35E-04	4.08E-08	1.17E-05	44.2	3.85E-02	1.00E-03
SI40_E	0.49	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI40_E	0.49	38	0	1	8.24E-02	1.09E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.71E-06	33.0	2.88E-02	7.49E-04
SI40_E	0.49	25	0	1	5.44E-02	7.23E-02	9.26E-05	1.25E-04	1.14E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.76E-06	21.8	1.90E-02	4.95E-04
SI40_E	0.49	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.60E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI40_E	0.49	18	0	1	3.91E-02	5.19E-02	6.65E-05	8.98E-05	8.15E-05	2.03E-05	0.00E+00	1.18E-04	1.19E-04	1.45E-08	4.13E-06	15.7	1.37E-02	3.56E-04
SI40_E	0.49	15	0	1	3.21E-02	4.27E-02	5.46E-05	7.38E-05	6.69E-05	1.67E-05	0.00E+00	9.73E-05	9.74E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI40_E	0.49	11	0	1	2.37E-02	3.15E-02	4.03E-05	5.45E-05	4.95E-05	1.24E-05	0.00E+00	7.19E-05	7.20E-05	8.78E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI40_W	0.50	11	0	1	2.33E-02	3.10E-02	3.97E-05	5.36E-05	4.86E-05	1.21E-05	0.00E+00	7.07E-05	7.08E-05	8.62E-09	2.47E-06	9.4	8.15E-03	2.12E-04
SI40_W	0.50	7	0	1	1.55E-02	2.07E-02	2.64E-05	3.57E-05	3.24E-05	8.09E-06	0.00E+00	4.71E-05	4.72E-05	5.75E-09	1.64E-06	6.2	5.43E-03	1.41E-04
SI40_W	0.50	6	0	1	1.36E-02	1.81E-02	2.31E-05	3.13E-05	2.84E-05	7.08E-06	0.00E+00	4.12E-05	4.13E-05	5.03E-09	1.44E-06	5.5	4.75E-03	1.24E-04
SI40_W	0.50	4	0	1	9.72E-03	1.29E-02	1.65E-05	2.23E-05	2.03E-05	5.06E-06	0.00E+00	2.95E-05	2.95E-05	3.59E-09	1.03E-06	3.9	3.40E-03	8.84E-05
SI40_W	0.50	6	0	1	1.36E-02	1.81E-02	2.31E-05	3.13E-05	2.84E-05	7.08E-06	0.00E+00	4.12E-05	4.13E-05	5.03E-09	1.44E-06	5.5	4.75E-03	1.24E-04
SI40_W	0.50	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI40_W	0.50	46	0	1	9.91E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.16E-05	0.00E+00	3.00E-04	3.01E-04	3.66E-08	1.05E-05	39.8	3.46E-02	9.02E-04
SI40_W	0.50	70	0	1	1.52E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.61E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI40_W	0.50	56	0	1	1.22E-01	1.63E-01	2.08E-04	2.81E-04	2.55E-04	6.37E-05	0.00E+00	3.71E-04	3.71E-04	4.53E-08	1.29E-05	49.1	4.28E-02	1.11E-03
SI40_W	0.50	46	0	1	1.01E-01	1.34E-01	1.72E-04	2.32E-04	2.11E-04	5.26E-05	0.00E+00	3.06E-04	3.07E-04	3.74E-08	1.07E-05	40.5	3.53E-02	9.19E-04
SI40_W	0.50	42	0	1	9.13E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.76E-05	0.00E+00	2.77E-04	2.77E-04	3.38E-08	9.66E-06	36.6	3.19E-02	8.31E-04
SI40_W	0.50	47	0	1	1.03E-01	1.37E-01	1.75E-04	2.37E-04	2.15E-04	5.36E-05	0.00E+00	3.12E-04	3.13E-04	3.81E-08	1.09E-05	41.3	3.60E-02	9.37E-04
SI40_W	0.50	50	0	1	1.09E-01	1.45E-01	1.85E-04	2.50E-04	2.27E-04	5.67E-05	0.00E+00	3.30E-04	3.30E-04	4.02E-08	1.15E-05	43.7	3.80E-02	9.90E-04
SI40_W	0.50	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.55E-04	2.31E-04	5.77E-05	0.00E+00	3.36E-04	3.36E-04	4.10E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI40_W	0.50	53	0	1	1.15E-01	1.52E-01	1.95E-04	2.63E-04	2.39E-04	5.97E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.0	4.01E-02	1.04E-03
SI40_W	0.50	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.86E-04	2.59E-04	6.48E-05	0.00E+00	3.77E-04	3.77E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI40_W	0.50	71	0	1	1.54E-01	2.04E-01	2.61E-04	3.53E-04	3.20E-04	7.99E-05	0.00E+00	4.65E-04	4.66E-04	5.68E-08	1.62E-05	61.6	5.37E-02	1.40E-03
SI40_W	0.50	76	0	1	1.65E-01	2.19E-01	2.81E-04	3.80E-04	3.44E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.77E-02	1.50E-03
SI40_W	0.50	53	0	1	1.15E-01	1.52E-01	1.95E-04	2.63E-04	2.39E-04	5.97E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.0	4.01E-02	1.04E-03
SI40_W	0.50	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.90E-04
SI40_W	0.50	29	0	1	6.41E-02	8.52E-02	1.09E-04	1.47E-04	1.34E-04	3.34E-05	0.00E+00	1.94E-04	1.95E-04	2.37E-08	6.78E-06	25.7	2.24E-02	5.83E-04
SI40_W	0.50	25	0	1	5.44E-02	7.23E-02	9.25E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.75E-06	21.8	1.90E-02	4.95E-04
SI40_W	0.50	21	0	1	4.47E-02	5.94E-02	7.60E-05	1.03E-04	9.32E-05	2.33E-05	0.00E+00	1.35E-04	1.36E-04	1.65E-08	4.73E-06	17.9	1.56E-02	4.07E-04
SI40_W	0.50	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI41_E	0.75	16	0	1	3.50E-02	4.65E-02	5.95E-05	8.04E-05	7.29E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.70E-06	14.0	1.22E-02	3.18E-04
SI41_E	0.75	11	0	1	2.33E-02	3.10E-02	3.97E-05	5.36E-05	4.86E-05	1.21E-05	0.00E+00	7.07E-05	7.08E-05	8.62E-09	2.47E-06	9.4	8.15E-03	2.12E-04
SI41_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI41_E	0.75	7	0	1	1.46E-02	1.94E-02	2.48E-05	3.35E-05	3.04E-05	7.59E-06	0.00E+00	4.42E-05	4.42E-05	5.39E-09	1.54E-06	5.8	5.09E-03	1.33E-04
SI41_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI41_E	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI41_E	0.75	68	0	1	1.49E-01	1.98E-01	2.53E-04	3.42E-04	3.10E-04	7.74E-05	0.00E+00	4.51E-04	4.51E-04	5.50E-08	1.57E-05	59.6	5.20E-02	1.35E-03
SI41_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.22E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI41_E	0.75	84	0	1	1.84E-01	2.44E-01	3.12E-04	4.22E-04	3.83E-04	9.56E-05	0.00E+00	5.57E-04	5.57E-04	6.79E-08	1.94E-05	73.7	6.42E-02	1.67E-03
SI41_E	0.75	70	0	1	1.52E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.61E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI41_E	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.86E-04	7.13E-05	0.00E+00	4.15E-04	4.16E-04	5.07E-08	1.45E-05	55.0	4.79E-02	1.25E-03
SI41_E	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.04E-05	0.00E+00	4.68E-04	4.69E-04	5.71E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI41_E	0.75	75	0	1	1.63E-01	2.17E-01	2.78E-04	3.75E-04	3.40E-04	8.50E-05	0.00E+00	4.95E-04	4.95E-04	6.04E-08	1.73E-05	65.5	5.71E-02	1.49E-03
SI41_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.46E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.14E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI41_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI41_E	0.75	86	0	1	1.87E-01	2.48E-01	3.17E-04	4.29E-04	3.89E-04	9.71E-05	0.00E+00	5.65E-04	5.66E-04	6.90E-08	1.97E-05	74.9	6.52E-02	1.70E-03
SI41_E	0.75	106	0	1	2.30E-01	3.06E-01	3.92E-04	5.29E-04	4.80E-04	1.20E-04	0.00E+00	6.98E-04	6.99E-04	8.52E-08	2.44E-05	92.4	8.05E-02	2.10E-03
SI41_E	0.75	114	0	1	2.48E-01	3.29E-01	4.21E-04	5.69E-04	5.17E-04	1.29E-04	0.00E+00	7.51E-04	7.52E-04	9.16E-08	2.62E-05	99.4	8.66E-02	2.25E-03
SI41_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI41_E	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI41_E	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI41_E	0.75	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.88E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.48E-04	3.02E-08	8.63E-06	32.7	2.85E-02	7.43E-04
SI41_E	0.75	31	0	1	6.71E-02	8.91E-02	1.14E-04	1.54E-04	1.40E-04	3.49E-05	0.00E+00	2.03E-04	2.03E-04	2.48E-08	7.09E-06	26.9	2.34E-02	6.10E-04
SI41_E	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI41_W	0.75	16	0	1	3.50E-02	4.65E-02	5.95E-05	8.04E-05	7.29E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.70E-06	14.0	1.22E-02	3.18E-04
SI41_W	0.75	11	0	1	2.33E-02	3.10E-02	3.97E-05	5.36E-05	4.86E-05	1.21E-05	0.00E+00	7.07E-05	7.08E-05	8.62E-09	2.47E-06	9.4	8.15E-03	2.12E-04
SI41_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI41_W	0.75	7	0	1	1.46E-02	1.94E-02	2.48E-05	3.35E-05	3.04E-05	7.59E-06	0.00E+00	4.42E-05	4.42E-05	5.39E-09	1.54E-06	5.8	5.09E-03	1.33E-04
SI41_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI41_W	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI41_W	0.75	68	0	1	1.49E-01	1.98E-01	2.53E-04	3.42E-04	3.10E-04	7.74E-05	0.00E+00	4.51E-04	4.51E-04	5.50E-08	1.57E-05	59.6	5.20E-02	1.35E-03
SI41_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.22E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI41_W	0.75	84	0	1	1.84E-01	2.44E-01	3.12E-04	4.22E-04	3.83E-04	9.56E-05	0.00E+00	5.57E-04	5.57E-04	6.79E-08	1.94E-05	73.7	6.42E-02	1.67E-03
SI41_W	0.75	70	0	1	1.52E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.61E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI41_W	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.86E-04	7.13E-05	0.00E+00	4.15E-04	4.16E-04	5.07E-08	1.45E-05	55.0	4.79E-02	1.25E-03
SI41_W	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.04E-05	0.00E+00	4.68E-04	4.69E-04	5.71E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI41_W	0.75	75	0	1	1.63E-01	2.17E-01	2.78E-04	3.75E-04	3.40E-04	8.50E-05	0.00E+00	4.95E-04	4.95E-04	6.04E-08	1.73E-05	65.5	5.71E-02	1.49E-03
SI41_W	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.46E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.14E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI41_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI41_W	0.75	86	0	1	1.87E-01	2.48E-01	3.17E-04	4.29E-04	3.89E-04	9.71E-05	0.00E+00	5.65E-04	5.66E-04	6.90E-08	1.97E-05	74.9	6.52E-02	1.70E-03
SI41_W	0.75	106	0	1	2.30E-01	3.06E-01	3.92E-04	5.29E-04	4.80E-04	1.20E-04	0.00E+00	6.98E-04	6.99E-04	8.52E-08	2.44E-05	92.4	8.05E-02	2.10E-03
SI41_W	0.75	114	0	1	2.48E-01	3.29E-01	4.21E-04	5.69E-04	5.17E-04	1.29E-04	0.00E+00	7.51E-04	7.52E-04	9.16E-08	2.62E-05	99.4	8.66E-02	2.25E-03
SI41_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI41_W	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI41_W	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI41_W	0.75	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.88E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.48E-04	3.02E-08	8.63E-06	32.7	2.85E-02	7.43E-04
SI41_W	0.75	31	0	1	6.71E-02	8.91E-02	1.14E-04	1.54E-04	1.40E-04	3.49E-05	0.00E+00	2.03E-04	2.03E-04	2.48E-08	7.09E-06	26.9	2.34E-02	6.10E-04
SI41_W	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI42_E	0.75	16	0	1	3.50E-02	4.65E-02	5.95E-05	8.04E-05	7.29E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.70E-06	14.0	1.22E-02	3.18E-04
SI42_E	0.75	11	0	1	2.33E-02	3.10E-02	3.97E-05	5.36E-05	4.86E-05	1.21E-05	0.00E+00	7.07E-05	7.08E-05	8.62E-09	2.47E-06	9.4	8.15E-03	2.12E-04
SI42_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI42_E	0.75	7	0	1	1.46E-02	1.94E-02	2.48E-05	3.35E-05	3.04E-05	7.59E-06	0.00E+00	4.42E-05	4.42E-05	5.39E-09	1.54E-06	5.8	5.09E-03	1.33E-04
SI42_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.55E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI42_E	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI42_E	0.75	68	0	1	1.49E-01	1.98E-01	2.53E-04	3.42E-04	3.10E-04	7.74E-05	0.00E+00	4.51E-04	4.51E-04	5.50E-08	1.57E-05	59.6	5.20E-02	1.35E-03
SI42_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.22E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI42_E	0.75	84	0	1	1.84E-01	2.44E-01	3.12E-04	4.22E-04	3.83E-04	9.56E-05	0.00E+00	5.57E-04	5.57E-04	6.79E-08	1.94E-05	73.7	6.42E-02	1.67E-03
SI42_E	0.75	70	0	1	1.52E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.61E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI42_E	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.86E-04	7.13E-05	0.00E+00	4.15E-04	4.16E-04	5.07E-08	1.45E-05	55.0	4.79E-02	1.25E-03
SI42_E	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.04E-05	0.00E+00	4.68E-04	4.69E-04	5.71E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI42_E	0.75	75	0	1	1.63E-01	2.17E-01	2.78E-04	3.75E-04	3.40E-04	8.50E-05	0.00E+00	4.95E-04	4.95E-04	6.04E-08	1.73E-05	65.5	5.71E-02	1.49E-03
SI42_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.46E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.14E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI42_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI42_E	0.75	86	0	1	1.87E-01	2.48E-01	3.17E-04	4.29E-04	3.89E-04	9.71E-05	0.00E+00	5.65E-04	5.66E-04	6.90E-08	1.97E-05	74.9	6.52E-02	1.70E-03
SI42_E	0.75	106	0	1	2.30E-01	3.06E-01	3.92E-04	5.29E-04	4.80E-04	1.20E-04	0.00E+00	6.98E-04	6.99E-04	8.52E-08	2.44E-05	92.4	8.05E-02	2.10E-03
SI42_E	0.75	114	0	1	2.48E-01	3.29E-01	4.21E-04	5.69E-04	5.17E-04	1.29E-04	0.00E+00	7.51E-04	7.52E-04	9.16E-08	2.62E-05	99.4	8.66E-02	2.25E-03
SI42_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.59E-04	8.95E-05	0.00E+00	5.21E-04	5.22E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI42_E	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI42_E	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI42_E	0.75	37	0	1	8.16E-02	1.08E-01	1.39E-04	1.88E-04	1.70E-04	4.25E-05	0.00E+00	2.47E-04	2.48E-04	3.02E-08	8.63E-06	32.7	2.85E-02	7.43E-04
SI42_E	0.75	31	0	1	6.71E-02	8.91E-02	1.14E-04	1.54E-04	1.40E-04	3.49E-05	0.00E+00	2.03E-04	2.03E-04	2.48E-08	7.09E-06	26.9	2.34E-02	6.10E-04
SI42_E	0.75	23	0	1	4.96E-02	6.58E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.24E-06	19.9	1.73E-02	4.51E-04
SI42_W	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.92E-05	6.28E-05	1.57E-05	0.00E+00	9.13E-05	9.14E-05	1.11E-08	3.18E-06	12.1	1.05E-02	2.74E-04
SI42_W	0.75	9	0	1	2.01E-02	2.67E-02	3.41E-05	4.61E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.09E-05	7.42E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI42_W	0.75	8	0	1	1.76E-02	2.33E-02	2.99E-05	4.04E-05	3.66E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.0	6.14E-03	1.60E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_W	0.75	6	0	1	1.26E-02	1.67E-02	2.13E-05	2.88E-05	2.62E-05	6.53E-06	0.00E+00	3.80E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI42_W	0.75	8	0	1	1.76E-02	2.33E-02	2.99E-05	4.04E-05	3.66E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.0	6.14E-03	1.60E-04
SI42_W	0.75	20	0	1	4.27E-02	5.67E-02	7.25E-05	9.80E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.29E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI42_W	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.66E-05	0.00E+00	3.88E-04	3.88E-04	4.73E-08	1.35E-05	51.4	4.47E-02	1.16E-03
SI42_W	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.93E-04	5.94E-04	7.24E-08	2.07E-05	78.5	6.84E-02	1.78E-03
SI42_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI42_W	0.75	60	0	1	1.31E-01	1.73E-01	2.22E-04	3.00E-04	2.72E-04	6.79E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI42_W	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.14E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.3	4.12E-02	1.07E-03
SI42_W	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.77E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI42_W	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.26E-04	5.20E-08	1.49E-05	56.4	4.91E-02	1.28E-03
SI42_W	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI42_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.40E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.49E-04	5.48E-08	1.57E-05	59.4	5.18E-02	1.35E-03
SI42_W	0.75	74	0	1	1.61E-01	2.13E-01	2.73E-04	3.69E-04	3.35E-04	8.36E-05	0.00E+00	4.87E-04	4.87E-04	5.94E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI42_W	0.75	91	0	1	1.98E-01	2.63E-01	3.37E-04	4.56E-04	4.13E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.33E-08	2.10E-05	79.6	6.93E-02	1.80E-03
SI42_W	0.75	98	0	1	2.13E-01	2.83E-01	3.63E-04	4.90E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.47E-04	7.89E-08	2.26E-05	85.6	7.46E-02	1.94E-03
SI42_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.40E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.49E-04	5.48E-08	1.57E-05	59.4	5.18E-02	1.35E-03
SI42_W	0.75	45	0	1	9.79E-02	1.30E-01	1.66E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI42_W	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI42_W	0.75	32	0	1	7.03E-02	9.34E-02	1.19E-04	1.61E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.43E-06	28.2	2.46E-02	6.39E-04
SI42_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI42_W	0.75	20	0	1	4.27E-02	5.67E-02	7.25E-05	9.80E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.29E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI43_E	0.75	15	0	1	3.26E-02	4.32E-02	5.53E-05	7.48E-05	6.79E-05	1.69E-05	0.00E+00	9.87E-05	9.88E-05	1.20E-08	3.44E-06	13.1	1.14E-02	2.96E-04
SI43_E	0.75	10	0	1	2.17E-02	2.88E-02	3.69E-05	4.99E-05	4.52E-05	1.13E-05	0.00E+00	6.58E-05	6.58E-05	8.02E-09	2.29E-06	8.7	7.58E-03	1.97E-04
SI43_E	0.75	9	0	1	1.90E-02	2.52E-02	3.23E-05	4.36E-05	3.96E-05	9.89E-06	0.00E+00	5.76E-05	5.76E-05	7.02E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI43_E	0.75	6	0	1	1.36E-02	1.80E-02	2.31E-05	3.12E-05	2.83E-05	7.06E-06	0.00E+00	4.11E-05	4.11E-05	5.01E-09	1.43E-06	5.4	4.74E-03	1.23E-04
SI43_E	0.75	9	0	1	1.90E-02	2.52E-02	3.23E-05	4.36E-05	3.96E-05	9.89E-06	0.00E+00	5.76E-05	5.76E-05	7.02E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI43_E	0.75	21	0	1	4.61E-02	6.13E-02	7.84E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI43_E	0.75	64	0	1	1.38E-01	1.84E-01	2.35E-04	3.18E-04	2.88E-04	7.20E-05	0.00E+00	4.19E-04	4.20E-04	5.12E-08	1.46E-05	55.5	4.84E-02	1.26E-03
SI43_E	0.75	97	0	1	2.12E-01	2.81E-01	3.60E-04	4.86E-04	4.41E-04	1.10E-04	0.00E+00	6.41E-04	6.42E-04	7.82E-08	2.24E-05	84.9	7.40E-02	1.92E-03
SI43_E	0.75	79	0	1	1.71E-01	2.27E-01	2.91E-04	3.93E-04	3.56E-04	8.90E-05	0.00E+00	5.18E-04	5.18E-04	6.32E-08	1.81E-05	68.6	5.97E-02	1.55E-03
SI43_E	0.75	65	0	1	1.41E-01	1.87E-01	2.40E-04	3.24E-04	2.94E-04	7.34E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.6	4.93E-02	1.28E-03
SI43_E	0.75	59	0	1	1.27E-01	1.69E-01	2.17E-04	2.93E-04	2.66E-04	6.64E-05	0.00E+00	3.86E-04	3.87E-04	4.71E-08	1.35E-05	51.1	4.46E-02	1.16E-03
SI43_E	0.75	66	0	1	1.44E-01	1.91E-01	2.44E-04	3.30E-04	3.00E-04	7.48E-05	0.00E+00	4.36E-04	4.36E-04	5.32E-08	1.52E-05	57.7	5.02E-02	1.31E-03
SI43_E	0.75	70	0	1	1.52E-01	2.02E-01	2.58E-04	3.49E-04	3.17E-04	7.91E-05	0.00E+00	4.60E-04	4.61E-04	5.62E-08	1.61E-05	60.9	5.31E-02	1.38E-03
SI43_E	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.05E-05	0.00E+00	4.69E-04	4.69E-04	5.72E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI43_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.33E-05	0.00E+00	4.85E-04	4.86E-04	5.92E-08	1.69E-05	64.2	5.59E-02	1.46E-03
SI43_E	0.75	80	0	1	1.74E-01	2.31E-01	2.95E-04	3.99E-04	3.62E-04	9.04E-05	0.00E+00	5.26E-04	5.27E-04	6.42E-08	1.84E-05	69.6	6.07E-02	1.58E-03
SI43_E	0.75	98	0	1	2.14E-01	2.85E-01	3.64E-04	4.92E-04	4.47E-04	1.12E-04	0.00E+00	6.50E-04	6.50E-04	7.92E-08	2.27E-05	86.0	7.49E-02	1.95E-03
SI43_E	0.75	106	0	1	2.31E-01	3.06E-01	3.92E-04	5.30E-04	4.81E-04	1.20E-04	0.00E+00	6.99E-04	7.00E-04	8.53E-08	2.44E-05	92.5	8.06E-02	2.10E-03
SI43_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.33E-05	0.00E+00	4.85E-04	4.86E-04	5.92E-08	1.69E-05	64.2	5.59E-02	1.46E-03
SI43_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.91E-08	1.12E-05	42.4	3.70E-02	9.62E-04
SI43_E	0.75	41	0	1	8.95E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.66E-05	0.00E+00	2.71E-04	2.72E-04	3.31E-08	9.46E-06	35.9	3.13E-02	8.14E-04
SI43_E	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.81E-08	8.03E-06	30.5	2.65E-02	6.91E-04
SI43_E	0.75	29	0	1	6.24E-02	8.29E-02	1.06E-04	1.43E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.0	2.18E-02	5.68E-04
SI43_E	0.75	21	0	1	4.61E-02	6.13E-02	7.84E-05	1.06E-04	9.61E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI43_W	0.75	10	0	1	2.16E-02	2.87E-02	3.67E-05	4.96E-05	4.50E-05	1.12E-05	0.00E+00	6.55E-05	6.55E-05	7.98E-09	2.28E-06	8.7	7.55E-03	1.96E-04
SI43_W	0.75	7	0	1	1.44E-02	1.91E-02	2.45E-05	3.31E-05	3.00E-05	7.49E-06	0.00E+00	4.36E-05	4.37E-05	5.32E-09	1.52E-06	5.8	5.03E-03	1.31E-04
SI43_W	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.63E-05	6.56E-06	0.00E+00	3.82E-05	3.82E-05	4.66E-09	1.33E-06	5.1	4.40E-03	1.15E-04
SI43_W	0.75	4	0	1	9.00E-03	1.20E-02	1.53E-05	2.07E-05	1.88E-05	4.68E-06	0.00E+00	2.73E-05	2.73E-05	3.33E-09	9.51E-07	3.6	3.14E-03	8.19E-05
SI43_W	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.63E-05	6.56E-06	0.00E+00	3.82E-05	3.82E-05	4.66E-09	1.33E-06	5.1	4.40E-03	1.15E-04
SI43_W	0.75	14	0	1	3.06E-02	4.06E-02	5.20E-05	7.03E-05	6.38E-05	1.59E-05	0.00E+00	9.27E-05	9.28E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04
SI43_W	0.75	42	0	1	9.18E-02	1.22E-01	1.56E-04	2.11E-04	1.91E-04	4.78E-05	0.00E+00	2.78E-04	2.78E-04	3.39E-08	9.70E-06	36.8	3.21E-02	8.35E-04
SI43_W	0.75	64	0	1	1.40E-01	1.86E-01	2.39E-04	3.23E-04	2.93E-04	7.31E-05	0.00E+00	4.25E-04	4.26E-04	5.19E-08	1.48E-05	56.3	4.91E-02	1.28E-03
SI43_W	0.75	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.60E-04	2.36E-04	5.90E-05	0.00E+00	3.44E-04	3.44E-04	4.19E-08	1.20E-05	45.5	3.96E-02	1.03E-03
SI43_W	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.87E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.89E-06	37.5	3.27E-02	8.51E-04
SI43_W	0.75	39	0	1	8.46E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.57E-04	3.13E-08	8.94E-06	33.9	2.96E-02	7.69E-04
SI43_W	0.75	44	0	1	9.54E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.89E-04	3.53E-08	1.01E-05	38.3	3.33E-02	8.68E-04
SI43_W	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.05E-04	3.06E-04	3.73E-08	1.07E-05	40.4	3.52E-02	9.17E-04
SI43_W	0.75	47	0	1	1.03E-01	1.36E-01	1.74E-04	2.36E-04	2.14E-04	5.34E-05	0.00E+00	3.11E-04	3.11E-04	3.79E-08	1.08E-05	41.2	3.59E-02	9.33E-04
SI43_W	0.75	49	0	1	1.06E-01	1.41E-01	1.81E-04	2.44E-04	2.21E-04	5.53E-05	0.00E+00	3.22E-04	3.22E-04	3.93E-08	1.12E-05	42.6	3.71E-02	9.66E-04
SI43_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.40E-04	6.00E-05	0.00E+00	3.49E-04	3.49E-04	4.26E-08	1.22E-05	46.2	4.03E-02	1.05E-03
SI43_W	0.75	65	0	1	1.42E-01	1.89E-01	2.42E-04	3.27E-04	2.96E-04	7.40E-05	0.00E+00	4.31E-04	4.31E-04	5.26E-08	1.50E-05	57.0	4.97E-02	1.29E-03
SI43_W	0.75	70	0	1	1.53E-01	2.03E-01	2.60E-04	3.51E-04	3.19E-04	7.96E-05	0.00E+00	4.64E-04	4.64E-04	5.66E-08	1.62E-05	61.4	5.35E-02	1.39E-03
SI43_W	0.75	49	0	1	1.06E-01	1.41E-01	1.81E-04	2.44E-04	2.21E-04	5.53E-05	0.00E+00	3.22E-04	3.22E-04	3.93E-08	1.12E-05	42.6	3.71E-02	9.66E-04
SI43_W	0.75	32	0	1	7.02E-02	9.32E-02	1.19E-04	1.61E-04	1.46E-04	3.65E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.38E-04
SI43_W	0.75	27	0	1	5.94E-02	7.89E-02	1.01E-04	1.36E-04	1.24E-04	3.09E-05	0.00E+00	1.80E-04	1.80E-04	2.20E-08	6.28E-06	23.8	2.08E-02	5.40E-04
SI43_W	0.75	23	0	1	5.04E-02	6.69E-02	8.57E-05	1.16E-04	1.05E-04	2.62E-05	0.00E+00	1.53E-04	1.53E-04	1.86E-08	5.33E-06	20.2	1.76E-02	4.58E-04
SI43_W	0.75	19	0	1	4.14E-02	5.50E-02	7.04E-05	9.51E-05	8.63E-05	2.15E-05	0.00E+00	1.25E-04	1.26E-04	1.53E-08	4.38E-06	16.6	1.45E-02	3.77E-04
SI43_W	0.75	14	0	1	3.06E-02	4.06E-02	5.20E-05	7.03E-05	6.38E-05	1.59E-05	0.00E+00	9.27E-05	9.28E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_E	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.92E-05	6.28E-05	1.57E-05	0.00E+00	9.13E-05	9.14E-05	1.11E-08	3.18E-06	12.1	1.05E-02	2.74E-04
SI44_E	0.75	9	0	1	2.01E-02	2.67E-02	3.41E-05	4.61E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.09E-05	7.42E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI44_E	0.75	8	0	1	1.76E-02	2.33E-02	2.99E-05	4.04E-05	3.66E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.0	6.14E-03	1.60E-04
SI44_E	0.75	6	0	1	1.26E-02	1.67E-02	2.13E-05	2.88E-05	2.62E-05	6.53E-06	0.00E+00	3.80E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI44_E	0.75	8	0	1	1.76E-02	2.33E-02	2.99E-05	4.04E-05	3.66E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.0	6.14E-03	1.60E-04
SI44_E	0.75	20	0	1	4.27E-02	5.67E-02	7.25E-05	9.80E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.29E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI44_E	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.66E-05	0.00E+00	3.88E-04	3.88E-04	4.73E-08	1.35E-05	51.4	4.47E-02	1.16E-03
SI44_E	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.93E-04	5.94E-04	7.24E-08	2.07E-05	78.5	6.84E-02	1.78E-03
SI44_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.63E-04	3.30E-04	8.23E-05	0.00E+00	4.79E-04	4.80E-04	5.85E-08	1.67E-05	63.4	5.53E-02	1.44E-03
SI44_E	0.75	60	0	1	1.31E-01	1.73E-01	2.22E-04	3.00E-04	2.72E-04	6.79E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI44_E	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.14E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.3	4.12E-02	1.07E-03
SI44_E	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.77E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI44_E	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.26E-04	5.20E-08	1.49E-05	56.4	4.91E-02	1.28E-03
SI44_E	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI44_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.40E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.49E-04	5.48E-08	1.57E-05	59.4	5.18E-02	1.35E-03
SI44_E	0.75	74	0	1	1.61E-01	2.13E-01	2.73E-04	3.69E-04	3.35E-04	8.36E-05	0.00E+00	4.87E-04	4.87E-04	5.94E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI44_E	0.75	91	0	1	1.98E-01	2.63E-01	3.37E-04	4.56E-04	4.13E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.33E-08	2.10E-05	79.6	6.93E-02	1.80E-03
SI44_E	0.75	98	0	1	2.13E-01	2.83E-01	3.63E-04	4.90E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.47E-04	7.89E-08	2.26E-05	85.6	7.46E-02	1.94E-03
SI44_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.40E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.49E-04	5.48E-08	1.57E-05	59.4	5.18E-02	1.35E-03
SI44_E	0.75	45	0	1	9.79E-02	1.30E-01	1.66E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI44_E	0.75	38	0	1	8.28E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.2	2.90E-02	7.54E-04
SI44_E	0.75	32	0	1	7.03E-02	9.34E-02	1.19E-04	1.61E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.43E-06	28.2	2.46E-02	6.39E-04
SI44_E	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI44_E	0.75	20	0	1	4.27E-02	5.67E-02	7.25E-05	9.80E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.29E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI44_W	0.75	6	0	1	1.31E-02	1.74E-02	2.22E-05	3.00E-05	2.72E-05	6.80E-06	0.00E+00	3.96E-05	3.97E-05	4.83E-09	1.38E-06	5.2	4.57E-03	1.19E-04
SI44_W	0.75	4	0	1	8.71E-03	1.16E-02	1.48E-05	2.00E-05	1.82E-05	4.54E-06	0.00E+00	2.64E-05	2.64E-05	3.22E-09	9.21E-07	3.5	3.05E-03	7.93E-05
SI44_W	0.75	4	0	1	7.62E-03	1.01E-02	1.30E-05	1.75E-05	1.59E-05	3.97E-06	0.00E+00	2.31E-05	2.31E-05	2.82E-09	8.06E-07	3.1	2.66E-03	6.94E-05
SI44_W	0.75	3	0	1	5.45E-03	7.23E-03	9.26E-06	1.25E-05	1.14E-05	2.83E-06	0.00E+00	1.65E-05	1.65E-05	2.01E-09	5.76E-07	2.2	1.90E-03	4.95E-05
SI44_W	0.75	4	0	1	7.62E-03	1.01E-02	1.30E-05	1.75E-05	1.59E-05	3.97E-06	0.00E+00	2.31E-05	2.31E-05	2.82E-09	8.06E-07	3.1	2.66E-03	6.94E-05
SI44_W	0.75	9	0	1	1.85E-02	2.46E-02	3.15E-05	4.25E-05	3.86E-05	9.64E-06	0.00E+00	5.61E-05	5.62E-05	6.85E-09	1.96E-06	7.4	6.47E-03	1.68E-04
SI44_W	0.75	26	0	1	5.55E-02	7.38E-02	9.44E-05	1.28E-04	1.16E-04	2.89E-05	0.00E+00	1.68E-04	1.69E-04	2.05E-08	5.87E-06	22.3	1.94E-02	5.05E-04
SI44_W	0.75	39	0	1	8.49E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.57E-04	2.58E-04	3.14E-08	8.98E-06	34.1	2.97E-02	7.73E-04
SI44_W	0.75	32	0	1	6.86E-02	9.12E-02	1.17E-04	1.58E-04	1.43E-04	3.57E-05	0.00E+00	2.08E-04	2.08E-04	2.54E-08	7.25E-06	27.5	2.40E-02	6.24E-04
SI44_W	0.75	26	0	1	5.66E-02	7.52E-02	9.63E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.09E-08	5.99E-06	22.7	1.98E-02	5.15E-04
SI44_W	0.75	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI44_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI44_W	0.75	28	0	1	6.10E-02	8.10E-02	1.04E-04	1.40E-04	1.27E-04	3.18E-05	0.00E+00	1.85E-04	1.85E-04	2.26E-08	6.45E-06	24.5	2.13E-02	5.55E-04
SI44_W	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.29E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.56E-06	24.9	2.17E-02	5.65E-04
SI44_W	0.75	30	0	1	6.43E-02	8.54E-02	1.09E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.79E-06	25.8	2.25E-02	5.85E-04
SI44_W	0.75	32	0	1	6.97E-02	9.26E-02	1.19E-04	1.60E-04	1.45E-04	3.63E-05	0.00E+00	2.11E-04	2.11E-04	2.58E-08	7.37E-06	28.0	2.44E-02	6.34E-04
SI44_W	0.75	40	0	1	8.60E-02	1.14E-01	1.46E-04	1.98E-04	1.79E-04	4.48E-05	0.00E+00	2.61E-04	2.61E-04	3.18E-08	9.10E-06	34.5	3.01E-02	7.83E-04
SI44_W	0.75	43	0	1	9.26E-02	1.23E-01	1.57E-04	2.13E-04	1.93E-04	4.82E-05	0.00E+00	2.81E-04	2.81E-04	3.42E-08	9.79E-06	37.1	3.24E-02	8.42E-04
SI44_W	0.75	30	0	1	6.43E-02	8.54E-02	1.09E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.79E-06	25.8	2.25E-02	5.85E-04
SI44_W	0.75	20	0	1	4.25E-02	5.64E-02	7.22E-05	9.76E-05	8.85E-05	2.21E-05	0.00E+00	1.29E-04	1.29E-04	1.57E-08	4.49E-06	17.0	1.48E-02	3.86E-04
SI44_W	0.75	17	0	1	3.59E-02	4.77E-02	6.11E-05	8.26E-05	7.49E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.80E-06	14.4	1.26E-02	3.27E-04
SI44_W	0.75	14	0	1	3.05E-02	4.05E-02	5.18E-05	7.01E-05	6.36E-05	1.59E-05	0.00E+00	9.24E-05	9.25E-05	1.13E-08	3.22E-06	12.2	1.07E-02	2.77E-04
SI44_W	0.75	12	0	1	2.50E-02	3.33E-02	4.26E-05	5.76E-05	5.22E-05	1.30E-05	0.00E+00	7.59E-05	7.60E-05	9.26E-09	2.65E-06	10.0	8.76E-03	2.28E-04
SI44_W	0.75	9	0	1	1.85E-02	2.46E-02	3.15E-05	4.25E-05	3.86E-05	9.64E-06	0.00E+00	5.61E-05	5.62E-05	6.85E-09	1.96E-06	7.4	6.47E-03	1.68E-04
SI45_E	0.75	6	0	1	1.31E-02	1.74E-02	2.22E-05	3.00E-05	2.72E-05	6.80E-06	0.00E+00	3.96E-05	3.97E-05	4.83E-09	1.38E-06	5.2	4.57E-03	1.19E-04
SI45_E	0.75	4	0	1	8.71E-03	1.16E-02	1.48E-05	2.00E-05	1.82E-05	4.54E-06	0.00E+00	2.64E-05	2.64E-05	3.22E-09	9.21E-07	3.5	3.05E-03	7.93E-05
SI45_E	0.75	4	0	1	7.62E-03	1.01E-02	1.30E-05	1.75E-05	1.59E-05	3.97E-06	0.00E+00	2.31E-05	2.31E-05	2.82E-09	8.06E-07	3.1	2.66E-03	6.94E-05
SI45_E	0.75	3	0	1	5.45E-03	7.23E-03	9.26E-06	1.25E-05	1.14E-05	2.83E-06	0.00E+00	1.65E-05	1.65E-05	2.01E-09	5.76E-07	2.2	1.90E-03	4.95E-05
SI45_E	0.75	4	0	1	7.62E-03	1.01E-02	1.30E-05	1.75E-05	1.59E-05	3.97E-06	0.00E+00	2.31E-05	2.31E-05	2.82E-09	8.06E-07	3.1	2.66E-03	6.94E-05
SI45_E	0.75	9	0	1	1.85E-02	2.46E-02	3.15E-05	4.25E-05	3.86E-05	9.64E-06	0.00E+00	5.61E-05	5.62E-05	6.85E-09	1.96E-06	7.4	6.47E-03	1.68E-04
SI45_E	0.75	26	0	1	5.55E-02	7.38E-02	9.44E-05	1.28E-04	1.16E-04	2.89E-05	0.00E+00	1.68E-04	1.69E-04	2.05E-08	5.87E-06	22.3	1.94E-02	5.05E-04
SI45_E	0.75	39	0	1	8.49E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.57E-04	2.58E-04	3.14E-08	8.98E-06	34.1	2.97E-02	7.73E-04
SI45_E	0.75	32	0	1	6.86E-02	9.12E-02	1.17E-04	1.58E-04	1.43E-04	3.57E-05	0.00E+00	2.08E-04	2.08E-04	2.54E-08	7.25E-06	27.5	2.40E-02	6.24E-04
SI45_E	0.75	26	0	1	5.66E-02	7.52E-02	9.63E-05	1.30E-04	1.18E-04	2.95E-05	0.00E+00	1.72E-04	1.72E-04	2.09E-08	5.99E-06	22.7	1.98E-02	5.15E-04
SI45_E	0.75	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI45_E	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI45_E	0.75	28	0	1	6.10E-02	8.10E-02	1.04E-04	1.40E-04	1.27E-04	3.18E-05	0.00E+00	1.85E-04	1.85E-04	2.26E-08	6.45E-06	24.5	2.13E-02	5.55E-04
SI45_E	0.75	29	0	1	6.21E-02	8.25E-02	1.06E-04	1.43E-04	1.29E-04	3.23E-05	0.00E+00	1.88E-04	1.88E-04	2.30E-08	6.56E-06	24.9	2.17E-02	5.65E-04
SI45_E	0.75	30	0	1	6.43E-02	8.54E-02	1.09E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.79E-06	25.8	2.25E-02	5.85E-04
SI45_E	0.75	32	0	1	6.97E-02	9.26E-02	1.19E-04	1.60E-04	1.45E-04	3.63E-05	0.00E+00	2.11E-04	2.11E-04	2.58E-08	7.37E-06	28.0	2.44E-02	6.34E-04
SI45_E	0.75	40	0	1	8.60E-02	1.14E-01	1.46E-04	1.98E-04	1.79E-04	4.48E-05	0.00E+00	2.61E-04	2.61E-04	3.18E-08	9.10E-06	34.5	3.01E-02	7.83E-04
SI45_E	0.75	43	0	1	9.26E-02	1.23E-01	1.57E-04	2.13E-04	1.93E-04	4.82E-05	0.00E+00	2.81E-04	2.81E-04	3.42E-08	9.79E-06	37.1	3.24E-02	8.42E-04
SI45_E	0.75	30	0	1	6.43E-02	8.54E-02	1.09E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.79E-06	25.8	2.25E-02	5.85E-04
SI45_E	0.75	20	0	1	4.25E-02	5.64E-02	7.22E-05	9.76E-05	8.85E-05	2.21E-05	0.00E+00	1.29E-04	1.29E-04	1.57E-08	4.49E-06	17.0	1.48E-02	3.86E-04
SI45_E	0.75	17	0	1	3.59E-02	4.77E-02	6.11E-05	8.26E-05	7.49E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.80E-06	14.4	1.26E-02	3.27E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI45_E	0.75	14	0	1	3.05E-02	4.05E-02	5.18E-05	7.01E-05	6.36E-05	1.59E-05	0.00E+00	9.24E-05	9.25E-05	1.13E-08	3.22E-06	12.2	1.07E-02	2.77E-04
SI45_E	0.75	12	0	1	2.50E-02	3.33E-02	4.26E-05	5.76E-05	5.22E-05	1.30E-05	0.00E+00	7.59E-05	7.60E-05	9.26E-09	2.65E-06	10.0	8.76E-03	2.28E-04
SI45_E	0.75	9	0	1	1.85E-02	2.46E-02	3.15E-05	4.25E-05	3.86E-05	9.64E-06	0.00E+00	5.61E-05	5.62E-05	6.85E-09	1.96E-06	7.4	6.47E-03	1.68E-04
SI45_W	0.75	5	0	1	1.11E-02	1.48E-02	1.89E-05	2.55E-05	2.32E-05	5.78E-06	0.00E+00	3.37E-05	3.37E-05	4.11E-09	1.17E-06	4.5	3.88E-03	1.01E-04
SI45_W	0.75	3	0	1	7.41E-03	9.84E-03	1.26E-05	1.70E-05	1.54E-05	3.86E-06	0.00E+00	2.24E-05	2.25E-05	2.74E-09	7.83E-07	3.0	2.59E-03	6.74E-05
SI45_W	0.75	3	0	1	6.48E-03	8.61E-03	1.10E-05	1.49E-05	1.35E-05	3.37E-06	0.00E+00	1.96E-05	1.97E-05	2.40E-09	6.85E-07	2.6	2.26E-03	5.89E-05
SI45_W	0.75	2	0	1	4.63E-03	6.15E-03	7.87E-06	1.06E-05	9.65E-06	2.41E-06	0.00E+00	1.40E-05	1.40E-05	1.71E-09	4.89E-07	1.9	1.62E-03	4.21E-05
SI45_W	0.75	3	0	1	6.48E-03	8.61E-03	1.10E-05	1.49E-05	1.35E-05	3.37E-06	0.00E+00	1.96E-05	1.97E-05	2.40E-09	6.85E-07	2.6	2.26E-03	5.89E-05
SI45_W	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.19E-06	0.00E+00	4.77E-05	4.77E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI45_W	0.75	22	0	1	4.72E-02	6.27E-02	8.03E-05	1.08E-04	9.84E-05	2.46E-05	0.00E+00	1.43E-04	1.43E-04	1.75E-08	4.99E-06	18.9	1.65E-02	4.29E-04
SI45_W	0.75	33	0	1	7.22E-02	9.59E-02	1.23E-04	1.66E-04	1.51E-04	3.76E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.63E-06	29.0	2.52E-02	6.57E-04
SI45_W	0.75	27	0	1	5.83E-02	7.75E-02	9.91E-05	1.34E-04	1.22E-04	3.04E-05	0.00E+00	1.77E-04	1.77E-04	2.16E-08	6.17E-06	23.4	2.04E-02	5.31E-04
SI45_W	0.75	22	0	1	4.81E-02	6.39E-02	8.18E-05	1.11E-04	1.00E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.09E-06	19.3	1.68E-02	4.38E-04
SI45_W	0.75	20	0	1	4.35E-02	5.78E-02	7.40E-05	1.00E-04	9.07E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.60E-06	17.5	1.52E-02	3.96E-04
SI45_W	0.75	23	0	1	4.91E-02	6.52E-02	8.34E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.19E-06	19.7	1.71E-02	4.46E-04
SI45_W	0.75	24	0	1	5.18E-02	6.89E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.92E-08	5.48E-06	20.8	1.81E-02	4.72E-04
SI45_W	0.75	24	0	1	5.28E-02	7.01E-02	8.97E-05	1.21E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.95E-08	5.58E-06	21.2	1.84E-02	4.80E-04
SI45_W	0.75	25	0	1	5.46E-02	7.26E-02	9.29E-05	1.25E-04	1.14E-04	2.84E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.77E-06	21.9	1.91E-02	4.97E-04
SI45_W	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.80E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI45_W	0.75	34	0	1	7.31E-02	9.71E-02	1.24E-04	1.68E-04	1.52E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.70E-08	7.73E-06	29.3	2.56E-02	6.65E-04
SI45_W	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.38E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI45_W	0.75	25	0	1	5.46E-02	7.26E-02	9.29E-05	1.25E-04	1.14E-04	2.84E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.77E-06	21.9	1.91E-02	4.97E-04
SI45_W	0.75	17	0	1	3.61E-02	4.80E-02	6.14E-05	8.30E-05	7.53E-05	1.88E-05	0.00E+00	1.09E-04	1.10E-04	1.33E-08	3.82E-06	14.5	1.26E-02	3.28E-04
SI45_W	0.75	14	0	1	3.05E-02	4.06E-02	5.19E-05	7.02E-05	6.37E-05	1.59E-05	0.00E+00	9.26E-05	9.27E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04
SI45_W	0.75	12	0	1	2.59E-02	3.44E-02	4.41E-05	5.96E-05	5.40E-05	1.35E-05	0.00E+00	7.86E-05	7.86E-05	9.58E-09	2.74E-06	10.4	9.06E-03	2.36E-04
SI45_W	0.75	10	0	1	2.13E-02	2.83E-02	3.62E-05	4.89E-05	4.44E-05	1.11E-05	0.00E+00	6.45E-05	6.46E-05	7.87E-09	2.25E-06	8.5	7.44E-03	1.94E-04
SI45_W	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.19E-06	0.00E+00	4.77E-05	4.77E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI46_E	0.75	5	0	1	1.11E-02	1.48E-02	1.89E-05	2.55E-05	2.32E-05	5.78E-06	0.00E+00	3.37E-05	3.37E-05	4.11E-09	1.17E-06	4.5	3.88E-03	1.01E-04
SI46_E	0.75	3	0	1	7.41E-03	9.84E-03	1.26E-05	1.70E-05	1.54E-05	3.86E-06	0.00E+00	2.24E-05	2.25E-05	2.74E-09	7.83E-07	3.0	2.59E-03	6.74E-05
SI46_E	0.75	3	0	1	6.48E-03	8.61E-03	1.10E-05	1.49E-05	1.35E-05	3.37E-06	0.00E+00	1.96E-05	1.97E-05	2.40E-09	6.85E-07	2.6	2.26E-03	5.89E-05
SI46_E	0.75	2	0	1	4.63E-03	6.15E-03	7.87E-06	1.06E-05	9.65E-06	2.41E-06	0.00E+00	1.40E-05	1.40E-05	1.71E-09	4.89E-07	1.9	1.62E-03	4.21E-05
SI46_E	0.75	3	0	1	6.48E-03	8.61E-03	1.10E-05	1.49E-05	1.35E-05	3.37E-06	0.00E+00	1.96E-05	1.97E-05	2.40E-09	6.85E-07	2.6	2.26E-03	5.89E-05
SI46_E	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.19E-06	0.00E+00	4.77E-05	4.77E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI46_E	0.75	22	0	1	4.72E-02	6.27E-02	8.03E-05	1.08E-04	9.84E-05	2.46E-05	0.00E+00	1.43E-04	1.43E-04	1.75E-08	4.99E-06	18.9	1.65E-02	4.29E-04
SI46_E	0.75	33	0	1	7.22E-02	9.59E-02	1.23E-04	1.66E-04	1.51E-04	3.76E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.63E-06	29.0	2.52E-02	6.57E-04
SI46_E	0.75	27	0	1	5.83E-02	7.75E-02	9.91E-05	1.34E-04	1.22E-04	3.04E-05	0.00E+00	1.77E-04	1.77E-04	2.16E-08	6.17E-06	23.4	2.04E-02	5.31E-04
SI46_E	0.75	22	0	1	4.81E-02	6.39E-02	8.18E-05	1.11E-04	1.00E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.09E-06	19.3	1.68E-02	4.38E-04
SI46_E	0.75	20	0	1	4.35E-02	5.78E-02	7.40E-05	1.00E-04	9.07E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.60E-06	17.5	1.52E-02	3.96E-04
SI46_E	0.75	23	0	1	4.91E-02	6.52E-02	8.34E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.19E-06	19.7	1.71E-02	4.46E-04
SI46_E	0.75	24	0	1	5.18E-02	6.89E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.92E-08	5.48E-06	20.8	1.81E-02	4.72E-04
SI46_E	0.75	24	0	1	5.28E-02	7.01E-02	8.97E-05	1.21E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.95E-08	5.58E-06	21.2	1.84E-02	4.80E-04
SI46_E	0.75	25	0	1	5.46E-02	7.26E-02	9.29E-05	1.25E-04	1.14E-04	2.84E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.77E-06	21.9	1.91E-02	4.97E-04
SI46_E	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.80E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI46_E	0.75	34	0	1	7.31E-02	9.71E-02	1.24E-04	1.68E-04	1.52E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.70E-08	7.73E-06	29.3	2.56E-02	6.65E-04
SI46_E	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.38E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI46_E	0.75	25	0	1	5.46E-02	7.26E-02	9.29E-05	1.25E-04	1.14E-04	2.84E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.77E-06	21.9	1.91E-02	4.97E-04
SI46_E	0.75	17	0	1	3.61E-02	4.80E-02	6.14E-05	8.30E-05	7.53E-05	1.88E-05	0.00E+00	1.09E-04	1.10E-04	1.33E-08	3.82E-06	14.5	1.26E-02	3.28E-04
SI46_E	0.75	14	0	1	3.05E-02	4.06E-02	5.19E-05	7.02E-05	6.37E-05	1.59E-05	0.00E+00	9.26E-05	9.27E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04
SI46_E	0.75	12	0	1	2.59E-02	3.44E-02	4.41E-05	5.96E-05	5.40E-05	1.35E-05	0.00E+00	7.86E-05	7.86E-05	9.58E-09	2.74E-06	10.4	9.06E-03	2.36E-04
SI46_E	0.75	10	0	1	2.13E-02	2.83E-02	3.62E-05	4.89E-05	4.44E-05	1.11E-05	0.00E+00	6.45E-05	6.46E-05	7.87E-09	2.25E-06	8.5	7.44E-03	1.94E-04
SI46_E	0.75	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.19E-06	0.00E+00	4.77E-05	4.77E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI46_W	0.75	7	0	1	1.50E-02	1.99E-02	2.54E-05	3.44E-05	3.12E-05	7.79E-06	0.00E+00	4.54E-05	4.54E-05	5.53E-09	1.58E-06	6.0	5.23E-03	1.36E-04
SI46_W	0.75	5	0	1	9.98E-03	1.33E-02	1.70E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.03E-05	3.69E-09	1.05E-06	4.0	3.49E-03	9.08E-05
SI46_W	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI46_W	0.75	3	0	1	6.24E-03	8.28E-03	1.06E-05	1.43E-05	1.30E-05	3.25E-06	0.00E+00	1.89E-05	1.89E-05	2.31E-09	6.59E-07	2.5	2.18E-03	5.67E-05
SI46_W	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI46_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI46_W	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI46_W	0.75	45	0	1	9.73E-02	1.29E-01	1.65E-04	2.24E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.0	3.40E-02	8.85E-04
SI46_W	0.75	36	0	1	7.86E-02	1.04E-01	1.34E-04	1.81E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.91E-08	8.31E-06	31.5	2.75E-02	7.15E-04
SI46_W	0.75	30	0	1	6.49E-02	8.62E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.90E-04
SI46_W	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI46_W	0.75	30	0	1	6.61E-02	8.78E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.00E-04	2.01E-04	2.44E-08	6.99E-06	26.5	2.31E-02	6.01E-04
SI46_W	0.75	32	0	1	6.98E-02	9.28E-02	1.19E-04	1.60E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.58E-08	7.38E-06	28.0	2.44E-02	6.35E-04
SI46_W	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.52E-06	28.5	2.48E-02	6.47E-04
SI46_W	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI46_W	0.75	37	0	1	7.98E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.16E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.44E-06	32.0	2.79E-02	7.26E-04
SI46_W	0.75	45	0	1	9.85E-02	1.31E-01	1.68E-04	2.26E-04	2.05E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.96E-04
SI46_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.21E-04	3.22E-04	3.92E-08	1.12E-05	42.5	3.71E-02	9.64E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_W	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI46_W	0.75	22	0	1	4.86E-02	6.46E-02	8.27E-05	1.12E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.48E-04	1.80E-08	5.14E-06	19.5	1.70E-02	4.42E-04
SI46_W	0.75	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.74E-04
SI46_W	0.75	16	0	1	3.49E-02	4.64E-02	5.94E-05	8.02E-05	7.28E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.69E-06	14.0	1.22E-02	3.18E-04
SI46_W	0.75	13	0	1	2.87E-02	3.81E-02	4.88E-05	6.59E-05	5.98E-05	1.49E-05	0.00E+00	8.69E-05	8.70E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04
SI46_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI47_E	0.75	7	0	1	1.50E-02	1.99E-02	2.54E-05	3.44E-05	3.12E-05	7.79E-06	0.00E+00	4.54E-05	4.54E-05	5.53E-09	1.58E-06	6.0	5.23E-03	1.36E-04
SI47_E	0.75	5	0	1	9.98E-03	1.33E-02	1.70E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.03E-05	3.69E-09	1.05E-06	4.0	3.49E-03	9.08E-05
SI47_E	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI47_E	0.75	3	0	1	6.24E-03	8.28E-03	1.06E-05	1.43E-05	1.30E-05	3.25E-06	0.00E+00	1.89E-05	1.89E-05	2.31E-09	6.59E-07	2.5	2.18E-03	5.67E-05
SI47_E	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI47_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI47_E	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI47_E	0.75	45	0	1	9.73E-02	1.29E-01	1.65E-04	2.24E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.0	3.40E-02	8.85E-04
SI47_E	0.75	36	0	1	7.86E-02	1.04E-01	1.34E-04	1.81E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.91E-08	8.31E-06	31.5	2.75E-02	7.15E-04
SI47_E	0.75	30	0	1	6.49E-02	8.62E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.90E-04
SI47_E	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI47_E	0.75	30	0	1	6.61E-02	8.78E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.00E-04	2.01E-04	2.44E-08	6.99E-06	26.5	2.31E-02	6.01E-04
SI47_E	0.75	32	0	1	6.98E-02	9.28E-02	1.19E-04	1.60E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.58E-08	7.38E-06	28.0	2.44E-02	6.35E-04
SI47_E	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.52E-06	28.5	2.48E-02	6.47E-04
SI47_E	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI47_E	0.75	37	0	1	7.98E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.16E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.44E-06	32.0	2.79E-02	7.26E-04
SI47_E	0.75	45	0	1	9.85E-02	1.31E-01	1.68E-04	2.26E-04	2.05E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.96E-04
SI47_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.21E-04	3.22E-04	3.92E-08	1.12E-05	42.5	3.71E-02	9.64E-04
SI47_E	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI47_E	0.75	22	0	1	4.86E-02	6.46E-02	8.27E-05	1.12E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.48E-04	1.80E-08	5.14E-06	19.5	1.70E-02	4.42E-04
SI47_E	0.75	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.74E-04
SI47_E	0.75	16	0	1	3.49E-02	4.64E-02	5.94E-05	8.02E-05	7.28E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.69E-06	14.0	1.22E-02	3.18E-04
SI47_E	0.75	13	0	1	2.87E-02	3.81E-02	4.88E-05	6.59E-05	5.98E-05	1.49E-05	0.00E+00	8.69E-05	8.70E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04
SI47_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI47_W	0.75	7	0	1	1.50E-02	1.99E-02	2.54E-05	3.44E-05	3.12E-05	7.79E-06	0.00E+00	4.54E-05	4.54E-05	5.53E-09	1.58E-06	6.0	5.23E-03	1.36E-04
SI47_W	0.75	5	0	1	9.98E-03	1.33E-02	1.70E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.03E-05	3.69E-09	1.05E-06	4.0	3.49E-03	9.08E-05
SI47_W	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI47_W	0.75	3	0	1	6.24E-03	8.28E-03	1.06E-05	1.43E-05	1.30E-05	3.25E-06	0.00E+00	1.89E-05	1.89E-05	2.31E-09	6.59E-07	2.5	2.18E-03	5.67E-05
SI47_W	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI47_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI47_W	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI47_W	0.75	45	0	1	9.73E-02	1.29E-01	1.65E-04	2.24E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.0	3.40E-02	8.85E-04
SI47_W	0.75	36	0	1	7.86E-02	1.04E-01	1.34E-04	1.81E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.91E-08	8.31E-06	31.5	2.75E-02	7.15E-04
SI47_W	0.75	30	0	1	6.49E-02	8.62E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.90E-04
SI47_W	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI47_W	0.75	30	0	1	6.61E-02	8.78E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.00E-04	2.01E-04	2.44E-08	6.99E-06	26.5	2.31E-02	6.01E-04
SI47_W	0.75	32	0	1	6.98E-02	9.28E-02	1.19E-04	1.60E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.58E-08	7.38E-06	28.0	2.44E-02	6.35E-04
SI47_W	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.52E-06	28.5	2.48E-02	6.47E-04
SI47_W	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI47_W	0.75	37	0	1	7.98E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.16E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.44E-06	32.0	2.79E-02	7.26E-04
SI47_W	0.75	45	0	1	9.85E-02	1.31E-01	1.68E-04	2.26E-04	2.05E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.96E-04
SI47_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.21E-04	3.22E-04	3.92E-08	1.12E-05	42.5	3.71E-02	9.64E-04
SI47_W	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI47_W	0.75	22	0	1	4.86E-02	6.46E-02	8.27E-05	1.12E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.48E-04	1.80E-08	5.14E-06	19.5	1.70E-02	4.42E-04
SI47_W	0.75	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.74E-04
SI47_W	0.75	16	0	1	3.49E-02	4.64E-02	5.94E-05	8.02E-05	7.28E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.69E-06	14.0	1.22E-02	3.18E-04
SI47_W	0.75	13	0	1	2.87E-02	3.81E-02	4.88E-05	6.59E-05	5.98E-05	1.49E-05	0.00E+00	8.69E-05	8.70E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04
SI47_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI48_E	0.75	7	0	1	1.50E-02	1.99E-02	2.54E-05	3.44E-05	3.12E-05	7.79E-06	0.00E+00	4.54E-05	4.54E-05	5.53E-09	1.58E-06	6.0	5.23E-03	1.36E-04
SI48_E	0.75	5	0	1	9.98E-03	1.33E-02	1.70E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.03E-05	3.69E-09	1.05E-06	4.0	3.49E-03	9.08E-05
SI48_E	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI48_E	0.75	3	0	1	6.24E-03	8.28E-03	1.06E-05	1.43E-05	1.30E-05	3.25E-06	0.00E+00	1.89E-05	1.89E-05	2.31E-09	6.59E-07	2.5	2.18E-03	5.67E-05
SI48_E	0.75	4	0	1	8.73E-03	1.16E-02	1.48E-05	2.01E-05	1.82E-05	4.54E-06	0.00E+00	2.65E-05	2.65E-05	3.23E-09	9.23E-07	3.5	3.05E-03	7.94E-05
SI48_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI48_E	0.75	29	0	1	6.36E-02	8.45E-02	1.08E-04	1.46E-04	1.33E-04	3.31E-05	0.00E+00	1.93E-04	1.93E-04	2.35E-08	6.72E-06	25.5	2.22E-02	5.79E-04
SI48_E	0.75	45	0	1	9.73E-02	1.29E-01	1.65E-04	2.24E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.0	3.40E-02	8.85E-04
SI48_E	0.75	36	0	1	7.86E-02	1.04E-01	1.34E-04	1.81E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.91E-08	8.31E-06	31.5	2.75E-02	7.15E-04
SI48_E	0.75	30	0	1	6.49E-02	8.62E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.90E-04
SI48_E	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI48_E	0.75	30	0	1	6.61E-02	8.78E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.00E-04	2.01E-04	2.44E-08	6.99E-06	26.5	2.31E-02	6.01E-04
SI48_E	0.75	32	0	1	6.98E-02	9.28E-02	1.19E-04	1.60E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.58E-08	7.38E-06	28.0	2.44E-02	6.35E-04
SI48_E	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.52E-06	28.5	2.48E-02	6.47E-04
SI48_E	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI48_E	0.75	37	0	1	7.98E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.16E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.44E-06	32.0	2.79E-02	7.26E-04
SI48_E	0.75	45	0	1	9.85E-02	1.31E-01	1.68E-04	2.26E-04	2.05E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.96E-04
SI48_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.21E-04	3.22E-04	3.92E-08	1.12E-05	42.5	3.71E-02	9.64E-04
SI48_E	0.75	34	0	1	7.36E-02	9.78E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI48_E	0.75	22	0	1	4.86E-02	6.46E-02	8.27E-05	1.12E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.48E-04	1.80E-08	5.14E-06	19.5	1.70E-02	4.42E-04
SI48_E	0.75	19	0	1	4.12E-02	5.47E-02	7.00E-05	9.46E-05	8.58E-05	2.14E-05	0.00E+00	1.25E-04	1.25E-04	1.52E-08	4.35E-06	16.5	1.44E-02	3.74E-04
SI48_E	0.75	16	0	1	3.49E-02	4.64E-02	5.94E-05	8.02E-05	7.28E-05	1.82E-05	0.00E+00	1.06E-04	1.06E-04	1.29E-08	3.69E-06	14.0	1.22E-02	3.18E-04
SI48_E	0.75	13	0	1	2.87E-02	3.81E-02	4.88E-05	6.59E-05	5.98E-05	1.49E-05	0.00E+00	8.69E-05	8.70E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04
SI48_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.43E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI48_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.20E-05	5.48E-06	0.00E+00	3.19E-05	3.20E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.58E-05
SI48_W	0.75	3	0	1	7.02E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.42E-07	2.8	2.45E-03	6.39E-05
SI48_W	0.75	3	0	1	6.14E-03	8.16E-03	1.04E-05	1.41E-05	1.28E-05	3.20E-06	0.00E+00	1.86E-05	1.86E-05	2.27E-09	6.50E-07	2.5	2.15E-03	5.59E-05
SI48_W	0.75	2	0	1	4.39E-03	5.83E-03	7.46E-06	1.01E-05	9.15E-06	2.28E-06	0.00E+00	1.33E-05	1.33E-05	1.62E-09	4.64E-07	1.8	1.53E-03	3.99E-05
SI48_W	0.75	3	0	1	6.14E-03	8.16E-03	1.04E-05	1.41E-05	1.28E-05	3.20E-06	0.00E+00	1.86E-05	1.86E-05	2.27E-09	6.50E-07	2.5	2.15E-03	5.59E-05
SI48_W	0.75	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.22E-03	1.36E-04
SI48_W	0.75	21	0	1	4.48E-02	5.95E-02	7.61E-05	1.03E-04	9.33E-05	2.33E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.73E-06	18.0	1.56E-02	4.07E-04
SI48_W	0.75	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.56E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI48_W	0.75	25	0	1	5.53E-02	7.35E-02	9.40E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.04E-08	5.85E-06	22.2	1.93E-02	5.03E-04
SI48_W	0.75	21	0	1	4.56E-02	6.06E-02	7.76E-05	1.05E-04	9.52E-05	2.38E-05	0.00E+00	1.38E-04	1.38E-04	1.69E-08	4.83E-06	18.3	1.60E-02	4.15E-04
SI48_W	0.75	19	0	1	4.13E-02	5.48E-02	7.01E-05	9.48E-05	8.60E-05	2.15E-05	0.00E+00	1.25E-04	1.25E-04	1.53E-08	4.36E-06	16.6	1.44E-02	3.75E-04
SI48_W	0.75	21	0	1	4.65E-02	6.18E-02	7.91E-05	1.07E-04	9.70E-05	2.42E-05	0.00E+00	1.41E-04	1.41E-04	1.72E-08	4.92E-06	18.7	1.63E-02	4.23E-04
SI48_W	0.75	23	0	1	4.92E-02	6.53E-02	8.36E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI48_W	0.75	23	0	1	5.00E-02	6.65E-02	8.51E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI48_W	0.75	24	0	1	5.18E-02	6.88E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.91E-08	5.48E-06	20.8	1.81E-02	4.71E-04
SI48_W	0.75	26	0	1	5.62E-02	7.46E-02	9.55E-05	1.29E-04	1.17E-04	2.92E-05	0.00E+00	1.70E-04	1.70E-04	2.08E-08	5.94E-06	22.5	1.96E-02	5.11E-04
SI48_W	0.75	32	0	1	6.93E-02	9.21E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.10E-04	2.56E-08	7.33E-06	27.8	2.42E-02	6.31E-04
SI48_W	0.75	34	0	1	7.46E-02	9.91E-02	1.27E-04	1.71E-04	1.56E-04	3.88E-05	0.00E+00	2.26E-04	2.26E-04	2.76E-08	7.89E-06	29.9	2.61E-02	6.79E-04
SI48_W	0.75	24	0	1	5.18E-02	6.88E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.91E-08	5.48E-06	20.8	1.81E-02	4.71E-04
SI48_W	0.75	16	0	1	3.42E-02	4.55E-02	5.82E-05	7.87E-05	7.14E-05	1.78E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.62E-06	13.7	1.20E-02	3.11E-04
SI48_W	0.75	13	0	1	2.90E-02	3.85E-02	4.92E-05	6.66E-05	6.04E-05	1.51E-05	0.00E+00	8.78E-05	8.79E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.64E-04
SI48_W	0.75	11	0	1	2.46E-02	3.27E-02	4.18E-05	5.65E-05	5.12E-05	1.28E-05	0.00E+00	7.45E-05	7.46E-05	9.09E-09	2.60E-06	9.9	8.59E-03	2.24E-04
SI48_W	0.75	9	0	1	2.02E-02	2.68E-02	3.43E-05	4.64E-05	4.21E-05	1.05E-05	0.00E+00	6.12E-05	6.13E-05	7.47E-09	2.13E-06	8.1	7.06E-03	1.84E-04
SI48_W	0.75	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.22E-03	1.36E-04
SI49_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.20E-05	5.48E-06	0.00E+00	3.19E-05	3.20E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.58E-05
SI49_E	0.75	3	0	1	7.02E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.42E-07	2.8	2.45E-03	6.39E-05
SI49_E	0.75	3	0	1	6.14E-03	8.16E-03	1.04E-05	1.41E-05	1.28E-05	3.20E-06	0.00E+00	1.86E-05	1.86E-05	2.27E-09	6.50E-07	2.5	2.15E-03	5.59E-05
SI49_E	0.75	2	0	1	4.39E-03	5.83E-03	7.46E-06	1.01E-05	9.15E-06	2.28E-06	0.00E+00	1.33E-05	1.33E-05	1.62E-09	4.64E-07	1.8	1.53E-03	3.99E-05
SI49_E	0.75	3	0	1	6.14E-03	8.16E-03	1.04E-05	1.41E-05	1.28E-05	3.20E-06	0.00E+00	1.86E-05	1.86E-05	2.27E-09	6.50E-07	2.5	2.15E-03	5.59E-05
SI49_E	0.75	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.22E-03	1.36E-04
SI49_E	0.75	21	0	1	4.48E-02	5.95E-02	7.61E-05	1.03E-04	9.33E-05	2.33E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.73E-06	18.0	1.56E-02	4.07E-04
SI49_E	0.75	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.56E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI49_E	0.75	25	0	1	5.53E-02	7.35E-02	9.40E-05	1.27E-04	1.15E-04	2.88E-05	0.00E+00	1.68E-04	1.68E-04	2.04E-08	5.85E-06	22.2	1.93E-02	5.03E-04
SI49_E	0.75	21	0	1	4.56E-02	6.06E-02	7.76E-05	1.05E-04	9.52E-05	2.38E-05	0.00E+00	1.38E-04	1.38E-04	1.69E-08	4.83E-06	18.3	1.60E-02	4.15E-04
SI49_E	0.75	19	0	1	4.13E-02	5.48E-02	7.01E-05	9.48E-05	8.60E-05	2.15E-05	0.00E+00	1.25E-04	1.25E-04	1.53E-08	4.36E-06	16.6	1.44E-02	3.75E-04
SI49_E	0.75	21	0	1	4.65E-02	6.18E-02	7.91E-05	1.07E-04	9.70E-05	2.42E-05	0.00E+00	1.41E-04	1.41E-04	1.72E-08	4.92E-06	18.7	1.63E-02	4.23E-04
SI49_E	0.75	23	0	1	4.92E-02	6.53E-02	8.36E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI49_E	0.75	23	0	1	5.00E-02	6.65E-02	8.51E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI49_E	0.75	24	0	1	5.18E-02	6.88E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.91E-08	5.48E-06	20.8	1.81E-02	4.71E-04
SI49_E	0.75	26	0	1	5.62E-02	7.46E-02	9.55E-05	1.29E-04	1.17E-04	2.92E-05	0.00E+00	1.70E-04	1.70E-04	2.08E-08	5.94E-06	22.5	1.96E-02	5.11E-04
SI49_E	0.75	32	0	1	6.93E-02	9.21E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.10E-04	2.56E-08	7.33E-06	27.8	2.42E-02	6.31E-04
SI49_E	0.75	34	0	1	7.46E-02	9.91E-02	1.27E-04	1.71E-04	1.56E-04	3.88E-05	0.00E+00	2.26E-04	2.26E-04	2.76E-08	7.89E-06	29.9	2.61E-02	6.79E-04
SI49_E	0.75	24	0	1	5.18E-02	6.88E-02	8.81E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.91E-08	5.48E-06	20.8	1.81E-02	4.71E-04
SI49_E	0.75	16	0	1	3.42E-02	4.55E-02	5.82E-05	7.87E-05	7.14E-05	1.78E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.62E-06	13.7	1.20E-02	3.11E-04
SI49_E	0.75	13	0	1	2.90E-02	3.85E-02	4.92E-05	6.66E-05	6.04E-05	1.51E-05	0.00E+00	8.78E-05	8.79E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.64E-04
SI49_E	0.75	11	0	1	2.46E-02	3.27E-02	4.18E-05	5.65E-05	5.12E-05	1.28E-05	0.00E+00	7.45E-05	7.46E-05	9.09E-09	2.60E-06	9.9	8.59E-03	2.24E-04
SI49_E	0.75	9	0	1	2.02E-02	2.68E-02	3.43E-05	4.64E-05	4.21E-05	1.05E-05	0.00E+00	6.12E-05	6.13E-05	7.47E-09	2.13E-06	8.1	7.06E-03	1.84E-04
SI49_E	0.75	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.22E-03	1.36E-04
SI49_W	0.75	10	0	1	2.28E-02	3.02E-02	3.87E-05	5.23E-05	4.74E-05	1.18E-05	0.00E+00	6.90E-05	6.90E-05	8.41E-09	2.41E-06	9.1	7.95E-03	2.07E-04
SI49_W	0.75	7	0	1	1.52E-02	2.02E-02	2.58E-05	3.49E-05	3.16E-05	7.90E-06	0.00E+00	4.60E-05	4.60E-05	5.61E-09	1.60E-06	6.1	5.30E-03	1.38E-04
SI49_W	0.75	6	0	1	1.33E-02	1.76E-02	2.26E-05	3.05E-05	2.77E-05	6.91E-06	0.00E+00	4.02E-05	4.03E-05	4.91E-09	1.40E-06	5.3	4.64E-03	1.21E-04
SI49_W	0.75	4	0	1	9.48E-03	1.26E-02	1.61E-05	2.18E-05	1.98E-05	4.94E-06	0.00E+00	2.87E-05	2.88E-05	3.51E-09	1.00E-06	3.8	3.31E-03	8.63E-05
SI49_W	0.75	6	0	1	1.33E-02	1.76E-02	2.26E-05	3.05E-05	2.77E-05	6.91E-06	0.00E+00	4.02E-05	4.03E-05	4.91E-09	1.40E-06	5.3	4.64E-03	1.21E-04
SI49_W	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04
SI49_W	0.75	44	0	1	9.67E-02	1.28E-01	1.64E-04	2.22E-04	2.02E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.58E-08	1.02E-05	38.8	3.38E-02	8.80E-04
SI49_W	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.40E-04	3.08E-04	7.70E-05	0.00E+00	4.48E-04	4.49E-04	5.47E-08	1.56E-05	59.3	5.17E-02	1.35E-03
SI49_W	0.75	55	0	1	1.19E-01	1.59E-01	2.03E-04	2.75E-04	2.49E-04	6.22E-05	0.00E+00	3.62E-04	3.62E-04	4.42E-08	1.26E-05	47.9	4.18E-02	1.09E-03
SI49_W	0.75	45	0	1	9.86E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.65E-08	1.04E-05	39.6	3.45E-02	8.97E-04
SI49_W	0.75	41	0	1	8.91E-02	1.18E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.30E-08	9.42E-06	35.8	3.12E-02	8.11E-04
SI49_W	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.23E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.3	3.51E-02	9.14E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_W	0.75	49	0	1	1.06E-01	1.41E-01	1.81E-04	2.44E-04	2.21E-04	5.53E-05	0.00E+00	3.22E-04	3.22E-04	3.93E-08	1.12E-05	42.6	3.71E-02	9.66E-04
SI49_W	0.75	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.48E-04	2.25E-04	5.63E-05	0.00E+00	3.28E-04	3.28E-04	4.00E-08	1.14E-05	43.4	3.78E-02	9.83E-04
SI49_W	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.33E-04	5.82E-05	0.00E+00	3.39E-04	3.39E-04	4.14E-08	1.18E-05	44.9	3.91E-02	1.02E-03
SI49_W	0.75	56	0	1	1.21E-01	1.61E-01	2.06E-04	2.79E-04	2.53E-04	6.32E-05	0.00E+00	3.68E-04	3.68E-04	4.49E-08	1.28E-05	48.7	4.24E-02	1.10E-03
SI49_W	0.75	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.44E-04	3.12E-04	7.80E-05	0.00E+00	4.54E-04	4.55E-04	5.54E-08	1.58E-05	60.1	5.24E-02	1.36E-03
SI49_W	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.39E-05	0.00E+00	4.89E-04	4.89E-04	5.96E-08	1.70E-05	64.7	5.63E-02	1.47E-03
SI49_W	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.33E-04	5.82E-05	0.00E+00	3.39E-04	3.39E-04	4.14E-08	1.18E-05	44.9	3.91E-02	1.02E-03
SI49_W	0.75	34	0	1	7.40E-02	9.82E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.24E-04	2.73E-08	7.82E-06	29.7	2.58E-02	6.73E-04
SI49_W	0.75	29	0	1	6.26E-02	8.31E-02	1.06E-04	1.44E-04	1.30E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.31E-08	6.62E-06	25.1	2.19E-02	5.69E-04
SI49_W	0.75	24	0	1	5.31E-02	7.05E-02	9.03E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.86E-02	4.83E-04
SI49_W	0.75	20	0	1	4.36E-02	5.79E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI49_W	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04
SI50_E	0.75	10	0	1	2.28E-02	3.02E-02	3.87E-05	5.23E-05	4.74E-05	1.18E-05	0.00E+00	6.90E-05	6.90E-05	8.41E-09	2.41E-06	9.1	7.95E-03	2.07E-04
SI50_E	0.75	7	0	1	1.52E-02	2.02E-02	2.58E-05	3.49E-05	3.16E-05	7.90E-06	0.00E+00	4.60E-05	4.60E-05	5.61E-09	1.60E-06	6.1	5.30E-03	1.38E-04
SI50_E	0.75	6	0	1	1.33E-02	1.76E-02	2.26E-05	3.05E-05	2.77E-05	6.91E-06	0.00E+00	4.02E-05	4.03E-05	4.91E-09	1.40E-06	5.3	4.64E-03	1.21E-04
SI50_E	0.75	4	0	1	9.48E-03	1.26E-02	1.61E-05	2.18E-05	1.98E-05	4.94E-06	0.00E+00	2.87E-05	2.88E-05	3.51E-09	1.00E-06	3.8	3.31E-03	8.63E-05
SI50_E	0.75	6	0	1	1.33E-02	1.76E-02	2.26E-05	3.05E-05	2.77E-05	6.91E-06	0.00E+00	4.02E-05	4.03E-05	4.91E-09	1.40E-06	5.3	4.64E-03	1.21E-04
SI50_E	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04
SI50_E	0.75	44	0	1	9.67E-02	1.28E-01	1.64E-04	2.22E-04	2.02E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.58E-08	1.02E-05	38.8	3.38E-02	8.80E-04
SI50_E	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.40E-04	3.08E-04	7.70E-05	0.00E+00	4.48E-04	4.49E-04	5.47E-08	1.56E-05	59.3	5.17E-02	1.35E-03
SI50_E	0.75	55	0	1	1.19E-01	1.59E-01	2.03E-04	2.75E-04	2.49E-04	6.22E-05	0.00E+00	3.62E-04	3.62E-04	4.42E-08	1.26E-05	47.9	4.18E-02	1.09E-03
SI50_E	0.75	45	0	1	9.86E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.13E-05	0.00E+00	2.99E-04	2.99E-04	3.65E-08	1.04E-05	39.6	3.45E-02	8.97E-04
SI50_E	0.75	41	0	1	8.91E-02	1.18E-01	1.52E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.30E-08	9.42E-06	35.8	3.12E-02	8.11E-04
SI50_E	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.23E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.3	3.51E-02	9.14E-04
SI50_E	0.75	49	0	1	1.06E-01	1.41E-01	1.81E-04	2.44E-04	2.21E-04	5.53E-05	0.00E+00	3.22E-04	3.22E-04	3.93E-08	1.12E-05	42.6	3.71E-02	9.66E-04
SI50_E	0.75	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.48E-04	2.25E-04	5.63E-05	0.00E+00	3.28E-04	3.28E-04	4.00E-08	1.14E-05	43.4	3.78E-02	9.83E-04
SI50_E	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.33E-04	5.82E-05	0.00E+00	3.39E-04	3.39E-04	4.14E-08	1.18E-05	44.9	3.91E-02	1.02E-03
SI50_E	0.75	56	0	1	1.21E-01	1.61E-01	2.06E-04	2.79E-04	2.53E-04	6.32E-05	0.00E+00	3.68E-04	3.68E-04	4.49E-08	1.28E-05	48.7	4.24E-02	1.10E-03
SI50_E	0.75	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.44E-04	3.12E-04	7.80E-05	0.00E+00	4.54E-04	4.55E-04	5.54E-08	1.58E-05	60.1	5.24E-02	1.36E-03
SI50_E	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.36E-04	8.39E-05	0.00E+00	4.89E-04	4.89E-04	5.96E-08	1.70E-05	64.7	5.63E-02	1.47E-03
SI50_E	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.33E-04	5.82E-05	0.00E+00	3.39E-04	3.39E-04	4.14E-08	1.18E-05	44.9	3.91E-02	1.02E-03
SI50_E	0.75	34	0	1	7.40E-02	9.82E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.24E-04	2.73E-08	7.82E-06	29.7	2.58E-02	6.73E-04
SI50_E	0.75	29	0	1	6.26E-02	8.31E-02	1.06E-04	1.44E-04	1.30E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.31E-08	6.62E-06	25.1	2.19E-02	5.69E-04
SI50_E	0.75	24	0	1	5.31E-02	7.05E-02	9.03E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.86E-02	4.83E-04
SI50_E	0.75	20	0	1	4.36E-02	5.79E-02	7.42E-05	1.00E-04	9.09E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.97E-04
SI50_E	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04
SI50_W	0.75	12	0	1	2.61E-02	3.47E-02	4.44E-05	6.00E-05	5.44E-05	1.36E-05	0.00E+00	7.91E-05	7.92E-05	9.65E-09	2.76E-06	10.5	9.13E-03	2.38E-04
SI50_W	0.75	8	0	1	1.74E-02	2.31E-02	2.96E-05	4.00E-05	3.63E-05	9.06E-06	0.00E+00	5.28E-05	5.28E-05	6.44E-09	1.84E-06	7.0	6.08E-03	1.58E-04
SI50_W	0.75	7	0	1	1.52E-02	2.02E-02	2.59E-05	3.50E-05	3.17E-05	7.93E-06	0.00E+00	4.62E-05	4.62E-05	5.63E-09	1.61E-06	6.1	5.32E-03	1.39E-04
SI50_W	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.66E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI50_W	0.75	7	0	1	1.52E-02	2.02E-02	2.59E-05	3.50E-05	3.17E-05	7.93E-06	0.00E+00	4.62E-05	4.62E-05	5.63E-09	1.61E-06	6.1	5.32E-03	1.39E-04
SI50_W	0.75	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI50_W	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.10E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI50_W	0.75	78	0	1	1.70E-01	2.25E-01	2.89E-04	3.90E-04	3.54E-04	8.83E-05	0.00E+00	5.14E-04	5.15E-04	6.27E-08	1.79E-05	68.1	5.93E-02	1.54E-03
SI50_W	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.86E-04	7.14E-05	0.00E+00	4.15E-04	4.16E-04	5.07E-08	1.45E-05	55.0	4.79E-02	1.25E-03
SI50_W	0.75	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.60E-04	2.36E-04	5.89E-05	0.00E+00	3.43E-04	3.43E-04	4.18E-08	1.20E-05	45.4	3.95E-02	1.03E-03
SI50_W	0.75	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.30E-04
SI50_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.40E-04	6.00E-05	0.00E+00	3.49E-04	3.50E-04	4.26E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI50_W	0.75	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.34E-05	0.00E+00	3.69E-04	3.70E-04	4.50E-08	1.29E-05	48.9	4.26E-02	1.11E-03
SI50_W	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.46E-05	0.00E+00	3.76E-04	3.76E-04	4.59E-08	1.31E-05	49.8	4.33E-02	1.13E-03
SI50_W	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI50_W	0.75	64	0	1	1.39E-01	1.85E-01	2.37E-04	3.20E-04	2.90E-04	7.25E-05	0.00E+00	4.22E-04	4.22E-04	5.15E-08	1.47E-05	55.9	4.87E-02	1.27E-03
SI50_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.58E-04	8.95E-05	0.00E+00	5.21E-04	5.21E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI50_W	0.75	85	0	1	1.85E-01	2.46E-01	3.14E-04	4.25E-04	3.86E-04	9.63E-05	0.00E+00	5.60E-04	5.61E-04	6.84E-08	1.96E-05	74.2	6.46E-02	1.68E-03
SI50_W	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI50_W	0.75	39	0	1	8.49E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.57E-04	2.57E-04	3.14E-08	8.97E-06	34.0	2.97E-02	7.72E-04
SI50_W	0.75	33	0	1	7.18E-02	9.54E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.65E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI50_W	0.75	28	0	1	6.09E-02	8.09E-02	1.04E-04	1.40E-04	1.27E-04	3.17E-05	0.00E+00	1.85E-04	1.85E-04	2.25E-08	6.44E-06	24.4	2.13E-02	5.54E-04
SI50_W	0.75	23	0	1	5.00E-02	6.65E-02	8.51E-05	1.15E-04	1.04E-04	2.61E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI50_W	0.75	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI51_E	0.75	12	0	1	2.61E-02	3.47E-02	4.44E-05	6.00E-05	5.44E-05	1.36E-05	0.00E+00	7.91E-05	7.92E-05	9.65E-09	2.76E-06	10.5	9.13E-03	2.38E-04
SI51_E	0.75	8	0	1	1.74E-02	2.31E-02	2.96E-05	4.00E-05	3.63E-05	9.06E-06	0.00E+00	5.28E-05	5.28E-05	6.44E-09	1.84E-06	7.0	6.08E-03	1.58E-04
SI51_E	0.75	7	0	1	1.52E-02	2.02E-02	2.59E-05	3.50E-05	3.17E-05	7.93E-06	0.00E+00	4.62E-05	4.62E-05	5.63E-09	1.61E-06	6.1	5.32E-03	1.39E-04
SI51_E	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.66E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI51_E	0.75	7	0	1	1.52E-02	2.02E-02	2.59E-05	3.50E-05	3.17E-05	7.93E-06	0.00E+00	4.62E-05	4.62E-05	5.63E-09	1.61E-06	6.1	5.32E-03	1.39E-04
SI51_E	0.75	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI51_E	0.75	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.10E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI51_E	0.75	78	0	1	1.70E-01	2.25E-01	2.89E-04	3.90E-04	3.54E-04	8.83E-05	0.00E+00	5.14E-04	5.15E-04	6.27E-08	1.79E-05	68.1	5.93E-02	1.54E-03
SI51_E	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.15E-04	2.86E-04	7.14E-05	0.00E+00	4.15E-04	4.16E-04	5.07E-08	1.45E-05	55.0	4.79E-02	1.25E-03

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI51_E	0.75	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.60E-04	2.36E-04	5.89E-05	0.00E+00	3.43E-04	3.43E-04	4.18E-08	1.20E-05	45.4	3.95E-02	1.03E-03
SI51_E	0.75	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.30E-04
SI51_E	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.40E-04	6.00E-05	0.00E+00	3.49E-04	3.50E-04	4.26E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI51_E	0.75	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.34E-05	0.00E+00	3.69E-04	3.70E-04	4.50E-08	1.29E-05	48.9	4.26E-02	1.11E-03
SI51_E	0.75	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.85E-04	2.59E-04	6.46E-05	0.00E+00	3.76E-04	3.76E-04	4.59E-08	1.31E-05	49.8	4.33E-02	1.13E-03
SI51_E	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI51_E	0.75	64	0	1	1.39E-01	1.85E-01	2.37E-04	3.20E-04	2.90E-04	7.25E-05	0.00E+00	4.22E-04	4.22E-04	5.15E-08	1.47E-05	55.9	4.87E-02	1.27E-03
SI51_E	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.95E-04	3.58E-04	8.95E-05	0.00E+00	5.21E-04	5.21E-04	6.36E-08	1.82E-05	69.0	6.01E-02	1.56E-03
SI51_E	0.75	85	0	1	1.85E-01	2.46E-01	3.14E-04	4.25E-04	3.86E-04	9.63E-05	0.00E+00	5.60E-04	5.61E-04	6.84E-08	1.96E-05	74.2	6.46E-02	1.68E-03
SI51_E	0.75	59	0	1	1.28E-01	1.71E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI51_E	0.75	39	0	1	8.49E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.57E-04	2.57E-04	3.14E-08	8.97E-06	34.0	2.97E-02	7.72E-04
SI51_E	0.75	33	0	1	7.18E-02	9.54E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.65E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI51_E	0.75	28	0	1	6.09E-02	8.09E-02	1.04E-04	1.40E-04	1.27E-04	3.17E-05	0.00E+00	1.85E-04	1.85E-04	2.25E-08	6.44E-06	24.4	2.13E-02	5.54E-04
SI51_E	0.75	23	0	1	5.00E-02	6.65E-02	8.51E-05	1.15E-04	1.04E-04	2.61E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI51_E	0.75	17	0	1	3.70E-02	4.91E-02	6.29E-05	8.50E-05	7.71E-05	1.93E-05	0.00E+00	1.12E-04	1.12E-04	1.37E-08	3.91E-06	14.8	1.29E-02	3.36E-04
SI51_W	0.75	16	0	1	3.47E-02	4.61E-02	5.90E-05	7.97E-05	7.23E-05	1.81E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.67E-06	13.9	1.21E-02	3.16E-04
SI51_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.44E-06	9.3	8.08E-03	2.10E-04
SI51_W	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI51_W	0.75	7	0	1	1.45E-02	1.92E-02	2.46E-05	3.32E-05	3.01E-05	7.52E-06	0.00E+00	4.38E-05	4.38E-05	5.34E-09	1.53E-06	5.8	5.05E-03	1.31E-04
SI51_W	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI51_W	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI51_W	0.75	68	0	1	1.47E-01	1.96E-01	2.51E-04	3.39E-04	3.07E-04	7.67E-05	0.00E+00	4.47E-04	4.47E-04	5.45E-08	1.56E-05	59.1	5.15E-02	1.34E-03
SI51_W	0.75	104	0	1	2.25E-01	3.00E-01	3.83E-04	5.18E-04	4.70E-04	1.17E-04	0.00E+00	6.83E-04	6.84E-04	8.34E-08	2.38E-05	90.4	7.88E-02	2.05E-03
SI51_W	0.75	84	0	1	1.82E-01	2.42E-01	3.10E-04	4.18E-04	3.80E-04	9.48E-05	0.00E+00	5.52E-04	5.52E-04	6.73E-08	1.93E-05	73.1	6.36E-02	1.66E-03
SI51_W	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.45E-04	3.13E-04	7.82E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.25E-02	1.37E-03
SI51_W	0.75	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI51_W	0.75	70	0	1	1.53E-01	2.04E-01	2.60E-04	3.52E-04	3.19E-04	7.97E-05	0.00E+00	4.64E-04	4.65E-04	5.66E-08	1.62E-05	61.5	5.35E-02	1.39E-03
SI51_W	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.43E-05	0.00E+00	4.91E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.66E-02	1.47E-03
SI51_W	0.75	76	0	1	1.65E-01	2.19E-01	2.80E-04	3.79E-04	3.43E-04	8.58E-05	0.00E+00	4.99E-04	5.00E-04	6.09E-08	1.74E-05	66.1	5.76E-02	1.50E-03
SI51_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI51_W	0.75	85	0	1	1.85E-01	2.46E-01	3.14E-04	4.25E-04	3.86E-04	9.63E-05	0.00E+00	5.61E-04	5.61E-04	6.84E-08	1.96E-05	74.2	6.47E-02	1.68E-03
SI51_W	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.25E-04	4.76E-04	1.19E-04	0.00E+00	6.92E-04	6.93E-04	8.44E-08	2.41E-05	91.6	7.98E-02	2.08E-03
SI51_W	0.75	113	0	1	2.46E-01	3.26E-01	4.18E-04	5.65E-04	5.12E-04	1.28E-04	0.00E+00	7.45E-04	7.45E-04	9.08E-08	2.60E-05	98.6	8.59E-02	2.24E-03
SI51_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI51_W	0.75	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.59E-04	2.35E-04	5.87E-05	0.00E+00	3.42E-04	3.42E-04	4.17E-08	1.19E-05	45.2	3.94E-02	1.03E-03
SI51_W	0.75	44	0	1	9.54E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.89E-04	3.53E-08	1.01E-05	38.3	3.33E-02	8.68E-04
SI51_W	0.75	37	0	1	8.09E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.21E-05	0.00E+00	2.45E-04	2.46E-04	2.99E-08	8.56E-06	32.5	2.83E-02	7.36E-04
SI51_W	0.75	31	0	1	6.65E-02	8.83E-02	1.13E-04	1.53E-04	1.39E-04	3.46E-05	0.00E+00	2.01E-04	2.02E-04	2.46E-08	7.03E-06	26.7	2.32E-02	6.05E-04
SI51_W	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI52_E	0.75	16	0	1	3.47E-02	4.61E-02	5.90E-05	7.97E-05	7.23E-05	1.81E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.67E-06	13.9	1.21E-02	3.16E-04
SI52_E	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.44E-06	9.3	8.08E-03	2.10E-04
SI52_E	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI52_E	0.75	7	0	1	1.45E-02	1.92E-02	2.46E-05	3.32E-05	3.01E-05	7.52E-06	0.00E+00	4.38E-05	4.38E-05	5.34E-09	1.53E-06	5.8	5.05E-03	1.31E-04
SI52_E	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI52_E	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI52_E	0.75	68	0	1	1.47E-01	1.96E-01	2.51E-04	3.39E-04	3.07E-04	7.67E-05	0.00E+00	4.47E-04	4.47E-04	5.45E-08	1.56E-05	59.1	5.15E-02	1.34E-03
SI52_E	0.75	104	0	1	2.25E-01	3.00E-01	3.83E-04	5.18E-04	4.70E-04	1.17E-04	0.00E+00	6.83E-04	6.84E-04	8.34E-08	2.38E-05	90.4	7.88E-02	2.05E-03
SI52_E	0.75	84	0	1	1.82E-01	2.42E-01	3.10E-04	4.18E-04	3.80E-04	9.48E-05	0.00E+00	5.52E-04	5.52E-04	6.73E-08	1.93E-05	73.1	6.36E-02	1.66E-03
SI52_E	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.45E-04	3.13E-04	7.82E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.25E-02	1.37E-03
SI52_E	0.75	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI52_E	0.75	70	0	1	1.53E-01	2.04E-01	2.60E-04	3.52E-04	3.19E-04	7.97E-05	0.00E+00	4.64E-04	4.65E-04	5.66E-08	1.62E-05	61.5	5.35E-02	1.39E-03
SI52_E	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.43E-05	0.00E+00	4.91E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.66E-02	1.47E-03
SI52_E	0.75	76	0	1	1.65E-01	2.19E-01	2.80E-04	3.79E-04	3.43E-04	8.58E-05	0.00E+00	4.99E-04	5.00E-04	6.09E-08	1.74E-05	66.1	5.76E-02	1.50E-03
SI52_E	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI52_E	0.75	85	0	1	1.85E-01	2.46E-01	3.14E-04	4.25E-04	3.86E-04	9.63E-05	0.00E+00	5.61E-04	5.61E-04	6.84E-08	1.96E-05	74.2	6.47E-02	1.68E-03
SI52_E	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.25E-04	4.76E-04	1.19E-04	0.00E+00	6.92E-04	6.93E-04	8.44E-08	2.41E-05	91.6	7.98E-02	2.08E-03
SI52_E	0.75	113	0	1	2.46E-01	3.26E-01	4.18E-04	5.65E-04	5.12E-04	1.28E-04	0.00E+00	7.45E-04	7.45E-04	9.08E-08	2.60E-05	98.6	8.59E-02	2.24E-03
SI52_E	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI52_E	0.75	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.59E-04	2.35E-04	5.87E-05	0.00E+00	3.42E-04	3.42E-04	4.17E-08	1.19E-05	45.2	3.94E-02	1.03E-03
SI52_E	0.75	44	0	1	9.54E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.89E-04	3.53E-08	1.01E-05	38.3	3.33E-02	8.68E-04
SI52_E	0.75	37	0	1	8.09E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.21E-05	0.00E+00	2.45E-04	2.46E-04	2.99E-08	8.56E-06	32.5	2.83E-02	7.36E-04
SI52_E	0.75	31	0	1	6.65E-02	8.83E-02	1.13E-04	1.53E-04	1.39E-04	3.46E-05	0.00E+00	2.01E-04	2.02E-04	2.46E-08	7.03E-06	26.7	2.32E-02	6.05E-04
SI52_E	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI52_W	0.75	16	0	1	3.47E-02	4.61E-02	5.90E-05	7.97E-05	7.23E-05	1.81E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.67E-06	13.9	1.21E-02	3.16E-04
SI52_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.44E-06	9.3	8.08E-03	2.10E-04
SI52_W	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI52_W	0.75	7	0	1	1.45E-02	1.92E-02	2.46E-05	3.32E-05	3.01E-05	7.52E-06	0.00E+00	4.38E-05	4.38E-05	5.34E-09	1.53E-06	5.8	5.05E-03	1.31E-04
SI52_W	0.75	9	0	1	2.02E-02	2.69E-02	3.44E-05	4.65E-05	4.22E-05	1.05E-05	0.00E+00	6.13E-05	6.14E-05	7.48E-09	2.14E-06	8.1	7.07E-03	1.84E-04
SI52_W	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_W	0.75	68	0	1	1.47E-01	1.96E-01	2.51E-04	3.39E-04	3.07E-04	7.67E-05	0.00E+00	4.47E-04	4.47E-04	5.45E-08	1.56E-05	59.1	5.15E-02	1.34E-03
SI52_W	0.75	104	0	1	2.25E-01	3.00E-01	3.83E-04	5.18E-04	4.70E-04	1.17E-04	0.00E+00	6.83E-04	6.84E-04	8.34E-08	2.38E-05	90.4	7.88E-02	2.05E-03
SI52_W	0.75	84	0	1	1.82E-01	2.42E-01	3.10E-04	4.18E-04	3.80E-04	9.48E-05	0.00E+00	5.52E-04	5.52E-04	6.73E-08	1.93E-05	73.1	6.36E-02	1.66E-03
SI52_W	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.45E-04	3.13E-04	7.82E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.25E-02	1.37E-03
SI52_W	0.75	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI52_W	0.75	70	0	1	1.53E-01	2.04E-01	2.60E-04	3.52E-04	3.19E-04	7.97E-05	0.00E+00	4.64E-04	4.65E-04	5.66E-08	1.62E-05	61.5	5.35E-02	1.39E-03
SI52_W	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.43E-05	0.00E+00	4.91E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.66E-02	1.47E-03
SI52_W	0.75	76	0	1	1.65E-01	2.19E-01	2.80E-04	3.79E-04	3.43E-04	8.58E-05	0.00E+00	4.99E-04	5.00E-04	6.09E-08	1.74E-05	66.1	5.76E-02	1.50E-03
SI52_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI52_W	0.75	85	0	1	1.85E-01	2.46E-01	3.14E-04	4.25E-04	3.86E-04	9.63E-05	0.00E+00	5.61E-04	5.61E-04	6.84E-08	1.96E-05	74.2	6.47E-02	1.68E-03
SI52_W	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.25E-04	4.76E-04	1.19E-04	0.00E+00	6.92E-04	6.93E-04	8.44E-08	2.41E-05	91.6	7.98E-02	2.08E-03
SI52_W	0.75	113	0	1	2.46E-01	3.26E-01	4.18E-04	5.65E-04	5.12E-04	1.28E-04	0.00E+00	7.45E-04	7.45E-04	9.08E-08	2.60E-05	98.6	8.59E-02	2.24E-03
SI52_W	0.75	78	0	1	1.71E-01	2.27E-01	2.90E-04	3.92E-04	3.55E-04	8.88E-05	0.00E+00	5.17E-04	5.17E-04	6.31E-08	1.80E-05	68.4	5.96E-02	1.55E-03
SI52_W	0.75	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.59E-04	2.35E-04	5.87E-05	0.00E+00	3.42E-04	3.42E-04	4.17E-08	1.19E-05	45.2	3.94E-02	1.03E-03
SI52_W	0.75	44	0	1	9.54E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.89E-04	3.53E-08	1.01E-05	38.3	3.33E-02	8.68E-04
SI52_W	0.75	37	0	1	8.09E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.21E-05	0.00E+00	2.45E-04	2.46E-04	2.99E-08	8.56E-06	32.5	2.83E-02	7.36E-04
SI52_W	0.75	31	0	1	6.65E-02	8.83E-02	1.13E-04	1.53E-04	1.39E-04	3.46E-05	0.00E+00	2.01E-04	2.02E-04	2.46E-08	7.03E-06	26.7	2.32E-02	6.05E-04
SI52_W	0.75	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI1N_E	0.45	9	0	1	1.86E-02	2.46E-02	3.15E-05	4.26E-05	3.87E-05	9.66E-06	0.00E+00	5.62E-05	5.63E-05	6.86E-09	1.96E-06	7.4	6.49E-03	1.69E-04
SI1N_E	0.45	6	0	1	1.24E-02	1.64E-02	2.10E-05	2.84E-05	2.58E-05	6.44E-06	0.00E+00	3.75E-05	3.75E-05	4.57E-09	1.31E-06	5.0	4.32E-03	1.13E-04
SI1N_E	0.45	5	0	1	1.08E-02	1.44E-02	1.84E-05	2.49E-05	2.26E-05	5.63E-06	0.00E+00	3.28E-05	3.28E-05	4.00E-09	1.14E-06	4.3	3.78E-03	9.85E-05
SI1N_E	0.45	4	0	1	7.73E-03	1.03E-02	1.31E-05	1.78E-05	1.61E-05	4.02E-06	0.00E+00	2.34E-05	2.35E-05	2.86E-09	8.17E-07	3.1	2.70E-03	7.03E-05
SI1N_E	0.45	5	0	1	1.08E-02	1.44E-02	1.84E-05	2.49E-05	2.26E-05	5.63E-06	0.00E+00	3.28E-05	3.28E-05	4.00E-09	1.14E-06	4.3	3.78E-03	9.85E-05
SI1N_E	0.45	12	0	1	2.63E-02	3.49E-02	4.47E-05	6.04E-05	5.48E-05	1.37E-05	0.00E+00	7.97E-05	7.98E-05	9.72E-09	2.78E-06	10.5	9.19E-03	2.39E-04
SI1N_E	0.45	36	0	1	7.89E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.11E-05	0.00E+00	2.39E-04	2.39E-04	2.92E-08	8.34E-06	31.6	2.76E-02	7.17E-04
SI1N_E	0.45	55	0	1	1.21E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.28E-05	0.00E+00	3.66E-04	3.66E-04	4.46E-08	1.28E-05	48.4	4.22E-02	1.10E-03
SI1N_E	0.45	45	0	1	9.74E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI1N_E	0.45	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.3	2.81E-02	7.31E-04
SI1N_E	0.45	33	0	1	7.27E-02	9.65E-02	1.24E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.69E-08	7.68E-06	29.2	2.54E-02	6.61E-04
SI1N_E	0.45	38	0	1	8.20E-02	1.09E-01	1.39E-04	1.88E-04	1.71E-04	4.27E-05	0.00E+00	2.48E-04	2.49E-04	3.03E-08	8.66E-06	32.9	2.86E-02	7.46E-04
SI1N_E	0.45	40	0	1	8.66E-02	1.15E-01	1.47E-04	1.99E-04	1.81E-04	4.51E-05	0.00E+00	2.62E-04	2.63E-04	3.20E-08	9.16E-06	34.7	3.03E-02	7.88E-04
SI1N_E	0.45	40	0	1	8.81E-02	1.17E-01	1.50E-04	2.03E-04	1.84E-04	4.59E-05	0.00E+00	2.67E-04	2.67E-04	3.26E-08	9.32E-06	35.4	3.08E-02	8.02E-04
SI1N_E	0.45	42	0	1	9.12E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.75E-05	0.00E+00	2.77E-04	2.77E-04	3.37E-08	9.65E-06	36.6	3.19E-02	8.30E-04
SI1N_E	0.45	45	0	1	9.90E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.15E-05	0.00E+00	3.00E-04	3.00E-04	3.66E-08	1.05E-05	39.7	3.46E-02	9.00E-04
SI1N_E	0.45	56	0	1	1.22E-01	1.62E-01	2.08E-04	2.81E-04	2.55E-04	6.36E-05	0.00E+00	3.70E-04	3.71E-04	4.52E-08	1.29E-05	49.0	4.27E-02	1.11E-03
SI1N_E	0.45	60	0	1	1.31E-01	1.75E-01	2.23E-04	3.02E-04	2.74E-04	6.84E-05	0.00E+00	3.98E-04	3.99E-04	4.86E-08	1.39E-05	52.7	4.59E-02	1.20E-03
SI1N_E	0.45	42	0	1	9.12E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.75E-05	0.00E+00	2.77E-04	2.77E-04	3.37E-08	9.65E-06	36.6	3.19E-02	8.30E-04
SI1N_E	0.45	28	0	1	6.03E-02	8.01E-02	1.03E-04	1.39E-04	1.26E-04	3.14E-05	0.00E+00	1.83E-04	1.83E-04	2.23E-08	6.38E-06	24.2	2.11E-02	5.49E-04
SI1N_E	0.45	23	0	1	5.10E-02	6.78E-02	8.68E-05	1.17E-04	1.06E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.40E-06	20.5	1.78E-02	4.64E-04
SI1N_E	0.45	20	0	1	4.33E-02	5.75E-02	7.36E-05	9.95E-05	9.03E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI1N_E	0.45	16	0	1	3.56E-02	4.72E-02	6.05E-05	8.17E-05	7.41E-05	1.85E-05	0.00E+00	1.08E-04	1.08E-04	1.31E-08	3.76E-06	14.3	1.24E-02	3.24E-04
SI1N_E	0.45	12	0	1	2.63E-02	3.49E-02	4.47E-05	6.04E-05	5.48E-05	1.37E-05	0.00E+00	7.97E-05	7.98E-05	9.72E-09	2.78E-06	10.5	9.19E-03	2.39E-04
SI1N_W	0.37	7	0	1	1.57E-02	2.09E-02	2.68E-05	3.62E-05	3.28E-05	8.19E-06	0.00E+00	4.77E-05	4.77E-05	5.82E-09	1.66E-06	6.3	5.50E-03	1.43E-04
SI1N_W	0.37	5	0	1	1.05E-02	1.39E-02	1.78E-05	2.41E-05	2.19E-05	5.46E-06	0.00E+00	3.18E-05	3.18E-05	3.88E-09	1.11E-06	4.2	3.67E-03	9.54E-05
SI1N_W	0.37	4	0	1	9.18E-03	1.22E-02	1.56E-05	2.11E-05	1.91E-05	4.78E-06	0.00E+00	2.78E-05	2.79E-05	3.39E-09	9.71E-07	3.7	3.21E-03	8.35E-05
SI1N_W	0.37	3	0	1	6.56E-03	8.71E-03	1.11E-05	1.51E-05	1.37E-05	3.41E-06	0.00E+00	1.99E-05	1.99E-05	2.42E-09	6.93E-07	2.6	2.29E-03	5.97E-05
SI1N_W	0.37	4	0	1	9.18E-03	1.22E-02	1.56E-05	2.11E-05	1.91E-05	4.78E-06	0.00E+00	2.78E-05	2.79E-05	3.39E-09	9.71E-07	3.7	3.21E-03	8.35E-05
SI1N_W	0.37	10	0	1	2.23E-02	2.96E-02	3.79E-05	5.12E-05	4.65E-05	1.16E-05	0.00E+00	6.76E-05	6.76E-05	8.24E-09	2.36E-06	8.9	7.79E-03	2.03E-04
SI1N_W	0.37	31	0	1	6.69E-02	8.89E-02	1.14E-04	1.54E-04	1.39E-04	3.48E-05	0.00E+00	2.03E-04	2.03E-04	2.47E-08	7.07E-06	26.8	2.34E-02	6.08E-04
SI1N_W	0.37	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.33E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.58E-02	9.31E-04
SI1N_W	0.37	38	0	1	8.26E-02	1.10E-01	1.40E-04	1.90E-04	1.72E-04	4.30E-05	0.00E+00	2.50E-04	2.51E-04	3.06E-08	8.74E-06	33.1	2.89E-02	7.52E-04
SI1N_W	0.37	31	0	1	6.82E-02	9.06E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.21E-06	27.4	2.38E-02	6.20E-04
SI1N_W	0.37	28	0	1	6.16E-02	8.19E-02	1.05E-04	1.42E-04	1.28E-04	3.21E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.52E-06	24.7	2.15E-02	5.61E-04
SI1N_W	0.37	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI1N_W	0.37	34	0	1	7.34E-02	9.76E-02	1.25E-04	1.69E-04	1.53E-04	3.82E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.77E-06	29.5	2.57E-02	6.68E-04
SI1N_W	0.37	34	0	1	7.48E-02	9.93E-02	1.27E-04	1.72E-04	1.56E-04	3.89E-05	0.00E+00	2.27E-04	2.27E-04	2.76E-08	7.90E-06	30.0	2.61E-02	6.80E-04
SI1N_W	0.37	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI1N_W	0.37	39	0	1	8.39E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.54E-04	2.55E-04	3.10E-08	8.87E-06	33.7	2.93E-02	7.64E-04
SI1N_W	0.37	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.39E-05	0.00E+00	3.14E-04	3.14E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI1N_W	0.37	51	0	1	1.11E-01	1.48E-01	1.90E-04	2.56E-04	2.32E-04	5.80E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.7	3.90E-02	1.01E-03
SI1N_W	0.37	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI1N_W	0.37	23	0	1	5.11E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.65E-04
SI1N_W	0.37	20	0	1	4.33E-02	5.75E-02	7.36E-05	9.94E-05	9.02E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI1N_W	0.37	17	0	1	3.67E-02	4.88E-02	6.24E-05	8.44E-05	7.66E-05	1.91E-05	0.00E+00	1.11E-04	1.11E-04	1.36E-08	3.88E-06	14.7	1.28E-02	3.34E-04
SI1N_W	0.37	14	0	1	3.02E-02	4.01E-02	5.13E-05	6.93E-05	6.29E-05	1.57E-05	0.00E+00	9.14E-05	9.15E-05	1.12E-08	3.19E-06	12.1	1.05E-02	2.74E-04
SI1N_W	0.37	10	0	1	2.23E-02	2.96E-02	3.79E-05	5.12E-05	4.65E-05	1.16E-05	0.00E+00	6.76E-05	6.76E-05	8.24E-09	2.36E-06	8.9	7.79E-03	2.03E-04
SI2N_E	0.40	7	0	1	1.60E-02	2.12E-02	2.71E-05	3.67E-05	3.33E-05	8.31E-06	0.00E+00	4.84E-05	4.84E-05	5.90E-09	1.69E-06	6.4	5.58E-03	1.45E-04
SI2N_E	0.40	5	0	1	1.06E-02	1.41E-02	1.81E-05	2.44E-05	2.22E-05	5.54E-06	0.00E+00	3.23E-05	3.23E-05	3.93E-09	1.13E-06	4.3	3.72E-03	9.68E-05
SI2N_E	0.40	4	0	1	9.31E-03	1.24E-02	1.58E-05	2.14E-05	1.94E-05	4.85E-06	0.00E+00	2.82E-05	2.82E-05	3.44E-09	9.84E-07	3.7	3.25E-03	8.47E-05

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2N_E	0.40	3	0	1	6.65E-03	8.83E-03	1.13E-05	1.53E-05	1.39E-05	3.46E-06	0.00E+00	2.02E-05	2.02E-05	2.46E-09	7.03E-07	2.7	2.32E-03	6.05E-05
SI2N_E	0.40	4	0	1	9.31E-03	1.24E-02	1.58E-05	2.14E-05	1.94E-05	4.85E-06	0.00E+00	2.82E-05	2.82E-05	3.44E-09	9.84E-07	3.7	3.25E-03	8.47E-05
SI2N_E	0.40	10	0	1	2.26E-02	3.00E-02	3.84E-05	5.20E-05	4.71E-05	1.18E-05	0.00E+00	6.85E-05	6.86E-05	8.36E-09	2.39E-06	9.1	7.90E-03	2.06E-04
SI2N_E	0.40	31	0	1	6.78E-02	9.01E-02	1.15E-04	1.56E-04	1.41E-04	3.53E-05	0.00E+00	2.06E-04	2.06E-04	2.51E-08	7.17E-06	27.2	2.37E-02	6.17E-04
SI2N_E	0.40	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.15E-04	3.84E-08	1.10E-05	41.6	3.63E-02	9.44E-04
SI2N_E	0.40	38	0	1	8.38E-02	1.11E-01	1.42E-04	1.93E-04	1.75E-04	4.36E-05	0.00E+00	2.54E-04	2.54E-04	3.10E-08	8.86E-06	33.6	2.93E-02	7.62E-04
SI2N_E	0.40	32	0	1	6.92E-02	9.19E-02	1.18E-04	1.59E-04	1.44E-04	3.60E-05	0.00E+00	2.10E-04	2.10E-04	2.56E-08	7.31E-06	27.7	2.42E-02	6.29E-04
SI2N_E	0.40	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.90E-04	2.31E-08	6.61E-06	25.1	2.18E-02	5.69E-04
SI2N_E	0.40	32	0	1	7.05E-02	9.37E-02	1.20E-04	1.62E-04	1.47E-04	3.67E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.45E-06	28.3	2.46E-02	6.41E-04
SI2N_E	0.40	34	0	1	7.45E-02	9.90E-02	1.27E-04	1.71E-04	1.55E-04	3.88E-05	0.00E+00	2.26E-04	2.26E-04	2.75E-08	7.88E-06	29.9	2.60E-02	6.78E-04
SI2N_E	0.40	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.02E-06	30.4	2.65E-02	6.90E-04
SI2N_E	0.40	36	0	1	7.85E-02	1.04E-01	1.33E-04	1.80E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.90E-08	8.30E-06	31.5	2.74E-02	7.14E-04
SI2N_E	0.40	39	0	1	8.51E-02	1.13E-01	1.45E-04	1.96E-04	1.77E-04	4.43E-05	0.00E+00	2.58E-04	2.58E-04	3.15E-08	9.00E-06	34.2	2.98E-02	7.74E-04
SI2N_E	0.40	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.41E-04	2.19E-04	5.47E-05	0.00E+00	3.18E-04	3.19E-04	3.89E-08	1.11E-05	42.2	3.67E-02	9.56E-04
SI2N_E	0.40	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.60E-04	2.36E-04	5.89E-05	0.00E+00	3.43E-04	3.43E-04	4.18E-08	1.20E-05	45.4	3.95E-02	1.03E-03
SI2N_E	0.40	36	0	1	7.85E-02	1.04E-01	1.33E-04	1.80E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.90E-08	8.30E-06	31.5	2.74E-02	7.14E-04
SI2N_E	0.40	24	0	1	5.19E-02	6.89E-02	8.82E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.57E-04	1.92E-08	5.48E-06	20.8	1.81E-02	4.72E-04
SI2N_E	0.40	20	0	1	4.39E-02	5.83E-02	7.46E-05	1.01E-04	9.15E-05	2.29E-05	0.00E+00	1.33E-04	1.33E-04	1.62E-08	4.64E-06	17.6	1.53E-02	3.99E-04
SI2N_E	0.40	17	0	1	3.72E-02	4.95E-02	6.33E-05	8.56E-05	7.76E-05	1.94E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.94E-06	14.9	1.30E-02	3.39E-04
SI2N_E	0.40	14	0	1	3.06E-02	4.06E-02	5.20E-05	7.03E-05	6.38E-05	1.59E-05	0.00E+00	9.27E-05	9.28E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04
SI2N_E	0.40	10	0	1	2.26E-02	3.00E-02	3.84E-05	5.20E-05	4.71E-05	1.18E-05	0.00E+00	6.85E-05	6.86E-05	8.36E-09	2.39E-06	9.1	7.90E-03	2.06E-04
SI2N_W	0.30	6	0	1	1.29E-02	1.71E-02	2.19E-05	2.96E-05	2.68E-05	6.70E-06	0.00E+00	3.90E-05	3.91E-05	4.76E-09	1.36E-06	5.2	4.50E-03	1.17E-04
SI2N_W	0.30	4	0	1	8.58E-03	1.14E-02	1.46E-05	1.97E-05	1.79E-05	4.47E-06	0.00E+00	2.60E-05	2.60E-05	3.17E-09	9.08E-07	3.4	3.00E-03	7.81E-05
SI2N_W	0.30	3	0	1	7.51E-03	9.98E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.94E-07	3.0	2.63E-03	6.83E-05
SI2N_W	0.30	2	0	1	5.37E-03	7.13E-03	9.12E-06	1.23E-05	1.12E-05	2.79E-06	0.00E+00	1.63E-05	1.63E-05	1.98E-09	5.67E-07	2.2	1.88E-03	4.88E-05
SI2N_W	0.30	3	0	1	7.51E-03	9.98E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.94E-07	3.0	2.63E-03	6.83E-05
SI2N_W	0.30	8	0	1	1.82E-02	2.42E-02	3.10E-05	4.19E-05	3.80E-05	9.50E-06	0.00E+00	5.53E-05	5.53E-05	6.74E-09	1.93E-06	7.3	6.38E-03	1.66E-04
SI2N_W	0.30	25	0	1	5.47E-02	7.27E-02	9.30E-05	1.26E-04	1.14E-04	2.85E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.79E-06	22.0	1.91E-02	4.98E-04
SI2N_W	0.30	38	0	1	8.37E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.36E-05	0.00E+00	2.54E-04	2.54E-04	3.09E-08	8.85E-06	33.6	2.93E-02	7.61E-04
SI2N_W	0.30	31	0	1	6.76E-02	8.98E-02	1.15E-04	1.55E-04	1.41E-04	3.52E-05	0.00E+00	2.05E-04	2.05E-04	2.50E-08	7.15E-06	27.1	2.36E-02	6.15E-04
SI2N_W	0.30	26	0	1	5.58E-02	7.41E-02	9.49E-05	1.28E-04	1.16E-04	2.90E-05	0.00E+00	1.69E-04	1.69E-04	2.06E-08	5.90E-06	22.4	1.95E-02	5.08E-04
SI2N_W	0.30	23	0	1	5.04E-02	6.70E-02	8.57E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.86E-08	5.33E-06	20.2	1.76E-02	4.59E-04
SI2N_W	0.30	26	0	1	5.69E-02	7.56E-02	9.67E-05	1.31E-04	1.19E-04	2.96E-05	0.00E+00	1.72E-04	1.73E-04	2.10E-08	6.01E-06	22.8	1.99E-02	5.17E-04
SI2N_W	0.30	28	0	1	6.01E-02	7.98E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.35E-06	24.1	2.10E-02	5.47E-04
SI2N_W	0.30	28	0	1	6.12E-02	8.13E-02	1.04E-04	1.41E-04	1.28E-04	3.18E-05	0.00E+00	1.85E-04	1.86E-04	2.26E-08	6.47E-06	24.5	2.14E-02	5.56E-04
SI2N_W	0.30	29	0	1	6.33E-02	8.41E-02	1.08E-04	1.45E-04	1.32E-04	3.30E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.69E-06	25.4	2.21E-02	5.76E-04
SI2N_W	0.30	32	0	1	6.87E-02	9.12E-02	1.17E-04	1.58E-04	1.43E-04	3.58E-05	0.00E+00	2.08E-04	2.08E-04	2.54E-08	7.26E-06	27.6	2.40E-02	6.25E-04
SI2N_W	0.30	39	0	1	8.48E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.41E-05	0.00E+00	2.57E-04	2.57E-04	3.13E-08	8.96E-06	34.0	2.96E-02	7.71E-04
SI2N_W	0.30	42	0	1	9.12E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.75E-05	0.00E+00	2.76E-04	2.77E-04	3.37E-08	9.64E-06	36.6	3.19E-02	8.30E-04
SI2N_W	0.30	29	0	1	6.33E-02	8.41E-02	1.08E-04	1.45E-04	1.32E-04	3.30E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.69E-06	25.4	2.21E-02	5.76E-04
SI2N_W	0.30	19	0	1	4.18E-02	5.56E-02	7.11E-05	9.62E-05	8.72E-05	2.18E-05	0.00E+00	1.27E-04	1.27E-04	1.55E-08	4.42E-06	16.8	1.46E-02	3.81E-04
SI2N_W	0.30	16	0	1	3.54E-02	4.70E-02	6.02E-05	8.14E-05	7.38E-05	1.84E-05	0.00E+00	1.07E-04	1.07E-04	1.31E-08	3.74E-06	14.2	1.24E-02	3.22E-04
SI2N_W	0.30	14	0	1	3.00E-02	3.99E-02	5.11E-05	6.90E-05	6.26E-05	1.56E-05	0.00E+00	9.11E-05	9.12E-05	1.11E-08	3.18E-06	12.1	1.05E-02	2.73E-04
SI2N_W	0.30	11	0	1	2.47E-02	3.28E-02	4.20E-05	5.67E-05	5.14E-05	1.28E-05	0.00E+00	7.48E-05	7.49E-05	9.13E-09	2.61E-06	9.9	8.63E-03	2.25E-04
SI2N_W	0.30	8	0	1	1.82E-02	2.42E-02	3.10E-05	4.19E-05	3.80E-05	9.50E-06	0.00E+00	5.53E-05	5.53E-05	6.74E-09	1.93E-06	7.3	6.38E-03	1.66E-04
SI3N_E	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.07E-05	9.08E-05	1.11E-08	3.16E-06	12.0	1.05E-02	2.72E-04
SI3N_E	0.75	9	0	1	2.00E-02	2.65E-02	3.39E-05	4.58E-05	4.16E-05	1.04E-05	0.00E+00	6.05E-05	6.05E-05	7.38E-09	2.11E-06	8.0	6.97E-03	1.82E-04
SI3N_E	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.09E-06	0.00E+00	5.29E-05	5.30E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI3N_E	0.75	6	0	1	1.25E-02	1.66E-02	2.12E-05	2.87E-05	2.60E-05	6.49E-06	0.00E+00	3.78E-05	3.78E-05	4.61E-09	1.32E-06	5.0	4.36E-03	1.13E-04
SI3N_E	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.09E-06	0.00E+00	5.29E-05	5.30E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI3N_E	0.75	19	0	1	4.24E-02	5.63E-02	7.21E-05	9.74E-05	8.84E-05	2.21E-05	0.00E+00	1.28E-04	1.29E-04	1.57E-08	4.48E-06	17.0	1.48E-02	3.86E-04
SI3N_E	0.75	58	0	1	1.27E-01	1.69E-01	2.16E-04	2.92E-04	2.65E-04	6.62E-05	0.00E+00	3.85E-04	3.86E-04	4.70E-08	1.34E-05	51.0	4.45E-02	1.16E-03
SI3N_E	0.75	89	0	1	1.95E-01	2.58E-01	3.31E-04	4.47E-04	4.06E-04	1.01E-04	0.00E+00	5.90E-04	5.90E-04	7.19E-08	2.06E-05	78.0	6.80E-02	1.77E-03
SI3N_E	0.75	72	0	1	1.57E-01	2.09E-01	2.67E-04	3.61E-04	3.28E-04	8.18E-05	0.00E+00	4.76E-04	4.77E-04	5.81E-08	1.66E-05	63.0	5.49E-02	1.43E-03
SI3N_E	0.75	60	0	1	1.30E-01	1.72E-01	2.20E-04	2.98E-04	2.70E-04	6.75E-05	0.00E+00	3.93E-04	3.93E-04	4.80E-08	1.37E-05	52.0	4.53E-02	1.18E-03
SI3N_E	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.33E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI3N_E	0.75	61	0	1	1.32E-01	1.76E-01	2.25E-04	3.04E-04	2.76E-04	6.88E-05	0.00E+00	4.01E-04	4.01E-04	4.89E-08	1.40E-05	53.0	4.62E-02	1.20E-03
SI3N_E	0.75	64	0	1	1.40E-01	1.86E-01	2.37E-04	3.21E-04	2.91E-04	7.27E-05	0.00E+00	4.23E-04	4.24E-04	5.16E-08	1.48E-05	56.0	4.88E-02	1.27E-03
SI3N_E	0.75	65	0	1	1.42E-01	1.89E-01	2.42E-04	3.27E-04	2.96E-04	7.40E-05	0.00E+00	4.31E-04	4.31E-04	5.26E-08	1.50E-05	57.0	4.97E-02	1.29E-03
SI3N_E	0.75	68	0	1	1.47E-01	1.95E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.46E-04	5.44E-08	1.56E-05	59.0	5.14E-02	1.34E-03
SI3N_E	0.75	73	0	1	1.60E-01	2.12E-01	2.71E-04	3.67E-04	3.33E-04	8.31E-05	0.00E+00	4.84E-04	4.84E-04	5.90E-08	1.69E-05	64.0	5.58E-02	1.45E-03
SI3N_E	0.75	91	0	1	1.97E-01	2.62E-01	3.35E-04	4.53E-04	4.11E-04	1.03E-04	0.00E+00	5.97E-04	5.98E-04	7.28E-08	2.08E-05	79.0	6.89E-02	1.79E-03
SI3N_E	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI3N_E	0.75	68	0	1	1.47E-01	1.95E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.46E-04	5.44E-08	1.56E-05	59.0	5.14E-02	1.34E-03
SI3N_E	0.75	45	0	1	9.73E-02	1.29E-01	1.65E-04	2.23E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.0	3.40E-02	8.85E-04
SI3N_E	0.75	38	0	1	8.23E-02	1.09E-01	1.40E-04	1.89E-04	1.72E-04	4.28E-05	0.00E+00	2.49E-04	2.50E-04	3.04E-08	8.70E-06	33.0	2.88E-02	7.49E-04
SI3N_E	0.75	32	0	1	6.98E-02	9.28E-02	1.19E-04	1.60E-04	1.46E-04	3.64E-05	0.00E+00	2.12E-04	2.12E-04	2.58E-08	7.38E-06	28.0	2.44E-02	6.35E-04
SI3N_E	0.75	26	0	1	5.74E-02	7.62E-02	9.75E-05	1.32E-04	1.20E-04	2.99E-05	0.00E+00	1.74E-04	1.74E-04	2.12E-08	6.06E-06	23.0	2.00E-02	5.22E-04
SI3N_E	0.75	19	0	1	4.24E-02	5.63E-02	7.21E-05	9.74E-05	8.84E-05	2.21E-05	0.00E+00	1.28E-04	1.29E-04	1.57E-08	4.48E-06	17.0	1.48E-02	3.86E-04

Table F-3: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3N_W	0.75	15	0	1	3.22E-02	4.28E-02	5.47E-05	7.40E-05	6.71E-05	1.68E-05	0.00E+00	9.76E-05	9.77E-05	1.19E-08	3.40E-06	12.9	1.13E-02	2.93E-04
SI3N_W	0.75	10	0	1	2.15E-02	2.85E-02	3.65E-05	4.93E-05	4.47E-05	1.12E-05	0.00E+00	6.50E-05	6.51E-05	7.94E-09	2.27E-06	8.6	7.50E-03	1.95E-04
SI3N_W	0.75	9	0	1	1.88E-02	2.49E-02	3.19E-05	4.31E-05	3.91E-05	9.78E-06	0.00E+00	5.69E-05	5.70E-05	6.94E-09	1.99E-06	7.5	6.56E-03	1.71E-04
SI3N_W	0.75	6	0	1	1.34E-02	1.78E-02	2.28E-05	3.08E-05	2.80E-05	6.98E-06	0.00E+00	4.07E-05	4.07E-05	4.96E-09	1.42E-06	5.4	4.69E-03	1.22E-04
SI3N_W	0.75	9	0	1	1.88E-02	2.49E-02	3.19E-05	4.31E-05	3.91E-05	9.78E-06	0.00E+00	5.69E-05	5.70E-05	6.94E-09	1.99E-06	7.5	6.56E-03	1.71E-04
SI3N_W	0.75	21	0	1	4.56E-02	6.06E-02	7.75E-05	1.05E-04	9.51E-05	2.37E-05	0.00E+00	1.38E-04	1.38E-04	1.69E-08	4.82E-06	18.3	1.59E-02	4.15E-04
SI3N_W	0.75	63	0	1	1.37E-01	1.82E-01	2.33E-04	3.14E-04	2.85E-04	7.12E-05	0.00E+00	4.15E-04	4.15E-04	5.06E-08	1.45E-05	54.9	4.78E-02	1.24E-03
SI3N_W	0.75	96	0	1	2.09E-01	2.78E-01	3.56E-04	4.81E-04	4.36E-04	1.09E-04	0.00E+00	6.34E-04	6.35E-04	7.74E-08	2.21E-05	83.9	7.31E-02	1.90E-03
SI3N_W	0.75	78	0	1	1.69E-01	2.25E-01	2.87E-04	3.88E-04	3.52E-04	8.80E-05	0.00E+00	5.12E-04	5.13E-04	6.25E-08	1.79E-05	67.8	5.91E-02	1.54E-03
SI3N_W	0.75	64	0	1	1.39E-01	1.85E-01	2.37E-04	3.21E-04	2.91E-04	7.26E-05	0.00E+00	4.23E-04	4.23E-04	5.16E-08	1.47E-05	56.0	4.88E-02	1.27E-03
SI3N_W	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.90E-04	2.63E-04	6.56E-05	0.00E+00	3.82E-04	3.83E-04	4.66E-08	1.33E-05	50.6	4.41E-02	1.15E-03
SI3N_W	0.75	65	0	1	1.42E-01	1.89E-01	2.42E-04	3.27E-04	2.96E-04	7.40E-05	0.00E+00	4.31E-04	4.31E-04	5.26E-08	1.50E-05	57.0	4.97E-02	1.29E-03
SI3N_W	0.75	69	0	1	1.50E-01	2.00E-01	2.55E-04	3.45E-04	3.13E-04	7.82E-05	0.00E+00	4.55E-04	4.56E-04	5.55E-08	1.59E-05	60.3	5.25E-02	1.37E-03
SI3N_W	0.75	70	0	1	1.53E-01	2.03E-01	2.60E-04	3.51E-04	3.19E-04	7.96E-05	0.00E+00	4.63E-04	4.64E-04	5.65E-08	1.62E-05	61.3	5.34E-02	1.39E-03
SI3N_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI3N_W	0.75	79	0	1	1.72E-01	2.28E-01	2.92E-04	3.94E-04	3.58E-04	8.94E-05	0.00E+00	5.20E-04	5.21E-04	6.35E-08	1.82E-05	68.9	6.00E-02	1.56E-03
SI3N_W	0.75	97	0	1	2.12E-01	2.82E-01	3.60E-04	4.87E-04	4.42E-04	1.10E-04	0.00E+00	6.42E-04	6.43E-04	7.84E-08	2.24E-05	85.0	7.41E-02	1.93E-03
SI3N_W	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.24E-04	4.75E-04	1.19E-04	0.00E+00	6.91E-04	6.92E-04	8.43E-08	2.41E-05	91.5	7.97E-02	2.07E-03
SI3N_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI3N_W	0.75	48	0	1	1.05E-01	1.39E-01	1.78E-04	2.40E-04	2.18E-04	5.45E-05	0.00E+00	3.17E-04	3.17E-04	3.87E-08	1.11E-05	42.0	3.66E-02	9.52E-04
SI3N_W	0.75	41	0	1	8.85E-02	1.18E-01	1.51E-04	2.03E-04	1.85E-04	4.61E-05	0.00E+00	2.68E-04	2.69E-04	3.27E-08	9.36E-06	35.5	3.09E-02	8.05E-04
SI3N_W	0.75	35	0	1	7.51E-02	9.98E-02	1.28E-04	1.73E-04	1.57E-04	3.91E-05	0.00E+00	2.28E-04	2.28E-04	2.78E-08	7.94E-06	30.1	2.63E-02	6.83E-04
SI3N_W	0.75	28	0	1	6.17E-02	8.20E-02	1.05E-04	1.42E-04	1.29E-04	3.21E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.52E-06	24.8	2.16E-02	5.61E-04
SI3N_W	0.75	21	0	1	4.56E-02	6.06E-02	7.75E-05	1.05E-04	9.51E-05	2.37E-05	0.00E+00	1.38E-04	1.38E-04	1.69E-08	4.82E-06	18.3	1.59E-02	4.15E-04

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S1	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S1	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S1	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S1	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S1	60	8	6	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.71E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	7	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.71E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	8	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	9	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	10	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	11	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	12	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	13	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	14	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	15	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	16	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	17	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.14E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	18	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.15E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	19	5	4.43E-02	1.67E-02	4.11E-05	9.56E-04	1.64E-04	1.15E-05	0.00E+00	6.76E-05	5.97E-05	9.18E-09	8.03E-07	10.5	9.39E-03	4.23E-05
S1	60	8	20	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.73E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	21	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.73E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	22	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.73E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	23	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.73E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S1	60	8	24	5	2.22E-02	8.34E-03	2.05E-05	4.78E-04	8.22E-05	5.71E-06	0.00E+00	3.38E-05	2.98E-05	4.59E-09	4.02E-07	5.3	4.69E-03	2.11E-05
S2	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S2	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S2	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S2	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S2	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S2	60	8	6	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	7	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	8	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	9	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	10	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	11	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	12	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	13	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	14	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	15	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	16	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	17	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	18	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.33E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	19	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.64E-05	5.33E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.37E-03	1.97E-05
S2	60	8	20	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	21	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	22	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	23	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S2	60	8	24	5	1.03E-02	3.88E-03	9.56E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.83E-06
S3	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S3	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S3	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S3	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S3	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S3	60	8	6	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	7	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	8	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	9	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	10	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	11	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	12	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	13	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	14	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	15	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	16	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	17	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	18	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.32E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05
S3	60	8	19	5	1.67E-02	6.29E-03	1.55E-05	3.61E-04	6.21E-05	4.33E-06	0.00E+00	2.55E-05	2.25E-05	3.47E-09	3.03E-07	4.0	3.54E-03	1.60E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	20	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	21	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	22	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	23	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S3	60	8	24	5	8.36E-03	3.15E-03	7.76E-06	1.80E-04	3.10E-05	2.16E-06	0.00E+00	1.28E-05	1.13E-05	1.73E-09	1.52E-07	2.0	1.77E-03	7.98E-06
S4	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S4	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S4	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S4	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S4	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S4	60	8	6	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.19E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	7	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.19E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	8	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.37E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	9	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.37E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	10	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.38E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	11	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.38E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	12	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.38E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	13	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.38E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	14	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.39E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	15	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.39E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	16	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.38E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	17	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.39E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	18	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.39E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	19	5	3.25E-02	1.22E-02	3.01E-05	7.00E-04	1.20E-04	8.39E-06	0.00E+00	4.95E-05	4.37E-05	6.73E-09	5.88E-07	7.7	6.88E-03	3.10E-05
S4	60	8	20	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.20E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	21	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.20E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	22	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.20E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	23	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.20E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S4	60	8	24	5	1.62E-02	6.11E-03	1.51E-05	3.50E-04	6.02E-05	4.19E-06	0.00E+00	2.48E-05	2.19E-05	3.36E-09	2.94E-07	3.9	3.44E-03	1.55E-05
S5	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S5	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S5	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S5	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S5	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S5	60	8	6	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	7	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	8	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	9	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	10	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	11	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	12	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	13	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	14	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.87E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	15	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.87E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	16	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.86E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	17	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.87E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	18	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.87E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	19	5	1.11E-02	4.17E-03	1.03E-05	2.39E-04	4.11E-05	2.87E-06	0.00E+00	1.69E-05	1.49E-05	2.30E-09	2.01E-07	2.6	2.35E-03	1.06E-05
S5	60	8	20	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	21	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	22	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	23	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S5	60	8	24	5	5.54E-03	2.09E-03	5.14E-06	1.20E-04	2.06E-05	1.43E-06	0.00E+00	8.46E-06	7.47E-06	1.15E-09	1.00E-07	1.3	1.17E-03	5.29E-06
S6	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S6	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S6	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S6	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S6	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S6	60	8	6	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.63E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	7	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.63E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	8	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	9	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	10	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	11	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	12	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	13	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	14	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	15	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	16	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	17	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.27E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	18	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.28E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	19	5	1.27E-02	4.77E-03	1.18E-05	2.73E-04	4.70E-05	3.28E-06	0.00E+00	1.93E-05	1.71E-05	2.63E-09	2.30E-07	3.0	2.68E-03	1.21E-05
S6	60	8	20	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.64E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	21	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.64E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	22	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.64E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	23	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.64E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S6	60	8	24	5	6.33E-03	2.38E-03	5.88E-06	1.37E-04	2.35E-05	1.63E-06	0.00E+00	9.67E-06	8.53E-06	1.31E-09	1.15E-07	1.5	1.34E-03	6.04E-06
S7	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S7	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S7	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S7	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S7	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S7	60	8	6	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.09E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	7	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.09E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	8	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.18E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	9	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.18E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	10	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.18E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	11	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.18E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	12	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	13	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	14	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	15	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	16	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	17	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	18	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	19	5	2.39E-02	9.01E-03	2.22E-05	5.17E-04	8.88E-05	6.19E-06	0.00E+00	3.66E-05	3.22E-05	4.96E-09	4.34E-07	5.7	5.07E-03	2.28E-05
S7	60	8	20	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.10E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	21	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.10E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	22	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.10E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	23	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.10E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S7	60	8	24	5	1.20E-02	4.51E-03	1.11E-05	2.58E-04	4.44E-05	3.09E-06	0.00E+00	1.83E-05	1.61E-05	2.48E-09	2.17E-07	2.8	2.54E-03	1.14E-05
S8	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S8	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S8	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S8	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S8	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S8	60	8	6	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	7	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	8	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	9	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	10	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	11	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	12	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	13	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	14	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.67E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	15	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.67E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	16	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.66E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	17	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.67E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	18	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.67E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	19	5	1.81E-02	6.80E-03	1.68E-05	3.90E-04	6.70E-05	4.67E-06	0.00E+00	2.76E-05	2.43E-05	3.74E-09	3.27E-07	4.3	3.83E-03	1.72E-05
S8	60	8	20	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	21	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	22	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	23	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S8	60	8	24	5	9.03E-03	3.40E-03	8.38E-06	1.95E-04	3.35E-05	2.33E-06	0.00E+00	1.38E-05	1.22E-05	1.87E-09	1.64E-07	2.1	1.91E-03	8.61E-06
S9	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S9	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S9	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S9	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S9	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S9	60	8	6	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.77E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	7	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.77E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	8	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	9	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	10	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	11	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	12	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	13	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	14	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	15	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	16	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	17	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	18	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.55E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	19	5	1.37E-02	5.17E-03	1.28E-05	2.97E-04	5.10E-05	3.56E-06	0.00E+00	2.10E-05	1.85E-05	2.85E-09	2.49E-07	3.3	2.91E-03	1.31E-05
S9	60	8	20	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.78E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	21	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.78E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	22	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.78E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	23	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.78E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S9	60	8	24	5	6.87E-03	2.59E-03	6.38E-06	1.48E-04	2.55E-05	1.77E-06	0.00E+00	1.05E-05	9.26E-06	1.42E-09	1.25E-07	1.6	1.46E-03	6.56E-06
S10	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S10	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S10	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S10	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S10	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S10	60	8	6	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	7	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	8	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.23E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	9	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.23E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	10	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	11	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	12	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	13	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	14	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	15	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	16	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	17	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	18	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	19	5	3.19E-02	1.20E-02	2.96E-05	6.89E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S10	60	8	20	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.13E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	21	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.13E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	22	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.13E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	23	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.13E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S10	60	8	24	5	1.60E-02	6.01E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.44E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S11	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S11	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S11	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S11	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S11	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S11	60	8	6	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	7	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	8	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.27E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	9	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.27E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	10	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	11	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	12	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	13	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	14	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	15	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	16	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	17	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	18	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	19	5	8.82E-03	3.32E-03	8.18E-06	1.90E-04	3.27E-05	2.28E-06	0.00E+00	1.35E-05	1.19E-05	1.83E-09	1.60E-07	2.1	1.87E-03	8.41E-06
S11	60	8	20	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	21	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	22	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	23	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S11	60	8	24	5	4.41E-03	1.66E-03	4.09E-06	9.51E-05	1.64E-05	1.14E-06	0.00E+00	6.73E-06	5.94E-06	9.14E-10	7.99E-08	1.0	9.34E-04	4.21E-06
S12	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S12	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S12	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S12	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S12	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S12	60	8	6	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	7	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	8	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.63E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	9	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.63E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	10	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	11	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	12	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	13	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	14	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	15	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	16	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	17	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	18	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.64E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	19	5	1.80E-02	6.76E-03	1.67E-05	3.88E-04	6.66E-05	4.65E-06	0.00E+00	2.74E-05	2.42E-05	3.72E-09	3.26E-07	4.3	3.81E-03	1.71E-05
S12	60	8	20	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	21	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	22	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	23	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S12	60	8	24	5	8.98E-03	3.38E-03	8.33E-06	1.94E-04	3.33E-05	2.32E-06	0.00E+00	1.37E-05	1.21E-05	1.86E-09	1.63E-07	2.1	1.90E-03	8.57E-06
S13	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S13	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S13	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S13	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S13	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S13	60	8	6	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	7	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	8	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.71E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	9	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.71E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	10	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.71E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	11	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	12	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	13	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	14	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	15	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	16	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	17	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	18	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	19	5	1.44E-02	5.41E-03	1.33E-05	3.10E-04	5.34E-05	3.72E-06	0.00E+00	2.20E-05	1.94E-05	2.98E-09	2.61E-07	3.4	3.05E-03	1.37E-05
S13	60	8	20	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	21	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	22	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	23	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S13	60	8	24	5	7.19E-03	2.71E-03	6.67E-06	1.55E-04	2.67E-05	1.86E-06	0.00E+00	1.10E-05	9.69E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.86E-06
S14	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S14	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S14	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S14	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S14	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S14	60	8	6	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	7	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	8	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.40E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	9	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.40E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	10	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.40E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	11	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	12	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	13	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	14	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	15	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	16	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	17	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	18	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	19	5	9.32E-03	3.51E-03	8.64E-06	2.01E-04	3.46E-05	2.41E-06	0.00E+00	1.42E-05	1.25E-05	1.93E-09	1.69E-07	2.2	1.97E-03	8.89E-06
S14	60	8	20	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	21	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	22	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	23	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S14	60	8	24	5	4.66E-03	1.75E-03	4.32E-06	1.01E-04	1.73E-05	1.20E-06	0.00E+00	7.11E-06	6.27E-06	9.65E-10	8.44E-08	1.1	9.87E-04	4.44E-06
S15	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S15	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S15	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S15	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S15	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S15	60	8	6	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S15	60	8	7	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	8	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	9	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	10	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	11	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	12	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	13	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	14	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	15	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	16	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	17	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	18	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	19	5	8.91E-03	3.35E-03	8.27E-06	1.92E-04	3.31E-05	2.30E-06	0.00E+00	1.36E-05	1.20E-05	1.85E-09	1.62E-07	2.1	1.89E-03	8.50E-06
S15	60	8	20	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S15	60	8	21	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S15	60	8	22	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S15	60	8	23	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S15	60	8	24	5	4.46E-03	1.68E-03	4.13E-06	9.62E-05	1.65E-05	1.15E-06	0.00E+00	6.80E-06	6.00E-06	9.23E-10	8.08E-08	1.1	9.44E-04	4.25E-06
S16	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S16	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S16	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S16	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S16	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S16	60	8	6	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.43E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	7	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.43E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	8	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	9	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	10	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	11	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	12	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	13	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	14	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	15	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	16	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	17	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	18	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	19	5	5.76E-03	2.17E-03	5.34E-06	1.24E-04	2.14E-05	1.49E-06	0.00E+00	8.79E-06	7.76E-06	1.19E-09	1.04E-07	1.4	1.22E-03	5.49E-06
S16	60	8	20	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.45E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	21	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.44E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	22	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.45E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	23	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.45E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S16	60	8	24	5	2.88E-03	1.08E-03	2.67E-06	6.21E-05	1.07E-05	7.43E-07	0.00E+00	4.40E-06	3.88E-06	5.97E-10	5.22E-08	0.7	6.10E-04	2.75E-06
S17	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S17	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S17	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S17	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S17	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S17	60	8	6	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	7	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	8	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	9	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	10	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	11	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	12	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	13	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	14	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.35E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	15	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	16	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.34E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	17	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.35E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	18	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.35E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	19	5	9.07E-03	3.41E-03	8.42E-06	1.96E-04	3.37E-05	2.35E-06	0.00E+00	1.39E-05	1.22E-05	1.88E-09	1.64E-07	2.2	1.92E-03	8.66E-06
S17	60	8	20	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	21	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	22	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	23	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S17	60	8	24	5	4.54E-03	1.71E-03	4.21E-06	9.79E-05	1.68E-05	1.17E-06	0.00E+00	6.93E-06	6.11E-06	9.40E-10	8.22E-08	1.1	9.61E-04	4.33E-06
S18	65	9	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S18	65	9	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S18	65	9	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S18	65	9	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S18	65	9	6	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	7	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	8	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	9	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	10	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	11	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	12	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	13	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	14	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.19E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	15	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.19E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	16	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.18E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	17	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.19E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	18	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.19E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	19	5	1.31E-02	4.04E-03	1.16E-05	2.18E-04	3.95E-05	3.19E-06	0.00E+00	1.71E-05	1.50E-05	2.60E-09	1.98E-07	3.0	2.37E-03	1.09E-05
S18	65	9	20	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	21	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	22	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	23	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S18	65	9	24	5	6.56E-03	2.02E-03	5.80E-06	1.09E-04	1.97E-05	1.59E-06	0.00E+00	8.55E-06	7.50E-06	1.30E-09	9.89E-08	1.5	1.19E-03	5.45E-06
S19	65	9	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S19	65	9	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S19	65	9	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S19	65	9	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S19	65	9	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S19	65	9	6	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.37E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	7	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.37E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	8	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.75E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	9	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.75E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	10	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.75E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	11	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.75E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	12	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	13	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	14	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	15	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	16	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	17	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	18	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	19	5	1.96E-02	6.04E-03	1.73E-05	3.26E-04	5.89E-05	4.76E-06	0.00E+00	2.55E-05	2.24E-05	3.89E-09	2.95E-07	4.4	3.54E-03	1.63E-05
S19	65	9	20	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.38E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	21	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.38E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	22	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.38E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	23	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.38E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S19	65	9	24	5	9.79E-03	3.02E-03	8.67E-06	1.63E-04	2.95E-05	2.37E-06	0.00E+00	1.28E-05	1.12E-05	1.94E-09	1.48E-07	2.2	1.77E-03	8.14E-06
S20	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S20	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S20	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S20	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S20	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S20	60	8	6	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.00E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	7	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.00E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	8	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.00E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	9	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.00E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	10	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	11	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	12	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	13	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	14	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	15	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	16	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	17	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	18	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	19	5	1.55E-02	5.84E-03	1.44E-05	3.35E-04	5.76E-05	4.01E-06	0.00E+00	2.37E-05	2.09E-05	3.22E-09	2.81E-07	3.7	3.29E-03	1.48E-05
S20	60	8	20	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.01E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	21	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.01E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	22	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.01E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	23	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.01E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S20	60	8	24	5	7.76E-03	2.92E-03	7.20E-06	1.67E-04	2.88E-05	2.00E-06	0.00E+00	1.18E-05	1.05E-05	1.61E-09	1.41E-07	1.8	1.64E-03	7.40E-06
S21	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S21	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S21	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S21	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S21	60	8	6	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.02E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	7	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.02E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	8	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.00E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	9	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.00E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	10	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.00E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	11	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	12	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	13	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	14	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	15	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	16	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	17	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	18	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	19	5	3.89E-02	1.46E-02	3.61E-05	8.40E-04	1.44E-04	1.01E-05	0.00E+00	5.94E-05	5.24E-05	8.07E-09	7.05E-07	9.2	8.25E-03	3.71E-05
S21	60	8	20	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.03E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	21	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.03E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	22	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.03E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	23	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.03E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S21	60	8	24	5	1.95E-02	7.32E-03	1.81E-05	4.20E-04	7.22E-05	5.02E-06	0.00E+00	2.97E-05	2.62E-05	4.03E-09	3.53E-07	4.6	4.12E-03	1.86E-05
S22	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S22	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S22	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S22	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S22	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S22	60	8	6	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.60E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	7	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.60E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	8	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.20E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	9	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.20E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	10	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.20E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	11	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.21E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	12	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.21E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	13	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.21E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	14	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.22E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	15	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.22E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	16	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.21E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	17	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.22E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	18	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.22E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	19	5	3.57E-02	1.34E-02	3.31E-05	7.69E-04	1.32E-04	9.22E-06	0.00E+00	5.44E-05	4.80E-05	7.39E-09	6.46E-07	8.5	7.56E-03	3.40E-05
S22	60	8	20	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.61E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	21	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.61E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	22	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.61E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	23	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.61E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S22	60	8	24	5	1.78E-02	6.71E-03	1.65E-05	3.85E-04	6.62E-05	4.60E-06	0.00E+00	2.72E-05	2.40E-05	3.70E-09	3.23E-07	4.2	3.78E-03	1.70E-05
S23	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S23	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S23	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S23	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S23	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S23	60	8	6	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.00E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S23	60	8	7	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.00E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S23	60	8	8	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.00E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	9	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.00E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	10	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.00E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	11	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.00E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	12	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	13	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	14	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	15	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	16	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	17	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	18	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	19	5	2.33E-02	8.75E-03	2.16E-05	5.02E-04	8.63E-05	6.01E-06	0.00E+00	3.55E-05	3.13E-05	4.82E-09	4.21E-07	5.5	4.93E-03	2.22E-05
S23	60	8	20	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.01E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S23	60	8	21	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.01E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S23	60	8	22	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.01E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	23	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.01E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S23	60	8	24	5	1.16E-02	4.38E-03	1.08E-05	2.51E-04	4.31E-05	3.00E-06	0.00E+00	1.77E-05	1.57E-05	2.41E-09	2.11E-07	2.8	2.46E-03	1.11E-05
S24	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S24	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S24	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S24	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S24	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S24	60	8	6	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	7	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	8	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.75E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	9	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.75E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	10	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.75E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	11	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	12	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	13	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	14	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	15	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	16	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	17	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	18	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	19	5	1.84E-02	6.93E-03	1.71E-05	3.97E-04	6.83E-05	4.76E-06	0.00E+00	2.81E-05	2.48E-05	3.82E-09	3.34E-07	4.4	3.90E-03	1.76E-05
S24	60	8	20	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	21	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	22	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	23	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S24	60	8	24	5	9.21E-03	3.47E-03	8.54E-06	1.99E-04	3.42E-05	2.38E-06	0.00E+00	1.41E-05	1.24E-05	1.91E-09	1.67E-07	2.2	1.95E-03	8.79E-06
S25	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S25	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S25	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S25	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S25	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S25	60	8	6	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	7	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	8	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	9	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.70E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	10	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.70E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	11	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.70E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	12	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	13	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	14	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	15	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	16	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	17	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	18	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	19	5	1.43E-02	5.40E-03	1.33E-05	3.10E-04	5.32E-05	3.71E-06	0.00E+00	2.19E-05	1.93E-05	2.97E-09	2.60E-07	3.4	3.04E-03	1.37E-05
S25	60	8	20	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	21	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	22	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	23	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S25	60	8	24	5	7.17E-03	2.70E-03	6.65E-06	1.55E-04	2.66E-05	1.85E-06	0.00E+00	1.09E-05	9.66E-06	1.49E-09	1.30E-07	1.7	1.52E-03	6.84E-06
S26	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S26	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S26	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S26	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S26	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S26	60	8	6	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.32E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	7	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.32E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	8	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	9	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	10	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	11	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	12	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	13	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	14	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.07E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	15	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.07E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	16	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.06E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	17	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.07E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	18	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.07E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05
S26	60	8	19	5	4.12E-02	1.55E-02	3.82E-05	8.89E-04	1.53E-04	1.07E-05	0.00E+00	6.29E-05	5.55E-05	8.54E-09	7.47E-07	9.8	8.73E-03	3.93E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	20	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.33E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	21	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.33E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	22	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.33E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	23	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.33E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S26	60	8	24	5	2.06E-02	7.75E-03	1.91E-05	4.45E-04	7.65E-05	5.32E-06	0.00E+00	3.15E-05	2.78E-05	4.27E-09	3.74E-07	4.9	4.37E-03	1.97E-05
S27	50	7	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S27	50	7	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S27	50	7	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S27	50	7	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S27	50	7	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S27	50	7	6	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.62E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	7	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.62E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	8	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	9	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.23E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	10	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	11	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	12	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	13	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	14	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.25E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	15	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.25E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	16	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.24E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	17	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.25E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	18	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.25E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	19	5	2.60E-02	1.21E-02	2.56E-05	7.31E-04	1.21E-04	7.25E-06	0.00E+00	4.74E-05	4.20E-05	5.68E-09	5.77E-07	6.6	6.58E-03	2.91E-05
S27	50	7	20	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.63E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	21	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.63E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	22	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.63E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	23	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.63E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S27	50	7	24	5	1.30E-02	6.07E-03	1.28E-05	3.66E-04	6.03E-05	3.62E-06	0.00E+00	2.37E-05	2.10E-05	2.84E-09	2.88E-07	3.3	3.29E-03	1.45E-05
S28	50	7	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S28	50	7	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S28	50	7	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S28	50	7	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S28	50	7	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S28	50	7	6	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.20E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	7	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.20E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	8	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	9	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	10	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	11	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	12	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	13	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	14	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	15	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	16	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	17	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.41E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	18	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.42E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	19	5	1.58E-02	7.39E-03	1.56E-05	4.45E-04	7.34E-05	4.42E-06	0.00E+00	2.88E-05	2.56E-05	3.46E-09	3.51E-07	4.0	4.01E-03	1.77E-05
S28	50	7	20	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.21E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	21	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.21E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	22	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.21E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	23	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.21E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S28	50	7	24	5	7.90E-03	3.70E-03	7.78E-06	2.23E-04	3.67E-05	2.20E-06	0.00E+00	1.44E-05	1.28E-05	1.73E-09	1.76E-07	2.0	2.00E-03	8.85E-06
S29	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S29	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S29	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S29	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S29	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S29	60	8	6	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.30E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	7	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.30E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	8	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.60E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	9	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.60E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	10	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.60E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	11	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	12	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	13	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	14	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	15	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	16	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.61E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	17	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.62E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	18	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.62E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	19	5	3.33E-02	1.25E-02	3.09E-05	7.19E-04	1.24E-04	8.62E-06	0.00E+00	5.09E-05	4.49E-05	6.91E-09	6.04E-07	7.9	7.06E-03	3.18E-05
S29	60	8	20	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.31E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	21	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.31E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	22	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.31E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	23	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.31E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S29	60	8	24	5	1.67E-02	6.27E-03	1.55E-05	3.60E-04	6.18E-05	4.30E-06	0.00E+00	2.54E-05	2.24E-05	3.45E-09	3.02E-07	4.0	3.53E-03	1.59E-05
S30	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S30	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S30	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S30	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S30	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S30	60	8	6	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.11E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	7	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.11E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	8	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.23E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	9	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.23E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	10	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.23E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	11	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	12	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	13	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	14	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	15	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	16	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	17	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.24E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	18	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	19	5	3.19E-02	1.20E-02	2.96E-05	6.88E-04	1.18E-04	8.25E-06	0.00E+00	4.87E-05	4.30E-05	6.61E-09	5.78E-07	7.6	6.76E-03	3.04E-05
S30	60	8	20	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	21	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	22	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	23	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.12E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S30	60	8	24	5	1.59E-02	6.00E-03	1.48E-05	3.44E-04	5.92E-05	4.11E-06	0.00E+00	2.43E-05	2.15E-05	3.31E-09	2.89E-07	3.8	3.38E-03	1.52E-05
S31	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S31	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S31	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S31	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S31	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S31	60	8	6	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.18E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	7	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.19E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	8	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	9	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	10	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	11	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	12	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	13	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	14	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	15	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	16	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	17	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	18	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	19	5	5.57E-02	2.10E-02	5.17E-05	1.20E-03	2.07E-04	1.44E-05	0.00E+00	8.50E-05	7.50E-05	1.15E-08	1.01E-06	13.2	1.18E-02	5.31E-05
S31	60	8	20	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.20E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	21	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.20E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	22	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.20E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	23	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.20E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S31	60	8	24	5	2.79E-02	1.05E-02	2.58E-05	6.01E-04	1.03E-04	7.19E-06	0.00E+00	4.25E-05	3.75E-05	5.77E-09	5.05E-07	6.6	5.90E-03	2.66E-05
S32	50	7	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S32	50	7	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S32	50	7	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S32	50	7	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S32	50	7	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S32	50	7	6	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.64E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	7	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.64E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	8	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.29E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	9	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.29E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	10	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.29E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	11	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	12	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	13	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	50	7	14	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	15	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	16	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	17	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.30E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	18	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.31E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	19	5	3.33E-02	1.56E-02	3.28E-05	9.38E-04	1.55E-04	9.31E-06	0.00E+00	6.08E-05	5.39E-05	7.29E-09	7.40E-07	8.4	8.45E-03	3.73E-05
S32	50	7	20	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.65E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	21	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.65E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	22	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.65E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	23	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.65E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S32	50	7	24	5	1.67E-02	7.79E-03	1.64E-05	4.69E-04	7.74E-05	4.64E-06	0.00E+00	3.04E-05	2.70E-05	3.65E-09	3.70E-07	4.2	4.22E-03	1.86E-05
S33	50	7	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S33	50	7	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S33	50	7	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S33	50	7	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S33	50	7	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S33	50	7	6	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.79E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	7	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.79E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	8	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.58E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	9	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.58E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	10	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.59E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	11	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.59E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	12	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.59E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	13	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	14	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	15	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	16	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	17	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	18	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.60E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	19	5	3.44E-02	1.61E-02	3.38E-05	9.68E-04	1.60E-04	9.61E-06	0.00E+00	6.27E-05	5.57E-05	7.52E-09	7.64E-07	8.7	8.72E-03	3.85E-05
S33	50	7	20	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.80E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	21	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.80E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	22	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.80E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	23	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.80E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S33	50	7	24	5	1.72E-02	8.04E-03	1.69E-05	4.84E-04	7.98E-05	4.79E-06	0.00E+00	3.14E-05	2.78E-05	3.76E-09	3.82E-07	4.3	4.36E-03	1.92E-05
S34	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S34	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S34	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S34	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S34	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S34	60	8	6	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.65E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	7	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	8	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.31E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	9	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.31E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	10	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.31E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	11	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	12	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	13	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	14	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	15	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	16	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	17	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	18	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	19	5	2.06E-02	7.75E-03	1.91E-05	4.44E-04	7.64E-05	5.32E-06	0.00E+00	3.14E-05	2.77E-05	4.27E-09	3.73E-07	4.9	4.36E-03	1.96E-05
S34	60	8	20	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	21	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	22	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	23	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S34	60	8	24	5	1.03E-02	3.87E-03	9.55E-06	2.22E-04	3.82E-05	2.66E-06	0.00E+00	1.57E-05	1.39E-05	2.13E-09	1.87E-07	2.4	2.18E-03	9.82E-06
S35	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S35	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S35	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S35	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S35	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S35	60	8	6	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.07E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	7	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.07E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	8	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.14E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	9	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.14E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	10	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.14E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	11	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.14E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	12	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	13	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	14	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	15	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	16	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	17	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	18	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	19	5	2.38E-02	8.95E-03	2.21E-05	5.13E-04	8.83E-05	6.15E-06	0.00E+00	3.63E-05	3.20E-05	4.93E-09	4.31E-07	5.6	5.04E-03	2.27E-05
S35	60	8	20	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.08E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	21	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.08E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	22	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.08E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	23	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.08E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S35	60	8	24	5	1.19E-02	4.48E-03	1.10E-05	2.57E-04	4.41E-05	3.07E-06	0.00E+00	1.82E-05	1.60E-05	2.47E-09	2.16E-07	2.8	2.52E-03	1.13E-05
S36	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S36	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S36	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S36	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S36	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S36	60	8	6	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.64E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	7	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.64E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	8	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	9	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	10	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	11	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	12	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	13	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	14	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.30E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	15	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.30E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	16	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.29E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	17	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.30E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	18	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.30E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	19	5	2.82E-02	1.06E-02	2.62E-05	6.09E-04	1.05E-04	7.30E-06	0.00E+00	4.31E-05	3.80E-05	5.85E-09	5.12E-07	6.7	5.98E-03	2.69E-05
S36	60	8	20	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.65E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	21	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.65E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	22	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.65E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	23	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.65E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S36	60	8	24	5	1.41E-02	5.31E-03	1.31E-05	3.05E-04	5.24E-05	3.64E-06	0.00E+00	2.16E-05	1.90E-05	2.93E-09	2.56E-07	3.4	2.99E-03	1.35E-05
S37	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S37	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S37	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S37	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S37	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S37	60	8	6	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	7	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	8	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	9	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	10	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	11	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	12	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	13	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	14	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	15	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	16	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	17	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	18	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	19	5	1.13E-02	4.25E-03	1.05E-05	2.44E-04	4.19E-05	2.92E-06	0.00E+00	1.72E-05	1.52E-05	2.34E-09	2.05E-07	2.7	2.39E-03	1.08E-05
S37	60	8	20	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	21	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	22	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	23	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S37	60	8	24	5	5.65E-03	2.13E-03	5.24E-06	1.22E-04	2.10E-05	1.46E-06	0.00E+00	8.62E-06	7.61E-06	1.17E-09	1.02E-07	1.3	1.20E-03	5.39E-06
S38	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S38	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S38	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S38	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S38	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S38	60	8	6	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.49E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S38	60	8	7	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.49E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06

Table F-5: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Emission Rate Summary Table: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	8	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.98E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	9	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.98E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	10	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.98E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	11	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	12	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	13	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	14	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	15	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	16	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	17	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	18	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	19	5	1.16E-02	4.35E-03	1.07E-05	2.50E-04	4.29E-05	2.99E-06	0.00E+00	1.77E-05	1.56E-05	2.40E-09	2.10E-07	2.7	2.45E-03	1.10E-05
S38	60	8	20	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.50E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S38	60	8	21	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.49E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S38	60	8	22	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.50E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S38	60	8	23	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.49E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S38	60	8	24	5	5.78E-03	2.18E-03	5.36E-06	1.25E-04	2.15E-05	1.49E-06	0.00E+00	8.83E-06	7.79E-06	1.20E-09	1.05E-07	1.4	1.23E-03	5.52E-06
S39	60	8	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S39	60	8	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S39	60	8	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S39	60	8	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S39	60	8	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S39	60	8	6	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.80E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	7	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.80E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	8	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	9	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	10	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	11	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	12	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	13	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	14	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	15	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	16	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	17	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	18	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.61E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	19	5	1.40E-02	5.26E-03	1.30E-05	3.02E-04	5.19E-05	3.62E-06	0.00E+00	2.13E-05	1.88E-05	2.90E-09	2.53E-07	3.3	2.96E-03	1.33E-05
S39	60	8	20	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.81E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	21	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.81E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	22	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.81E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	23	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.81E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S39	60	8	24	5	6.99E-03	2.63E-03	6.48E-06	1.51E-04	2.59E-05	1.80E-06	0.00E+00	1.07E-05	9.41E-06	1.45E-09	1.27E-07	1.7	1.48E-03	6.67E-06
S40	80	11	1	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S40	80	11	2	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S40	80	11	3	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S40	80	11	4	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S40	80	11	5	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
S40	80	11	6	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.51E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	7	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.51E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	8	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	9	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	10	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	11	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	12	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	13	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	14	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	15	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	16	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	17	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	18	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	19	5	1.37E-02	2.94E-03	1.13E-05	1.33E-04	2.77E-05	3.03E-06	0.00E+00	1.36E-05	1.18E-05	2.55E-09	1.49E-07	2.9	1.89E-03	9.05E-06
S40	80	11	20	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.52E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	21	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.52E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	22	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.52E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	23	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.52E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06
S40	80	11	24	5	6.84E-03	1.47E-03	5.66E-06	6.63E-05	1.38E-05	1.51E-06	0.00E+00	6.82E-06	5.92E-06	1.28E-09	7.44E-08	1.4	9.44E-04	4.52E-06

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_E	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_E	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_E	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_E	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_E	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI1_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI2_E	0.51	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_E	0.51	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_E	0.51	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_E	0.51	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_E	0.51	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	31	0	1	6.26E-02	9.98E-02	7.25E-05	7.69E-05	6.97E-05	2.45E-05	0.00E+00	3.94E-04	3.60E-04	1.01E-08	5.46E-06	18.1	5.50E-02	4.91E-04
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_E	0.51	15	0	1	3.13E-02	4.99E-02	3.63E-05	3.85E-05	3.49E-05	1.23E-05	0.00E+00	1.97E-04	1.80E-04	5.07E-09	2.73E-06	9.1	2.75E-02	2.45E-04
SI2_W	0.42	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_W	0.42	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_W	0.42	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_W	0.42	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_W	0.42	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	25	0	1	5.13E-02	8.18E-02	5.94E-05	6.30E-05	5.72E-05	2.01E-05	0.00E+00	3.23E-04	2.95E-04	8.30E-09	4.47E-06	14.8	4.51E-02	4.02E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI2_W	0.42	13	0	1	2.56E-02	4.09E-02	2.97E-05	3.15E-05	2.86E-05	1.01E-05	0.00E+00	1.62E-04	1.47E-04	4.15E-09	2.24E-06	7.4	2.26E-02	2.01E-04
SI3_E	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_E	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_E	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_E	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_E	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	30	0	1	6.16E-02	9.82E-02	7.13E-05	7.57E-05	6.86E-05	2.41E-05	0.00E+00	3.88E-04	3.54E-04	9.96E-09	5.37E-06	17.8	5.41E-02	4.83E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_E	0.50	15	0	1	3.08E-02	4.91E-02	3.57E-05	3.78E-05	3.43E-05	1.21E-05	0.00E+00	1.94E-04	1.77E-04	4.98E-09	2.68E-06	8.9	2.71E-02	2.41E-04
SI3_W	0.38	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_W	0.38	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_W	0.38	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_W	0.38	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_W	0.38	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	23	0	1	4.62E-02	7.36E-02	5.35E-05	5.67E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.65E-04	7.47E-09	4.03E-06	13.4	4.06E-02	3.62E-04
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI3_W	0.38	11	0	1	2.31E-02	3.68E-02	2.67E-05	2.84E-05	2.57E-05	9.05E-06	0.00E+00	1.45E-04	1.33E-04	3.74E-09	2.01E-06	6.7	2.03E-02	1.81E-04
SI4_E	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_E	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_E	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_E	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_E	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_E	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_W	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_W	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_W	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_W	0.32	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	19	0	1	3.90E-02	6.22E-02	4.52E-05	4.79E-05	4.34E-05	1.53E-05	0.00E+00	2.46E-04	2.24E-04	6.31E-09	3.40E-06	11.3	3.43E-02	3.06E-04
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI4_W	0.32	10	0	1	1.95E-02	3.11E-02	2.26E-05	2.40E-05	2.17E-05	7.64E-06	0.00E+00	1.23E-04	1.12E-04	3.16E-09	1.70E-06	5.6	1.71E-02	1.53E-04
SI5_E	0.58	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_E	0.58	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_E	0.58	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_E	0.58	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_E	0.58	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	35	0	1	7.18E-02	1.15E-01	8.32E-05	8.83E-05	8.00E-05	2.82E-05	0.00E+00	4.52E-04	4.13E-04	1.16E-08	6.26E-06	20.8	6.31E-02	5.63E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_E	0.58	18	0	1	3.59E-02	5.73E-02	4.16E-05	4.41E-05	4.00E-05	1.41E-05	0.00E+00	2.26E-04	2.06E-04	5.81E-09	3.13E-06	10.4	3.16E-02	2.82E-04
SI5_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_W	0.59	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	36	0	1	7.28E-02	1.16E-01	8.44E-05	8.95E-05	8.12E-05	2.86E-05	0.00E+00	4.59E-04	4.19E-04	1.18E-08	6.35E-06	21.1	6.40E-02	5.71E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI5_W	0.59	18	0	1	3.64E-02	5.81E-02	4.22E-05	4.48E-05	4.06E-05	1.43E-05	0.00E+00	2.29E-04	2.09E-04	5.90E-09	3.18E-06	10.5	3.20E-02	2.86E-04
SI6_E	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_E	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_E	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_E	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_E	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_E	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_W	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_W	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_W	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_W	0.43	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	26	0	1	5.33E-02	8.51E-02	6.18E-05	6.56E-05	5.95E-05	2.09E-05	0.00E+00	3.36E-04	3.07E-04	8.64E-09	4.65E-06	15.4	4.69E-02	4.18E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI6_W	0.43	13	0	1	2.67E-02	4.25E-02	3.09E-05	3.28E-05	2.97E-05	1.05E-05	0.00E+00	1.68E-04	1.53E-04	4.32E-09	2.33E-06	7.7	2.35E-02	2.09E-04
SI7_E	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_E	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_E	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_E	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_E	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_E	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_W	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_W	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_W	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_W	0.47	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	28	0	1	5.75E-02	9.16E-02	6.66E-05	7.06E-05	6.40E-05	2.25E-05	0.00E+00	3.62E-04	3.30E-04	9.30E-09	5.01E-06	16.6	5.05E-02	4.51E-04
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI7_W	0.47	14	0	1	2.87E-02	4.58E-02	3.33E-05	3.53E-05	3.20E-05	1.13E-05	0.00E+00	1.81E-04	1.65E-04	4.65E-09	2.51E-06	8.3	2.53E-02	2.25E-04
SI8_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	33	0	1	6.77E-02	1.08E-01	7.85E-05	8.32E-05	7.55E-05	2.65E-05	0.00E+00	4.27E-04	3.89E-04	1.10E-08	5.90E-06	19.6	5.95E-02	5.31E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_E	0.55	17	0	1	3.39E-02	5.40E-02	3.92E-05	4.16E-05	3.77E-05	1.33E-05	0.00E+00	2.13E-04	1.95E-04	5.48E-09	2.95E-06	9.8	2.98E-02	2.66E-04
SI8_W	0.48	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_W	0.48	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_W	0.48	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_W	0.48	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_W	0.48	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	29	0	1	5.95E-02	9.49E-02	6.90E-05	7.31E-05	6.63E-05	2.33E-05	0.00E+00	3.75E-04	3.42E-04	9.63E-09	5.19E-06	17.2	5.23E-02	4.67E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI8_W	0.48	15	0	1	2.98E-02	4.75E-02	3.45E-05	3.66E-05	3.32E-05	1.17E-05	0.00E+00	1.87E-04	1.71E-04	4.82E-09	2.59E-06	8.6	2.62E-02	2.33E-04
SI9_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI9_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI10_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI11_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI12_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI13_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI14_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI15_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI16_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI17_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05		4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI18_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI19_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI20_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI21_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI22_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI23_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI24_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI25_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI26_E	0.52	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_E	0.52	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_E	0.52	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_E	0.52	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_E	0.52	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	16	0	1	4.62E-02	7.37E-02	5.36E-05	5.68E-05	5.15E-05	1.81E-05	0.00E+00	2.91E-04	2.66E-04	7.48E-09	4.03E-06	13.4	4.06E-02	3.63E-04
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04
SI26_E	0.52	8	0	1	2.31E-02	3.69E-02	2.68E-05	2.84E-05	2.58E-05	9.06E-06	0.00E+00	1.46E-04	1.33E-04	3.74E-09	2.02E-06	6.7	2.03E-02	1.81E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_W	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_W	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_W	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_W	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI26_W	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI27_E	0.61	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_E	0.61	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_E	0.61	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_E	0.61	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_E	0.61	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	18	0	1	5.45E-02	8.68E-02	6.31E-05	6.69E-05	6.07E-05	2.13E-05	0.00E+00	3.43E-04	3.13E-04	8.81E-09	4.75E-06	15.8	4.79E-02	4.27E-04
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_E	0.61	9	0	1	2.72E-02	4.34E-02	3.15E-05	3.35E-05	3.03E-05	1.07E-05	0.00E+00	1.71E-04	1.56E-04	4.41E-09	2.37E-06	7.9	2.39E-02	2.14E-04
SI27_W	0.66	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_W	0.66	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_W	0.66	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_W	0.66	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_W	0.66	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	20	0	1	5.83E-02	9.29E-02	6.75E-05	7.16E-05	6.49E-05	2.28E-05	0.00E+00	3.67E-04	3.35E-04	9.43E-09	5.08E-06	16.9	5.12E-02	4.57E-04
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI27_W	0.66	10	0	1	2.91E-02	4.65E-02	3.37E-05	3.58E-05	3.25E-05	1.14E-05	0.00E+00	1.83E-04	1.67E-04	4.71E-09	2.54E-06	8.4	2.56E-02	2.28E-04
SI28_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_E	0.55	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	17	0	1	4.88E-02	7.78E-02	5.65E-05	5.99E-05	5.43E-05	1.91E-05	0.00E+00	3.07E-04	2.80E-04	7.89E-09	4.25E-06	14.1	4.29E-02	3.82E-04
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_E	0.55	8	0	1	2.44E-02	3.89E-02	2.82E-05	3.00E-05	2.72E-05	9.56E-06	0.00E+00	1.54E-04	1.40E-04	3.95E-09	2.13E-06	7.1	2.14E-02	1.91E-04
SI28_W	0.63	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_W	0.63	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_W	0.63	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_W	0.63	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_W	0.63	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	19	0	1	5.57E-02	8.89E-02	6.46E-05	6.85E-05	6.21E-05	2.18E-05	0.00E+00	3.51E-04	3.20E-04	9.02E-09	4.86E-06	16.1	4.90E-02	4.37E-04
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI28_W	0.63	9	0	1	2.79E-02	4.44E-02	3.23E-05	3.42E-05	3.10E-05	1.09E-05	0.00E+00	1.75E-04	1.60E-04	4.51E-09	2.43E-06	8.1	2.45E-02	2.18E-04
SI29_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI29_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI30_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI31_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI32_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI33_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI34_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI34_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI35_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI36_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI37_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI38_E	0.36	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_E	0.36	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_E	0.36	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_E	0.36	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_E	0.36	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	11	0	1	3.17E-02	5.05E-02	3.67E-05	3.89E-05	3.53E-05	1.24E-05	0.00E+00	1.99E-04	1.82E-04	5.12E-09	2.76E-06	9.2	2.78E-02	2.48E-04
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_E	0.36	5	0	1	1.58E-02	2.52E-02	1.83E-05	1.95E-05	1.76E-05	6.21E-06	0.00E+00	9.97E-05	9.10E-05	2.56E-09	1.38E-06	4.6	1.39E-02	1.24E-04
SI38_W	0.39	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_W	0.39	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_W	0.39	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_W	0.39	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_W	0.39	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	12	0	1	3.42E-02	5.45E-02	3.96E-05	4.20E-05	3.81E-05	1.34E-05	0.00E+00	2.15E-04	1.97E-04	5.53E-09	2.98E-06	9.9	3.01E-02	2.68E-04
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI38_W	0.39	6	0	1	1.71E-02	2.73E-02	1.98E-05	2.10E-05	1.91E-05	6.70E-06	0.00E+00	1.08E-04	9.83E-05	2.77E-09	1.49E-06	4.9	1.50E-02	1.34E-04
SI39_E	0.25	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_E	0.25	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_E	0.25	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_E	0.25	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_E	0.25	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_E	0.25	4	0	1	1.11E-02	1.77E-02	1.28E-05	1.36E-05	1.23E-05	4.34E-06	0.00E+00	6.98E-05	6.37E-05	1.79E-09	9.66E-07	3.2	9.74E-03	8.69E-05
SI39_W	0.17	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_W	0.17	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_W	0.17	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_W	0.17	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_W	0.17	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	5	0	1	1.52E-02	2.42E-02	1.76E-05	1.87E-05	1.69E-05	5.96E-06	0.00E+00	9.57E-05	8.73E-05	2.46E-09	1.33E-06	4.4	1.34E-02	1.19E-04
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI39_W	0.17	3	0	1	7.60E-03	1.21E-02	8.80E-06	9.34E-06	8.47E-06	2.98E-06	0.00E+00	4.79E-05	4.37E-05	1.23E-09	6.63E-07	2.2	6.68E-03	5.96E-05
SI40_E	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_E	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_E	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_E	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_E	0.49	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	15	0	1	4.31E-02	6.87E-02	4.99E-05	5.29E-05	4.80E-05	1.69E-05	0.00E+00	2.71E-04	2.47E-04	6.97E-09	3.75E-06	12.5	3.79E-02	3.38E-04
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_E	0.49	7	0	1	2.15E-02	3.43E-02	2.49E-05	2.65E-05	2.40E-05	8.44E-06	0.00E+00	1.36E-04	1.24E-04	3.48E-09	1.88E-06	6.2	1.89E-02	1.69E-04
SI40_W	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_W	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_W	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_W	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_W	0.50	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	15	0	1	4.43E-02	7.07E-02	5.14E-05	5.45E-05	4.94E-05	1.74E-05	0.00E+00	2.79E-04	2.55E-04	7.17E-09	3.87E-06	12.8	3.90E-02	3.48E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI40_W	0.50	8	0	1	2.22E-02	3.53E-02	2.57E-05	2.72E-05	2.47E-05	8.69E-06	0.00E+00	1.40E-04	1.27E-04	3.59E-09	1.93E-06	6.4	1.95E-02	1.74E-04
SI41_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI41_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI42_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI43_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI43_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI44_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI45_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI46_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI47_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI48_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI49_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI50_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI50_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI51_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_E	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI52_W	0.75	11	0	1	3.32E-02	5.30E-02	3.85E-05	4.09E-05	3.70E-05	1.30E-05	0.00E+00	2.09E-04	1.91E-04	5.38E-09	2.90E-06	9.6	2.92E-02	2.61E-04
SI1N_E	0.45	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_E	0.45	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_E	0.45	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_E	0.45	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_E	0.45	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	27	0	1	7.98E-02	1.27E-01	9.24E-05	9.80E-05	8.89E-05	3.13E-05	0.00E+00	5.03E-04	4.59E-04	1.29E-08	6.96E-06	23.1	7.01E-02	6.26E-04
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_E	0.45	14	0	1	3.99E-02	6.36E-02	4.62E-05	4.90E-05	4.45E-05	1.56E-05	0.00E+00	2.51E-04	2.29E-04	6.46E-09	3.48E-06	11.5	3.51E-02	3.13E-04
SI1N_W	0.37	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_W	0.37	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_W	0.37	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_W	0.37	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_W	0.37	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	22	0	1	6.50E-02	1.04E-01	7.53E-05	7.99E-05	7.24E-05	2.55E-05	0.00E+00	4.09E-04	3.74E-04	1.05E-08	5.67E-06	18.8	5.72E-02	5.10E-04
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI1N_W	0.37	11	0	1	3.25E-02	5.18E-02	3.77E-05	3.99E-05	3.62E-05	1.27E-05	0.00E+00	2.05E-04	1.87E-04	5.26E-09	2.83E-06	9.4	2.86E-02	2.55E-04
SI2N_E	0.40	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_E	0.40	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_E	0.40	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_E	0.40	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_E	0.40	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	24	0	1	7.09E-02	1.13E-01	8.22E-05	8.72E-05	7.90E-05	2.78E-05	0.00E+00	4.47E-04	4.08E-04	1.15E-08	6.18E-06	20.5	6.24E-02	5.56E-04
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_E	0.40	12	0	1	3.55E-02	5.66E-02	4.11E-05	4.36E-05	3.95E-05	1.39E-05	0.00E+00	2.23E-04	2.04E-04	5.74E-09	3.09E-06	10.3	3.12E-02	2.78E-04
SI2N_W	0.30	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_W	0.30	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_W	0.30	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_W	0.30	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_W	0.30	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04

Table F-6: Dundas BRT - Dundas Street West Vehicle (BUS - BRT) Signalized Source Emission Summary: Future Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	18	0	1	5.32E-02	8.48E-02	6.16E-05	6.54E-05	5.93E-05	2.09E-05	0.00E+00	3.35E-04	3.06E-04	8.61E-09	4.64E-06	15.4	4.68E-02	4.17E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI2N_W	0.30	9	0	1	2.66E-02	4.24E-02	3.08E-05	3.27E-05	2.96E-05	1.04E-05	0.00E+00	1.68E-04	1.53E-04	4.30E-09	2.32E-06	7.7	2.34E-02	2.09E-04
SI3N_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_E	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_E	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_W	0.75	0	0	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0	0.00E+00	0.00E+00
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	45	0	1	1.33E-01	2.12E-01	1.54E-04	1.63E-04	1.48E-04	5.21E-05	0.00E+00	8.38E-04	7.64E-04	2.15E-08	1.16E-05	38.5	1.17E-01	1.04E-03
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04
SI3N_W	0.75	23	0	1	6.65E-02	1.06E-01	7.70E-05	8.17E-05	7.41E-05	2.61E-05	0.00E+00	4.19E-04	3.82E-04	1.08E-08	5.80E-06	19.2	5.85E-02	5.21E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	3.21E-02	2.72E-03	3.86E-05	3.02E-03	7.23E-04	3.72E-05	2.54E-06	1.47E-05	9.36E-06	1.49E-08	8.38E-07	2.9	1.83E-04	2.03E-05
S1	60	8	2	5	2.08E-02	1.82E-03	2.58E-05	2.01E-03	4.82E-04	2.47E-05	1.68E-06	9.77E-06	6.24E-06	9.90E-09	5.56E-07	1.9	1.21E-04	1.36E-05
S1	60	8	3	5	1.80E-02	1.59E-03	2.25E-05	1.76E-03	4.22E-04	2.15E-05	1.46E-06	8.51E-06	5.46E-06	8.66E-09	4.84E-07	1.7	1.06E-04	1.19E-05
S1	60	8	4	5	1.28E-02	1.13E-03	1.61E-05	1.26E-03	3.01E-04	1.53E-05	1.04E-06	6.06E-06	3.90E-06	6.19E-09	3.45E-07	1.2	7.52E-05	8.47E-06
S1	60	8	5	5	1.80E-02	1.59E-03	2.25E-05	1.76E-03	4.22E-04	2.14E-05	1.46E-06	8.47E-06	5.46E-06	8.66E-09	4.82E-07	1.6	1.05E-04	1.19E-05
S1	60	8	6	5	4.37E-02	3.86E-03	5.48E-05	4.27E-03	1.02E-03	5.20E-05	3.54E-06	2.06E-05	1.33E-05	2.10E-08	1.17E-06	4.0	2.55E-04	2.88E-05
S1	60	8	7	5	1.31E-01	1.16E-02	1.64E-04	1.28E-02	3.07E-03	1.56E-04	1.06E-05	6.19E-05	3.98E-05	6.31E-08	3.52E-06	12.0	7.68E-04	8.64E-05
S1	60	8	8	5	2.08E-01	1.77E-02	2.51E-04	1.96E-02	4.70E-03	2.41E-04	1.65E-05	9.56E-05	6.08E-05	9.65E-08	5.45E-06	18.6	1.19E-03	1.32E-04
S1	60	8	9	5	1.81E-01	1.43E-02	2.03E-04	1.58E-02	3.79E-03	1.98E-04	1.35E-05	7.83E-05	4.91E-05	7.80E-08	4.46E-06	15.3	9.73E-04	1.07E-04
S1	60	8	10	5	1.57E-01	1.18E-02	1.67E-04	1.31E-02	3.13E-03	1.64E-04	1.13E-05	6.52E-05	4.06E-05	6.44E-08	3.72E-06	12.7	8.11E-04	8.81E-05
S1	60	8	11	5	1.48E-01	1.07E-02	1.51E-04	1.18E-02	2.83E-03	1.50E-04	1.03E-05	5.94E-05	3.68E-05	5.82E-08	3.39E-06	11.6	7.39E-04	7.96E-05
S1	60	8	12	5	1.78E-01	1.20E-02	1.71E-04	1.33E-02	3.19E-03	1.71E-04	1.17E-05	6.79E-05	4.21E-05	6.56E-08	3.87E-06	13.3	8.45E-04	8.98E-05
S1	60	8	13	5	1.91E-01	1.27E-02	1.80E-04	1.41E-02	3.37E-03	1.81E-04	1.25E-05	7.20E-05	4.46E-05	6.93E-08	4.11E-06	14.1	8.96E-04	9.49E-05
S1	60	8	14	5	1.96E-01	1.29E-02	1.84E-04	1.43E-02	3.43E-03	1.85E-04	1.27E-05	7.34E-05	4.55E-05	7.06E-08	4.19E-06	14.4	9.14E-04	9.66E-05
S1	60	8	15	5	2.05E-01	1.34E-02	1.90E-04	1.48E-02	3.55E-03	1.92E-04	1.32E-05	7.61E-05	4.72E-05	7.31E-08	4.34E-06	14.9	9.48E-04	1.00E-04
S1	60	8	16	5	2.21E-01	1.45E-02	2.06E-04	1.61E-02	3.86E-03	2.08E-04	1.43E-05	8.25E-05	5.12E-05	7.93E-08	4.71E-06	16.2	1.03E-03	1.08E-04
S1	60	8	17	5	2.73E-01	1.79E-02	2.54E-04	1.99E-02	4.76E-03	2.56E-04	1.76E-05	1.02E-04	6.31E-05	9.78E-08	5.81E-06	19.9	1.27E-03	1.34E-04
S1	60	8	18	5	2.90E-01	1.93E-02	2.74E-04	2.14E-02	5.12E-03	2.75E-04	1.89E-05	1.09E-04	6.78E-05	1.05E-07	6.23E-06	21.4	1.36E-03	1.44E-04
S1	60	8	19	5	1.98E-01	1.34E-02	1.90E-04	1.48E-02	3.55E-03	1.90E-04	1.31E-05	7.56E-05	4.69E-05	7.31E-08	4.31E-06	14.8	9.41E-04	1.00E-04
S1	60	8	20	5	1.24E-01	8.85E-03	1.26E-04	9.80E-03	2.35E-03	1.25E-04	8.54E-06	4.94E-05	3.06E-05	4.83E-08	2.82E-06	9.7	6.15E-04	6.61E-05
S1	60	8	21	5	1.01E-01	7.49E-03	1.06E-04	8.30E-03	1.99E-03	1.05E-04	7.17E-06	4.15E-05	2.58E-05	4.09E-08	2.37E-06	8.1	5.16E-04	5.59E-05
S1	60	8	22	5	8.26E-02	6.35E-03	9.02E-05	7.04E-03	1.69E-03	8.81E-05	6.03E-06	3.50E-05	2.19E-05	3.47E-08	1.99E-06	6.8	4.35E-04	4.74E-05
S1	60	8	23	5	6.56E-02	5.22E-03	7.41E-05	5.78E-03	1.39E-03	7.20E-05	4.92E-06	2.85E-05	1.79E-05	2.85E-08	1.63E-06	5.6	3.55E-04	3.90E-05
S1	60	8	24	5	4.70E-02	3.86E-03	5.48E-05	4.27E-03	1.02E-03	5.29E-05	3.62E-06	2.10E-05	1.33E-05	2.10E-08	1.19E-06	4.1	2.61E-04	2.88E-05
S2	60	8	1	5	1.63E-02	1.39E-03	1.97E-05	1.54E-03	3.68E-04	1.89E-05	1.29E-06	7.49E-06	4.76E-06	7.56E-09	4.27E-07	1.5	9.31E-05	1.04E-05
S2	60	8	2	5	1.06E-02	9.24E-04	1.31E-05	1.02E-03	2.45E-04	1.26E-05	8.56E-07	4.97E-06	3.18E-06	5.04E-09	2.83E-07	1.0	6.17E-05	6.90E-06
S2	60	8	3	5	9.16E-03	8.09E-04	1.15E-05	8.96E-04	2.15E-04	1.09E-05	7.45E-07	4.33E-06	2.78E-06	4.41E-09	2.47E-07	0.8	5.37E-05	6.04E-06
S2	60	8	4	5	6.54E-03	5.78E-04	8.20E-06	6.40E-04	1.53E-04	7.80E-06	5.31E-07	3.08E-06	1.99E-06	3.15E-09	1.76E-07	0.6	3.83E-05	4.31E-06
S2	60	8	5	5	9.16E-03	8.09E-04	1.15E-05	8.96E-04	2.15E-04	1.09E-05	7.42E-07	4.31E-06	2.78E-06	4.41E-09	2.46E-07	0.8	5.35E-05	6.04E-06
S2	60	8	6	5	2.22E-02	1.96E-03	2.79E-05	2.18E-03	5.21E-04	2.65E-05	1.80E-06	1.05E-05	6.75E-06	1.07E-08	5.96E-07	2.0	1.30E-04	1.47E-05
S2	60	8	7	5	6.67E-02	5.89E-03	8.36E-05	6.53E-03	1.56E-03	7.97E-05	5.42E-06	3.15E-05	2.02E-05	3.21E-08	1.79E-06	6.1	3.91E-04	4.40E-05
S2	60	8	8	5	1.06E-01	9.01E-03	1.28E-04	9.98E-03	2.39E-03	1.23E-04	8.38E-06	4.87E-05	3.10E-05	4.91E-08	2.77E-06	9.5	6.04E-04	6.73E-05
S2	60	8	9	5	9.24E-02	7.28E-03	1.03E-04	8.06E-03	1.93E-03	1.01E-04	6.88E-06	3.99E-05	2.50E-05	3.97E-08	2.27E-06	7.8	4.95E-04	5.43E-05
S2	60	8	10	5	8.00E-02	6.01E-03	8.53E-05	6.65E-03	1.59E-03	8.37E-05	5.73E-06	3.32E-05	2.07E-05	3.28E-08	1.89E-06	6.5	4.13E-04	4.49E-05
S2	60	8	11	5	7.51E-02	5.43E-03	7.71E-05	6.01E-03	1.44E-03	7.62E-05	5.23E-06	3.02E-05	1.87E-05	2.96E-08	1.72E-06	5.9	3.76E-04	4.05E-05
S2	60	8	12	5	9.04E-02	6.12E-03	8.69E-05	6.78E-03	1.63E-03	8.69E-05	5.98E-06	3.46E-05	2.14E-05	3.34E-08	1.97E-06	6.8	4.30E-04	4.57E-05
S2	60	8	13	5	9.72E-02	6.47E-03	9.18E-05	7.17E-03	1.72E-03	9.22E-05	6.34E-06	3.66E-05	2.27E-05	3.53E-08	2.09E-06	7.2	4.56E-04	4.83E-05
S2	60	8	14	5	9.98E-02	6.58E-03	9.35E-05	7.29E-03	1.75E-03	9.40E-05	6.47E-06	3.74E-05	2.32E-05	3.59E-08	2.13E-06	7.3	4.65E-04	4.92E-05
S2	60	8	15	5	1.04E-01	6.82E-03	9.68E-05	7.55E-03	1.81E-03	9.75E-05	6.71E-06	3.88E-05	2.40E-05	3.72E-08	2.21E-06	7.6	4.83E-04	5.09E-05
S2	60	8	16	5	1.13E-01	7.39E-03	1.05E-04	8.19E-03	1.96E-03	1.06E-04	7.27E-06	4.20E-05	2.61E-05	4.03E-08	2.40E-06	8.2	5.23E-04	5.52E-05
S2	60	8	17	5	1.39E-01	9.13E-03	1.30E-04	1.01E-02	2.42E-03	1.30E-04	8.98E-06	5.18E-05	3.21E-05	4.98E-08	2.96E-06	10.1	6.45E-04	6.81E-05
S2	60	8	18	5	1.48E-01	9.82E-03	1.39E-04	1.09E-02	2.61E-03	1.40E-04	9.63E-06	5.56E-05	3.45E-05	5.36E-08	3.17E-06	10.9	6.92E-04	7.33E-05
S2	60	8	19	5	1.01E-01	6.82E-03	9.67E-05	7.55E-03	1.81E-03	9.69E-05	6.66E-06	3.85E-05	2.39E-05	3.72E-08	2.20E-06	7.5	4.79E-04	5.09E-05
S2	60	8	20	5	6.32E-02	4.51E-03	6.39E-05	4.99E-03	1.20E-03	6.34E-05	4.35E-06	2.52E-05	1.56E-05	2.46E-08	1.43E-06	4.9	3.13E-04	3.36E-05
S2	60	8	21	5	5.14E-02	3.81E-03	5.41E-05	4.22E-03	1.01E-03	5.32E-05	3.65E-06	2.11E-05	1.31E-05	2.08E-08	1.20E-06	4.1	2.63E-04	2.85E-05
S2	60	8	22	5	4.20E-02	3.23E-03	4.59E-05	3.58E-03	8.59E-04	4.49E-05	3.07E-06	1.78E-05	1.11E-05	1.76E-08	1.01E-06	3.5	2.21E-04	2.42E-05
S2	60	8	23	5	3.34E-02	2.66E-03	3.77E-05	2.94E-03	7.05E-04	3.66E-05	2.51E-06	1.45E-05	9.13E-06	1.45E-08	8.28E-07	2.8	1.81E-04	1.98E-05
S2	60	8	24	5	2.39E-02	1.96E-03	2.79E-05	2.18E-03	5.21E-04	2.69E-05	1.84E-06	1.07E-05	6.75E-06	1.07E-08	6.08E-07	2.1	1.33E-04	1.47E-05
S3	60	8	1	5	2.11E-02	1.79E-03	2.54E-05	1.98E-03	4.75E-04	2.44E-05	1.67E-06	9.68E-06	6.15E-06	9.76E-09	5.51E-07	1.9	1.20E-04	1.34E-05
S3	60	8	2	5	1.37E-02	1.19E-03	1.69E-05	1.32E-03	3.17E-04	1.62E-05	1.11E-06	6.42E-06	4.10E-06	6.51E-09	3.66E-07	1.2	7.97E-05	8.91E-06
S3	60	8	3	5	1.18E-02	1.04E-03	1.48E-05	1.16E-03	2.77E-04	1.41E-05	9.62E-07	5.59E-06	3.59E-06	5.69E-09	3.18E-07	1.1	6.94E-05	7.80E-06
S3	60	8	4	5	8.44E-03	7.46E-04	1.06E-05	8.26E-04	1.98E-04	1.01E-05	6.85E-07	3.98E-06	2.56E-06	4.07E-09	2.27E-07	0.8	4.94E-05	5.57E-06
S3	60	8	5	5	1.18E-02	1.04E-03	1.48E-05	1.16E-03	2.77E-04	1.41E-05	9.58E-07	5.57E-06	3.59E-06	5.69E-09	3.17E-07	1.1	6.91E-05	7.80E-06
S3	60	8	6	5	2.87E-02	2.54E-03	3.60E-05	2.81E-03	6.73E-04	3.42E-05	2.33E-06	1.35E-05	8.72E-06	1.38E-08	7.70E-07	2.6	1.68E-04	1.89E-05
S3	60	8	7	5	8.61E-02	7.61E-03	1.08E-04	8.43E-03	2.02E-03	1.03E-04	7.00E-06	4.07E-05	2.61E-05	4.15E-08	2.32E-06	7.9	5.05E-04	5.68E-05
S3	60	8	8	5	1.36E-01	1.16E-02	1.65E-04	1.29E-02	3.09E-03	1.59E-04	1.08E-05	6.29E-05	4.00E-05	6.35E-08	3.58E-06	12.2	7.81E-04	8.69E-05
S3	60	8	9	5	1.19E-01	9.40E-03	1.33E-04	1.04E-02	2.49E-03	1.30E-04	8.88E-06	5.15E-05	3.23E-05	5.13E-08	2.93E-06	10.0	6.40E-04	7.02E-05
S3	60	8	10	5	1.03E-01	7.76E-03	1.10E-04	8.59E-03	2.06E-03	1.08E-04	7.41E-06	4.29E-05	2.67E-05	4.23E-08	2.44E-06	8.4	5.33E-04	5.79E-05
S3	60	8	11	5	9.70E-02	7.01E-03	9.95E-05	7.77E-03	1.86E-03	9.84E-05	6.75E-06	3.90E-05	2.42E-05	3.83E-08	2.23E-06	7.6	4.86E-04	5.24E-05
S3	60	8	12	5	1.17E-01	7.91E-03	1.12E-04	8.76E-03	2.10E-03	1.12E-04	7.72E-06	4.46E-05	2.77E-05	4.31E-08	2.55E-06	8.7	5.55E-04	5.90E-05
S3	60	8	13	5	1.25E-01	8.35E-03	1.19E-04	9.25E-03	2.22E-03	1.19E-04	8.19E-06	4.73E-05	2.93E-05	4.56E-08	2.70E-06	9.3	5.89E-04	6.24E-05
S3	60	8	14	5	1.29E-01	8.50E-03	1.21E-04	9.42E-03	2.26E-03	1.21E-04	8.35E-06	4.83E-05	2.99E-05	4.64E-08	2.75E-06	9.4	6.01E-04	6.35E-05
S3	60	8	15	5	1.35E-01	8.80E-03	1.25E-04	9.75E-03	2.34E-03	1.26E-04	8.67E-06	5.01E-05	3.10E-05	4.80E-08	2.86E-06	9.8	6.23E-04	6.57E-05
S3	60	8	16	5	1.46E-01	9.55E-03	1.36E-04	1.06E-02	2.53E-03	1.37E-04	9.39E-06	5.42E-05	3.36E-05	5.21E-08	3.10E-06	10.6	6.75E-04	7.13E-05
S3	60	8	17	5	1.79E-01	1.18E-02	1.67E-04	1.31E-02	3.13E-03	1.68E-04	1.16E-05	6.69E-05	4.15E-05	6.43E-08	3.82E-06	13.1	8.33E-04	8.80E-05
S3	60	8	18	5	1.91E-01	1.27E-02	1.80E-04	1.40E-02	3.37E-03	1.81E-04	1.24E-05	7.18E-05	4.45E-05	6.92E-08	4.10E-06	14.1	8.94E-04	9.47E-05
S3	60	8	19	5	1.30E-01	8.80E-03	1.25E-04	9.75E-03	2.34E-03	1.25E-04	8.60E-06	4.97E-05	3.08E-05	4.80E-08	2.84E-06	9.7	6.19E-04	6.57E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	20	5	8.16E-02	5.82E-03	8.26E-05	6.45E-03	1.54E-03	8.19E-05	5.62E-06	3.25E-05	2.01E-05	3.17E-08	1.85E-06	6.3	4.04E-04	4.34E-05
S3	60	8	21	5	6.64E-02	4.92E-03	6.99E-05	5.45E-03	1.31E-03	6.88E-05	4.71E-06	2.73E-05	1.69E-05	2.69E-08	1.56E-06	5.3	3.39E-04	3.68E-05
S3	60	8	22	5	5.43E-02	4.18E-03	5.93E-05	4.63E-03	1.11E-03	5.79E-05	3.97E-06	2.30E-05	1.44E-05	2.28E-08	1.31E-06	4.5	2.86E-04	3.12E-05
S3	60	8	23	5	4.31E-02	3.43E-03	4.87E-05	3.80E-03	9.11E-04	4.73E-05	3.24E-06	1.88E-05	1.18E-05	1.87E-08	1.07E-06	3.7	2.33E-04	2.56E-05
S3	60	8	24	5	3.09E-02	2.54E-03	3.60E-05	2.81E-03	6.73E-04	3.48E-05	2.38E-06	1.38E-05	8.72E-06	1.38E-08	7.86E-07	2.7	1.71E-04	1.89E-05
S4	60	8	1	5	4.75E-02	4.04E-03	5.73E-05	1.67E-03	3.94E-04	5.51E-05	3.76E-06	2.18E-05	1.39E-05	2.20E-08	1.24E-06	4.2	2.71E-04	3.01E-05
S4	60	8	2	5	3.09E-02	2.69E-03	3.82E-05	1.11E-03	2.62E-04	3.66E-05	2.49E-06	1.45E-05	9.25E-06	1.47E-08	8.25E-07	2.8	1.80E-04	2.01E-05
S4	60	8	3	5	2.67E-02	2.35E-03	3.34E-05	9.74E-04	2.30E-04	3.19E-05	2.17E-06	1.26E-05	8.09E-06	1.28E-08	7.18E-07	2.4	1.56E-04	1.76E-05
S4	60	8	4	5	1.90E-02	1.68E-03	2.39E-05	6.96E-04	1.64E-04	2.27E-05	1.55E-06	8.98E-06	5.78E-06	9.17E-09	5.11E-07	1.7	1.11E-04	1.26E-05
S4	60	8	5	5	2.67E-02	2.35E-03	3.34E-05	9.74E-04	2.30E-04	3.18E-05	2.16E-06	1.26E-05	8.09E-06	1.28E-08	7.15E-07	2.4	1.56E-04	1.76E-05
S4	60	8	6	5	6.47E-02	5.72E-03	8.12E-05	2.37E-03	5.58E-04	7.71E-05	5.25E-06	3.05E-05	1.97E-05	3.12E-08	1.74E-06	5.9	3.79E-04	4.27E-05
S4	60	8	7	5	1.94E-01	1.72E-02	2.43E-04	7.10E-03	1.67E-03	2.32E-04	1.58E-05	9.18E-05	5.90E-05	9.35E-08	5.22E-06	17.8	1.14E-03	1.28E-04
S4	60	8	8	5	3.08E-01	2.62E-02	3.72E-04	1.09E-02	2.56E-03	3.58E-04	2.44E-05	1.42E-04	9.02E-05	1.43E-07	8.07E-06	27.6	1.76E-03	1.96E-04
S4	60	8	9	5	2.69E-01	2.12E-02	3.01E-04	8.77E-03	2.07E-03	2.93E-04	2.00E-05	1.16E-04	7.28E-05	1.16E-07	6.62E-06	22.6	1.44E-03	1.58E-04
S4	60	8	10	5	2.33E-01	1.75E-02	2.48E-04	7.24E-03	1.71E-03	2.44E-04	1.67E-05	9.67E-05	6.02E-05	9.54E-08	5.51E-06	18.9	1.20E-03	1.31E-04
S4	60	8	11	5	2.19E-01	1.58E-02	2.24E-04	6.54E-03	1.54E-03	2.22E-04	1.52E-05	8.80E-05	5.46E-05	8.63E-08	5.02E-06	17.2	1.10E-03	1.18E-04
S4	60	8	12	5	2.63E-01	1.78E-02	2.53E-04	7.38E-03	1.74E-03	2.53E-04	1.74E-05	1.01E-04	6.24E-05	9.73E-08	5.74E-06	19.7	1.25E-03	1.33E-04
S4	60	8	13	5	2.83E-01	1.88E-02	2.67E-04	7.79E-03	1.84E-03	2.68E-04	1.85E-05	1.07E-04	6.62E-05	1.03E-07	6.09E-06	20.9	1.33E-03	1.41E-04
S4	60	8	14	5	2.91E-01	1.92E-02	2.72E-04	7.93E-03	1.87E-03	2.74E-04	1.88E-05	1.09E-04	6.75E-05	1.05E-07	6.21E-06	21.3	1.35E-03	1.43E-04
S4	60	8	15	5	3.04E-01	1.98E-02	2.82E-04	8.21E-03	1.94E-03	2.84E-04	1.95E-05	1.13E-04	7.00E-05	1.08E-07	6.44E-06	22.1	1.41E-03	1.48E-04
S4	60	8	16	5	3.28E-01	2.15E-02	3.06E-04	8.91E-03	2.10E-03	3.08E-04	2.12E-05	1.22E-04	7.59E-05	1.17E-07	6.98E-06	23.9	1.52E-03	1.61E-04
S4	60	8	17	5	4.05E-01	2.66E-02	3.77E-04	1.10E-02	2.59E-03	3.80E-04	2.61E-05	1.51E-04	9.36E-05	1.45E-07	8.61E-06	29.5	1.88E-03	1.98E-04
S4	60	8	18	5	4.30E-01	2.86E-02	4.06E-04	1.18E-02	2.79E-03	4.08E-04	2.80E-05	1.62E-04	1.00E-04	1.56E-07	9.24E-06	31.7	2.02E-03	2.13E-04
S4	60	8	19	5	2.94E-01	1.98E-02	2.82E-04	8.21E-03	1.94E-03	2.82E-04	1.94E-05	1.12E-04	6.95E-05	1.08E-07	6.39E-06	21.9	1.39E-03	1.48E-04
S4	60	8	20	5	1.84E-01	1.31E-02	1.86E-04	5.43E-03	1.28E-03	1.85E-04	1.27E-05	7.33E-05	4.54E-05	7.16E-08	4.18E-06	14.3	9.11E-04	9.80E-05
S4	60	8	21	5	1.50E-01	1.11E-02	1.58E-04	4.59E-03	1.08E-03	1.55E-04	1.06E-05	6.15E-05	3.82E-05	6.06E-08	3.51E-06	12.0	7.65E-04	8.29E-05
S4	60	8	22	5	1.22E-01	9.42E-03	1.34E-04	3.90E-03	9.19E-04	1.31E-04	8.94E-06	5.18E-05	3.24E-05	5.14E-08	2.95E-06	10.1	6.44E-04	7.03E-05
S4	60	8	23	5	9.72E-02	7.74E-03	1.10E-04	3.20E-03	7.55E-04	1.07E-04	7.30E-06	4.23E-05	2.66E-05	4.22E-08	2.41E-06	8.2	5.26E-04	5.78E-05
S4	60	8	24	5	6.96E-02	5.72E-03	8.12E-05	2.37E-03	5.58E-04	7.85E-05	5.36E-06	3.11E-05	1.97E-05	3.12E-08	1.77E-06	6.1	3.86E-04	4.27E-05
S5	60	8	1	5	1.53E-02	1.30E-03	1.84E-05	5.36E-04	1.26E-04	1.77E-05	1.21E-06	7.00E-06	4.45E-06	7.06E-09	3.99E-07	1.4	8.69E-05	9.67E-06
S5	60	8	2	5	9.91E-03	8.63E-04	1.23E-05	3.57E-04	8.42E-05	1.17E-05	8.00E-07	4.65E-06	2.97E-06	4.71E-09	2.65E-07	0.9	5.77E-05	6.45E-06
S5	60	8	3	5	8.55E-03	7.55E-04	1.07E-05	3.13E-04	7.37E-05	1.02E-05	6.96E-07	4.05E-06	2.60E-06	4.12E-09	2.30E-07	0.8	5.02E-05	5.64E-06
S5	60	8	4	5	6.11E-03	5.40E-04	7.66E-06	2.23E-04	5.26E-05	7.29E-06	4.96E-07	2.88E-06	1.85E-06	2.94E-09	1.64E-07	0.6	3.58E-05	4.03E-06
S5	60	8	5	5	8.55E-03	7.55E-04	1.07E-05	3.13E-04	7.37E-05	1.02E-05	6.93E-07	4.03E-06	2.60E-06	4.12E-09	2.29E-07	0.8	5.00E-05	5.64E-06
S5	60	8	6	5	2.08E-02	1.83E-03	2.60E-05	7.59E-04	1.79E-04	2.48E-05	1.68E-06	9.79E-06	6.31E-06	1.00E-08	5.57E-07	1.9	1.21E-04	1.37E-05
S5	60	8	7	5	6.23E-02	5.50E-03	7.81E-05	2.28E-03	5.37E-04	7.44E-05	5.06E-06	2.94E-05	1.89E-05	3.00E-08	1.68E-06	5.7	3.65E-04	4.11E-05
S5	60	8	8	5	9.87E-02	8.42E-03	1.19E-04	3.48E-03	8.21E-04	1.15E-04	7.83E-06	4.55E-05	2.89E-05	4.59E-08	2.59E-06	8.8	5.65E-04	6.29E-05
S5	60	8	9	5	8.63E-02	6.80E-03	9.65E-05	2.81E-03	6.63E-04	9.39E-05	6.43E-06	3.73E-05	2.34E-05	3.71E-08	2.12E-06	7.3	4.63E-04	5.08E-05
S5	60	8	10	5	7.48E-02	5.61E-03	7.97E-05	2.32E-03	5.47E-04	7.82E-05	5.36E-06	3.10E-05	1.93E-05	3.06E-08	1.77E-06	6.1	3.86E-04	4.19E-05
S5	60	8	11	5	7.02E-02	5.07E-03	7.20E-05	2.10E-03	4.95E-04	7.12E-05	4.88E-06	2.83E-05	1.75E-05	2.77E-08	1.61E-06	5.5	3.51E-04	3.79E-05
S5	60	8	12	5	8.45E-02	5.72E-03	8.12E-05	2.37E-03	5.58E-04	8.12E-05	5.59E-06	3.23E-05	2.00E-05	3.12E-08	1.84E-06	6.3	4.02E-04	4.27E-05
S5	60	8	13	5	9.08E-02	6.04E-03	8.58E-05	2.50E-03	5.89E-04	8.61E-05	5.92E-06	3.42E-05	2.12E-05	3.30E-08	1.95E-06	6.7	4.26E-04	4.51E-05
S5	60	8	14	5	9.33E-02	6.15E-03	8.73E-05	2.54E-03	6.00E-04	8.78E-05	6.04E-06	3.49E-05	2.16E-05	3.36E-08	1.99E-06	6.8	4.35E-04	4.59E-05
S5	60	8	15	5	9.75E-02	6.37E-03	9.04E-05	2.63E-03	6.21E-04	9.11E-05	6.27E-06	3.62E-05	2.25E-05	3.48E-08	2.07E-06	7.1	4.51E-04	4.75E-05
S5	60	8	16	5	1.05E-01	6.91E-03	9.81E-05	2.86E-03	6.74E-04	9.88E-05	6.80E-06	3.92E-05	2.43E-05	3.77E-08	2.24E-06	7.7	4.89E-04	5.16E-05
S5	60	8	17	5	1.30E-01	8.53E-03	1.21E-04	3.53E-03	8.32E-04	1.22E-04	8.38E-06	4.84E-05	3.00E-05	4.65E-08	2.76E-06	9.5	6.03E-04	6.37E-05
S5	60	8	18	5	1.38E-01	9.17E-03	1.30E-04	3.80E-03	8.95E-04	1.31E-04	9.00E-06	5.20E-05	3.22E-05	5.01E-08	2.96E-06	10.2	6.47E-04	6.85E-05
S5	60	8	19	5	9.43E-02	6.37E-03	9.04E-05	2.63E-03	6.21E-04	9.05E-05	6.22E-06	3.60E-05	2.23E-05	3.47E-08	2.05E-06	7.0	4.48E-04	4.75E-05
S5	60	8	20	5	5.90E-02	4.21E-03	5.97E-05	1.74E-03	4.11E-04	5.92E-05	4.06E-06	2.35E-05	1.46E-05	2.30E-08	1.34E-06	4.6	2.92E-04	3.14E-05
S5	60	8	21	5	4.80E-02	3.56E-03	5.05E-05	1.47E-03	3.47E-04	4.97E-05	3.41E-06	1.97E-05	1.23E-05	1.94E-08	1.13E-06	3.9	2.45E-04	2.66E-05
S5	60	8	22	5	3.93E-02	3.02E-03	4.29E-05	1.25E-03	2.95E-04	4.19E-05	2.87E-06	1.66E-05	1.04E-05	1.65E-08	9.48E-07	3.2	2.07E-04	2.26E-05
S5	60	8	23	5	3.12E-02	2.48E-03	3.52E-05	1.03E-03	2.42E-04	3.42E-05	2.34E-06	1.36E-05	8.53E-06	1.35E-08	7.73E-07	2.6	1.69E-04	1.85E-05
S5	60	8	24	5	2.23E-02	1.83E-03	2.60E-05	7.59E-04	1.79E-04	2.52E-05	1.72E-06	9.98E-06	6.31E-06	1.00E-08	5.68E-07	1.9	1.24E-04	1.37E-05
S6	60	8	1	5	1.82E-02	1.54E-03	2.19E-05	6.38E-04	1.50E-04	2.10E-05	1.44E-06	8.33E-06	5.30E-06	8.41E-09	4.75E-07	1.6	1.03E-04	1.15E-05
S6	60	8	2	5	1.18E-02	1.03E-03	1.46E-05	4.25E-04	1.00E-04	1.40E-05	9.52E-07	5.53E-06	3.53E-06	5.60E-09	3.15E-07	1.1	6.87E-05	7.67E-06
S6	60	8	3	5	1.02E-02	8.99E-04	1.28E-05	3.72E-04	8.77E-05	1.22E-05	8.29E-07	4.82E-06	3.09E-06	4.90E-09	2.74E-07	0.9	5.98E-05	6.71E-06
S6	60	8	4	5	7.27E-03	6.42E-04	9.12E-06	2.66E-04	6.26E-05	8.67E-06	5.90E-07	3.43E-06	2.21E-06	3.50E-09	1.95E-07	0.7	4.26E-05	4.80E-06
S6	60	8	5	5	1.02E-02	8.99E-04	1.28E-05	3.72E-04	8.77E-05	1.21E-05	8.25E-07	4.80E-06	3.09E-06	4.90E-09	2.73E-07	0.9	5.95E-05	6.71E-06
S6	60	8	6	5	2.47E-02	2.18E-03	3.10E-05	9.03E-04	2.13E-04	2.95E-05	2.00E-06	1.17E-05	7.51E-06	1.19E-08	6.63E-07	2.3	1.45E-04	1.63E-05
S6	60	8	7	5	7.42E-02	6.55E-03	9.30E-05	2.71E-03	6.39E-04	8.86E-05	6.03E-06	3.50E-05	2.25E-05	3.57E-08	1.99E-06	6.8	4.35E-04	4.89E-05
S6	60	8	8	5	1.18E-01	1.00E-02	1.42E-04	4.15E-03	9.77E-04	1.37E-04	9.32E-06	5.41E-05	3.44E-05	5.46E-08	3.08E-06	10.5	6.72E-04	7.48E-05
S6	60	8	9	5	1.03E-01	8.09E-03	1.15E-04	3.35E-03	7.89E-04	1.12E-04	7.65E-06	4.43E-05	2.78E-05	4.41E-08	2.53E-06	8.6	5.51E-04	6.04E-05
S6	60	8	10	5	8.90E-02	6.68E-03	9.48E-05	2.76E-03	6.51E-04	9.31E-05	6.38E-06	3.69E-05	2.30E-05	3.64E-08	2.11E-06	7.2	4.59E-04	4.99E-05
S6	60	8	11	5	8.35E-02	6.04E-03	8.57E-05	2.50E-03	5.89E-04	8.47E-05	5.81E-06	3.36E-05	2.08E-05	3.29E-08	1.92E-06	6.6	4.18E-04	4.51E-05
S6	60	8	12	5	1.01E-01	6.81E-03	9.66E-05	2.82E-03	6.64E-04	9.67E-05	6.65E-06	3.84E-05	2.38E-05	3.72E-08	2.19E-06	7.5	4.78E-04	5.08E-05
S6	60	8	13	5	1.08E-01	7.19E-03	1.02E-04	2.98E-03	7.02E-04	1.03E-04	7.05E-06	4.07E-05	2.53E-05	3.93E-08	2.32E-06	8.0	5.07E-04	5.37E-05
S6	60	8	14	5	1.11E-01	7.32E-03	1.04E-04	3.03E-03	7.14E-04	1.05E-04	7.19E-06	4.15E-05	2.58E-05	4.00E-08	2.37E-06	8.1	5.17E-04	5.47E-05
S6	60	8	15	5	1.16E-01	7.58E-03	1.08E-04	3.14E-03	7.39E-04	1.08E-04	7.46E-06	4.31E-05	2.67E-05	4.14E-08	2.46E-06	8.4	5.37E-04	5.66E-05
S6	60	8	16	5	1.25E-01	8.22E-03	1.17E-04	3.40E-03	8.02E-04	1.18E-04	8.09E-06	4.67E-05	2.90E-05	4.49E-08	2.67E-06	9.1	5.82E-04	6.14E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	17	5	1.54E-01	1.01E-02	1.44E-04	4.20E-03	9.90E-04	1.45E-04	9.98E-06	5.76E-05	3.57E-05	5.54E-08	3.29E-06	11.3	7.18E-04	7.58E-05
S6	60	8	18	5	1.64E-01	1.09E-02	1.55E-04	4.52E-03	1.06E-03	1.56E-04	1.07E-05	6.18E-05	3.84E-05	5.96E-08	3.53E-06	12.1	7.70E-04	8.15E-05
S6	60	8	19	5	1.12E-01	7.58E-03	1.08E-04	3.14E-03	7.39E-04	1.08E-04	7.41E-06	4.28E-05	2.65E-05	4.14E-08	2.44E-06	8.4	5.33E-04	5.66E-05
S6	60	8	20	5	7.03E-02	5.01E-03	7.11E-05	2.07E-03	4.89E-04	7.05E-05	4.84E-06	2.80E-05	1.73E-05	2.73E-08	1.60E-06	5.5	3.48E-04	3.74E-05
S6	60	8	21	5	5.72E-02	4.24E-03	6.02E-05	1.75E-03	4.13E-04	5.92E-05	4.06E-06	2.35E-05	1.46E-05	2.31E-08	1.34E-06	4.6	2.92E-04	3.17E-05
S6	60	8	22	5	4.67E-02	3.60E-03	5.10E-05	1.49E-03	3.51E-04	4.99E-05	3.42E-06	1.98E-05	1.24E-05	1.96E-08	1.13E-06	3.9	2.46E-04	2.69E-05
S6	60	8	23	5	3.71E-02	2.95E-03	4.19E-05	1.22E-03	2.88E-04	4.08E-05	2.79E-06	1.62E-05	1.02E-05	1.61E-08	9.21E-07	3.1	2.01E-04	2.21E-05
S6	60	8	24	5	2.66E-02	2.18E-03	3.10E-05	9.03E-04	2.13E-04	3.00E-05	2.05E-06	1.19E-05	7.51E-06	1.19E-08	6.76E-07	2.3	1.47E-04	1.63E-05
S7	60	8	1	5	3.50E-02	2.97E-03	4.21E-05	1.23E-03	2.90E-04	4.05E-05	2.76E-06	1.61E-05	1.02E-05	1.62E-08	9.14E-07	3.1	1.99E-04	2.22E-05
S7	60	8	2	5	2.27E-02	1.98E-03	2.81E-05	8.19E-04	1.93E-04	2.69E-05	1.83E-06	1.07E-05	6.80E-06	1.08E-08	6.07E-07	2.1	1.32E-04	1.48E-05
S7	60	8	3	5	1.96E-02	1.73E-03	2.46E-05	7.17E-04	1.69E-04	2.34E-05	1.60E-06	9.28E-06	5.95E-06	9.44E-09	5.28E-07	1.8	1.15E-04	1.29E-05
S7	60	8	4	5	1.40E-02	1.24E-03	1.76E-05	5.12E-04	1.21E-04	1.67E-05	1.14E-06	6.61E-06	4.25E-06	6.75E-09	3.76E-07	1.3	8.20E-05	9.24E-06
S7	60	8	5	5	1.96E-02	1.73E-03	2.46E-05	7.17E-04	1.69E-04	2.34E-05	1.59E-06	9.24E-06	5.95E-06	9.44E-09	5.26E-07	1.8	1.15E-04	1.29E-05
S7	60	8	6	5	4.76E-02	4.21E-03	5.97E-05	1.74E-03	4.10E-04	5.67E-05	3.86E-06	2.24E-05	1.45E-05	2.29E-08	1.28E-06	4.4	2.78E-04	3.14E-05
S7	60	8	7	5	1.43E-01	1.26E-02	1.79E-04	5.22E-03	1.23E-03	1.71E-04	1.16E-05	6.75E-05	4.34E-05	6.88E-08	3.84E-06	13.1	8.38E-04	9.42E-05
S7	60	8	8	5	2.26E-01	1.93E-02	2.74E-04	7.98E-03	1.88E-03	2.63E-04	1.80E-05	1.04E-04	6.63E-05	1.05E-07	5.94E-06	20.3	1.29E-03	1.44E-04
S7	60	8	9	5	1.98E-01	1.56E-02	2.21E-04	6.45E-03	1.52E-03	2.15E-04	1.47E-05	8.54E-05	5.36E-05	8.50E-08	4.87E-06	16.6	1.06E-03	1.16E-04
S7	60	8	10	5	1.71E-01	1.29E-02	1.83E-04	5.32E-03	1.25E-03	1.79E-04	1.23E-05	7.11E-05	4.43E-05	7.02E-08	4.05E-06	13.9	8.84E-04	9.61E-05
S7	60	8	11	5	1.61E-01	1.16E-02	1.65E-04	4.81E-03	1.13E-03	1.63E-04	1.12E-05	6.48E-05	4.02E-05	6.34E-08	3.69E-06	12.6	8.06E-04	8.68E-05
S7	60	8	12	5	1.94E-01	1.31E-02	1.86E-04	5.43E-03	1.28E-03	1.86E-04	1.28E-05	7.40E-05	4.59E-05	7.16E-08	4.22E-06	14.5	9.21E-04	9.79E-05
S7	60	8	13	5	2.08E-01	1.39E-02	1.97E-04	5.73E-03	1.35E-03	1.97E-04	1.36E-05	7.85E-05	4.87E-05	7.56E-08	4.48E-06	15.4	9.77E-04	1.03E-04
S7	60	8	14	5	2.14E-01	1.41E-02	2.00E-04	5.83E-03	1.38E-03	2.01E-04	1.39E-05	8.00E-05	4.96E-05	7.70E-08	4.57E-06	15.7	9.96E-04	1.05E-04
S7	60	8	15	5	2.24E-01	1.46E-02	2.07E-04	6.04E-03	1.42E-03	2.09E-04	1.44E-05	8.30E-05	5.15E-05	7.97E-08	4.74E-06	16.3	1.03E-03	1.09E-04
S7	60	8	16	5	2.41E-01	1.58E-02	2.25E-04	6.55E-03	1.54E-03	2.26E-04	1.56E-05	9.00E-05	5.58E-05	8.64E-08	5.13E-06	17.6	1.12E-03	1.18E-04
S7	60	8	17	5	2.98E-01	1.95E-02	2.77E-04	8.09E-03	1.91E-03	2.79E-04	1.92E-05	1.11E-04	6.89E-05	1.07E-07	6.33E-06	21.7	1.38E-03	1.46E-04
S7	60	8	18	5	3.16E-01	2.10E-02	2.99E-04	8.70E-03	2.05E-03	3.00E-04	2.06E-05	1.19E-04	7.39E-05	1.15E-07	6.80E-06	23.3	1.48E-03	1.57E-04
S7	60	8	19	5	2.16E-01	1.46E-02	2.07E-04	6.04E-03	1.42E-03	2.08E-04	1.43E-05	8.24E-05	5.11E-05	7.97E-08	4.70E-06	16.1	1.03E-03	1.09E-04
S7	60	8	20	5	1.35E-01	9.65E-03	1.37E-04	3.99E-03	9.41E-04	1.36E-04	9.32E-06	5.39E-05	3.34E-05	5.27E-08	3.07E-06	10.5	6.70E-04	7.21E-05
S7	60	8	21	5	1.10E-01	8.17E-03	1.16E-04	3.38E-03	7.96E-04	1.14E-04	7.82E-06	4.53E-05	2.81E-05	4.45E-08	2.58E-06	8.8	5.63E-04	6.10E-05
S7	60	8	22	5	9.00E-02	6.93E-03	9.83E-05	2.87E-03	6.76E-04	9.61E-05	6.58E-06	3.81E-05	2.38E-05	3.78E-08	2.17E-06	7.4	4.74E-04	5.17E-05
S7	60	8	23	5	7.15E-02	5.69E-03	8.08E-05	2.35E-03	5.55E-04	7.85E-05	5.37E-06	3.11E-05	1.96E-05	3.10E-08	1.77E-06	6.1	3.87E-04	4.25E-05
S7	60	8	24	5	5.12E-02	4.21E-03	5.97E-05	1.74E-03	4.10E-04	5.77E-05	3.94E-06	2.29E-05	1.45E-05	2.29E-08	1.30E-06	4.5	2.84E-04	3.14E-05
S8	60	8	1	5	2.49E-02	2.11E-03	3.00E-05	8.75E-04	2.06E-04	2.89E-05	1.97E-06	1.14E-05	7.27E-06	1.15E-08	6.51E-07	2.2	1.42E-04	1.58E-05
S8	60	8	2	5	1.62E-02	1.41E-03	2.00E-05	5.83E-04	1.37E-04	1.92E-05	1.31E-06	7.59E-06	4.84E-06	7.69E-09	4.32E-07	1.5	9.42E-05	1.05E-05
S8	60	8	3	5	1.40E-02	1.23E-03	1.75E-05	5.10E-04	1.20E-04	1.67E-05	1.14E-06	6.60E-06	4.24E-06	6.73E-09	3.76E-07	1.3	8.20E-05	9.21E-06
S8	60	8	4	5	9.97E-03	8.81E-04	1.25E-05	3.64E-04	8.59E-05	1.19E-05	8.09E-07	4.70E-06	3.03E-06	4.80E-09	2.68E-07	0.9	5.84E-05	6.58E-06
S8	60	8	5	5	1.40E-02	1.23E-03	1.75E-05	5.10E-04	1.20E-04	1.66E-05	1.13E-06	6.58E-06	4.24E-06	6.72E-09	3.75E-07	1.3	8.16E-05	9.21E-06
S8	60	8	6	5	3.39E-02	3.00E-03	4.25E-05	1.24E-03	2.92E-04	4.04E-05	2.75E-06	1.60E-05	1.03E-05	1.63E-08	9.10E-07	3.1	1.98E-04	2.24E-05
S8	60	8	7	5	1.02E-01	8.99E-03	1.28E-04	3.72E-03	8.76E-04	1.21E-04	8.27E-06	4.81E-05	3.09E-05	4.90E-08	2.74E-06	9.3	5.96E-04	6.71E-05
S8	60	8	8	5	1.61E-01	1.37E-02	1.95E-04	5.69E-03	1.34E-03	1.87E-04	1.28E-05	7.42E-05	4.72E-05	7.49E-08	4.23E-06	14.4	9.22E-04	1.03E-04
S8	60	8	9	5	1.41E-01	1.11E-02	1.58E-04	4.59E-03	1.08E-03	1.53E-04	1.05E-05	6.08E-05	3.82E-05	6.05E-08	3.47E-06	11.9	7.56E-04	8.29E-05
S8	60	8	10	5	1.22E-01	9.16E-03	1.30E-04	3.79E-03	8.94E-04	1.28E-04	8.75E-06	5.07E-05	3.15E-05	5.00E-08	2.89E-06	9.9	6.30E-04	6.84E-05
S8	60	8	11	5	1.15E-01	8.28E-03	1.18E-04	3.43E-03	8.08E-04	1.16E-04	7.97E-06	4.61E-05	2.86E-05	4.52E-08	2.63E-06	9.0	5.74E-04	6.18E-05
S8	60	8	12	5	1.38E-01	9.34E-03	1.33E-04	3.86E-03	9.11E-04	1.33E-04	9.12E-06	5.27E-05	3.27E-05	5.10E-08	3.01E-06	10.3	6.56E-04	6.97E-05
S8	60	8	13	5	1.48E-01	9.87E-03	1.40E-04	4.08E-03	9.62E-04	1.41E-04	9.67E-06	5.59E-05	3.47E-05	5.38E-08	3.19E-06	10.9	6.96E-04	7.37E-05
S8	60	8	14	5	1.52E-01	1.00E-02	1.43E-04	4.15E-03	9.80E-04	1.43E-04	9.87E-06	5.70E-05	3.53E-05	5.48E-08	3.25E-06	11.2	7.10E-04	7.50E-05
S8	60	8	15	5	1.59E-01	1.04E-02	1.48E-04	4.30E-03	1.01E-03	1.49E-04	1.02E-05	5.91E-05	3.67E-05	5.67E-08	3.37E-06	11.6	7.36E-04	7.76E-05
S8	60	8	16	5	1.72E-01	1.13E-02	1.60E-04	4.66E-03	1.10E-03	1.61E-04	1.11E-05	6.41E-05	3.97E-05	6.15E-08	3.66E-06	12.5	7.98E-04	8.42E-05
S8	60	8	17	5	2.12E-01	1.39E-02	1.98E-04	5.76E-03	1.36E-03	1.99E-04	1.37E-05	7.91E-05	4.90E-05	7.60E-08	4.51E-06	15.5	9.84E-04	1.04E-04
S8	60	8	18	5	2.25E-01	1.50E-02	2.13E-04	6.20E-03	1.46E-03	2.14E-04	1.47E-05	8.48E-05	5.26E-05	8.17E-08	4.84E-06	16.6	1.06E-03	1.12E-04
S8	60	8	19	5	1.54E-01	1.04E-02	1.48E-04	4.30E-03	1.01E-03	1.48E-04	1.02E-05	5.87E-05	3.64E-05	5.67E-08	3.35E-06	11.5	7.31E-04	7.76E-05
S8	60	8	20	5	9.64E-02	6.87E-03	9.75E-05	2.84E-03	6.70E-04	9.67E-05	6.63E-06	3.84E-05	2.38E-05	3.75E-08	2.19E-06	7.5	4.77E-04	5.13E-05
S8	60	8	21	5	7.84E-02	5.81E-03	8.25E-05	2.41E-03	5.67E-04	8.12E-05	5.57E-06	3.22E-05	2.00E-05	3.17E-08	1.84E-06	6.3	4.01E-04	4.34E-05
S8	60	8	22	5	6.41E-02	4.93E-03	7.00E-05	2.04E-03	4.81E-04	6.84E-05	4.69E-06	2.71E-05	1.70E-05	2.69E-08	1.55E-06	5.3	3.37E-04	3.68E-05
S8	60	8	23	5	5.09E-02	4.05E-03	5.75E-05	1.68E-03	3.95E-04	5.59E-05	3.82E-06	2.22E-05	1.39E-05	2.21E-08	1.26E-06	4.3	2.75E-04	3.03E-05
S8	60	8	24	5	3.65E-02	3.00E-03	4.25E-05	1.24E-03	2.92E-04	4.11E-05	2.81E-06	1.63E-05	1.03E-05	1.63E-08	9.28E-07	3.2	2.02E-04	2.24E-05
S9	60	8	1	5	2.17E-02	1.84E-03	2.61E-05	7.62E-04	1.80E-04	2.51E-05	1.71E-06	9.96E-06	6.33E-06	1.00E-08	5.67E-07	1.9	1.24E-04	1.38E-05
S9	60	8	2	5	1.41E-02	1.23E-03	1.74E-05	5.08E-04	1.20E-04	1.67E-05	1.14E-06	6.61E-06	4.22E-06	6.70E-09	3.76E-07	1.3	8.20E-05	9.17E-06
S9	60	8	3	5	1.22E-02	1.07E-03	1.52E-05	4.44E-04	1.05E-04	1.45E-05	9.90E-07	5.75E-06	3.69E-06	5.86E-09	3.27E-07	1.1	7.14E-05	8.02E-06
S9	60	8	4	5	8.69E-03	7.67E-04	1.09E-05	3.17E-04	7.48E-05	1.04E-05	7.05E-07	4.10E-06	2.64E-06	4.18E-09	2.33E-07	0.8	5.08E-05	5.73E-06
S9	60	8	5	5	1.22E-02	1.07E-03	1.52E-05	4.44E-04	1.05E-04	1.45E-05	9.86E-07	5.73E-06	3.69E-06	5.86E-09	3.26E-07	1.1	7.11E-05	8.02E-06
S9	60	8	6	5	2.95E-02	2.61E-03	3.70E-05	1.08E-03	2.54E-04	3.52E-05	2.39E-06	1.39E-05	8.97E-06	1.42E-08	7.92E-07	2.7	1.73E-04	1.95E-05
S9	60	8	7	5	8.86E-02	7.83E-03	1.11E-04	3.24E-03	7.63E-04	1.06E-04	7.20E-06	4.19E-05	2.69E-05	4.27E-08	2.38E-06	8.1	5.19E-04	5.84E-05
S9	60	8	8	5	1.40E-01	1.20E-02	1.70E-04	4.95E-03	1.17E-03	1.63E-04	1.11E-05	6.47E-05	4.11E-05	6.53E-08	3.68E-06	12.6	8.03E-04	8.94E-05
S9	60	8	9	5	1.23E-01	9.67E-03	1.37E-04	4.00E-03	9.43E-04	1.34E-04	9.14E-06	5.30E-05	3.32E-05	5.27E-08	3.02E-06	10.3	6.58E-04	7.22E-05
S9	60	8	10	5	1.06E-01	7.98E-03	1.13E-04	3.30E-03	7.78E-04	1.11E-04	7.62E-06	4.41E-05	2.75E-05	4.35E-08	2.51E-06	8.6	5.49E-04	5.96E-05
S9	60	8	11	5	9.98E-02	7.21E-03	1.02E-04	2.98E-03	7.03E-04	1.01E-04	6.94E-06	4.02E-05	2.49E-05	3.94E-08	2.29E-06	7.8	5.00E-04	5.39E-05
S9	60	8	12	5	1.20E-01	8.13E-03	1.15E-04	3.36E-03	7.93E-04	1.15E-04	7.94E-06	4.59E-05	2.85E-05	4.44E-08	2.62E-06	9.0	5.71E-04	6.07E-05
S9	60	8	13	5	1.29E-01	8.59E-03	1.22E-04	3.56E-03	8.38E-04	1.22E-04	8.43E-06	4.87E-05	3.02E-05	4.69E-08	2.78E-06	9.5	6.06E-04	6.42E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	14	5	1.33E-01	8.75E-03	1.24E-04	3.62E-03	8.53E-04	1.25E-04	8.59E-06	4.96E-05	3.08E-05	4.77E-08	2.83E-06	9.7	6.18E-04	6.53E-05
S9	60	8	15	5	1.39E-01	9.05E-03	1.29E-04	3.75E-03	8.83E-04	1.30E-04	8.92E-06	5.15E-05	3.19E-05	4.94E-08	2.94E-06	10.1	6.41E-04	6.76E-05
S9	60	8	16	5	1.50E-01	9.82E-03	1.39E-04	4.06E-03	9.58E-04	1.40E-04	9.66E-06	5.58E-05	3.46E-05	5.36E-08	3.18E-06	10.9	6.95E-04	7.33E-05
S9	60	8	17	5	1.85E-01	1.21E-02	1.72E-04	5.02E-03	1.18E-03	1.73E-04	1.19E-05	6.89E-05	4.27E-05	6.62E-08	3.93E-06	13.5	8.57E-04	9.05E-05
S9	60	8	18	5	1.96E-01	1.30E-02	1.85E-04	5.40E-03	1.27E-03	1.86E-04	1.28E-05	7.39E-05	4.58E-05	7.12E-08	4.22E-06	14.5	9.20E-04	9.74E-05
S9	60	8	19	5	1.34E-01	9.05E-03	1.29E-04	3.75E-03	8.83E-04	1.29E-04	8.85E-06	5.11E-05	3.17E-05	4.94E-08	2.92E-06	10.0	6.36E-04	6.76E-05
S9	60	8	20	5	8.39E-02	5.99E-03	8.49E-05	2.48E-03	5.84E-04	8.42E-05	5.78E-06	3.34E-05	2.07E-05	3.27E-08	1.91E-06	6.5	4.16E-04	4.47E-05
S9	60	8	21	5	6.83E-02	5.06E-03	7.19E-05	2.10E-03	4.94E-04	7.07E-05	4.85E-06	2.81E-05	1.74E-05	2.76E-08	1.60E-06	5.5	3.49E-04	3.78E-05
S9	60	8	22	5	5.58E-02	4.30E-03	6.10E-05	1.78E-03	4.19E-04	5.96E-05	4.08E-06	2.36E-05	1.48E-05	2.34E-08	1.35E-06	4.6	2.94E-04	3.21E-05
S9	60	8	23	5	4.43E-02	3.53E-03	5.01E-05	1.46E-03	3.44E-04	4.87E-05	3.33E-06	1.93E-05	1.21E-05	1.93E-08	1.10E-06	3.8	2.40E-04	2.64E-05
S9	60	8	24	5	3.18E-02	2.61E-03	3.70E-05	1.08E-03	2.54E-04	3.58E-05	2.45E-06	1.42E-05	8.97E-06	1.42E-08	8.08E-07	2.8	1.76E-04	1.95E-05
S10	60	8	1	5	5.41E-02	4.60E-03	6.53E-05	1.90E-03	4.48E-04	6.28E-05	4.28E-06	2.49E-05	1.58E-05	2.51E-08	1.42E-06	4.8	3.09E-04	3.43E-05
S10	60	8	2	5	3.52E-02	3.07E-03	4.35E-05	1.27E-03	2.99E-04	4.17E-05	2.84E-06	1.65E-05	1.05E-05	1.67E-08	9.39E-07	3.2	2.05E-04	2.29E-05
S10	60	8	3	5	3.04E-02	2.68E-03	3.81E-05	1.11E-03	2.62E-04	3.63E-05	2.47E-06	1.44E-05	9.22E-06	1.46E-08	8.18E-07	2.8	1.78E-04	2.00E-05
S10	60	8	4	5	2.17E-02	1.92E-03	2.72E-05	7.93E-04	1.87E-04	2.59E-05	1.76E-06	1.02E-05	6.58E-06	1.04E-08	5.82E-07	2.0	1.27E-04	1.43E-05
S10	60	8	5	5	3.04E-02	2.68E-03	3.81E-05	1.11E-03	2.62E-04	3.62E-05	2.46E-06	1.43E-05	9.22E-06	1.46E-08	8.14E-07	2.8	1.78E-04	2.00E-05
S10	60	8	6	5	7.37E-02	6.51E-03	9.24E-05	2.69E-03	6.35E-04	8.79E-05	5.98E-06	3.48E-05	2.24E-05	3.55E-08	1.98E-06	6.7	4.31E-04	4.86E-05
S10	60	8	7	5	2.21E-01	1.95E-02	2.77E-04	8.08E-03	1.91E-03	2.64E-04	1.80E-05	1.05E-04	6.72E-05	1.07E-07	5.95E-06	20.3	1.30E-03	1.46E-04
S10	60	8	8	5	3.51E-01	2.99E-02	4.24E-04	1.24E-02	2.91E-03	4.08E-04	2.78E-05	1.61E-04	1.03E-04	1.63E-07	9.19E-06	31.4	2.00E-03	2.23E-04
S10	60	8	9	5	3.06E-01	2.41E-02	3.43E-04	9.99E-03	2.35E-03	3.33E-04	2.28E-05	1.32E-04	8.30E-05	1.32E-07	7.54E-06	25.8	1.64E-03	1.80E-04
S10	60	8	10	5	2.65E-01	1.99E-02	2.83E-04	8.24E-03	1.94E-03	2.78E-04	1.90E-05	1.10E-04	6.85E-05	1.09E-07	6.28E-06	21.5	1.37E-03	1.49E-04
S10	60	8	11	5	2.49E-01	1.80E-02	2.56E-04	7.45E-03	1.76E-03	2.53E-04	1.73E-05	1.00E-04	6.22E-05	9.82E-08	5.72E-06	19.6	1.25E-03	1.34E-04
S10	60	8	12	5	3.00E-01	2.03E-02	2.88E-04	8.40E-03	1.98E-03	2.88E-04	1.98E-05	1.15E-04	7.11E-05	1.11E-07	6.54E-06	22.4	1.43E-03	1.52E-04
S10	60	8	13	5	3.22E-01	2.15E-02	3.05E-04	8.88E-03	2.09E-03	3.06E-04	2.10E-05	1.22E-04	7.54E-05	1.17E-07	6.93E-06	23.8	1.51E-03	1.60E-04
S10	60	8	14	5	3.31E-01	2.18E-02	3.10E-04	9.03E-03	2.13E-03	3.12E-04	2.15E-05	1.24E-04	7.69E-05	1.19E-07	7.07E-06	24.3	1.54E-03	1.63E-04
S10	60	8	15	5	3.46E-01	2.26E-02	3.21E-04	9.35E-03	2.20E-03	3.24E-04	2.23E-05	1.29E-04	7.97E-05	1.23E-07	7.34E-06	25.2	1.60E-03	1.69E-04
S10	60	8	16	5	3.74E-01	2.45E-02	3.48E-04	1.01E-02	2.39E-03	3.51E-04	2.41E-05	1.39E-04	8.64E-05	1.34E-07	7.95E-06	27.3	1.73E-03	1.83E-04
S10	60	8	17	5	4.61E-01	3.03E-02	4.30E-04	1.25E-02	2.95E-03	4.33E-04	2.98E-05	1.72E-04	1.07E-04	1.65E-07	9.81E-06	33.7	2.14E-03	2.26E-04
S10	60	8	18	5	4.90E-01	3.26E-02	4.62E-04	1.35E-02	3.18E-03	4.64E-04	3.19E-05	1.84E-04	1.14E-04	1.78E-07	1.05E-05	36.1	2.30E-03	2.43E-04
S10	60	8	19	5	3.35E-01	2.26E-02	3.21E-04	9.35E-03	2.20E-03	3.21E-04	2.21E-05	1.28E-04	7.92E-05	1.23E-07	7.28E-06	25.0	1.59E-03	1.69E-04
S10	60	8	20	5	2.10E-01	1.49E-02	2.12E-04	6.18E-03	1.46E-03	2.10E-04	1.44E-05	8.34E-05	5.17E-05	8.15E-08	4.76E-06	16.3	1.04E-03	1.12E-04
S10	60	8	21	5	1.71E-01	1.26E-02	1.79E-04	5.23E-03	1.23E-03	1.77E-04	1.21E-05	7.01E-05	4.35E-05	6.90E-08	3.99E-06	13.7	8.71E-04	9.44E-05
S10	60	8	22	5	1.39E-01	1.07E-02	1.52E-04	4.44E-03	1.05E-03	1.49E-04	1.02E-05	5.90E-05	3.69E-05	5.85E-08	3.36E-06	11.5	7.34E-04	8.01E-05
S10	60	8	23	5	1.11E-01	8.81E-03	1.25E-04	3.65E-03	8.59E-04	1.22E-04	8.31E-06	4.82E-05	3.03E-05	4.81E-08	2.75E-06	9.4	5.99E-04	6.58E-05
S10	60	8	24	5	7.93E-02	6.51E-03	9.24E-05	2.69E-03	6.35E-04	8.94E-05	6.10E-06	3.54E-05	2.24E-05	3.55E-08	2.02E-06	6.9	4.40E-04	4.86E-05
S11	60	8	1	5	1.89E-02	1.61E-03	2.28E-05	6.64E-04	1.57E-04	2.19E-05	1.50E-06	8.68E-06	5.52E-06	8.76E-09	4.94E-07	1.7	1.08E-04	1.20E-05
S11	60	8	2	5	1.23E-02	1.07E-03	1.52E-05	4.43E-04	1.04E-04	1.46E-05	9.92E-07	5.76E-06	3.68E-06	5.84E-09	3.28E-07	1.1	7.15E-05	7.99E-06
S11	60	8	3	5	1.06E-02	9.37E-04	1.33E-05	3.88E-04	9.14E-05	1.27E-05	8.63E-07	5.02E-06	3.22E-06	5.11E-09	2.86E-07	1.0	6.23E-05	6.99E-06
S11	60	8	4	5	7.58E-03	6.69E-04	9.50E-06	2.77E-04	6.53E-05	9.03E-06	6.15E-07	3.57E-06	2.30E-06	3.65E-09	2.03E-07	0.7	4.43E-05	5.00E-06
S11	60	8	5	5	1.06E-02	9.37E-04	1.33E-05	3.88E-04	9.14E-05	1.26E-05	8.60E-07	5.00E-06	3.22E-06	5.11E-09	2.84E-07	1.0	6.20E-05	6.99E-06
S11	60	8	6	5	2.58E-02	2.27E-03	3.23E-05	9.41E-04	2.22E-04	3.07E-05	2.09E-06	1.21E-05	7.82E-06	1.24E-08	6.91E-07	2.4	1.51E-04	1.70E-05
S11	60	8	7	5	7.73E-02	6.82E-03	9.69E-05	2.82E-03	6.66E-04	9.23E-05	6.28E-06	3.65E-05	2.35E-05	3.72E-08	2.08E-06	7.1	4.53E-04	5.10E-05
S11	60	8	8	5	1.22E-01	1.04E-02	1.48E-04	4.32E-03	1.02E-03	1.42E-04	9.71E-06	5.64E-05	3.59E-05	5.69E-08	3.21E-06	11.0	7.00E-04	7.79E-05
S11	60	8	9	5	1.07E-01	8.43E-03	1.20E-04	3.49E-03	8.22E-04	1.16E-04	7.97E-06	4.62E-05	2.90E-05	4.60E-08	2.63E-06	9.0	5.74E-04	6.29E-05
S11	60	8	10	5	9.27E-02	6.96E-03	9.88E-05	2.88E-03	6.79E-04	9.69E-05	6.64E-06	3.85E-05	2.39E-05	3.80E-08	2.19E-06	7.5	4.78E-04	5.20E-05
S11	60	8	11	5	8.70E-02	6.29E-03	8.93E-05	2.60E-03	6.13E-04	8.82E-05	6.05E-06	3.50E-05	2.17E-05	3.43E-08	2.00E-06	6.8	4.36E-04	4.70E-05
S11	60	8	12	5	1.05E-01	7.09E-03	1.01E-04	2.93E-03	6.92E-04	1.01E-04	6.93E-06	4.00E-05	2.48E-05	3.87E-08	2.28E-06	7.8	4.98E-04	5.30E-05
S11	60	8	13	5	1.13E-01	7.49E-03	1.06E-04	3.10E-03	7.31E-04	1.07E-04	7.35E-06	4.24E-05	2.63E-05	4.09E-08	2.42E-06	8.3	5.28E-04	5.60E-05
S11	60	8	14	5	1.16E-01	7.63E-03	1.08E-04	3.16E-03	7.44E-04	1.09E-04	7.49E-06	4.33E-05	2.68E-05	4.16E-08	2.47E-06	8.5	5.39E-04	5.70E-05
S11	60	8	15	5	1.21E-01	7.90E-03	1.12E-04	3.27E-03	7.70E-04	1.13E-04	7.78E-06	4.49E-05	2.78E-05	4.31E-08	2.56E-06	8.8	5.59E-04	5.90E-05
S11	60	8	16	5	1.31E-01	8.56E-03	1.22E-04	3.54E-03	8.35E-04	1.22E-04	8.43E-06	4.87E-05	3.02E-05	4.67E-08	2.78E-06	9.5	6.06E-04	6.39E-05
S11	60	8	17	5	1.61E-01	1.06E-02	1.50E-04	4.37E-03	1.03E-03	1.51E-04	1.04E-05	6.00E-05	3.72E-05	5.77E-08	3.43E-06	11.8	7.48E-04	7.89E-05
S11	60	8	18	5	1.71E-01	1.14E-02	1.61E-04	4.71E-03	1.11E-03	1.62E-04	1.12E-05	6.44E-05	4.00E-05	6.21E-08	3.68E-06	12.6	8.02E-04	8.49E-05
S11	60	8	19	5	1.17E-01	7.90E-03	1.12E-04	3.27E-03	7.70E-04	1.12E-04	7.72E-06	4.46E-05	2.76E-05	4.31E-08	2.54E-06	8.7	5.55E-04	5.90E-05
S11	60	8	20	5	7.32E-02	5.22E-03	7.41E-05	2.16E-03	5.09E-04	7.34E-05	5.04E-06	2.91E-05	1.81E-05	2.85E-08	1.66E-06	5.7	3.63E-04	3.90E-05
S11	60	8	21	5	5.96E-02	4.42E-03	6.27E-05	1.83E-03	4.31E-04	6.17E-05	4.23E-06	2.45E-05	1.52E-05	2.41E-08	1.40E-06	4.8	3.04E-04	3.30E-05
S11	60	8	22	5	4.87E-02	3.75E-03	5.32E-05	1.55E-03	3.65E-04	5.20E-05	3.56E-06	2.06E-05	1.29E-05	2.04E-08	1.18E-06	4.0	2.56E-04	2.80E-05
S11	60	8	23	5	3.87E-02	3.08E-03	4.37E-05	1.27E-03	3.00E-04	4.25E-05	2.90E-06	1.68E-05	1.06E-05	1.68E-08	9.59E-07	3.3	2.09E-04	2.30E-05
S11	60	8	24	5	2.77E-02	2.27E-03	3.23E-05	9.41E-04	2.22E-04	3.12E-05	2.13E-06	1.24E-05	7.82E-06	1.24E-08	7.05E-07	2.4	1.54E-04	1.70E-05
S12	60	8	1	5	3.89E-02	3.31E-03	4.69E-05	1.37E-03	3.22E-04	4.51E-05	3.08E-06	1.79E-05	1.14E-05	1.80E-08	1.02E-06	3.5	2.22E-04	2.47E-05
S12	60	8	2	5	2.53E-02	2.20E-03	3.13E-05	9.12E-04	2.15E-04	3.00E-05	2.04E-06	1.19E-05	7.57E-06	1.20E-08	6.75E-07	2.3	1.47E-04	1.65E-05
S12	60	8	3	5	2.18E-02	1.93E-03	2.74E-05	7.98E-04	1.88E-04	2.61E-05	1.78E-06	1.03E-05	6.63E-06	1.05E-08	5.88E-07	2.0	1.28E-04	1.44E-05
S12	60	8	4	5	1.56E-02	1.38E-03	1.96E-05	5.70E-04	1.34E-04	1.86E-05	1.27E-06	7.36E-06	4.73E-06	7.51E-09	4.19E-07	1.4	9.13E-05	1.03E-05
S12	60	8	5	5	2.18E-02	1.93E-03	2.74E-05	7.98E-04	1.88E-04	2.60E-05	1.77E-06	1.03E-05	6.63E-06	1.05E-08	5.86E-07	2.0	1.28E-04	1.44E-05
S12	60	8	6	5	5.30E-02	4.68E-03	6.65E-05	1.94E-03	4.57E-04	6.32E-05	4.30E-06	2.50E-05	1.61E-05	2.55E-08	1.42E-06	4.9	3.10E-04	3.50E-05
S12	60	8	7	5	1.59E-01	1.41E-02	1.99E-04	5.81E-03	1.37E-03	1.90E-04	1.29E-05	7.51E-05	4.83E-05	7.66E-08	4.28E-06	14.6	9.33E-04	1.05E-04
S12	60	8	8	5	2.52E-01	2.15E-02	3.05E-04	8.89E-03	2.10E-03	2.93E-04	2.00E-05	1.16E-04	7.39E-05	1.17E-07	6.61E-06	22.6	1.44E-03	1.60E-04
S12	60	8	9	5	2.20E-01	1.74E-02	2.46E-04	7.18E-03	1.69E-03	2.40E-04	1.64E-05	9.51E-05	5.97E-05	9.47E-08	5.42E-06	18.5	1.18E-03	1.30E-04
S12	60	8	10	5	1.91E-01	1.43E-02	2.03E-04	5.93E-03	1.40E-03	2.00E-04	1.37E-05	7.92E-05	4.93E-05	7.82E-08	4.51E-06	15.5	9.85E-04	1.07E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	11	5	1.79E-01	1.29E-02	1.84E-04	5.36E-03	1.26E-03	1.82E-04	1.25E-05	7.21E-05	4.47E-05	7.06E-08	4.11E-06	14.1	8.97E-04	9.67E-05
S12	60	8	12	5	2.16E-01	1.46E-02	2.07E-04	6.04E-03	1.42E-03	2.07E-04	1.43E-05	8.24E-05	5.11E-05	7.97E-08	4.70E-06	16.1	1.03E-03	1.09E-04
S12	60	8	13	5	2.32E-01	1.54E-02	2.19E-04	6.38E-03	1.50E-03	2.20E-04	1.51E-05	8.74E-05	5.42E-05	8.42E-08	4.99E-06	17.1	1.09E-03	1.15E-04
S12	60	8	14	5	2.38E-01	1.57E-02	2.23E-04	6.50E-03	1.53E-03	2.24E-04	1.54E-05	8.91E-05	5.53E-05	8.57E-08	5.08E-06	17.4	1.11E-03	1.17E-04
S12	60	8	15	5	2.49E-01	1.63E-02	2.31E-04	6.72E-03	1.59E-03	2.33E-04	1.60E-05	9.24E-05	5.73E-05	8.87E-08	5.27E-06	18.1	1.15E-03	1.21E-04
S12	60	8	16	5	2.69E-01	1.76E-02	2.50E-04	7.29E-03	1.72E-03	2.52E-04	1.73E-05	1.00E-04	6.21E-05	9.62E-08	5.72E-06	19.6	1.25E-03	1.32E-04
S12	60	8	17	5	3.31E-01	2.18E-02	3.09E-04	9.00E-03	2.12E-03	3.11E-04	2.14E-05	1.24E-04	7.67E-05	1.19E-07	7.05E-06	24.2	1.54E-03	1.63E-04
S12	60	8	18	5	3.52E-01	2.34E-02	3.32E-04	9.69E-03	2.28E-03	3.34E-04	2.30E-05	1.33E-04	8.23E-05	1.28E-07	7.57E-06	26.0	1.65E-03	1.75E-04
S12	60	8	19	5	2.41E-01	1.63E-02	2.31E-04	6.72E-03	1.59E-03	2.31E-04	1.59E-05	9.18E-05	5.69E-05	8.87E-08	5.24E-06	18.0	1.14E-03	1.21E-04
S12	60	8	20	5	1.51E-01	1.07E-02	1.52E-04	4.45E-03	1.05E-03	1.51E-04	1.04E-05	6.00E-05	3.72E-05	5.86E-08	3.42E-06	11.7	7.46E-04	8.02E-05
S12	60	8	21	5	1.23E-01	9.09E-03	1.29E-04	3.76E-03	8.87E-04	1.27E-04	8.70E-06	5.04E-05	3.13E-05	4.96E-08	2.87E-06	9.8	6.27E-04	6.79E-05
S12	60	8	22	5	1.00E-01	7.71E-03	1.09E-04	3.19E-03	7.52E-04	1.07E-04	7.33E-06	4.24E-05	2.65E-05	4.21E-08	2.42E-06	8.3	5.28E-04	5.76E-05
S12	60	8	23	5	7.96E-02	6.34E-03	8.99E-05	2.62E-03	6.18E-04	8.74E-05	5.98E-06	3.47E-05	2.18E-05	3.46E-08	1.97E-06	6.8	4.31E-04	4.73E-05
S12	60	8	24	5	5.70E-02	4.68E-03	6.65E-05	1.94E-03	4.57E-04	6.43E-05	4.39E-06	2.55E-05	1.61E-05	2.55E-08	1.45E-06	5.0	3.16E-04	3.50E-05
S13	60	8	1	5	2.93E-02	2.49E-03	3.54E-05	1.03E-03	2.43E-04	3.40E-05	2.32E-06	1.35E-05	8.56E-06	1.36E-08	7.67E-07	2.6	1.67E-04	1.86E-05
S13	60	8	2	5	1.91E-02	1.66E-03	2.36E-05	6.87E-04	1.62E-04	2.26E-05	1.54E-06	8.94E-06	5.71E-06	9.06E-09	5.09E-07	1.7	1.11E-04	1.24E-05
S13	60	8	3	5	1.65E-02	1.45E-03	2.06E-05	6.01E-04	1.42E-04	1.97E-05	1.34E-06	7.78E-06	4.99E-06	7.92E-09	4.43E-07	1.5	9.66E-05	1.08E-05
S13	60	8	4	5	1.18E-02	1.04E-03	1.47E-05	4.29E-04	1.01E-04	1.40E-05	9.53E-07	5.54E-06	3.57E-06	5.66E-09	3.15E-07	1.1	6.88E-05	7.75E-06
S13	60	8	5	5	1.65E-02	1.45E-03	2.06E-05	6.01E-04	1.42E-04	1.96E-05	1.33E-06	7.75E-06	4.99E-06	7.92E-09	4.41E-07	1.5	9.62E-05	1.08E-05
S13	60	8	6	5	4.00E-02	3.53E-03	5.01E-05	1.46E-03	3.44E-04	4.76E-05	3.24E-06	1.88E-05	1.21E-05	1.92E-08	1.07E-06	3.7	2.34E-04	2.63E-05
S13	60	8	7	5	1.20E-01	1.06E-02	1.50E-04	4.38E-03	1.03E-03	1.43E-04	9.74E-06	5.66E-05	3.64E-05	5.77E-08	3.22E-06	11.0	7.03E-04	7.90E-05
S13	60	8	8	5	1.90E-01	1.62E-02	2.30E-04	6.70E-03	1.58E-03	2.21E-04	1.51E-05	8.75E-05	5.56E-05	8.83E-08	4.98E-06	17.0	1.09E-03	1.21E-04
S13	60	8	9	5	1.66E-01	1.31E-02	1.86E-04	5.41E-03	1.28E-03	1.81E-04	1.24E-05	7.16E-05	4.50E-05	7.13E-08	4.08E-06	14.0	8.90E-04	9.76E-05
S13	60	8	10	5	1.44E-01	1.08E-02	1.53E-04	4.47E-03	1.05E-03	1.50E-04	1.03E-05	5.97E-05	3.71E-05	5.89E-08	3.40E-06	11.6	7.42E-04	8.06E-05
S13	60	8	11	5	1.35E-01	9.76E-03	1.38E-04	4.04E-03	9.52E-04	1.37E-04	9.39E-06	5.43E-05	3.37E-05	5.32E-08	3.10E-06	10.6	6.76E-04	7.28E-05
S13	60	8	12	5	1.62E-01	1.10E-02	1.56E-04	4.55E-03	1.07E-03	1.56E-04	1.07E-05	6.21E-05	3.85E-05	6.00E-08	3.54E-06	12.1	7.73E-04	8.21E-05
S13	60	8	13	5	1.75E-01	1.16E-02	1.65E-04	4.81E-03	1.13E-03	1.66E-04	1.14E-05	6.58E-05	4.08E-05	6.34E-08	3.76E-06	12.9	8.20E-04	8.68E-05
S13	60	8	14	5	1.79E-01	1.18E-02	1.68E-04	4.89E-03	1.15E-03	1.69E-04	1.16E-05	6.71E-05	4.16E-05	6.46E-08	3.83E-06	13.1	8.36E-04	8.83E-05
S13	60	8	15	5	1.88E-01	1.22E-02	1.74E-04	5.07E-03	1.19E-03	1.75E-04	1.21E-05	6.96E-05	4.32E-05	6.68E-08	3.97E-06	13.6	8.67E-04	9.14E-05
S13	60	8	16	5	2.03E-01	1.33E-02	1.89E-04	5.50E-03	1.30E-03	1.90E-04	1.31E-05	7.55E-05	4.68E-05	7.25E-08	4.31E-06	14.8	9.40E-04	9.92E-05
S13	60	8	17	5	2.50E-01	1.64E-02	2.33E-04	6.78E-03	1.60E-03	2.34E-04	1.61E-05	9.31E-05	5.78E-05	8.95E-08	5.31E-06	18.2	1.16E-03	1.22E-04
S13	60	8	18	5	2.65E-01	1.76E-02	2.50E-04	7.30E-03	1.72E-03	2.52E-04	1.73E-05	9.99E-05	6.20E-05	9.63E-08	5.70E-06	19.6	1.24E-03	1.32E-04
S13	60	8	19	5	1.81E-01	1.22E-02	1.74E-04	5.07E-03	1.19E-03	1.74E-04	1.20E-05	6.92E-05	4.29E-05	6.68E-08	3.95E-06	13.5	8.61E-04	9.14E-05
S13	60	8	20	5	1.14E-01	8.10E-03	1.15E-04	3.35E-03	7.90E-04	1.14E-04	7.81E-06	4.52E-05	2.80E-05	4.42E-08	2.58E-06	8.8	5.62E-04	6.04E-05
S13	60	8	21	5	9.24E-02	6.85E-03	9.72E-05	2.83E-03	6.68E-04	9.57E-05	6.56E-06	3.80E-05	2.36E-05	3.74E-08	2.16E-06	7.4	4.72E-04	5.11E-05
S13	60	8	22	5	7.55E-02	5.81E-03	8.25E-05	2.40E-03	5.67E-04	8.06E-05	5.52E-06	3.20E-05	2.00E-05	3.17E-08	1.82E-06	6.2	3.98E-04	4.34E-05
S13	60	8	23	5	6.00E-02	4.77E-03	6.78E-05	1.98E-03	4.66E-04	6.58E-05	4.50E-06	2.61E-05	1.64E-05	2.60E-08	1.49E-06	5.1	3.24E-04	3.56E-05
S13	60	8	24	5	4.30E-02	3.53E-03	5.01E-05	1.46E-03	3.44E-04	4.84E-05	3.31E-06	1.92E-05	1.21E-05	1.92E-08	1.09E-06	3.7	2.38E-04	2.63E-05
S14	60	8	1	5	1.75E-02	1.48E-03	2.11E-05	6.14E-04	1.45E-04	2.02E-05	1.38E-06	8.02E-06	5.10E-06	8.09E-09	4.57E-07	1.6	9.96E-05	1.11E-05
S14	60	8	2	5	1.13E-02	9.89E-04	1.40E-05	4.09E-04	9.65E-05	1.34E-05	9.16E-07	5.32E-06	3.40E-06	5.39E-09	3.03E-07	1.0	6.61E-05	7.38E-06
S14	60	8	3	5	9.80E-03	8.65E-04	1.23E-05	3.58E-04	8.44E-05	1.17E-05	7.97E-07	4.63E-06	2.97E-06	4.72E-09	2.64E-07	0.9	5.75E-05	6.46E-06
S14	60	8	4	5	7.00E-03	6.18E-04	8.77E-06	2.56E-04	6.03E-05	8.35E-06	5.68E-07	3.30E-06	2.12E-06	3.37E-09	1.88E-07	0.6	4.10E-05	4.61E-06
S14	60	8	5	5	9.80E-03	8.65E-04	1.23E-05	3.58E-04	8.44E-05	1.17E-05	7.94E-07	4.62E-06	2.97E-06	4.72E-09	2.63E-07	0.9	5.73E-05	6.46E-06
S14	60	8	6	5	2.38E-02	2.10E-03	2.98E-05	8.69E-04	2.05E-04	2.83E-05	1.93E-06	1.12E-05	7.22E-06	1.15E-08	6.38E-07	2.2	1.39E-04	1.57E-05
S14	60	8	7	5	7.14E-02	6.30E-03	8.95E-05	2.61E-03	6.15E-04	8.52E-05	5.80E-06	3.37E-05	2.17E-05	3.44E-08	1.92E-06	6.5	4.18E-04	4.71E-05
S14	60	8	8	5	1.13E-01	9.64E-03	1.37E-04	3.99E-03	9.40E-04	1.32E-04	8.97E-06	5.21E-05	3.31E-05	5.26E-08	2.97E-06	10.1	6.47E-04	7.20E-05
S14	60	8	9	5	9.88E-02	7.79E-03	1.11E-04	3.22E-03	7.60E-04	1.08E-04	7.36E-06	4.27E-05	2.68E-05	4.25E-08	2.43E-06	8.3	5.30E-04	5.81E-05
S14	60	8	10	5	8.56E-02	6.43E-03	9.12E-05	2.66E-03	6.27E-04	8.96E-05	6.14E-06	3.55E-05	2.21E-05	3.51E-08	2.03E-06	6.9	4.42E-04	4.80E-05
S14	60	8	11	5	8.04E-02	5.81E-03	8.25E-05	2.40E-03	5.67E-04	8.15E-05	5.59E-06	3.24E-05	2.01E-05	3.17E-08	1.84E-06	6.3	4.02E-04	4.34E-05
S14	60	8	12	5	9.68E-02	6.55E-03	9.30E-05	2.71E-03	6.39E-04	9.30E-05	6.40E-06	3.70E-05	2.29E-05	3.58E-08	2.11E-06	7.2	4.60E-04	4.89E-05
S14	60	8	13	5	1.04E-01	6.92E-03	9.82E-05	2.86E-03	6.75E-04	9.86E-05	6.79E-06	3.92E-05	2.43E-05	3.78E-08	2.24E-06	7.7	4.88E-04	5.17E-05
S14	60	8	14	5	1.07E-01	7.05E-03	1.00E-04	2.91E-03	6.87E-04	1.01E-04	6.92E-06	4.00E-05	2.48E-05	3.85E-08	2.28E-06	7.8	4.98E-04	5.26E-05
S14	60	8	15	5	1.12E-01	7.29E-03	1.04E-04	3.02E-03	7.11E-04	1.04E-04	7.18E-06	4.15E-05	2.57E-05	3.98E-08	2.37E-06	8.1	5.16E-04	5.45E-05
S14	60	8	16	5	1.21E-01	7.91E-03	1.12E-04	3.27E-03	7.72E-04	1.13E-04	7.78E-06	4.49E-05	2.79E-05	4.32E-08	2.56E-06	8.8	5.60E-04	5.91E-05
S14	60	8	17	5	1.49E-01	9.77E-03	1.39E-04	4.04E-03	9.52E-04	1.40E-04	9.60E-06	5.55E-05	3.44E-05	5.33E-08	3.16E-06	10.9	6.91E-04	7.29E-05
S14	60	8	18	5	1.58E-01	1.05E-02	1.49E-04	4.35E-03	1.02E-03	1.50E-04	1.03E-05	5.95E-05	3.69E-05	5.73E-08	3.40E-06	11.6	7.41E-04	7.85E-05
S14	60	8	19	5	1.08E-01	7.29E-03	1.04E-04	3.02E-03	7.11E-04	1.04E-04	7.13E-06	4.12E-05	2.55E-05	3.98E-08	2.35E-06	8.1	5.13E-04	5.45E-05
S14	60	8	20	5	6.76E-02	4.82E-03	6.84E-05	1.99E-03	4.70E-04	6.78E-05	4.65E-06	2.69E-05	1.67E-05	2.63E-08	1.54E-06	5.3	3.35E-04	3.60E-05
S14	60	8	21	5	5.50E-02	4.08E-03	5.79E-05	1.69E-03	3.98E-04	5.70E-05	3.90E-06	2.26E-05	1.40E-05	2.23E-08	1.29E-06	4.4	2.81E-04	3.05E-05
S14	60	8	22	5	4.50E-02	3.46E-03	4.91E-05	1.43E-03	3.38E-04	4.80E-05	3.29E-06	1.90E-05	1.19E-05	1.89E-08	1.09E-06	3.7	2.37E-04	2.58E-05
S14	60	8	23	5	3.57E-02	2.84E-03	4.04E-05	1.18E-03	2.77E-04	3.92E-05	2.68E-06	1.55E-05	9.77E-06	1.55E-08	8.86E-07	3.0	1.93E-04	2.12E-05
S14	60	8	24	5	2.56E-02	2.10E-03	2.98E-05	8.69E-04	2.05E-04	2.88E-05	1.97E-06	1.14E-05	7.22E-06	1.15E-08	6.51E-07	2.2	1.42E-04	1.57E-05
S15	60	8	1	5	2.16E-02	1.84E-03	2.61E-05	7.60E-04	1.79E-04	2.51E-05	1.71E-06	9.93E-06	6.31E-06	1.00E-08	5.66E-07	1.9	1.23E-04	1.37E-05
S15	60	8	2	5	1.40E-02	1.22E-03	1.74E-05	5.07E-04	1.19E-04	1.67E-05	1.13E-06	6.59E-06	4.21E-06	6.68E-09	3.75E-07	1.3	8.18E-05	9.14E-06
S15	60	8	3	5	1.21E-02	1.07E-03	1.52E-05	4.43E-04	1.05E-04	1.45E-05	9.87E-07	5.74E-06	3.68E-06	5.84E-09	3.27E-07	1.1	7.12E-05	8.00E-06
S15	60	8	4	5	8.67E-03	7.65E-04	1.09E-05	3.17E-04	7.47E-05	1.03E-05	7.03E-07	4.09E-06	2.63E-06	4.17E-09	2.33E-07	0.8	5.07E-05	5.71E-06
S15	60	8	5	5	1.21E-02	1.07E-03	1.52E-05	4.43E-04	1.05E-04	1.45E-05	9.83E-07	5.72E-06	3.68E-06	5.84E-09	3.25E-07	1.1	7.09E-05	8.00E-06
S15	60	8	6	5	2.95E-02	2.60E-03	3.69E-05	1.08E-03	2.54E-04	3.51E-05	2.39E-06	1.39E-05	8.94E-06	1.42E-08	7.90E-07	2.7	1.72E-04	1.94E-05
S15	60	8	7	5	8.84E-02	7.81E-03	1.11E-04	3.23E-03	7.61E-04	1.06E-04	7.18E-06	4.18E-05	2.68E-05	4.26E-08	2.38E-06	8.1	5.18E-04	5.83E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	8	5	1.40E-01	1.19E-02	1.69E-04	4.94E-03	1.16E-03	1.63E-04	1.11E-05	6.45E-05	4.10E-05	6.51E-08	3.67E-06	12.5	8.01E-04	8.92E-05
S15	60	8	9	5	1.22E-01	9.64E-03	1.37E-04	3.99E-03	9.41E-04	1.33E-04	9.11E-06	5.28E-05	3.32E-05	5.26E-08	3.01E-06	10.3	6.57E-04	7.20E-05
S15	60	8	10	5	1.06E-01	7.96E-03	1.13E-04	3.29E-03	7.76E-04	1.11E-04	7.60E-06	4.40E-05	2.74E-05	4.34E-08	2.51E-06	8.6	5.47E-04	5.94E-05
S15	60	8	11	5	9.95E-02	7.19E-03	1.02E-04	2.98E-03	7.02E-04	1.01E-04	6.92E-06	4.01E-05	2.48E-05	3.93E-08	2.28E-06	7.8	4.98E-04	5.37E-05
S15	60	8	12	5	1.20E-01	8.11E-03	1.15E-04	3.36E-03	7.91E-04	1.15E-04	7.92E-06	4.58E-05	2.84E-05	4.43E-08	2.61E-06	9.0	5.70E-04	6.06E-05
S15	60	8	13	5	1.29E-01	8.57E-03	1.22E-04	3.55E-03	8.36E-04	1.22E-04	8.40E-06	4.85E-05	3.01E-05	4.68E-08	2.77E-06	9.5	6.04E-04	6.40E-05
S15	60	8	14	5	1.32E-01	8.73E-03	1.24E-04	3.61E-03	8.51E-04	1.25E-04	8.57E-06	4.95E-05	3.07E-05	4.76E-08	2.83E-06	9.7	6.16E-04	6.52E-05
S15	60	8	15	5	1.38E-01	9.03E-03	1.28E-04	3.74E-03	8.81E-04	1.29E-04	8.89E-06	5.14E-05	3.19E-05	4.93E-08	2.93E-06	10.1	6.40E-04	6.74E-05
S15	60	8	16	5	1.49E-01	9.80E-03	1.39E-04	4.05E-03	9.56E-04	1.40E-04	9.64E-06	5.57E-05	3.45E-05	5.35E-08	3.18E-06	10.9	6.93E-04	7.32E-05
S15	60	8	17	5	1.84E-01	1.21E-02	1.72E-04	5.00E-03	1.18E-03	1.73E-04	1.19E-05	6.87E-05	4.26E-05	6.60E-08	3.92E-06	13.4	8.55E-04	9.03E-05
S15	60	8	18	5	1.96E-01	1.30E-02	1.85E-04	5.38E-03	1.27E-03	1.86E-04	1.28E-05	7.37E-05	4.57E-05	7.10E-08	4.21E-06	14.4	9.18E-04	9.72E-05
S15	60	8	19	5	1.34E-01	9.03E-03	1.28E-04	3.74E-03	8.81E-04	1.28E-04	8.83E-06	5.10E-05	3.16E-05	4.93E-08	2.91E-06	10.0	6.35E-04	6.74E-05
S15	60	8	20	5	8.37E-02	5.97E-03	8.47E-05	2.47E-03	5.82E-04	8.40E-05	5.76E-06	3.33E-05	2.07E-05	3.26E-08	1.90E-06	6.5	4.15E-04	4.46E-05
S15	60	8	21	5	6.81E-02	5.05E-03	7.17E-05	2.09E-03	4.93E-04	7.06E-05	4.84E-06	2.80E-05	1.74E-05	2.76E-08	1.60E-06	5.5	3.48E-04	3.77E-05
S15	60	8	22	5	5.57E-02	4.29E-03	6.08E-05	1.77E-03	4.18E-04	5.95E-05	4.07E-06	2.36E-05	1.47E-05	2.34E-08	1.34E-06	4.6	2.93E-04	3.20E-05
S15	60	8	23	5	4.42E-02	3.52E-03	5.00E-05	1.46E-03	3.43E-04	4.86E-05	3.32E-06	1.93E-05	1.21E-05	1.92E-08	1.10E-06	3.8	2.39E-04	2.63E-05
S15	60	8	24	5	3.17E-02	2.60E-03	3.69E-05	1.08E-03	2.54E-04	3.57E-05	2.44E-06	1.42E-05	8.94E-06	1.42E-08	8.06E-07	2.8	1.76E-04	1.94E-05
S16	60	8	1	5	1.39E-02	1.18E-03	1.68E-05	4.90E-04	1.15E-04	1.62E-05	1.10E-06	6.40E-06	4.07E-06	6.46E-09	3.64E-07	1.2	7.95E-05	8.84E-06
S16	60	8	2	5	9.05E-03	7.89E-04	1.12E-05	3.27E-04	7.70E-05	1.07E-05	7.31E-07	4.25E-06	2.71E-06	4.30E-09	2.42E-07	0.8	5.27E-05	5.89E-06
S16	60	8	3	5	7.82E-03	6.91E-04	9.80E-06	2.86E-04	6.74E-05	9.35E-06	6.36E-07	3.70E-06	2.37E-06	3.77E-09	2.11E-07	0.7	4.59E-05	5.16E-06
S16	60	8	4	5	5.58E-03	4.93E-04	7.00E-06	2.04E-04	4.81E-05	6.66E-06	4.53E-07	2.63E-06	1.70E-06	2.69E-09	1.50E-07	0.5	3.27E-05	3.68E-06
S16	60	8	5	5	7.82E-03	6.91E-04	9.80E-06	2.86E-04	6.74E-05	9.32E-06	6.34E-07	3.68E-06	2.37E-06	3.77E-09	2.10E-07	0.7	4.57E-05	5.16E-06
S16	60	8	6	5	1.90E-02	1.68E-03	2.38E-05	6.94E-04	1.64E-04	2.26E-05	1.54E-06	8.95E-06	5.76E-06	9.14E-09	5.09E-07	1.7	1.11E-04	1.25E-05
S16	60	8	7	5	5.70E-02	5.03E-03	7.14E-05	2.08E-03	4.91E-04	6.80E-05	4.63E-06	2.69E-05	1.73E-05	2.74E-08	1.53E-06	5.2	3.34E-04	3.76E-05
S16	60	8	8	5	9.03E-02	7.70E-03	1.09E-04	3.18E-03	7.51E-04	1.05E-04	7.16E-06	4.16E-05	2.64E-05	4.20E-08	2.37E-06	8.1	5.16E-04	5.75E-05
S16	60	8	9	5	7.89E-02	6.22E-03	8.82E-05	2.57E-03	6.06E-04	8.59E-05	5.87E-06	3.41E-05	2.14E-05	3.39E-08	1.94E-06	6.6	4.23E-04	4.64E-05
S16	60	8	10	5	6.83E-02	5.13E-03	7.28E-05	2.12E-03	5.00E-04	7.15E-05	4.90E-06	2.84E-05	1.77E-05	2.80E-08	1.62E-06	5.5	3.53E-04	3.83E-05
S16	60	8	11	5	6.41E-02	4.64E-03	6.58E-05	1.92E-03	4.52E-04	6.51E-05	4.46E-06	2.58E-05	1.60E-05	2.53E-08	1.47E-06	5.0	3.21E-04	3.46E-05
S16	60	8	12	5	7.72E-02	5.23E-03	7.42E-05	2.16E-03	5.10E-04	7.42E-05	5.11E-06	2.95E-05	1.83E-05	2.85E-08	1.68E-06	5.8	3.67E-04	3.90E-05
S16	60	8	13	5	8.30E-02	5.52E-03	7.84E-05	2.29E-03	5.39E-04	7.87E-05	5.42E-06	3.13E-05	1.94E-05	3.01E-08	1.79E-06	6.1	3.90E-04	4.13E-05
S16	60	8	14	5	8.53E-02	5.62E-03	7.98E-05	2.33E-03	5.48E-04	8.03E-05	5.53E-06	3.19E-05	1.98E-05	3.07E-08	1.82E-06	6.2	3.97E-04	4.20E-05
S16	60	8	15	5	8.91E-02	5.82E-03	8.27E-05	2.41E-03	5.68E-04	8.33E-05	5.73E-06	3.31E-05	2.05E-05	3.18E-08	1.89E-06	6.5	4.12E-04	4.35E-05
S16	60	8	16	5	9.63E-02	6.31E-03	8.96E-05	2.61E-03	6.16E-04	9.03E-05	6.21E-06	3.59E-05	2.22E-05	3.45E-08	2.05E-06	7.0	4.47E-04	4.71E-05
S16	60	8	17	5	1.19E-01	7.79E-03	1.11E-04	3.22E-03	7.60E-04	1.11E-04	7.66E-06	4.43E-05	2.75E-05	4.25E-08	2.53E-06	8.7	5.51E-04	5.82E-05
S16	60	8	18	5	1.26E-01	8.39E-03	1.19E-04	3.47E-03	8.18E-04	1.20E-04	8.22E-06	4.75E-05	2.95E-05	4.58E-08	2.71E-06	9.3	5.91E-04	6.26E-05
S16	60	8	19	5	8.62E-02	5.82E-03	8.26E-05	2.41E-03	5.68E-04	8.27E-05	5.69E-06	3.29E-05	2.04E-05	3.18E-08	1.88E-06	6.4	4.09E-04	4.35E-05
S16	60	8	20	5	5.40E-02	3.85E-03	5.46E-05	1.59E-03	3.75E-04	5.41E-05	3.71E-06	2.15E-05	1.33E-05	2.10E-08	1.23E-06	4.2	2.67E-04	2.87E-05
S16	60	8	21	5	4.39E-02	3.26E-03	4.62E-05	1.35E-03	3.18E-04	4.55E-05	3.12E-06	1.80E-05	1.12E-05	1.78E-08	1.03E-06	3.5	2.24E-04	2.43E-05
S16	60	8	22	5	3.59E-02	2.76E-03	3.92E-05	1.14E-03	2.69E-04	3.83E-05	2.62E-06	1.52E-05	9.50E-06	1.51E-08	8.66E-07	3.0	1.89E-04	2.06E-05
S16	60	8	23	5	2.85E-02	2.27E-03	3.22E-05	9.39E-04	2.21E-04	3.13E-05	2.14E-06	1.24E-05	7.80E-06	1.24E-08	7.07E-07	2.4	1.54E-04	1.69E-05
S16	60	8	24	5	2.04E-02	1.68E-03	2.38E-05	6.94E-04	1.64E-04	2.30E-05	1.57E-06	9.12E-06	5.76E-06	9.15E-09	5.19E-07	1.8	1.13E-04	1.25E-05
S17	60	8	1	5	2.63E-02	2.23E-03	3.17E-05	9.23E-04	2.18E-04	3.04E-05	2.08E-06	1.21E-05	7.66E-06	1.22E-08	6.87E-07	2.3	1.50E-04	1.67E-05
S17	60	8	2	5	1.71E-02	1.49E-03	2.11E-05	6.15E-04	1.45E-04	2.02E-05	1.38E-06	8.00E-06	5.11E-06	8.11E-09	4.56E-07	1.6	9.93E-05	1.11E-05
S17	60	8	3	5	1.47E-02	1.30E-03	1.85E-05	5.38E-04	1.27E-04	1.76E-05	1.20E-06	6.97E-06	4.47E-06	7.09E-09	3.97E-07	1.4	8.65E-05	9.71E-06
S17	60	8	4	5	1.05E-02	9.29E-04	1.32E-05	3.84E-04	9.06E-05	1.25E-05	8.54E-07	4.96E-06	3.19E-06	5.07E-09	2.82E-07	1.0	6.16E-05	6.94E-06
S17	60	8	5	5	1.47E-02	1.30E-03	1.85E-05	5.38E-04	1.27E-04	1.75E-05	1.19E-06	6.94E-06	4.47E-06	7.09E-09	3.95E-07	1.3	8.61E-05	9.71E-06
S17	60	8	6	5	3.58E-02	3.16E-03	4.48E-05	1.31E-03	3.08E-04	4.26E-05	2.90E-06	1.69E-05	1.09E-05	1.72E-08	9.59E-07	3.3	2.09E-04	2.36E-05
S17	60	8	7	5	1.07E-01	9.48E-03	1.35E-04	3.92E-03	9.24E-04	1.28E-04	8.72E-06	5.07E-05	3.26E-05	5.17E-08	2.89E-06	9.8	6.29E-04	7.08E-05
S17	60	8	8	5	1.70E-01	1.45E-02	2.06E-04	6.00E-03	1.41E-03	1.98E-04	1.35E-05	7.83E-05	4.98E-05	7.91E-08	4.46E-06	15.2	9.72E-04	1.08E-04
S17	60	8	9	5	1.49E-01	1.17E-02	1.66E-04	4.84E-03	1.14E-03	1.62E-04	1.11E-05	6.41E-05	4.02E-05	6.39E-08	3.66E-06	12.5	7.97E-04	8.74E-05
S17	60	8	10	5	1.29E-01	9.66E-03	1.37E-04	4.00E-03	9.43E-04	1.35E-04	9.23E-06	5.34E-05	3.32E-05	5.27E-08	3.05E-06	10.4	6.64E-04	7.22E-05
S17	60	8	11	5	1.21E-01	8.73E-03	1.24E-04	3.61E-03	8.52E-04	1.23E-04	8.41E-06	4.86E-05	3.02E-05	4.77E-08	2.77E-06	9.5	6.05E-04	6.52E-05
S17	60	8	12	5	1.45E-01	9.85E-03	1.40E-04	4.07E-03	9.61E-04	1.40E-04	9.62E-06	5.56E-05	3.45E-05	5.37E-08	3.17E-06	10.9	6.92E-04	7.35E-05
S17	60	8	13	5	1.56E-01	1.04E-02	1.48E-04	4.31E-03	1.02E-03	1.48E-04	1.02E-05	5.89E-05	3.65E-05	5.68E-08	3.36E-06	11.5	7.34E-04	7.77E-05
S17	60	8	14	5	1.61E-01	1.06E-02	1.50E-04	4.38E-03	1.03E-03	1.51E-04	1.04E-05	6.01E-05	3.73E-05	5.78E-08	3.43E-06	11.8	7.48E-04	7.91E-05
S17	60	8	15	5	1.68E-01	1.10E-02	1.56E-04	4.54E-03	1.07E-03	1.57E-04	1.08E-05	6.24E-05	3.87E-05	5.98E-08	3.56E-06	12.2	7.76E-04	8.19E-05
S17	60	8	16	5	1.81E-01	1.19E-02	1.69E-04	4.92E-03	1.16E-03	1.70E-04	1.17E-05	6.76E-05	4.19E-05	6.49E-08	3.86E-06	13.2	8.41E-04	8.88E-05
S17	60	8	17	5	2.23E-01	1.47E-02	2.08E-04	6.07E-03	1.43E-03	2.10E-04	1.44E-05	8.34E-05	5.17E-05	8.01E-08	4.76E-06	16.3	1.04E-03	1.10E-04
S17	60	8	18	5	2.37E-01	1.58E-02	2.24E-04	6.54E-03	1.54E-03	2.25E-04	1.55E-05	8.95E-05	5.55E-05	8.62E-08	5.11E-06	17.5	1.11E-03	1.18E-04
S17	60	8	19	5	1.62E-01	1.10E-02	1.56E-04	4.54E-03	1.07E-03	1.56E-04	1.07E-05	6.19E-05	3.84E-05	5.98E-08	3.53E-06	12.1	7.71E-04	8.19E-05
S17	60	8	20	5	1.02E-01	7.25E-03	1.03E-04	3.00E-03	7.07E-04	1.02E-04	7.00E-06	4.05E-05	2.51E-05	3.95E-08	2.31E-06	7.9	5.04E-04	5.41E-05
S17	60	8	21	5	8.27E-02	6.13E-03	8.70E-05	2.54E-03	5.98E-04	8.57E-05	5.87E-06	3.40E-05	2.11E-05	3.35E-08	1.94E-06	6.6	4.23E-04	4.58E-05
S17	60	8	22	5	6.76E-02	5.20E-03	7.39E-05	2.15E-03	5.08E-04	7.22E-05	4.94E-06	2.86E-05	1.79E-05	2.84E-08	1.63E-06	5.6	3.56E-04	3.89E-05
S17	60	8	23	5	5.37E-02	4.27E-03	6.07E-05	1.77E-03	4.17E-04	5.90E-05	4.03E-06	2.34E-05	1.47E-05	2.33E-08	1.33E-06	4.6	2.90E-04	3.19E-05
S17	60	8	24	5	3.85E-02	3.16E-03	4.48E-05	1.31E-03	3.08E-04	4.34E-05	2.96E-06	1.72E-05	1.09E-05	1.72E-08	9.79E-07	3.3	2.13E-04	2.36E-05
S18	65	9	1	5	3.25E-02	2.98E-03	4.12E-05	1.16E-03	2.80E-04	3.66E-05	2.46E-06	1.46E-05	9.21E-06	1.54E-08	8.35E-07	3.1	1.80E-04	1.96E-05
S18	65	9	2	5	2.11E-02	1.99E-03	2.75E-05	7.73E-04	1.86E-04	2.43E-05	1.63E-06	9.69E-06	6.14E-06	1.03E-08	5.54E-07	2.0	1.19E-04	1.31E-05
S18	65	9	3	5	1.82E-02	1.74E-03	2.40E-05	6.76E-04	1.63E-04	2.12E-05	1.42E-06	8.44E-06	5.37E-06	8.97E-09	4.82E-07	1.8	1.04E-04	1.14E-05
S18	65	9	4	5	1.30E-02	1.24E-03	1.72E-05	4.83E-04	1.17E-04	1.51E-05	1.01E-06	6.01E-06	3.84E-06	6.41E-09	3.43E-07	1.3	7.39E-05	8.16E-06

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	5	5	1.82E-02	1.74E-03	2.40E-05	6.76E-04	1.63E-04	2.11E-05	1.41E-06	8.41E-06	5.37E-06	8.97E-09	4.80E-07	1.8	1.03E-04	1.14E-05
S18	65	9	6	5	4.42E-02	4.23E-03	5.84E-05	1.64E-03	3.96E-04	5.13E-05	3.43E-06	2.04E-05	1.31E-05	2.18E-08	1.17E-06	4.3	2.51E-04	2.77E-05
S18	65	9	7	5	1.33E-01	1.27E-02	1.75E-04	4.93E-03	1.19E-03	1.54E-04	1.03E-05	6.14E-05	3.92E-05	6.54E-08	3.51E-06	12.8	7.55E-04	8.32E-05
S18	65	9	8	5	2.10E-01	1.94E-02	2.68E-04	7.54E-03	1.82E-03	2.38E-04	1.60E-05	9.49E-05	5.99E-05	1.00E-07	5.42E-06	19.8	1.17E-03	1.27E-04
S18	65	9	9	5	2.36E-01	1.57E-02	2.23E-04	6.51E-03	1.53E-03	2.24E-04	1.54E-05	8.91E-05	5.53E-05	8.59E-08	5.08E-06	17.4	1.11E-03	1.18E-04
S18	65	9	10	5	1.97E-01	1.30E-02	1.84E-04	5.37E-03	1.27E-03	1.85E-04	1.28E-05	7.37E-05	4.57E-05	7.09E-08	4.21E-06	14.4	9.18E-04	9.70E-05
S18	65	9	11	5	1.80E-01	1.17E-02	1.67E-04	4.86E-03	1.15E-03	1.68E-04	1.16E-05	6.68E-05	4.14E-05	6.41E-08	3.81E-06	13.1	8.31E-04	8.77E-05
S18	65	9	12	5	2.02E-01	1.32E-02	1.88E-04	5.48E-03	1.29E-03	1.89E-04	1.30E-05	7.52E-05	4.67E-05	7.23E-08	4.29E-06	14.7	9.37E-04	9.89E-05
S18	65	9	13	5	2.13E-01	1.40E-02	1.99E-04	5.79E-03	1.36E-03	2.00E-04	1.38E-05	7.94E-05	4.93E-05	7.63E-08	4.53E-06	15.6	9.89E-04	1.04E-04
S18	65	9	14	5	2.14E-01	1.42E-02	2.02E-04	5.89E-03	1.39E-03	2.03E-04	1.40E-05	8.06E-05	5.00E-05	7.77E-08	4.60E-06	15.8	1.00E-03	1.06E-04
S18	65	9	15	5	2.18E-01	1.47E-02	2.09E-04	6.10E-03	1.44E-03	2.09E-04	1.44E-05	8.32E-05	5.16E-05	8.04E-08	4.75E-06	16.3	1.04E-03	1.10E-04
S18	65	9	16	5	2.24E-01	1.60E-02	2.27E-04	6.61E-03	1.56E-03	2.25E-04	1.54E-05	8.93E-05	5.53E-05	8.72E-08	5.09E-06	17.4	1.11E-03	1.19E-04
S18	65	9	17	5	2.66E-01	1.97E-02	2.80E-04	8.16E-03	1.92E-03	2.76E-04	1.89E-05	1.09E-04	6.79E-05	1.08E-07	6.23E-06	21.3	1.36E-03	1.47E-04
S18	65	9	18	5	2.76E-01	2.12E-02	3.01E-04	8.78E-03	2.07E-03	2.95E-04	2.02E-05	1.17E-04	7.30E-05	1.16E-07	6.66E-06	22.8	1.45E-03	1.59E-04
S18	65	9	19	5	2.00E-01	1.47E-02	2.03E-04	5.70E-03	1.38E-03	1.88E-04	1.27E-05	7.51E-05	4.62E-05	7.57E-08	4.30E-06	15.7	9.25E-04	9.63E-05
S18	65	9	20	5	1.25E-01	9.70E-03	1.34E-04	3.77E-03	9.09E-04	1.23E-04	8.30E-06	4.91E-05	3.02E-05	5.00E-08	2.81E-06	10.3	6.05E-04	6.36E-05
S18	65	9	21	5	1.02E-01	8.21E-03	1.13E-04	3.19E-03	7.69E-04	1.03E-04	6.96E-06	4.12E-05	2.54E-05	4.23E-08	2.36E-06	8.6	5.07E-04	5.39E-05
S18	65	9	22	5	8.35E-02	6.96E-03	9.62E-05	2.71E-03	6.53E-04	8.69E-05	5.86E-06	3.47E-05	2.15E-05	3.59E-08	1.99E-06	7.3	4.27E-04	4.57E-05
S18	65	9	23	5	6.63E-02	5.72E-03	7.90E-05	2.22E-03	5.36E-04	7.10E-05	4.78E-06	2.83E-05	1.77E-05	2.95E-08	1.62E-06	5.9	3.49E-04	3.75E-05
S18	65	9	24	5	4.75E-02	4.23E-03	5.84E-05	1.64E-03	3.96E-04	5.22E-05	3.51E-06	2.08E-05	1.31E-05	2.18E-08	1.19E-06	4.3	2.56E-04	2.77E-05
S19	65	9	1	5	4.56E-02	4.19E-03	5.79E-05	1.63E-03	3.93E-04	5.15E-05	3.46E-06	2.05E-05	1.29E-05	2.16E-08	1.17E-06	4.3	2.52E-04	2.75E-05
S19	65	9	2	5	2.96E-02	2.79E-03	3.86E-05	1.09E-03	2.62E-04	3.42E-05	2.29E-06	1.36E-05	8.63E-06	1.44E-08	7.78E-07	2.8	1.67E-04	1.83E-05
S19	65	9	3	5	2.56E-02	2.45E-03	3.38E-05	9.50E-04	2.29E-04	2.98E-05	2.00E-06	1.19E-05	7.55E-06	1.26E-08	6.77E-07	2.5	1.46E-04	1.60E-05
S19	65	9	4	5	1.83E-02	1.75E-03	2.41E-05	6.79E-04	1.64E-04	2.12E-05	1.42E-06	8.44E-06	5.39E-06	9.00E-09	4.82E-07	1.8	1.04E-04	1.15E-05
S19	65	9	5	5	2.56E-02	2.45E-03	3.38E-05	9.50E-04	2.29E-04	2.97E-05	1.99E-06	1.18E-05	7.55E-06	1.26E-08	6.75E-07	2.5	1.45E-04	1.60E-05
S19	65	9	6	5	6.21E-02	5.94E-03	8.20E-05	2.31E-03	5.57E-04	7.21E-05	4.83E-06	2.87E-05	1.83E-05	3.06E-08	1.64E-06	6.0	3.52E-04	3.90E-05
S19	65	9	7	5	1.86E-01	1.78E-02	2.46E-04	6.92E-03	1.67E-03	2.17E-04	1.45E-05	8.63E-05	5.50E-05	9.18E-08	4.93E-06	18.0	1.06E-03	1.17E-04
S19	65	9	8	5	2.95E-01	2.72E-02	3.76E-04	1.06E-02	2.55E-03	3.34E-04	2.25E-05	1.33E-04	8.41E-05	1.40E-07	7.62E-06	27.8	1.64E-03	1.79E-04
S19	65	9	9	5	3.32E-01	2.21E-02	3.14E-04	9.15E-03	2.16E-03	3.15E-04	2.17E-05	1.25E-04	7.76E-05	1.21E-07	7.14E-06	24.5	1.56E-03	1.65E-04
S19	65	9	10	5	2.77E-01	1.82E-02	2.59E-04	7.55E-03	1.78E-03	2.61E-04	1.79E-05	1.04E-04	6.42E-05	9.96E-08	5.91E-06	20.3	1.29E-03	1.36E-04
S19	65	9	11	5	2.53E-01	1.65E-02	2.34E-04	6.82E-03	1.61E-03	2.36E-04	1.62E-05	9.38E-05	5.82E-05	9.00E-08	5.35E-06	18.4	1.17E-03	1.23E-04
S19	65	9	12	5	2.84E-01	1.86E-02	2.64E-04	7.69E-03	1.81E-03	2.66E-04	1.83E-05	1.06E-04	6.55E-05	1.02E-07	6.03E-06	20.7	1.32E-03	1.39E-04
S19	65	9	13	5	2.99E-01	1.97E-02	2.79E-04	8.13E-03	1.92E-03	2.81E-04	1.93E-05	1.12E-04	6.92E-05	1.07E-07	6.37E-06	21.9	1.39E-03	1.47E-04
S19	65	9	14	5	3.01E-01	2.00E-02	2.84E-04	8.28E-03	1.95E-03	2.85E-04	1.96E-05	1.13E-04	7.03E-05	1.09E-07	6.46E-06	22.2	1.41E-03	1.49E-04
S19	65	9	15	5	3.07E-01	2.07E-02	2.94E-04	8.57E-03	2.02E-03	2.94E-04	2.02E-05	1.17E-04	7.25E-05	1.13E-07	6.67E-06	22.9	1.46E-03	1.55E-04
S19	65	9	16	5	3.15E-01	2.25E-02	3.19E-04	9.29E-03	2.19E-03	3.16E-04	2.17E-05	1.25E-04	7.77E-05	1.23E-07	7.15E-06	24.5	1.56E-03	1.68E-04
S19	65	9	17	5	3.74E-01	2.77E-02	3.93E-04	1.15E-02	2.70E-03	3.87E-04	2.65E-05	1.54E-04	9.54E-05	1.51E-07	8.76E-06	30.0	1.91E-03	2.07E-04
S19	65	9	18	5	3.88E-01	2.98E-02	4.23E-04	1.23E-02	2.91E-03	4.14E-04	2.83E-05	1.64E-04	1.03E-04	1.63E-07	9.35E-06	32.0	2.04E-03	2.23E-04
S19	65	9	19	5	2.81E-01	2.06E-02	2.85E-04	8.01E-03	1.93E-03	2.64E-04	1.79E-05	1.05E-04	6.50E-05	1.06E-07	6.04E-06	22.1	1.30E-03	1.35E-04
S19	65	9	20	5	1.76E-01	1.36E-02	1.88E-04	5.29E-03	1.28E-03	1.73E-04	1.17E-05	6.89E-05	4.24E-05	7.03E-08	3.95E-06	14.4	8.49E-04	8.94E-05
S19	65	9	21	5	1.43E-01	1.15E-02	1.59E-04	4.48E-03	1.08E-03	1.45E-04	9.78E-06	5.79E-05	3.57E-05	5.94E-08	3.31E-06	12.1	7.13E-04	7.57E-05
S19	65	9	22	5	1.17E-01	9.78E-03	1.35E-04	3.80E-03	9.17E-04	1.22E-04	8.23E-06	4.88E-05	3.02E-05	5.04E-08	2.79E-06	10.2	6.00E-04	6.42E-05
S19	65	9	23	5	9.31E-02	8.04E-03	1.11E-04	3.12E-03	7.53E-04	9.97E-05	6.71E-06	3.98E-05	2.48E-05	4.14E-08	2.28E-06	8.3	4.90E-04	5.27E-05
S19	65	9	24	5	6.68E-02	5.94E-03	8.20E-05	2.31E-03	5.57E-04	7.33E-05	4.93E-06	2.92E-05	1.83E-05	3.06E-08	1.67E-06	6.1	3.60E-04	3.90E-05
S20	60	8	1	5	3.45E-02	2.93E-03	4.16E-05	1.21E-03	2.86E-04	4.00E-05	2.73E-06	1.58E-05	1.01E-05	1.60E-08	9.02E-07	3.1	1.97E-04	2.19E-05
S20	60	8	2	5	2.24E-02	1.95E-03	2.77E-05	8.08E-04	1.90E-04	2.66E-05	1.81E-06	1.05E-05	6.71E-06	1.06E-08	5.98E-07	2.0	1.30E-04	1.46E-05
S20	60	8	3	5	1.93E-02	1.71E-03	2.43E-05	7.07E-04	1.67E-04	2.31E-05	1.57E-06	9.15E-06	5.87E-06	9.32E-09	5.21E-07	1.8	1.14E-04	1.28E-05
S20	60	8	4	5	1.38E-02	1.22E-03	1.73E-05	5.05E-04	1.19E-04	1.65E-05	1.12E-06	6.52E-06	4.19E-06	6.66E-09	3.71E-07	1.3	8.09E-05	9.11E-06
S20	60	8	5	5	1.93E-02	1.71E-03	2.43E-05	7.07E-04	1.67E-04	2.31E-05	1.57E-06	9.12E-06	5.87E-06	9.32E-09	5.19E-07	1.8	1.13E-04	1.28E-05
S20	60	8	6	5	4.70E-02	4.15E-03	5.89E-05	1.72E-03	4.05E-04	5.60E-05	3.81E-06	2.21E-05	1.43E-05	2.26E-08	1.26E-06	4.3	2.75E-04	3.10E-05
S20	60	8	7	5	1.41E-01	1.24E-02	1.77E-04	5.15E-03	1.21E-03	1.68E-04	1.15E-05	6.66E-05	4.28E-05	6.79E-08	3.79E-06	12.9	8.26E-04	9.30E-05
S20	60	8	8	5	2.23E-01	1.90E-02	2.70E-04	7.88E-03	1.86E-03	2.60E-04	1.77E-05	1.03E-04	6.54E-05	1.04E-07	5.86E-06	20.0	1.28E-03	1.42E-04
S20	60	8	9	5	1.95E-01	1.54E-02	2.18E-04	6.36E-03	1.50E-03	2.12E-04	1.45E-05	8.43E-05	5.29E-05	8.39E-08	4.80E-06	16.4	1.05E-03	1.15E-04
S20	60	8	10	5	1.69E-01	1.27E-02	1.80E-04	5.25E-03	1.24E-03	1.77E-04	1.21E-05	7.02E-05	4.37E-05	6.92E-08	4.00E-06	13.7	8.73E-04	9.48E-05
S20	60	8	11	5	1.59E-01	1.15E-02	1.63E-04	4.75E-03	1.12E-03	1.61E-04	1.10E-05	6.39E-05	3.96E-05	6.26E-08	3.64E-06	12.5	7.95E-04	8.57E-05
S20	60	8	12	5	1.91E-01	1.29E-02	1.84E-04	5.35E-03	1.26E-03	1.84E-04	1.26E-05	7.30E-05	4.53E-05	7.06E-08	4.17E-06	14.3	9.09E-04	9.66E-05
S20	60	8	13	5	2.05E-01	1.37E-02	1.94E-04	5.66E-03	1.33E-03	1.95E-04	1.34E-05	7.74E-05	4.80E-05	7.46E-08	4.42E-06	15.2	9.64E-04	1.02E-04
S20	60	8	14	5	2.11E-01	1.39E-02	1.97E-04	5.76E-03	1.36E-03	1.99E-04	1.37E-05	7.90E-05	4.90E-05	7.59E-08	4.51E-06	15.5	9.83E-04	1.04E-04
S20	60	8	15	5	2.21E-01	1.44E-02	2.05E-04	5.96E-03	1.40E-03	2.06E-04	1.42E-05	8.19E-05	5.08E-05	7.86E-08	4.67E-06	16.0	1.02E-03	1.08E-04
S20	60	8	16	5	2.38E-01	1.56E-02	2.22E-04	6.46E-03	1.52E-03	2.23E-04	1.54E-05	8.88E-05	5.51E-05	8.53E-08	5.07E-06	17.4	1.11E-03	1.17E-04
S20	60	8	17	5	2.94E-01	1.93E-02	2.74E-04	7.98E-03	1.88E-03	2.76E-04	1.90E-05	1.10E-04	6.79E-05	1.05E-07	6.25E-06	21.4	1.36E-03	1.44E-04
S20	60	8	18	5	3.12E-01	2.07E-02	2.94E-04	8.58E-03	2.02E-03	2.96E-04	2.03E-05	1.18E-04	7.29E-05	1.13E-07	6.71E-06	23.0	1.46E-03	1.55E-04
S20	60	8	19	5	2.13E-01	1.44E-02	2.04E-04	5.96E-03	1.40E-03	2.05E-04	1.41E-05	8.13E-05	5.04E-05	7.86E-08	4.64E-06	15.9	1.01E-03	1.08E-04
S20	60	8	20	5	1.34E-01	9.52E-03	1.35E-04	3.94E-03	9.29E-04	1.34E-04	9.19E-06	5.32E-05	3.30E-05	5.19E-08	3.03E-06	10.4	6.61E-04	7.11E-05
S20	60	8	21	5	1.09E-01	8.06E-03	1.14E-04	3.33E-03	7.86E-04	1.13E-04	7.71E-06	4.46E-05	2.77E-05	4.39E-08	2.54E-06	8.7	5.55E-04	6.01E-05
S20	60	8	22	5	8.88E-02	6.84E-03	9.70E-05	2.83E-03	6.67E-04	9.48E-05	6.49E-06	3.76E-05	2.35E-05	3.73E-08	2.14E-06	7.3	4.68E-04	5.10E-05
S20	60	8	23	5	7.05E-02	5.61E-03	7.97E-05	2.32E-03	5.48E-04	7.74E-05	5.30E-06	3.07E-05	1.93E-05	3.06E-08	1.75E-06	6.0	3.81E-04	4.19E-05
S20	60	8	24	5	5.05E-02	4.15E-03	5.89E-05	1.72E-03	4.05E-04	5.69E-05	3.89E-06	2.26E-05	1.43E-05	2.26E-08	1.29E-06	4.4	2.80E-04	3.10E-05
S21	60	8	1	5	7.47E-02	6.34E-03	9.00E-05	2.62E-03	6.19E-04	8.66E-05	5.91E-06	3.43E-05	2.18E-05	3.46E-08	1.95E-06	6.7	4.26E-04	4.74E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	2	5	4.85E-02	4.23E-03	6.00E-05	1.75E-03	4.12E-04	5.75E-05	3.92E-06	2.28E-05	1.45E-05	2.31E-08	1.30E-06	4.4	2.82E-04	3.16E-05
S21	60	8	3	5	4.19E-02	3.70E-03	5.25E-05	1.53E-03	3.61E-04	5.01E-05	3.41E-06	1.98E-05	1.27E-05	2.02E-08	1.13E-06	3.8	2.46E-04	2.76E-05
S21	60	8	4	5	2.99E-02	2.64E-03	3.75E-05	1.09E-03	2.58E-04	3.57E-05	2.43E-06	1.41E-05	9.08E-06	1.44E-08	8.03E-07	2.7	1.75E-04	1.97E-05
S21	60	8	5	5	4.19E-02	3.70E-03	5.25E-05	1.53E-03	3.61E-04	4.99E-05	3.39E-06	1.97E-05	1.27E-05	2.02E-08	1.12E-06	3.8	2.45E-04	2.76E-05
S21	60	8	6	5	1.02E-01	8.98E-03	1.28E-04	3.72E-03	8.76E-04	1.21E-04	8.24E-06	4.79E-05	3.09E-05	4.90E-08	2.73E-06	9.3	5.95E-04	6.71E-05
S21	60	8	7	5	3.05E-01	2.70E-02	3.83E-04	1.12E-02	2.63E-03	3.64E-04	2.48E-05	1.44E-04	9.26E-05	1.47E-07	8.21E-06	28.0	1.79E-03	2.01E-04
S21	60	8	8	5	4.84E-01	4.12E-02	5.85E-04	1.71E-02	4.02E-03	5.62E-04	3.84E-05	2.23E-04	1.42E-04	2.25E-07	1.27E-05	43.3	2.77E-03	3.08E-04
S21	60	8	9	5	4.23E-01	3.33E-02	4.73E-04	1.38E-02	3.25E-03	4.60E-04	3.15E-05	1.82E-04	1.14E-04	1.82E-07	1.04E-05	35.5	2.27E-03	2.49E-04
S21	60	8	10	5	3.66E-01	2.75E-02	3.90E-04	1.14E-02	2.68E-03	3.83E-04	2.62E-05	1.52E-04	9.46E-05	1.50E-07	8.66E-06	29.6	1.89E-03	2.05E-04
S21	60	8	11	5	3.44E-01	2.48E-02	3.53E-04	1.03E-02	2.42E-03	3.48E-04	2.39E-05	1.38E-04	8.58E-05	1.36E-07	7.89E-06	27.0	1.72E-03	1.85E-04
S21	60	8	12	5	4.14E-01	2.80E-02	3.98E-04	1.16E-02	2.73E-03	3.98E-04	2.74E-05	1.58E-04	9.80E-05	1.53E-07	9.02E-06	30.9	1.97E-03	2.09E-04
S21	60	8	13	5	4.44E-01	2.96E-02	4.20E-04	1.22E-02	2.89E-03	4.22E-04	2.90E-05	1.68E-04	1.04E-04	1.62E-07	9.56E-06	32.8	2.09E-03	2.21E-04
S21	60	8	14	5	4.57E-01	3.01E-02	4.28E-04	1.25E-02	2.94E-03	4.30E-04	2.96E-05	1.71E-04	1.06E-04	1.64E-07	9.75E-06	33.5	2.13E-03	2.25E-04
S21	60	8	15	5	4.77E-01	3.12E-02	4.43E-04	1.29E-02	3.04E-03	4.46E-04	3.07E-05	1.77E-04	1.10E-04	1.70E-07	1.01E-05	34.7	2.21E-03	2.33E-04
S21	60	8	16	5	5.16E-01	3.38E-02	4.80E-04	1.40E-02	3.30E-03	4.84E-04	3.33E-05	1.92E-04	1.19E-04	1.85E-07	1.10E-05	37.6	2.39E-03	2.53E-04
S21	60	8	17	5	6.36E-01	4.18E-02	5.93E-04	1.73E-02	4.07E-03	5.97E-04	4.11E-05	2.37E-04	1.47E-04	2.28E-07	1.35E-05	46.4	2.95E-03	3.12E-04
S21	60	8	18	5	6.75E-01	4.49E-02	6.38E-04	1.86E-02	4.38E-03	6.41E-04	4.40E-05	2.54E-04	1.58E-04	2.45E-07	1.45E-05	49.8	3.17E-03	3.35E-04
S21	60	8	19	5	4.62E-01	3.12E-02	4.43E-04	1.29E-02	3.04E-03	4.43E-04	3.05E-05	1.76E-04	1.09E-04	1.70E-07	1.00E-05	34.4	2.19E-03	2.33E-04
S21	60	8	20	5	2.89E-01	2.06E-02	2.93E-04	8.53E-03	2.01E-03	2.90E-04	1.99E-05	1.15E-04	7.13E-05	1.12E-07	6.56E-06	22.5	1.43E-03	1.54E-04
S21	60	8	21	5	2.35E-01	1.74E-02	2.48E-04	7.21E-03	1.70E-03	2.44E-04	1.67E-05	9.67E-05	6.00E-05	9.51E-08	5.51E-06	18.9	1.20E-03	1.30E-04
S21	60	8	22	5	1.92E-01	1.48E-02	2.10E-04	6.12E-03	1.44E-03	2.05E-04	1.41E-05	8.14E-05	5.09E-05	8.07E-08	4.64E-06	15.9	1.01E-03	1.10E-04
S21	60	8	23	5	1.53E-01	1.22E-02	1.73E-04	5.03E-03	1.19E-03	1.68E-04	1.15E-05	6.65E-05	4.18E-05	6.63E-08	3.79E-06	12.9	8.26E-04	9.08E-05
S21	60	8	24	5	1.09E-01	8.98E-03	1.28E-04	3.72E-03	8.76E-04	1.23E-04	8.42E-06	4.89E-05	3.09E-05	4.90E-08	2.78E-06	9.5	6.07E-04	6.71E-05
S22	60	8	1	5	5.92E-02	5.02E-03	7.13E-05	5.57E-03	1.33E-03	6.86E-05	4.68E-06	2.72E-05	1.73E-05	2.74E-08	1.55E-06	5.3	3.37E-04	3.75E-05
S22	60	8	2	5	3.84E-02	3.35E-03	4.75E-05	3.71E-03	8.89E-04	4.55E-05	3.10E-06	1.80E-05	1.15E-05	1.83E-08	1.03E-06	3.5	2.24E-04	2.50E-05
S22	60	8	3	5	3.32E-02	2.93E-03	4.16E-05	3.25E-03	7.78E-04	3.97E-05	2.70E-06	1.57E-05	1.01E-05	1.60E-08	8.93E-07	3.0	1.95E-04	2.19E-05
S22	60	8	4	5	2.37E-02	2.09E-03	2.97E-05	2.32E-03	5.56E-04	2.83E-05	1.92E-06	1.12E-05	7.19E-06	1.14E-08	6.36E-07	2.2	1.39E-04	1.56E-05
S22	60	8	5	5	3.32E-02	2.93E-03	4.16E-05	3.25E-03	7.78E-04	3.95E-05	2.69E-06	1.56E-05	1.01E-05	1.60E-08	8.90E-07	3.0	1.94E-04	2.19E-05
S22	60	8	6	5	8.06E-02	7.12E-03	1.01E-04	7.88E-03	1.89E-03	9.60E-05	6.53E-06	3.80E-05	2.45E-05	3.88E-08	2.16E-06	7.4	4.71E-04	5.31E-05
S22	60	8	7	5	2.42E-01	2.13E-02	3.03E-04	2.37E-02	5.67E-03	2.89E-04	1.96E-05	1.14E-04	7.34E-05	1.16E-07	6.50E-06	22.2	1.42E-03	1.59E-04
S22	60	8	8	5	3.83E-01	3.27E-02	4.63E-04	3.62E-02	8.67E-03	4.45E-04	3.04E-05	1.76E-04	1.12E-04	1.78E-07	1.00E-05	34.3	2.19E-03	2.44E-04
S22	60	8	9	5	3.35E-01	2.64E-02	3.74E-04	2.92E-02	7.00E-03	3.64E-04	2.49E-05	1.44E-04	9.07E-05	1.44E-07	8.23E-06	28.2	1.80E-03	1.97E-04
S22	60	8	10	5	2.90E-01	2.18E-02	3.09E-04	2.41E-02	5.78E-03	3.03E-04	2.08E-05	1.20E-04	7.49E-05	1.19E-07	6.86E-06	23.5	1.50E-03	1.63E-04
S22	60	8	11	5	2.72E-01	1.97E-02	2.79E-04	2.18E-02	5.22E-03	2.76E-04	1.89E-05	1.10E-04	6.79E-05	1.07E-07	6.25E-06	21.4	1.36E-03	1.47E-04
S22	60	8	12	5	3.28E-01	2.22E-02	3.15E-04	2.46E-02	5.89E-03	3.15E-04	2.17E-05	1.25E-04	7.76E-05	1.21E-07	7.14E-06	24.5	1.56E-03	1.66E-04
S22	60	8	13	5	3.52E-01	2.34E-02	3.33E-04	2.60E-02	6.22E-03	3.34E-04	2.30E-05	1.33E-04	8.23E-05	1.28E-07	7.57E-06	26.0	1.65E-03	1.75E-04
S22	60	8	14	5	3.62E-01	2.39E-02	3.39E-04	2.64E-02	6.33E-03	3.41E-04	2.34E-05	1.35E-04	8.40E-05	1.30E-07	7.73E-06	26.5	1.69E-03	1.78E-04
S22	60	8	15	5	3.78E-01	2.47E-02	3.51E-04	2.74E-02	6.56E-03	3.53E-04	2.43E-05	1.40E-04	8.71E-05	1.35E-07	8.01E-06	27.5	1.75E-03	1.84E-04
S22	60	8	16	5	4.09E-01	2.68E-02	3.80E-04	2.97E-02	7.11E-03	3.83E-04	2.64E-05	1.52E-04	9.44E-05	1.46E-07	8.69E-06	29.8	1.90E-03	2.00E-04
S22	60	8	17	5	5.03E-01	3.31E-02	4.69E-04	3.66E-02	8.78E-03	4.73E-04	3.25E-05	1.88E-04	1.16E-04	1.80E-07	1.07E-05	36.8	2.34E-03	2.47E-04
S22	60	8	18	5	5.35E-01	3.56E-02	5.05E-04	3.94E-02	9.45E-03	5.07E-04	3.49E-05	2.02E-04	1.25E-04	1.94E-07	1.15E-05	39.4	2.51E-03	2.66E-04
S22	60	8	19	5	3.66E-01	2.47E-02	3.51E-04	2.74E-02	6.56E-03	3.51E-04	2.41E-05	1.39E-04	8.65E-05	1.35E-07	7.96E-06	27.3	1.74E-03	1.84E-04
S22	60	8	20	5	2.29E-01	1.63E-02	2.32E-04	1.81E-02	4.33E-03	2.30E-04	1.58E-05	9.12E-05	5.65E-05	8.91E-08	5.20E-06	17.8	1.13E-03	1.22E-04
S22	60	8	21	5	1.86E-01	1.38E-02	1.96E-04	1.53E-02	3.67E-03	1.93E-04	1.32E-05	7.66E-05	4.75E-05	7.54E-08	4.36E-06	14.9	9.52E-04	1.03E-04
S22	60	8	22	5	1.52E-01	1.17E-02	1.66E-04	1.30E-02	3.11E-03	1.63E-04	1.11E-05	6.45E-05	4.03E-05	6.39E-08	3.68E-06	12.6	8.02E-04	8.75E-05
S22	60	8	23	5	1.21E-01	9.63E-03	1.37E-04	1.07E-02	2.56E-03	1.33E-04	9.08E-06	5.27E-05	3.31E-05	5.25E-08	3.00E-06	10.3	6.54E-04	7.19E-05
S22	60	8	24	5	8.66E-02	7.12E-03	1.01E-04	7.88E-03	1.89E-03	9.77E-05	6.67E-06	3.87E-05	2.45E-05	3.88E-08	2.20E-06	7.5	4.81E-04	5.31E-05
S23	60	8	1	5	3.54E-02	3.00E-03	4.26E-05	3.33E-03	7.97E-04	4.10E-05	2.80E-06	1.62E-05	1.03E-05	1.64E-08	9.25E-07	3.2	2.02E-04	2.24E-05
S23	60	8	2	5	2.30E-02	2.00E-03	2.84E-05	2.22E-03	5.32E-04	2.72E-05	1.86E-06	1.08E-05	6.88E-06	1.09E-08	6.14E-07	2.1	1.34E-04	1.50E-05
S23	60	8	3	5	1.98E-02	1.75E-03	2.49E-05	1.94E-03	4.65E-04	2.37E-05	1.61E-06	9.38E-06	6.02E-06	9.56E-09	5.34E-07	1.8	1.16E-04	1.31E-05
S23	60	8	4	5	1.42E-02	1.25E-03	1.78E-05	1.39E-03	3.32E-04	1.69E-05	1.15E-06	6.68E-06	4.30E-06	6.82E-09	3.80E-07	1.3	8.29E-05	9.35E-06
S23	60	8	5	5	1.98E-02	1.75E-03	2.49E-05	1.94E-03	4.65E-04	2.36E-05	1.61E-06	9.35E-06	6.02E-06	9.55E-09	5.32E-07	1.8	1.16E-04	1.31E-05
S23	60	8	6	5	4.82E-02	4.26E-03	6.04E-05	4.71E-03	1.13E-03	5.74E-05	3.91E-06	2.27E-05	1.46E-05	2.32E-08	1.29E-06	4.4	2.82E-04	3.18E-05
S23	60	8	7	5	1.45E-01	1.28E-02	1.81E-04	1.41E-02	3.39E-03	1.73E-04	1.17E-05	6.83E-05	4.39E-05	6.96E-08	3.89E-06	13.3	8.47E-04	9.53E-05
S23	60	8	8	5	2.29E-01	1.95E-02	2.77E-04	2.16E-02	5.18E-03	2.66E-04	1.82E-05	1.05E-04	6.71E-05	1.06E-07	6.01E-06	20.5	1.31E-03	1.46E-04
S23	60	8	9	5	2.00E-01	1.58E-02	2.24E-04	1.75E-02	4.19E-03	2.18E-04	1.49E-05	8.64E-05	5.42E-05	8.60E-08	4.92E-06	16.8	1.07E-03	1.18E-04
S23	60	8	10	5	1.73E-01	1.30E-02	1.85E-04	1.44E-02	3.46E-03	1.81E-04	1.24E-05	7.20E-05	4.48E-05	7.10E-08	4.10E-06	14.0	8.95E-04	9.72E-05
S23	60	8	11	5	1.63E-01	1.18E-02	1.67E-04	1.30E-02	3.12E-03	1.65E-04	1.13E-05	6.55E-05	4.06E-05	6.42E-08	3.74E-06	12.8	8.15E-04	8.78E-05
S23	60	8	12	5	1.96E-01	1.33E-02	1.88E-04	1.47E-02	3.52E-03	1.88E-04	1.30E-05	7.49E-05	4.64E-05	7.24E-08	4.27E-06	14.6	9.32E-04	9.91E-05
S23	60	8	13	5	2.11E-01	1.40E-02	1.99E-04	1.55E-02	3.72E-03	2.00E-04	1.37E-05	7.94E-05	4.92E-05	7.65E-08	4.53E-06	15.5	9.88E-04	1.05E-04
S23	60	8	14	5	2.16E-01	1.43E-02	2.03E-04	1.58E-02	3.79E-03	2.04E-04	1.40E-05	8.10E-05	5.02E-05	7.79E-08	4.62E-06	15.9	1.01E-03	1.07E-04
S23	60	8	15	5	2.26E-01	1.48E-02	2.10E-04	1.64E-02	3.92E-03	2.11E-04	1.45E-05	8.40E-05	5.21E-05	8.06E-08	4.79E-06	16.4	1.05E-03	1.10E-04
S23	60	8	16	5	2.44E-01	1.60E-02	2.27E-04	1.77E-02	4.25E-03	2.29E-04	1.58E-05	9.10E-05	5.65E-05	8.74E-08	5.19E-06	17.8	1.13E-03	1.20E-04
S23	60	8	17	5	3.01E-01	1.98E-02	2.81E-04	2.19E-02	5.25E-03	2.83E-04	1.94E-05	1.12E-04	6.97E-05	1.08E-07	6.41E-06	22.0	1.40E-03	1.48E-04
S23	60	8	18	5	3.20E-01	2.13E-02	3.02E-04	2.36E-02	5.65E-03	3.03E-04	2.09E-05	1.21E-04	7.47E-05	1.16E-07	6.88E-06	23.6	1.50E-03	1.59E-04
S23	60	8	19	5	2.19E-01	1.48E-02	2.10E-04	1.64E-02	3.92E-03	2.10E-04	1.44E-05	8.34E-05	5.17E-05	8.06E-08	4.76E-06	16.3	1.04E-03	1.10E-04
S23	60	8	20	5	1.37E-01	9.76E-03	1.39E-04	1.08E-02	2.59E-03	1.37E-04	9.42E-06	5.45E-05	3.38E-05	5.33E-08	3.11E-06	10.7	6.78E-04	7.29E-05
S23	60	8	21	5	1.11E-01	8.26E-03	1.17E-04	9.15E-03	2.19E-03	1.15E-04	7.91E-06	4.58E-05	2.84E-05	4.51E-08	2.61E-06	8.9	5.69E-04	6.17E-05
S23	60	8	22	5	9.11E-02	7.01E-03	9.95E-05	7.76E-03	1.86E-03	9.72E-05	6.66E-06	3.86E-05	2.41E-05	3.82E-08	2.20E-06	7.5	4.79E-04	5.23E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	23	5	7.23E-02	5.76E-03	8.17E-05	6.38E-03	1.53E-03	7.94E-05	5.43E-06	3.15E-05	1.98E-05	3.14E-08	1.79E-06	6.1	3.91E-04	4.30E-05
S23	60	8	24	5	5.18E-02	4.26E-03	6.04E-05	4.71E-03	1.13E-03	5.84E-05	3.99E-06	2.31E-05	1.46E-05	2.32E-08	1.32E-06	4.5	2.87E-04	3.18E-05
S24	60	8	1	5	2.63E-02	2.23E-03	3.17E-05	2.47E-03	5.92E-04	3.05E-05	2.08E-06	1.21E-05	7.67E-06	1.22E-08	6.87E-07	2.3	1.50E-04	1.67E-05
S24	60	8	2	5	1.71E-02	1.49E-03	2.11E-05	1.65E-03	3.95E-04	2.02E-05	1.38E-06	8.01E-06	5.11E-06	8.11E-09	4.56E-07	1.6	9.94E-05	1.11E-05
S24	60	8	3	5	1.47E-02	1.30E-03	1.85E-05	1.44E-03	3.46E-04	1.76E-05	1.20E-06	6.97E-06	4.47E-06	7.10E-09	3.97E-07	1.4	8.65E-05	9.72E-06
S24	60	8	4	5	1.05E-02	9.30E-04	1.32E-05	1.03E-03	2.47E-04	1.26E-05	8.54E-07	4.97E-06	3.20E-06	5.07E-09	2.83E-07	1.0	6.16E-05	6.94E-06
S24	60	8	5	5	1.47E-02	1.30E-03	1.85E-05	1.44E-03	3.46E-04	1.76E-05	1.19E-06	6.95E-06	4.47E-06	7.10E-09	3.95E-07	1.3	8.62E-05	9.72E-06
S24	60	8	6	5	3.58E-02	3.16E-03	4.49E-05	3.50E-03	8.39E-04	4.27E-05	2.90E-06	1.69E-05	1.09E-05	1.72E-08	9.60E-07	3.3	2.09E-04	2.36E-05
S24	60	8	7	5	1.07E-01	9.48E-03	1.35E-04	1.05E-02	2.52E-03	1.28E-04	8.73E-06	5.07E-05	3.26E-05	5.17E-08	2.89E-06	9.9	6.29E-04	7.08E-05
S24	60	8	8	5	1.70E-01	1.45E-02	2.06E-04	1.61E-02	3.85E-03	1.98E-04	1.35E-05	7.84E-05	4.99E-05	7.91E-08	4.46E-06	15.2	9.73E-04	1.08E-04
S24	60	8	9	5	1.49E-01	1.17E-02	1.66E-04	1.30E-02	3.11E-03	1.62E-04	1.11E-05	6.42E-05	4.03E-05	6.39E-08	3.66E-06	12.5	7.98E-04	8.75E-05
S24	60	8	10	5	1.29E-01	9.67E-03	1.37E-04	1.07E-02	2.57E-03	1.35E-04	9.23E-06	5.35E-05	3.33E-05	5.28E-08	3.05E-06	10.4	6.65E-04	7.22E-05
S24	60	8	11	5	1.21E-01	8.74E-03	1.24E-04	9.68E-03	2.32E-03	1.23E-04	8.41E-06	4.87E-05	3.02E-05	4.77E-08	2.78E-06	9.5	6.05E-04	6.53E-05
S24	60	8	12	5	1.46E-01	9.86E-03	1.40E-04	1.09E-02	2.62E-03	1.40E-04	9.63E-06	5.56E-05	3.45E-05	5.38E-08	3.17E-06	10.9	6.92E-04	7.36E-05
S24	60	8	13	5	1.56E-01	1.04E-02	1.48E-04	1.15E-02	2.76E-03	1.48E-04	1.02E-05	5.90E-05	3.66E-05	5.68E-08	3.37E-06	11.5	7.34E-04	7.78E-05
S24	60	8	14	5	1.61E-01	1.06E-02	1.50E-04	1.17E-02	2.81E-03	1.51E-04	1.04E-05	6.02E-05	3.73E-05	5.79E-08	3.43E-06	11.8	7.49E-04	7.91E-05
S24	60	8	15	5	1.68E-01	1.10E-02	1.56E-04	1.22E-02	2.91E-03	1.57E-04	1.08E-05	6.24E-05	3.87E-05	5.99E-08	3.56E-06	12.2	7.77E-04	8.19E-05
S24	60	8	16	5	1.82E-01	1.19E-02	1.69E-04	1.32E-02	3.16E-03	1.70E-04	1.17E-05	6.76E-05	4.19E-05	6.50E-08	3.86E-06	13.2	8.42E-04	8.89E-05
S24	60	8	17	5	2.24E-01	1.47E-02	2.09E-04	1.63E-02	3.90E-03	2.10E-04	1.44E-05	8.34E-05	5.17E-05	8.02E-08	4.76E-06	16.3	1.04E-03	1.10E-04
S24	60	8	18	5	2.38E-01	1.58E-02	2.24E-04	1.75E-02	4.20E-03	2.25E-04	1.55E-05	8.95E-05	5.55E-05	8.63E-08	5.11E-06	17.5	1.11E-03	1.18E-04
S24	60	8	19	5	1.63E-01	1.10E-02	1.56E-04	1.22E-02	2.91E-03	1.56E-04	1.07E-05	6.20E-05	3.84E-05	5.99E-08	3.53E-06	12.1	7.71E-04	8.19E-05
S24	60	8	20	5	1.02E-01	7.25E-03	1.03E-04	8.03E-03	1.93E-03	1.02E-04	7.00E-06	4.05E-05	2.51E-05	3.96E-08	2.31E-06	7.9	5.04E-04	5.42E-05
S24	60	8	21	5	8.28E-02	6.14E-03	8.71E-05	6.80E-03	1.63E-03	8.57E-05	5.87E-06	3.40E-05	2.11E-05	3.35E-08	1.94E-06	6.6	4.23E-04	4.58E-05
S24	60	8	22	5	6.77E-02	5.21E-03	7.39E-05	5.77E-03	1.38E-03	7.22E-05	4.95E-06	2.87E-05	1.79E-05	2.84E-08	1.63E-06	5.6	3.56E-04	3.89E-05
S24	60	8	23	5	5.37E-02	4.28E-03	6.07E-05	4.74E-03	1.14E-03	5.90E-05	4.03E-06	2.34E-05	1.47E-05	2.33E-08	1.33E-06	4.6	2.91E-04	3.19E-05
S24	60	8	24	5	3.85E-02	3.16E-03	4.49E-05	3.50E-03	8.39E-04	4.34E-05	2.96E-06	1.72E-05	1.09E-05	1.72E-08	9.79E-07	3.3	2.14E-04	2.36E-05
S25	60	8	1	5	2.18E-02	1.85E-03	2.63E-05	2.05E-03	4.92E-04	2.53E-05	1.73E-06	1.00E-05	6.37E-06	1.01E-08	5.71E-07	1.9	1.24E-04	1.38E-05
S25	60	8	2	5	1.42E-02	1.24E-03	1.75E-05	1.37E-03	3.28E-04	1.68E-05	1.15E-06	6.65E-06	4.25E-06	6.74E-09	3.79E-07	1.3	8.26E-05	9.23E-06
S25	60	8	3	5	1.22E-02	1.08E-03	1.53E-05	1.20E-03	2.87E-04	1.46E-05	9.96E-07	5.79E-06	3.72E-06	5.90E-09	3.30E-07	1.1	7.19E-05	8.07E-06
S25	60	8	4	5	8.74E-03	7.72E-04	1.10E-05	8.56E-04	2.05E-04	1.04E-05	7.10E-07	4.12E-06	2.65E-06	4.21E-09	2.35E-07	0.8	5.12E-05	5.77E-06
S25	60	8	5	5	1.22E-02	1.08E-03	1.53E-05	1.20E-03	2.87E-04	1.46E-05	9.92E-07	5.77E-06	3.72E-06	5.90E-09	3.28E-07	1.1	7.16E-05	8.07E-06
S25	60	8	6	5	2.97E-02	2.63E-03	3.73E-05	2.91E-03	6.97E-04	3.54E-05	2.41E-06	1.40E-05	9.02E-06	1.43E-08	7.97E-07	2.7	1.74E-04	1.96E-05
S25	60	8	7	5	8.92E-02	7.88E-03	1.12E-04	8.73E-03	2.09E-03	1.07E-04	7.25E-06	4.21E-05	2.71E-05	4.30E-08	2.40E-06	8.2	5.23E-04	5.88E-05
S25	60	8	8	5	1.41E-01	1.20E-02	1.71E-04	1.33E-02	3.20E-03	1.64E-04	1.12E-05	6.51E-05	4.14E-05	6.57E-08	3.71E-06	12.7	8.08E-04	9.00E-05
S25	60	8	9	5	1.24E-01	9.73E-03	1.38E-04	1.08E-02	2.58E-03	1.34E-04	9.20E-06	5.33E-05	3.35E-05	5.31E-08	3.04E-06	10.4	6.63E-04	7.27E-05
S25	60	8	10	5	1.07E-01	8.03E-03	1.14E-04	8.90E-03	2.13E-03	1.12E-04	7.67E-06	4.44E-05	2.76E-05	4.38E-08	2.53E-06	8.7	5.52E-04	6.00E-05
S25	60	8	11	5	1.00E-01	7.26E-03	1.03E-04	8.04E-03	1.93E-03	1.02E-04	6.99E-06	4.04E-05	2.51E-05	3.96E-08	2.31E-06	7.9	5.03E-04	5.42E-05
S25	60	8	12	5	1.21E-01	8.19E-03	1.16E-04	9.07E-03	2.17E-03	1.16E-04	8.00E-06	4.62E-05	2.86E-05	4.47E-08	2.64E-06	9.0	5.75E-04	6.11E-05
S25	60	8	13	5	1.30E-01	8.65E-03	1.23E-04	9.58E-03	2.30E-03	1.23E-04	8.48E-06	4.90E-05	3.04E-05	4.72E-08	2.80E-06	9.6	6.10E-04	6.46E-05
S25	60	8	14	5	1.33E-01	8.80E-03	1.25E-04	9.75E-03	2.34E-03	1.26E-04	8.65E-06	5.00E-05	3.10E-05	4.81E-08	2.85E-06	9.8	6.22E-04	6.57E-05
S25	60	8	15	5	1.40E-01	9.11E-03	1.29E-04	1.01E-02	2.42E-03	1.30E-04	8.98E-06	5.18E-05	3.21E-05	4.97E-08	2.96E-06	10.1	6.45E-04	6.80E-05
S25	60	8	16	5	1.51E-01	9.89E-03	1.40E-04	1.10E-02	2.62E-03	1.41E-04	9.73E-06	5.62E-05	3.48E-05	5.40E-08	3.21E-06	11.0	6.99E-04	7.38E-05
S25	60	8	17	5	1.86E-01	1.22E-02	1.73E-04	1.35E-02	3.24E-03	1.74E-04	1.20E-05	6.93E-05	4.30E-05	6.66E-08	3.95E-06	13.6	8.63E-04	9.11E-05
S25	60	8	18	5	1.97E-01	1.31E-02	1.86E-04	1.45E-02	3.49E-03	1.87E-04	1.29E-05	7.44E-05	4.61E-05	7.17E-08	4.24E-06	14.6	9.26E-04	9.80E-05
S25	60	8	19	5	1.35E-01	9.11E-03	1.29E-04	1.01E-02	2.42E-03	1.30E-04	8.91E-06	5.15E-05	3.19E-05	4.97E-08	2.94E-06	10.1	6.41E-04	6.80E-05
S25	60	8	20	5	8.45E-02	6.02E-03	8.55E-05	6.67E-03	1.60E-03	8.48E-05	5.82E-06	3.36E-05	2.09E-05	3.29E-08	1.92E-06	6.6	4.19E-04	4.50E-05
S25	60	8	21	5	6.87E-02	5.10E-03	7.23E-05	5.65E-03	1.35E-03	7.12E-05	4.88E-06	2.82E-05	1.75E-05	2.78E-08	1.61E-06	5.5	3.51E-04	3.81E-05
S25	60	8	22	5	5.62E-02	4.33E-03	6.14E-05	4.79E-03	1.15E-03	6.00E-05	4.11E-06	2.38E-05	1.49E-05	2.36E-08	1.36E-06	4.6	2.96E-04	3.23E-05
S25	60	8	23	5	4.46E-02	3.55E-03	5.04E-05	3.94E-03	9.43E-04	4.90E-05	3.35E-06	1.94E-05	1.22E-05	1.94E-08	1.11E-06	3.8	2.41E-04	2.65E-05
S25	60	8	24	5	3.20E-02	2.63E-03	3.73E-05	2.91E-03	6.97E-04	3.60E-05	2.46E-06	1.43E-05	9.02E-06	1.43E-08	8.13E-07	2.8	1.77E-04	1.96E-05
S26	60	8	1	5	6.75E-02	5.73E-03	8.13E-05	6.35E-03	1.52E-03	7.82E-05	5.33E-06	3.10E-05	1.97E-05	3.12E-08	1.76E-06	6.0	3.84E-04	4.28E-05
S26	60	8	2	5	4.38E-02	3.82E-03	5.42E-05	4.23E-03	1.01E-03	5.19E-05	3.54E-06	2.06E-05	1.31E-05	2.08E-08	1.17E-06	4.0	2.55E-04	2.85E-05
S26	60	8	3	5	3.78E-02	3.34E-03	4.74E-05	3.70E-03	8.87E-04	4.52E-05	3.08E-06	1.79E-05	1.15E-05	1.82E-08	1.02E-06	3.5	2.22E-04	2.49E-05
S26	60	8	4	5	2.70E-02	2.39E-03	3.39E-05	2.64E-03	6.34E-04	3.22E-05	2.19E-06	1.27E-05	8.20E-06	1.30E-08	7.25E-07	2.5	1.58E-04	1.78E-05
S26	60	8	5	5	3.78E-02	3.34E-03	4.74E-05	3.70E-03	8.87E-04	4.51E-05	3.07E-06	1.78E-05	1.15E-05	1.82E-08	1.01E-06	3.5	2.21E-04	2.49E-05
S26	60	8	6	5	9.19E-02	8.11E-03	1.15E-04	8.99E-03	2.15E-03	1.09E-04	7.45E-06	4.33E-05	2.79E-05	4.42E-08	2.46E-06	8.4	5.37E-04	6.06E-05
S26	60	8	7	5	2.76E-01	2.43E-02	3.45E-04	2.70E-02	6.46E-03	3.29E-04	2.24E-05	1.30E-04	8.37E-05	1.33E-07	7.41E-06	25.3	1.62E-03	1.82E-04
S26	60	8	8	5	4.37E-01	3.72E-02	5.28E-04	4.12E-02	9.88E-03	5.08E-04	3.46E-05	2.01E-04	1.28E-04	2.03E-07	1.15E-05	39.1	2.50E-03	2.78E-04
S26	60	8	9	5	3.82E-01	3.01E-02	4.27E-04	3.33E-02	7.98E-03	4.15E-04	2.84E-05	1.65E-04	1.03E-04	1.64E-07	9.39E-06	32.1	2.05E-03	2.25E-04
S26	60	8	10	5	3.31E-01	2.48E-02	3.52E-04	2.75E-02	6.59E-03	3.46E-04	2.37E-05	1.37E-04	8.54E-05	1.35E-07	7.82E-06	26.8	1.71E-03	1.85E-04
S26	60	8	11	5	3.10E-01	2.24E-02	3.18E-04	2.49E-02	5.96E-03	3.15E-04	2.16E-05	1.25E-04	7.75E-05	1.22E-07	7.12E-06	24.4	1.55E-03	1.67E-04
S26	60	8	12	5	3.74E-01	2.53E-02	3.59E-04	2.80E-02	6.72E-03	3.59E-04	2.47E-05	1.43E-04	8.85E-05	1.38E-07	8.14E-06	27.9	1.78E-03	1.89E-04
S26	60	8	13	5	4.01E-01	2.67E-02	3.79E-04	2.96E-02	7.10E-03	3.81E-04	2.62E-05	1.51E-04	9.39E-05	1.46E-07	8.64E-06	29.6	1.88E-03	2.00E-04
S26	60	8	14	5	4.12E-01	2.72E-02	3.86E-04	3.01E-02	7.22E-03	3.89E-04	2.67E-05	1.54E-04	9.57E-05	1.48E-07	8.81E-06	30.2	1.92E-03	2.03E-04
S26	60	8	15	5	4.31E-01	2.82E-02	4.00E-04	3.12E-02	7.48E-03	4.03E-04	2.77E-05	1.60E-04	9.93E-05	1.54E-07	9.14E-06	31.4	1.99E-03	2.10E-04
S26	60	8	16	5	4.66E-01	3.05E-02	4.34E-04	3.38E-02	8.11E-03	4.37E-04	3.01E-05	1.74E-04	1.08E-04	1.67E-07	9.90E-06	34.0	2.16E-03	2.28E-04
S26	60	8	17	5	5.74E-01	3.77E-02	5.35E-04	4.18E-02	1.00E-02	5.39E-04	3.71E-05	2.14E-04	1.33E-04	2.06E-07	1.22E-05	41.9	2.67E-03	2.82E-04
S26	60	8	18	5	6.10E-01	4.06E-02	5.76E-04	4.49E-02	1.08E-02	5.79E-04	3.98E-05	2.30E-04	1.43E-04	2.21E-07	1.31E-05	45.0	2.86E-03	3.03E-04
S26	60	8	19	5	4.17E-01	2.82E-02	4.00E-04	3.12E-02	7.48E-03	4.00E-04	2.75E-05	1.59E-04	9.86E-05	1.54E-07	9.07E-06	31.1	1.98E-03	2.10E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	20	5	2.61E-01	1.86E-02	2.64E-04	2.06E-02	4.94E-03	2.62E-04	1.80E-05	1.04E-04	6.44E-05	1.02E-07	5.93E-06	20.3	1.29E-03	1.39E-04
S26	60	8	21	5	2.12E-01	1.58E-02	2.24E-04	1.74E-02	4.18E-03	2.20E-04	1.51E-05	8.73E-05	5.42E-05	8.59E-08	4.98E-06	17.0	1.09E-03	1.18E-04
S26	60	8	22	5	1.74E-01	1.34E-02	1.90E-04	1.48E-02	3.55E-03	1.85E-04	1.27E-05	7.35E-05	4.60E-05	7.29E-08	4.19E-06	14.3	9.14E-04	9.98E-05
S26	60	8	23	5	1.38E-01	1.10E-02	1.56E-04	1.22E-02	2.91E-03	1.51E-04	1.04E-05	6.00E-05	3.77E-05	5.99E-08	3.42E-06	11.7	7.46E-04	8.20E-05
S26	60	8	24	5	9.88E-02	8.11E-03	1.15E-04	8.99E-03	2.15E-03	1.11E-04	7.60E-06	4.41E-05	2.79E-05	4.43E-08	2.51E-06	8.6	5.48E-04	6.06E-05
S27	50	7	1	5	5.11E-02	4.06E-03	5.93E-05	4.54E-03	1.08E-03	6.14E-05	4.25E-06	2.42E-05	1.55E-05	2.34E-08	1.37E-06	4.4	3.03E-04	3.46E-05
S27	50	7	2	5	3.32E-02	2.70E-03	3.95E-05	3.02E-03	7.17E-04	4.08E-05	2.82E-06	1.61E-05	1.03E-05	1.56E-08	9.11E-07	2.9	2.01E-04	2.30E-05
S27	50	7	3	5	2.87E-02	2.37E-03	3.46E-05	2.65E-03	6.27E-04	3.55E-05	2.45E-06	1.40E-05	9.03E-06	1.36E-08	7.93E-07	2.5	1.75E-04	2.02E-05
S27	50	7	4	5	2.05E-02	1.69E-03	2.47E-05	1.89E-03	4.48E-04	2.53E-05	1.75E-06	9.96E-06	6.45E-06	9.75E-09	5.65E-07	1.8	1.25E-04	1.44E-05
S27	50	7	5	5	2.87E-02	2.37E-03	3.46E-05	2.65E-03	6.27E-04	3.54E-05	2.44E-06	1.39E-05	9.03E-06	1.36E-08	7.90E-07	2.5	1.74E-04	2.02E-05
S27	50	7	6	5	6.96E-02	5.75E-03	8.40E-05	6.43E-03	1.52E-03	8.60E-05	5.93E-06	3.38E-05	2.19E-05	3.31E-08	1.92E-06	6.1	4.23E-04	4.90E-05
S27	50	7	7	5	2.09E-01	1.72E-02	2.52E-04	1.93E-02	4.57E-03	2.59E-04	1.78E-05	1.02E-04	6.58E-05	9.94E-08	5.77E-06	18.5	1.27E-03	1.47E-04
S27	50	7	8	5	3.31E-01	2.64E-02	3.85E-04	2.95E-02	6.99E-03	3.99E-04	2.76E-05	1.57E-04	1.01E-04	1.52E-07	8.92E-06	28.6	1.97E-03	2.25E-04
S27	50	7	9	5	2.89E-01	2.13E-02	3.11E-04	2.38E-02	5.65E-03	3.26E-04	2.26E-05	1.29E-04	8.13E-05	1.23E-07	7.31E-06	23.5	1.61E-03	1.81E-04
S27	50	7	10	5	2.51E-01	1.76E-02	2.57E-04	1.97E-02	4.66E-03	2.72E-04	1.88E-05	1.07E-04	6.72E-05	1.01E-07	6.09E-06	19.6	1.34E-03	1.50E-04
S27	50	7	11	5	2.35E-01	1.59E-02	2.32E-04	1.78E-02	4.21E-03	2.47E-04	1.72E-05	9.75E-05	6.08E-05	9.17E-08	5.54E-06	17.8	1.22E-03	1.35E-04
S27	50	7	12	5	2.84E-01	1.79E-02	2.62E-04	2.00E-02	4.75E-03	2.82E-04	1.96E-05	1.11E-04	6.95E-05	1.03E-07	6.33E-06	20.4	1.40E-03	1.53E-04
S27	50	7	13	5	3.05E-01	1.89E-02	2.77E-04	2.12E-02	5.02E-03	2.99E-04	2.08E-05	1.18E-04	7.37E-05	1.09E-07	6.72E-06	21.7	1.48E-03	1.61E-04
S27	50	7	14	5	3.13E-01	1.93E-02	2.82E-04	2.15E-02	5.11E-03	3.05E-04	2.12E-05	1.20E-04	7.51E-05	1.11E-07	6.85E-06	22.1	1.51E-03	1.64E-04
S27	50	7	15	5	3.27E-01	1.99E-02	2.93E-04	2.23E-02	5.29E-03	3.16E-04	2.20E-05	1.25E-04	7.79E-05	1.15E-07	7.10E-06	23.0	1.57E-03	1.70E-04
S27	50	7	16	5	3.54E-01	2.16E-02	3.17E-04	2.42E-02	5.74E-03	3.43E-04	2.39E-05	1.35E-04	8.45E-05	1.25E-07	7.70E-06	24.9	1.70E-03	1.84E-04
S27	50	7	17	5	4.36E-01	2.67E-02	3.91E-04	2.99E-02	7.08E-03	4.23E-04	2.95E-05	1.67E-04	1.04E-04	1.54E-07	9.50E-06	30.7	2.10E-03	2.28E-04
S27	50	7	18	5	4.63E-01	2.87E-02	4.20E-04	3.21E-02	7.62E-03	4.54E-04	3.16E-05	1.79E-04	1.12E-04	1.66E-07	1.02E-05	32.9	2.25E-03	2.45E-04
S27	50	7	19	5	3.17E-01	1.99E-02	2.92E-04	2.23E-02	5.29E-03	3.14E-04	2.19E-05	1.24E-04	7.74E-05	1.15E-07	7.05E-06	22.8	1.56E-03	1.70E-04
S27	50	7	20	5	1.98E-01	1.32E-02	1.93E-04	1.47E-02	3.50E-03	2.06E-04	1.43E-05	8.11E-05	5.06E-05	7.61E-08	4.61E-06	14.9	1.02E-03	1.12E-04
S27	50	7	21	5	1.61E-01	1.12E-02	1.63E-04	1.25E-02	2.96E-03	1.73E-04	1.20E-05	6.81E-05	4.26E-05	6.44E-08	3.87E-06	12.5	8.54E-04	9.50E-05
S27	50	7	22	5	1.32E-01	9.47E-03	1.38E-04	1.06E-02	2.51E-03	1.46E-04	1.01E-05	5.74E-05	3.61E-05	5.46E-08	3.26E-06	10.5	7.19E-04	8.06E-05
S27	50	7	23	5	1.05E-01	7.78E-03	1.14E-04	8.69E-03	2.06E-03	1.19E-04	8.24E-06	4.69E-05	2.97E-05	4.48E-08	2.66E-06	8.5	5.87E-04	6.62E-05
S27	50	7	24	5	7.48E-02	5.75E-03	8.40E-05	6.43E-03	1.52E-03	8.75E-05	6.05E-06	3.45E-05	2.19E-05	3.31E-08	1.96E-06	6.3	4.31E-04	4.90E-05
S28	50	7	1	5	3.52E-02	2.80E-03	4.09E-05	1.23E-03	2.82E-04	4.24E-05	2.93E-06	1.67E-05	1.07E-05	1.61E-08	9.47E-07	3.0	2.09E-04	2.38E-05
S28	50	7	2	5	2.29E-02	1.87E-03	2.73E-05	8.19E-04	1.88E-04	2.81E-05	1.94E-06	1.11E-05	7.12E-06	1.08E-08	6.29E-07	2.0	1.39E-04	1.59E-05
S28	50	7	3	5	1.98E-02	1.63E-03	2.39E-05	7.17E-04	1.65E-04	2.45E-05	1.69E-06	9.64E-06	6.23E-06	9.41E-09	5.47E-07	1.7	1.21E-04	1.39E-05
S28	50	7	4	5	1.41E-02	1.17E-03	1.70E-05	5.12E-04	1.18E-04	1.75E-05	1.20E-06	6.87E-06	4.45E-06	6.72E-09	3.90E-07	1.2	8.59E-05	9.93E-06
S28	50	7	5	5	1.98E-02	1.63E-03	2.39E-05	7.17E-04	1.65E-04	2.44E-05	1.68E-06	9.61E-06	6.23E-06	9.41E-09	5.45E-07	1.7	1.20E-04	1.39E-05
S28	50	7	6	5	4.80E-02	3.96E-03	5.80E-05	1.74E-03	4.00E-04	5.93E-05	4.09E-06	2.33E-05	1.51E-05	2.29E-08	1.32E-06	4.2	2.92E-04	3.38E-05
S28	50	7	7	5	1.44E-01	1.19E-02	1.74E-04	5.22E-03	1.20E-03	1.78E-04	1.23E-05	7.02E-05	4.54E-05	6.86E-08	3.98E-06	12.7	8.77E-04	1.01E-04
S28	50	7	8	5	2.28E-01	1.82E-02	2.66E-04	7.99E-03	1.83E-03	2.75E-04	1.90E-05	1.08E-04	6.94E-05	1.05E-07	6.15E-06	19.7	1.36E-03	1.55E-04
S28	50	7	9	5	2.00E-01	1.47E-02	2.15E-04	6.45E-03	1.48E-03	2.25E-04	1.56E-05	8.87E-05	5.61E-05	8.47E-08	5.04E-06	16.2	1.11E-03	1.25E-04
S28	50	7	10	5	1.73E-01	1.21E-02	1.77E-04	5.33E-03	1.22E-03	1.87E-04	1.30E-05	7.39E-05	4.63E-05	7.00E-08	4.20E-06	13.5	9.26E-04	1.03E-04
S28	50	7	11	5	1.62E-01	1.10E-02	1.60E-04	4.81E-03	1.11E-03	1.70E-04	1.18E-05	6.73E-05	4.20E-05	6.32E-08	3.82E-06	12.3	8.43E-04	9.34E-05
S28	50	7	12	5	1.96E-01	1.24E-02	1.81E-04	5.43E-03	1.25E-03	1.95E-04	1.35E-05	7.68E-05	4.79E-05	7.13E-08	4.37E-06	14.1	9.64E-04	1.05E-04
S28	50	7	13	5	2.10E-01	1.31E-02	1.91E-04	5.74E-03	1.32E-03	2.06E-04	1.44E-05	8.15E-05	5.08E-05	7.54E-08	4.63E-06	15.0	1.02E-03	1.11E-04
S28	50	7	14	5	2.16E-01	1.33E-02	1.95E-04	5.84E-03	1.34E-03	2.10E-04	1.47E-05	8.31E-05	5.18E-05	7.67E-08	4.72E-06	15.3	1.04E-03	1.13E-04
S28	50	7	15	5	2.26E-01	1.38E-02	2.02E-04	6.04E-03	1.39E-03	2.18E-04	1.52E-05	8.62E-05	5.38E-05	7.94E-08	4.90E-06	15.8	1.08E-03	1.17E-04
S28	50	7	16	5	2.44E-01	1.49E-02	2.19E-04	6.55E-03	1.51E-03	2.37E-04	1.65E-05	9.34E-05	5.83E-05	8.61E-08	5.31E-06	17.2	1.17E-03	1.27E-04
S28	50	7	17	5	3.01E-01	1.84E-02	2.70E-04	8.09E-03	1.86E-03	2.92E-04	2.03E-05	1.15E-04	7.19E-05	1.06E-07	6.55E-06	21.2	1.45E-03	1.57E-04
S28	50	7	18	5	3.19E-01	1.98E-02	2.90E-04	8.71E-03	2.00E-03	3.13E-04	2.18E-05	1.24E-04	7.71E-05	1.14E-07	7.03E-06	22.7	1.55E-03	1.69E-04
S28	50	7	19	5	2.18E-01	1.38E-02	2.01E-04	6.04E-03	1.39E-03	2.17E-04	1.51E-05	8.56E-05	5.34E-05	7.94E-08	4.87E-06	15.7	1.07E-03	1.17E-04
S28	50	7	20	5	1.37E-01	9.09E-03	1.33E-04	3.99E-03	9.17E-04	1.42E-04	9.86E-06	5.60E-05	3.49E-05	5.25E-08	3.18E-06	10.2	7.02E-04	7.75E-05
S28	50	7	21	5	1.11E-01	7.70E-03	1.12E-04	3.38E-03	7.76E-04	1.19E-04	8.27E-06	4.70E-05	2.94E-05	4.44E-08	2.67E-06	8.6	5.89E-04	6.56E-05
S28	50	7	22	5	9.08E-02	6.53E-03	9.54E-05	2.87E-03	6.59E-04	1.00E-04	6.96E-06	3.96E-05	2.49E-05	3.77E-08	2.25E-06	7.2	4.96E-04	5.56E-05
S28	50	7	23	5	7.21E-02	5.36E-03	7.84E-05	2.36E-03	5.41E-04	8.20E-05	5.68E-06	3.23E-05	2.05E-05	3.09E-08	1.84E-06	5.9	4.05E-04	4.57E-05
S28	50	7	24	5	5.16E-02	3.96E-03	5.80E-05	1.74E-03	4.00E-04	6.03E-05	4.17E-06	2.38E-05	1.51E-05	2.29E-08	1.35E-06	4.3	2.98E-04	3.38E-05
S29	60	8	1	5	7.66E-02	6.51E-03	9.23E-05	2.69E-03	6.35E-04	8.88E-05	6.06E-06	3.52E-05	2.24E-05	3.55E-08	2.00E-06	6.8	4.37E-04	4.86E-05
S29	60	8	2	5	4.98E-02	4.34E-03	6.16E-05	1.79E-03	4.23E-04	5.90E-05	4.02E-06	2.33E-05	1.49E-05	2.37E-08	1.33E-06	4.5	2.90E-04	3.24E-05
S29	60	8	3	5	4.30E-02	3.80E-03	5.39E-05	1.57E-03	3.70E-04	5.14E-05	3.50E-06	2.03E-05	1.30E-05	2.07E-08	1.16E-06	3.9	2.52E-04	2.83E-05
S29	60	8	4	5	3.07E-02	2.71E-03	3.85E-05	1.12E-03	2.64E-04	3.66E-05	2.49E-06	1.45E-05	9.32E-06	1.48E-08	8.24E-07	2.8	1.80E-04	2.02E-05
S29	60	8	5	5	4.30E-02	3.80E-03	5.39E-05	1.57E-03	3.70E-04	5.12E-05	3.48E-06	2.02E-05	1.30E-05	2.07E-08	1.15E-06	3.9	2.51E-04	2.83E-05
S29	60	8	6	5	1.04E-01	9.22E-03	1.31E-04	3.81E-03	8.99E-04	1.24E-04	8.46E-06	4.92E-05	3.17E-05	5.03E-08	2.80E-06	9.5	6.10E-04	6.88E-05
S29	60	8	7	5	3.13E-01	2.76E-02	3.92E-04	1.14E-02	2.70E-03	3.74E-04	2.54E-05	1.48E-04	9.50E-05	1.51E-07	8.42E-06	28.7	1.84E-03	2.06E-04
S29	60	8	8	5	4.96E-01	4.23E-02	6.00E-04	1.75E-02	4.12E-03	5.77E-04	3.93E-05	2.28E-04	1.45E-04	2.31E-07	1.30E-05	44.4	2.84E-03	3.16E-04
S29	60	8	9	5	4.33E-01	3.42E-02	4.85E-04	1.41E-02	3.33E-03	4.72E-04	3.23E-05	1.87E-04	1.17E-04	1.86E-07	1.07E-05	36.5	2.33E-03	2.55E-04
S29	60	8	10	5	3.76E-01	2.82E-02	4.00E-04	1.17E-02	2.75E-03	3.93E-04	2.69E-05	1.56E-04	9.70E-05	1.54E-07	8.88E-06	30.4	1.94E-03	2.10E-04
S29	60	8	11	5	3.52E-01	2.55E-02	3.62E-04	1.05E-02	2.49E-03	3.57E-04	2.45E-05	1.42E-04	8.80E-05	1.39E-07	8.09E-06	27.7	1.77E-03	1.90E-04
S29	60	8	12	5	4.24E-01	2.87E-02	4.08E-04	1.19E-02	2.80E-03	4.08E-04	2.81E-05	1.62E-04	1.01E-04	1.57E-07	9.25E-06	31.7	2.02E-03	2.15E-04
S29	60	8	13	5	4.56E-01	3.04E-02	4.31E-04	1.26E-02	2.96E-03	4.33E-04	2.98E-05	1.72E-04	1.07E-04	1.66E-07	9.81E-06	33.7	2.14E-03	2.27E-04
S29	60	8	14	5	4.68E-01	3.09E-02	4.39E-04	1.28E-02	3.01E-03	4.41E-04	3.04E-05	1.75E-04	1.09E-04	1.69E-07	1.00E-05	34.3	2.18E-03	2.31E-04
S29	60	8	15	5	4.90E-01	3.20E-02	4.54E-04	1.32E-02	3.12E-03	4.58E-04	3.15E-05	1.82E-04	1.13E-04	1.75E-07	1.04E-05	35.6	2.27E-03	2.39E-04
S29	60	8	16	5	5.29E-01	3.47E-02	4.93E-04	1.44E-02	3.38E-03	4.96E-04	3.41E-05	1.97E-04	1.22E-04	1.89E-07	1.12E-05	38.6	2.45E-03	2.59E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	17	5	6.52E-01	4.28E-02	6.08E-04	1.77E-02	4.18E-03	6.12E-04	4.21E-05	2.43E-04	1.51E-04	2.34E-07	1.39E-05	47.6	3.03E-03	3.20E-04
S29	60	8	18	5	6.93E-01	4.61E-02	6.54E-04	1.91E-02	4.49E-03	6.57E-04	4.52E-05	2.61E-04	1.62E-04	2.51E-07	1.49E-05	51.1	3.25E-03	3.44E-04
S29	60	8	19	5	4.74E-01	3.20E-02	4.54E-04	1.32E-02	3.12E-03	4.55E-04	3.13E-05	1.81E-04	1.12E-04	1.75E-07	1.03E-05	35.3	2.25E-03	2.39E-04
S29	60	8	20	5	2.97E-01	2.11E-02	3.00E-04	8.75E-03	2.06E-03	2.98E-04	2.04E-05	1.18E-04	7.32E-05	1.15E-07	6.73E-06	23.1	1.47E-03	1.58E-04
S29	60	8	21	5	2.41E-01	1.79E-02	2.54E-04	7.40E-03	1.74E-03	2.50E-04	1.71E-05	9.91E-05	6.16E-05	9.76E-08	5.65E-06	19.3	1.23E-03	1.34E-04
S29	60	8	22	5	1.97E-01	1.52E-02	2.15E-04	6.28E-03	1.48E-03	2.11E-04	1.44E-05	8.35E-05	5.22E-05	8.28E-08	4.76E-06	16.3	1.04E-03	1.13E-04
S29	60	8	23	5	1.57E-01	1.25E-02	1.77E-04	5.16E-03	1.22E-03	1.72E-04	1.18E-05	6.82E-05	4.29E-05	6.80E-08	3.88E-06	13.3	8.47E-04	9.31E-05
S29	60	8	24	5	1.12E-01	9.22E-03	1.31E-04	3.81E-03	8.99E-04	1.26E-04	8.64E-06	5.01E-05	3.17E-05	5.03E-08	2.85E-06	9.8	6.22E-04	6.88E-05
S30	60	8	1	5	7.82E-02	6.64E-03	9.43E-05	2.75E-03	6.48E-04	9.07E-05	6.19E-06	3.59E-05	2.28E-05	3.62E-08	2.05E-06	7.0	4.46E-04	4.96E-05
S30	60	8	2	5	5.08E-02	4.43E-03	6.29E-05	1.83E-03	4.32E-04	6.02E-05	4.10E-06	2.38E-05	1.52E-05	2.42E-08	1.36E-06	4.6	2.96E-04	3.31E-05
S30	60	8	3	5	4.39E-02	3.88E-03	5.50E-05	1.60E-03	3.78E-04	5.25E-05	3.57E-06	2.08E-05	1.33E-05	2.11E-08	1.18E-06	4.0	2.58E-04	2.89E-05
S30	60	8	4	5	3.13E-02	2.77E-03	3.93E-05	1.15E-03	2.70E-04	3.74E-05	2.54E-06	1.48E-05	9.51E-06	1.51E-08	8.41E-07	2.9	1.83E-04	2.07E-05
S30	60	8	5	5	4.39E-02	3.88E-03	5.50E-05	1.60E-03	3.78E-04	5.23E-05	3.56E-06	2.07E-05	1.33E-05	2.11E-08	1.18E-06	4.0	2.57E-04	2.89E-05
S30	60	8	6	5	1.07E-01	9.41E-03	1.34E-04	3.89E-03	9.18E-04	1.27E-04	8.64E-06	5.02E-05	3.23E-05	5.13E-08	2.86E-06	9.7	6.23E-04	7.03E-05
S30	60	8	7	5	3.20E-01	2.82E-02	4.01E-04	1.17E-02	2.75E-03	3.82E-04	2.60E-05	1.51E-04	9.70E-05	1.54E-07	8.60E-06	29.3	1.87E-03	2.11E-04
S30	60	8	8	5	5.07E-01	4.32E-02	6.13E-04	1.79E-02	4.21E-03	5.89E-04	4.02E-05	2.33E-04	1.48E-04	2.35E-07	1.33E-05	45.4	2.90E-03	3.22E-04
S30	60	8	9	5	4.43E-01	3.49E-02	4.95E-04	1.44E-02	3.40E-03	4.82E-04	3.30E-05	1.91E-04	1.20E-04	1.90E-07	1.09E-05	37.2	2.37E-03	2.60E-04
S30	60	8	10	5	3.83E-01	2.88E-02	4.09E-04	1.19E-02	2.81E-03	4.01E-04	2.75E-05	1.59E-04	9.91E-05	1.57E-07	9.07E-06	31.1	1.98E-03	2.15E-04
S30	60	8	11	5	3.60E-01	2.60E-02	3.69E-04	1.08E-02	2.54E-03	3.65E-04	2.50E-05	1.45E-04	8.98E-05	1.42E-07	8.26E-06	28.3	1.80E-03	1.94E-04
S30	60	8	12	5	4.33E-01	2.93E-02	4.16E-04	1.21E-02	2.86E-03	4.17E-04	2.87E-05	1.66E-04	1.03E-04	1.60E-07	9.45E-06	32.4	2.06E-03	2.19E-04
S30	60	8	13	5	4.66E-01	3.10E-02	4.40E-04	1.28E-02	3.02E-03	4.42E-04	3.04E-05	1.76E-04	1.09E-04	1.69E-07	1.00E-05	34.4	2.19E-03	2.31E-04
S30	60	8	14	5	4.78E-01	3.16E-02	4.48E-04	1.31E-02	3.08E-03	4.51E-04	3.10E-05	1.79E-04	1.11E-04	1.72E-07	1.02E-05	35.1	2.23E-03	2.36E-04
S30	60	8	15	5	5.00E-01	3.27E-02	4.64E-04	1.35E-02	3.19E-03	4.67E-04	3.22E-05	1.86E-04	1.15E-04	1.78E-07	1.06E-05	36.4	2.31E-03	2.44E-04
S30	60	8	16	5	5.40E-01	3.54E-02	5.03E-04	1.47E-02	3.46E-03	5.07E-04	3.49E-05	2.01E-04	1.25E-04	1.93E-07	1.15E-05	39.4	2.51E-03	2.65E-04
S30	60	8	17	5	6.66E-01	4.37E-02	6.21E-04	1.81E-02	4.27E-03	6.25E-04	4.30E-05	2.48E-04	1.54E-04	2.39E-07	1.42E-05	48.6	3.09E-03	3.27E-04
S30	60	8	18	5	7.07E-01	4.71E-02	6.68E-04	1.95E-02	4.59E-03	6.71E-04	4.61E-05	2.67E-04	1.65E-04	2.57E-07	1.52E-05	52.2	3.32E-03	3.51E-04
S30	60	8	19	5	4.84E-01	3.27E-02	4.64E-04	1.35E-02	3.19E-03	4.64E-04	3.19E-05	1.84E-04	1.14E-04	1.78E-07	1.05E-05	36.1	2.30E-03	2.44E-04
S30	60	8	20	5	3.03E-01	2.16E-02	3.06E-04	8.93E-03	2.11E-03	3.04E-04	2.08E-05	1.21E-04	7.47E-05	1.18E-07	6.88E-06	23.6	1.50E-03	1.61E-04
S30	60	8	21	5	2.46E-01	1.83E-02	2.59E-04	7.56E-03	1.78E-03	2.55E-04	1.75E-05	1.01E-04	6.29E-05	9.97E-08	5.77E-06	19.8	1.26E-03	1.36E-04
S30	60	8	22	5	2.01E-01	1.55E-02	2.20E-04	6.41E-03	1.51E-03	2.15E-04	1.47E-05	8.53E-05	5.33E-05	8.46E-08	4.86E-06	16.6	1.06E-03	1.16E-04
S30	60	8	23	5	1.60E-01	1.27E-02	1.81E-04	5.27E-03	1.24E-03	1.76E-04	1.20E-05	6.96E-05	4.38E-05	6.95E-08	3.97E-06	13.6	8.65E-04	9.51E-05
S30	60	8	24	5	1.15E-01	9.41E-03	1.34E-04	3.89E-03	9.18E-04	1.29E-04	8.82E-06	5.12E-05	3.23E-05	5.13E-08	2.92E-06	10.0	6.36E-04	7.03E-05
S31	60	8	1	5	1.41E-01	1.20E-02	1.70E-04	4.95E-03	1.17E-03	1.63E-04	1.11E-05	6.47E-05	4.11E-05	6.53E-08	3.69E-06	12.6	8.04E-04	8.94E-05
S31	60	8	2	5	9.16E-02	7.98E-03	1.13E-04	3.30E-03	7.78E-04	1.09E-04	7.39E-06	4.30E-05	2.74E-05	4.35E-08	2.45E-06	8.3	5.33E-04	5.96E-05
S31	60	8	3	5	7.91E-02	6.98E-03	9.91E-05	2.89E-03	6.81E-04	9.45E-05	6.43E-06	3.74E-05	2.40E-05	3.81E-08	2.13E-06	7.3	4.64E-04	5.21E-05
S31	60	8	4	5	5.65E-02	4.99E-03	7.08E-05	2.06E-03	4.86E-04	6.73E-05	4.58E-06	2.66E-05	1.71E-05	2.72E-08	1.52E-06	5.2	3.31E-04	3.72E-05
S31	60	8	5	5	7.91E-02	6.98E-03	9.91E-05	2.89E-03	6.81E-04	9.42E-05	6.41E-06	3.73E-05	2.40E-05	3.81E-08	2.12E-06	7.2	4.62E-04	5.21E-05
S31	60	8	6	5	1.92E-01	1.70E-02	2.41E-04	7.02E-03	1.65E-03	2.29E-04	1.56E-05	9.05E-05	5.83E-05	9.25E-08	5.15E-06	17.6	1.12E-03	1.27E-04
S31	60	8	7	5	5.76E-01	5.09E-02	7.22E-04	2.10E-02	4.96E-03	6.88E-04	4.68E-05	2.72E-04	1.75E-04	2.77E-07	1.55E-05	52.9	3.38E-03	3.80E-04
S31	60	8	8	5	9.13E-01	7.78E-02	1.10E-03	3.22E-02	7.59E-03	1.06E-03	7.24E-05	4.20E-04	2.67E-04	4.24E-07	2.39E-05	81.8	5.22E-03	5.81E-04
S31	60	8	9	5	7.98E-01	6.28E-02	8.92E-04	2.60E-02	6.13E-03	8.68E-04	5.94E-05	3.44E-04	2.16E-04	3.43E-07	1.96E-05	67.1	4.28E-03	4.69E-04
S31	60	8	10	5	6.91E-01	5.19E-02	7.36E-04	2.15E-02	5.06E-03	7.23E-04	4.95E-05	2.87E-04	1.78E-04	2.83E-07	1.63E-05	56.0	3.57E-03	3.87E-04
S31	60	8	11	5	6.49E-01	4.69E-02	6.65E-04	1.94E-02	4.57E-03	6.58E-04	4.51E-05	2.61E-04	1.62E-04	2.56E-07	1.49E-05	51.0	3.25E-03	3.50E-04
S31	60	8	12	5	7.81E-01	5.29E-02	7.50E-04	2.19E-02	5.16E-03	7.51E-04	5.16E-05	2.98E-04	1.85E-04	2.89E-07	1.70E-05	58.4	3.71E-03	3.95E-04
S31	60	8	13	5	8.39E-01	5.59E-02	7.93E-04	2.31E-02	5.45E-03	7.96E-04	5.48E-05	3.16E-04	1.96E-04	3.05E-07	1.81E-05	61.9	3.94E-03	4.17E-04
S31	60	8	14	5	8.62E-01	5.69E-02	8.07E-04	2.35E-02	5.55E-03	8.12E-04	5.59E-05	3.23E-04	2.00E-04	3.10E-07	1.84E-05	63.2	4.02E-03	4.25E-04
S31	60	8	15	5	9.01E-01	5.89E-02	8.36E-04	2.43E-02	5.74E-03	8.42E-04	5.80E-05	3.35E-04	2.08E-04	3.21E-07	1.91E-05	65.5	4.17E-03	4.39E-04
S31	60	8	16	5	9.74E-01	6.38E-02	9.06E-04	2.64E-02	6.23E-03	9.13E-04	6.28E-05	3.63E-04	2.25E-04	3.48E-07	2.07E-05	71.0	4.52E-03	4.77E-04
S31	60	8	17	5	1.20E+00	7.88E-02	1.12E-03	3.26E-02	7.69E-03	1.13E-03	7.75E-05	4.48E-04	2.78E-04	4.30E-07	2.55E-05	87.6	5.57E-03	5.88E-04
S31	60	8	18	5	1.27E+00	8.48E-02	1.20E-03	3.51E-02	8.27E-03	1.21E-03	8.31E-05	4.80E-04	2.98E-04	4.63E-07	2.74E-05	94.0	5.98E-03	6.33E-04
S31	60	8	19	5	8.72E-01	5.89E-02	8.35E-04	2.43E-02	5.74E-03	8.37E-04	5.75E-05	3.32E-04	2.06E-04	3.21E-07	1.90E-05	65.0	4.14E-03	4.39E-04
S31	60	8	20	5	5.46E-01	3.89E-02	5.52E-04	1.61E-02	3.79E-03	5.47E-04	3.76E-05	2.17E-04	1.35E-04	2.12E-07	1.24E-05	42.4	2.70E-03	2.90E-04
S31	60	8	21	5	4.44E-01	3.29E-02	4.67E-04	1.36E-02	3.21E-03	4.60E-04	3.15E-05	1.82E-04	1.13E-04	1.80E-07	1.04E-05	35.6	2.27E-03	2.46E-04
S31	60	8	22	5	3.63E-01	2.79E-02	3.96E-04	1.16E-02	2.72E-03	3.87E-04	2.65E-05	1.54E-04	9.61E-05	1.52E-07	8.76E-06	30.0	1.91E-03	2.09E-04
S31	60	8	23	5	2.88E-01	2.29E-02	3.26E-04	9.49E-03	2.24E-03	3.16E-04	2.16E-05	1.25E-04	7.89E-05	1.25E-07	7.15E-06	24.4	1.56E-03	1.71E-04
S31	60	8	24	5	2.06E-01	1.70E-02	2.41E-04	7.02E-03	1.65E-03	2.33E-04	1.59E-05	9.22E-05	5.83E-05	9.25E-08	5.25E-06	18.0	1.15E-03	1.27E-04
S32	60	8	1	5	7.54E-02	6.40E-03	9.08E-05	2.65E-03	6.24E-04	8.74E-05	5.96E-06	3.46E-05	2.20E-05	3.49E-08	1.97E-06	6.7	4.30E-04	4.78E-05
S32	60	8	2	5	4.90E-02	4.27E-03	6.06E-05	1.77E-03	4.16E-04	5.80E-05	3.95E-06	2.30E-05	1.47E-05	2.33E-08	1.31E-06	4.5	2.85E-04	3.19E-05
S32	60	8	3	5	4.23E-02	3.73E-03	5.30E-05	1.54E-03	3.64E-04	5.05E-05	3.44E-06	2.00E-05	1.28E-05	2.04E-08	1.14E-06	3.9	2.48E-04	2.79E-05
S32	60	8	4	5	3.02E-02	2.67E-03	3.79E-05	1.10E-03	2.60E-04	3.60E-05	2.45E-06	1.42E-05	9.17E-06	1.45E-08	8.11E-07	2.8	1.77E-04	1.99E-05
S32	60	8	5	5	4.23E-02	3.73E-03	5.30E-05	1.54E-03	3.64E-04	5.04E-05	3.43E-06	1.99E-05	1.28E-05	2.04E-08	1.13E-06	3.9	2.47E-04	2.79E-05
S32	60	8	6	5	1.03E-01	9.07E-03	1.29E-04	3.75E-03	8.84E-04	1.22E-04	8.32E-06	4.84E-05	3.12E-05	4.94E-08	2.75E-06	9.4	6.00E-04	6.77E-05
S32	60	8	7	5	3.08E-01	2.72E-02	3.86E-04	1.13E-02	2.65E-03	3.68E-04	2.50E-05	1.45E-04	9.35E-05	1.48E-07	8.28E-06	28.3	1.81E-03	2.03E-04
S32	60	8	8	5	4.88E-01	4.16E-02	5.90E-04	1.72E-02	4.06E-03	5.68E-04	3.87E-05	2.25E-04	1.43E-04	2.27E-07	1.28E-05	43.7	2.79E-03	3.11E-04
S32	60	8	9	5	4.26E-01	3.36E-02	4.77E-04	1.39E-02	3.28E-03	4.64E-04	3.18E-05	1.84E-04	1.16E-04	1.83E-07	1.05E-05	35.9	2.29E-03	2.51E-04
S32	60	8	10	5	3.69E-01	2.77E-02	3.94E-04	1.15E-02	2.71E-03	3.86E-04	2.65E-05	1.53E-04	9.54E-05	1.51E-07	8.74E-06	29.9	1.91E-03	2.07E-04
S32	60	8	11	5	3.47E-01	2.51E-02	3.56E-04	1.04E-02	2.45E-03	3.52E-04	2.41E-05	1.40E-04	8.66E-05	1.37E-07	7.96E-06	27.3	1.74E-03	1.87E-04
S32	60	8	12	5	4.18E-01	2.83E-02	4.01E-04	1.17E-02	2.76E-03	4.01E-04	2.76E-05	1.60E-04	9.89E-05	1.54E-07	9.10E-06	31.2	1.99E-03	2.11E-04
S32	60	8	13	5	4.49E-01	2.99E-02	4.24E-04	1.24E-02	2.91E-03	4.26E-04	2.93E-05	1.69E-04	1.05E-04	1.63E-07	9.65E-06	33.1	2.11E-03	2.23E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	60	8	14	5	4.61E-01	3.04E-02	4.31E-04	1.26E-02	2.97E-03	4.34E-04	2.99E-05	1.73E-04	1.07E-04	1.66E-07	9.84E-06	33.8	2.15E-03	2.27E-04
S32	60	8	15	5	4.82E-01	3.15E-02	4.47E-04	1.30E-02	3.07E-03	4.50E-04	3.10E-05	1.79E-04	1.11E-04	1.72E-07	1.02E-05	35.0	2.23E-03	2.35E-04
S32	60	8	16	5	5.21E-01	3.41E-02	4.85E-04	1.41E-02	3.33E-03	4.88E-04	3.36E-05	1.94E-04	1.20E-04	1.86E-07	1.11E-05	38.0	2.41E-03	2.55E-04
S32	60	8	17	5	6.41E-01	4.21E-02	5.98E-04	1.74E-02	4.11E-03	6.02E-04	4.14E-05	2.39E-04	1.48E-04	2.30E-07	1.37E-05	46.9	2.98E-03	3.15E-04
S32	60	8	18	5	6.81E-01	4.53E-02	6.43E-04	1.88E-02	4.42E-03	6.46E-04	4.45E-05	2.57E-04	1.59E-04	2.47E-07	1.47E-05	50.3	3.20E-03	3.39E-04
S32	60	8	19	5	4.66E-01	3.15E-02	4.47E-04	1.30E-02	3.07E-03	4.47E-04	3.08E-05	1.78E-04	1.10E-04	1.72E-07	1.01E-05	34.8	2.21E-03	2.35E-04
S32	60	8	20	5	2.92E-01	2.08E-02	2.95E-04	8.61E-03	2.03E-03	2.93E-04	2.01E-05	1.16E-04	7.20E-05	1.13E-07	6.62E-06	22.7	1.45E-03	1.55E-04
S32	60	8	21	5	2.37E-01	1.76E-02	2.50E-04	7.28E-03	1.72E-03	2.46E-04	1.68E-05	9.75E-05	6.06E-05	9.60E-08	5.56E-06	19.0	1.21E-03	1.31E-04
S32	60	8	22	5	1.94E-01	1.49E-02	2.12E-04	6.18E-03	1.46E-03	2.07E-04	1.42E-05	8.22E-05	5.14E-05	8.15E-08	4.68E-06	16.0	1.02E-03	1.12E-04
S32	60	8	23	5	1.54E-01	1.23E-02	1.74E-04	5.08E-03	1.20E-03	1.69E-04	1.16E-05	6.71E-05	4.22E-05	6.69E-08	3.82E-06	13.1	8.34E-04	9.16E-05
S32	60	8	24	5	1.10E-01	9.07E-03	1.29E-04	3.75E-03	8.84E-04	1.24E-04	8.50E-06	4.93E-05	3.12E-05	4.95E-08	2.81E-06	9.6	6.12E-04	6.77E-05
S33	60	8	1	5	6.11E-02	5.19E-03	7.37E-05	5.75E-03	1.38E-03	7.08E-05	4.83E-06	2.81E-05	1.78E-05	2.83E-08	1.60E-06	5.5	3.48E-04	3.87E-05
S33	60	8	2	5	3.97E-02	3.46E-03	4.91E-05	3.83E-03	9.18E-04	4.70E-05	3.21E-06	1.86E-05	1.19E-05	1.89E-08	1.06E-06	3.6	2.31E-04	2.58E-05
S33	60	8	3	5	3.43E-02	3.03E-03	4.30E-05	3.35E-03	8.04E-04	4.10E-05	2.79E-06	1.62E-05	1.04E-05	1.65E-08	9.23E-07	3.1	2.01E-04	2.26E-05
S33	60	8	4	5	2.45E-02	2.16E-03	3.07E-05	2.40E-03	5.74E-04	2.92E-05	1.99E-06	1.15E-05	7.43E-06	1.18E-08	6.57E-07	2.2	1.43E-04	1.61E-05
S33	60	8	5	5	3.43E-02	3.03E-03	4.30E-05	3.35E-03	8.04E-04	4.08E-05	2.78E-06	1.62E-05	1.04E-05	1.65E-08	9.19E-07	3.1	2.00E-04	2.26E-05
S33	60	8	6	5	8.32E-02	7.35E-03	1.04E-04	8.14E-03	1.95E-03	9.92E-05	6.75E-06	3.92E-05	2.53E-05	4.01E-08	2.23E-06	7.6	4.87E-04	5.49E-05
S33	60	8	7	5	2.50E-01	2.21E-02	3.13E-04	2.44E-02	5.85E-03	2.98E-04	2.03E-05	1.18E-04	7.58E-05	1.20E-07	6.71E-06	22.9	1.46E-03	1.65E-04
S33	60	8	8	5	3.96E-01	3.37E-02	4.79E-04	3.74E-02	8.95E-03	4.60E-04	3.14E-05	1.82E-04	1.16E-04	1.84E-07	1.04E-05	35.4	2.26E-03	2.52E-04
S33	60	8	9	5	3.46E-01	2.72E-02	3.87E-04	3.02E-02	7.23E-03	3.76E-04	2.57E-05	1.49E-04	9.37E-05	1.49E-07	8.51E-06	29.1	1.85E-03	2.03E-04
S33	60	8	10	5	3.00E-01	2.25E-02	3.19E-04	2.49E-02	5.97E-03	3.13E-04	2.15E-05	1.24E-04	7.74E-05	1.23E-07	7.09E-06	24.3	1.55E-03	1.68E-04
S33	60	8	11	5	2.81E-01	2.03E-02	2.88E-04	2.25E-02	5.40E-03	2.85E-04	1.96E-05	1.13E-04	7.02E-05	1.11E-07	6.45E-06	22.1	1.41E-03	1.52E-04
S33	60	8	12	5	3.39E-01	2.29E-02	3.25E-04	2.54E-02	6.08E-03	3.25E-04	2.24E-05	1.29E-04	8.02E-05	1.25E-07	7.38E-06	25.3	1.61E-03	1.71E-04
S33	60	8	13	5	3.64E-01	2.42E-02	3.44E-04	2.68E-02	6.43E-03	3.45E-04	2.37E-05	1.37E-04	8.51E-05	1.32E-07	7.83E-06	26.8	1.71E-03	1.81E-04
S33	60	8	14	5	3.74E-01	2.47E-02	3.50E-04	2.73E-02	6.54E-03	3.52E-04	2.42E-05	1.40E-04	8.67E-05	1.35E-07	7.98E-06	27.4	1.74E-03	1.84E-04
S33	60	8	15	5	3.91E-01	2.55E-02	3.62E-04	2.83E-02	6.77E-03	3.65E-04	2.51E-05	1.45E-04	9.00E-05	1.39E-07	8.28E-06	28.4	1.81E-03	1.91E-04
S33	60	8	16	5	4.22E-01	2.77E-02	3.93E-04	3.07E-02	7.35E-03	3.96E-04	2.72E-05	1.57E-04	9.75E-05	1.51E-07	8.97E-06	30.8	1.96E-03	2.07E-04
S33	60	8	17	5	5.20E-01	3.42E-02	4.85E-04	3.78E-02	9.07E-03	4.88E-04	3.36E-05	1.94E-04	1.20E-04	1.86E-07	1.11E-05	38.0	2.42E-03	2.55E-04
S33	60	8	18	5	5.53E-01	3.68E-02	5.22E-04	4.07E-02	9.76E-03	5.24E-04	3.60E-05	2.08E-04	1.29E-04	2.01E-07	1.19E-05	40.8	2.59E-03	2.74E-04
S33	60	8	19	5	3.78E-01	2.55E-02	3.62E-04	2.83E-02	6.77E-03	3.63E-04	2.49E-05	1.44E-04	8.93E-05	1.39E-07	8.22E-06	28.2	1.79E-03	1.91E-04
S33	60	8	20	5	2.37E-01	1.69E-02	2.39E-04	1.87E-02	4.48E-03	2.37E-04	1.63E-05	9.42E-05	5.84E-05	9.20E-08	5.37E-06	18.4	1.17E-03	1.26E-04
S33	60	8	21	5	1.92E-01	1.43E-02	2.03E-04	1.58E-02	3.79E-03	1.99E-04	1.37E-05	7.91E-05	4.91E-05	7.79E-08	4.51E-06	15.4	9.83E-04	1.07E-04
S33	60	8	22	5	1.57E-01	1.21E-02	1.72E-04	1.34E-02	3.21E-03	1.68E-04	1.15E-05	6.66E-05	4.16E-05	6.61E-08	3.80E-06	13.0	8.28E-04	9.04E-05
S33	60	8	23	5	1.25E-01	9.95E-03	1.41E-04	1.10E-02	2.64E-03	1.37E-04	9.38E-06	5.44E-05	3.42E-05	5.43E-08	3.10E-06	10.6	6.76E-04	7.43E-05
S33	60	8	24	5	8.95E-02	7.35E-03	1.04E-04	8.14E-03	1.95E-03	1.01E-04	6.89E-06	4.00E-05	2.53E-05	4.01E-08	2.28E-06	7.8	4.97E-04	5.49E-05
S34	60	8	1	5	3.55E-02	3.02E-03	4.28E-05	3.34E-03	8.01E-04	4.12E-05	2.81E-06	1.63E-05	1.04E-05	1.65E-08	9.29E-07	3.2	2.02E-04	2.25E-05
S34	60	8	2	5	2.31E-02	2.01E-03	2.85E-05	2.23E-03	5.34E-04	2.73E-05	1.86E-06	1.08E-05	6.91E-06	1.10E-08	6.16E-07	2.1	1.34E-04	1.50E-05
S34	60	8	3	5	1.99E-02	1.76E-03	2.50E-05	1.95E-03	4.67E-04	2.38E-05	1.62E-06	9.42E-06	6.05E-06	9.59E-09	5.36E-07	1.8	1.17E-04	1.31E-05
S34	60	8	4	5	1.42E-02	1.26E-03	1.78E-05	1.39E-03	3.34E-04	1.70E-05	1.15E-06	6.71E-06	4.32E-06	6.85E-09	3.82E-07	1.3	8.33E-05	9.38E-06
S34	60	8	5	5	1.99E-02	1.76E-03	2.50E-05	1.95E-03	4.67E-04	2.37E-05	1.61E-06	9.39E-06	6.05E-06	9.59E-09	5.34E-07	1.8	1.16E-04	1.31E-05
S34	60	8	6	5	4.84E-02	4.27E-03	6.06E-05	4.73E-03	1.13E-03	5.76E-05	3.92E-06	2.28E-05	1.47E-05	2.33E-08	1.30E-06	4.4	2.83E-04	3.19E-05
S34	60	8	7	5	1.45E-01	1.28E-02	1.82E-04	1.42E-02	3.40E-03	1.73E-04	1.18E-05	6.86E-05	4.41E-05	6.99E-08	3.90E-06	13.3	8.51E-04	9.57E-05
S34	60	8	8	5	2.30E-01	1.96E-02	2.78E-04	2.17E-02	5.20E-03	2.67E-04	1.82E-05	1.06E-04	6.74E-05	1.07E-07	6.03E-06	20.6	1.32E-03	1.46E-04
S34	60	8	9	5	2.01E-01	1.58E-02	2.25E-04	1.75E-02	4.20E-03	2.19E-04	1.50E-05	8.68E-05	5.44E-05	8.64E-08	4.94E-06	16.9	1.08E-03	1.18E-04
S34	60	8	10	5	1.74E-01	1.31E-02	1.86E-04	1.45E-02	3.47E-03	1.82E-04	1.25E-05	7.23E-05	4.50E-05	7.13E-08	4.12E-06	14.1	8.98E-04	9.76E-05
S34	60	8	11	5	1.63E-01	1.18E-02	1.68E-04	1.31E-02	3.14E-03	1.66E-04	1.14E-05	6.58E-05	4.08E-05	6.45E-08	3.75E-06	12.8	8.18E-04	8.82E-05
S34	60	8	12	5	1.97E-01	1.33E-02	1.89E-04	1.48E-02	3.54E-03	1.89E-04	1.30E-05	7.52E-05	4.66E-05	7.27E-08	4.29E-06	14.7	9.36E-04	9.95E-05
S34	60	8	13	5	2.11E-01	1.41E-02	2.00E-04	1.56E-02	3.74E-03	2.01E-04	1.38E-05	7.97E-05	4.94E-05	7.68E-08	4.55E-06	15.6	9.92E-04	1.05E-04
S34	60	8	14	5	2.17E-01	1.43E-02	2.03E-04	1.59E-02	3.80E-03	2.05E-04	1.41E-05	8.13E-05	5.04E-05	7.82E-08	4.64E-06	15.9	1.01E-03	1.07E-04
S34	60	8	15	5	2.27E-01	1.48E-02	2.11E-04	1.64E-02	3.94E-03	2.12E-04	1.46E-05	8.43E-05	5.23E-05	8.09E-08	4.81E-06	16.5	1.05E-03	1.11E-04
S34	60	8	16	5	2.45E-01	1.61E-02	2.28E-04	1.78E-02	4.27E-03	2.30E-04	1.58E-05	9.14E-05	5.67E-05	8.78E-08	5.22E-06	17.9	1.14E-03	1.20E-04
S34	60	8	17	5	3.02E-01	1.99E-02	2.82E-04	2.20E-02	5.27E-03	2.84E-04	1.95E-05	1.13E-04	6.99E-05	1.08E-07	6.44E-06	22.1	1.40E-03	1.48E-04
S34	60	8	18	5	3.21E-01	2.14E-02	3.03E-04	2.37E-02	5.67E-03	3.05E-04	2.10E-05	1.21E-04	7.51E-05	1.17E-07	6.91E-06	23.7	1.51E-03	1.60E-04
S34	60	8	19	5	2.20E-01	1.48E-02	2.10E-04	1.64E-02	3.94E-03	2.11E-04	1.45E-05	8.37E-05	5.19E-05	8.09E-08	4.78E-06	16.4	1.04E-03	1.11E-04
S34	60	8	20	5	1.38E-01	9.80E-03	1.39E-04	1.09E-02	2.60E-03	1.38E-04	9.46E-06	5.47E-05	3.39E-05	5.35E-08	3.12E-06	10.7	6.81E-04	7.32E-05
S34	60	8	21	5	1.12E-01	8.30E-03	1.18E-04	9.19E-03	2.20E-03	1.16E-04	7.94E-06	4.60E-05	2.85E-05	4.53E-08	2.62E-06	9.0	5.72E-04	6.19E-05
S34	60	8	22	5	9.15E-02	7.04E-03	9.99E-05	7.80E-03	1.87E-03	9.76E-05	6.68E-06	3.87E-05	2.42E-05	3.84E-08	2.21E-06	7.6	4.81E-04	5.26E-05
S34	60	8	23	5	7.26E-02	5.78E-03	8.21E-05	6.40E-03	1.53E-03	7.97E-05	5.45E-06	3.16E-05	1.99E-05	3.15E-08	1.80E-06	6.2	3.93E-04	4.32E-05
S34	60	8	24	5	5.20E-02	4.27E-03	6.06E-05	4.73E-03	1.13E-03	5.86E-05	4.01E-06	2.32E-05	1.47E-05	2.33E-08	1.32E-06	4.5	2.89E-04	3.19E-05
S35	60	8	1	5	4.06E-02	3.45E-03	4.89E-05	3.82E-03	9.15E-04	4.70E-05	3.21E-06	1.86E-05	1.18E-05	1.88E-08	1.06E-06	3.6	2.31E-04	2.57E-05
S35	60	8	2	5	2.64E-02	2.30E-03	3.26E-05	2.55E-03	6.10E-04	3.12E-05	2.13E-06	1.24E-05	7.90E-06	1.25E-08	7.04E-07	2.4	1.53E-04	1.72E-05
S35	60	8	3	5	2.28E-02	2.01E-03	2.85E-05	2.23E-03	5.34E-04	2.72E-05	1.85E-06	1.08E-05	6.91E-06	1.10E-08	6.13E-07	2.1	1.34E-04	1.50E-05
S35	60	8	4	5	1.63E-02	1.44E-03	2.04E-05	1.59E-03	3.81E-04	1.94E-05	1.32E-06	7.67E-06	4.93E-06	7.83E-09	4.36E-07	1.5	9.51E-05	1.07E-05
S35	60	8	5	5	2.28E-02	2.01E-03	2.85E-05	2.23E-03	5.34E-04	2.71E-05	1.84E-06	1.07E-05	6.91E-06	1.10E-08	6.10E-07	2.1	1.33E-04	1.50E-05
S35	60	8	6	5	5.53E-02	4.88E-03	6.93E-05	5.41E-03	1.30E-03	6.59E-05	4.48E-06	2.60E-05	1.68E-05	2.66E-08	1.48E-06	5.1	3.23E-04	3.65E-05
S35	60	8	7	5	1.66E-01	1.46E-02	2.08E-04	1.62E-02	3.89E-03	1.98E-04	1.35E-05	7.83E-05	5.03E-05	7.99E-08	4.46E-06	15.2	9.72E-04	1.09E-04
S35	60	8	8	5	2.63E-01	2.24E-02	3.18E-04	2.48E-02	5.95E-03	3.06E-04	2.08E-05	1.21E-04	7.70E-05	1.22E-07	6.89E-06	23.5	1.50E-03	1.67E-04
S35	60	8	9	5	2.30E-01	1.81E-02	2.57E-04	2.00E-02	4.80E-03	2.50E-04	1.71E-05	9.91E-05	6.22E-05	9.87E-08	5.65E-06	19.3	1.23E-03	1.35E-04
S35	60	8	10	5	1.99E-01	1.49E-02	2.12E-04	1.65E-02	3.96E-03	2.08E-04	1.43E-05	8.26E-05	5.14E-05	8.15E-08	4.71E-06	16.1	1.03E-03	1.11E-04

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	11	5	1.87E-01	1.35E-02	1.92E-04	1.50E-02	3.58E-03	1.89E-04	1.30E-05	7.52E-05	4.66E-05	7.36E-08	4.29E-06	14.7	9.35E-04	1.01E-04
S35	60	8	12	5	2.25E-01	1.52E-02	2.16E-04	1.69E-02	4.04E-03	2.16E-04	1.49E-05	8.59E-05	5.33E-05	8.31E-08	4.90E-06	16.8	1.07E-03	1.14E-04
S35	60	8	13	5	2.42E-01	1.61E-02	2.28E-04	1.78E-02	4.27E-03	2.29E-04	1.58E-05	9.11E-05	5.65E-05	8.78E-08	5.20E-06	17.8	1.13E-03	1.20E-04
S35	60	8	14	5	2.48E-01	1.64E-02	2.32E-04	1.81E-02	4.35E-03	2.34E-04	1.61E-05	9.29E-05	5.76E-05	8.93E-08	5.30E-06	18.2	1.16E-03	1.22E-04
S35	60	8	15	5	2.59E-01	1.69E-02	2.41E-04	1.88E-02	4.50E-03	2.42E-04	1.67E-05	9.63E-05	5.98E-05	9.25E-08	5.50E-06	18.9	1.20E-03	1.27E-04
S35	60	8	16	5	2.80E-01	1.84E-02	2.61E-04	2.04E-02	4.88E-03	2.63E-04	1.81E-05	1.04E-04	6.48E-05	1.00E-07	5.96E-06	20.4	1.30E-03	1.37E-04
S35	60	8	17	5	3.45E-01	2.27E-02	3.22E-04	2.51E-02	6.02E-03	3.24E-04	2.23E-05	1.29E-04	7.99E-05	1.24E-07	7.35E-06	25.2	1.60E-03	1.69E-04
S35	60	8	18	5	3.67E-01	2.44E-02	3.46E-04	2.70E-02	6.48E-03	3.48E-04	2.39E-05	1.38E-04	8.57E-05	1.33E-07	7.89E-06	27.1	1.72E-03	1.82E-04
S35	60	8	19	5	2.51E-01	1.69E-02	2.40E-04	1.88E-02	4.50E-03	2.41E-04	1.66E-05	9.57E-05	5.93E-05	9.25E-08	5.46E-06	18.7	1.19E-03	1.27E-04
S35	60	8	20	5	1.57E-01	1.12E-02	1.59E-04	1.24E-02	2.97E-03	1.58E-04	1.08E-05	6.25E-05	3.88E-05	6.11E-08	3.57E-06	12.2	7.78E-04	8.36E-05
S35	60	8	21	5	1.28E-01	9.48E-03	1.34E-04	1.05E-02	2.52E-03	1.32E-04	9.07E-06	5.25E-05	3.26E-05	5.17E-08	2.99E-06	10.2	6.53E-04	7.08E-05
S35	60	8	22	5	1.04E-01	8.04E-03	1.14E-04	8.91E-03	2.13E-03	1.12E-04	7.64E-06	4.42E-05	2.77E-05	4.39E-08	2.52E-06	8.6	5.50E-04	6.00E-05
S35	60	8	23	5	8.30E-02	6.60E-03	9.37E-05	7.32E-03	1.75E-03	9.11E-05	6.23E-06	3.61E-05	2.27E-05	3.60E-08	2.06E-06	7.0	4.49E-04	4.93E-05
S35	60	8	24	5	5.94E-02	4.88E-03	6.93E-05	5.41E-03	1.30E-03	6.70E-05	4.58E-06	2.65E-05	1.68E-05	2.66E-08	1.51E-06	5.2	3.30E-04	3.65E-05
S36	60	8	1	5	5.31E-02	4.51E-03	6.40E-05	4.99E-03	1.20E-03	6.15E-05	4.20E-06	2.44E-05	1.55E-05	2.46E-08	1.39E-06	4.7	3.03E-04	3.37E-05
S36	60	8	2	5	3.45E-02	3.01E-03	4.27E-05	3.33E-03	7.98E-04	4.09E-05	2.78E-06	1.62E-05	1.03E-05	1.64E-08	9.21E-07	3.1	2.01E-04	2.24E-05
S36	60	8	3	5	2.98E-02	2.63E-03	3.73E-05	2.91E-03	6.98E-04	3.56E-05	2.42E-06	1.41E-05	9.04E-06	1.43E-08	8.02E-07	2.7	1.75E-04	1.96E-05
S36	60	8	4	5	2.13E-02	1.88E-03	2.67E-05	2.08E-03	4.99E-04	2.54E-05	1.73E-06	1.00E-05	6.46E-06	1.02E-08	5.71E-07	1.9	1.24E-04	1.40E-05
S36	60	8	5	5	2.98E-02	2.63E-03	3.73E-05	2.91E-03	6.98E-04	3.55E-05	2.41E-06	1.40E-05	9.04E-06	1.43E-08	7.99E-07	2.7	1.74E-04	1.96E-05
S36	60	8	6	5	7.23E-02	6.39E-03	9.06E-05	7.07E-03	1.70E-03	8.62E-05	5.86E-06	3.41E-05	2.19E-05	3.48E-08	1.94E-06	6.6	4.23E-04	4.77E-05
S36	60	8	7	5	2.17E-01	1.92E-02	2.72E-04	2.12E-02	5.09E-03	2.59E-04	1.76E-05	1.02E-04	6.58E-05	1.04E-07	5.83E-06	19.9	1.27E-03	1.43E-04
S36	60	8	8	5	3.44E-01	2.93E-02	4.16E-04	3.25E-02	7.78E-03	4.00E-04	2.73E-05	1.58E-04	1.01E-04	1.60E-07	9.02E-06	30.8	1.97E-03	2.19E-04
S36	60	8	9	5	3.00E-01	2.37E-02	3.36E-04	2.62E-02	6.28E-03	3.27E-04	2.24E-05	1.30E-04	8.14E-05	1.29E-07	7.39E-06	25.3	1.61E-03	1.77E-04
S36	60	8	10	5	2.60E-01	1.95E-02	2.77E-04	2.16E-02	5.19E-03	2.72E-04	1.86E-05	1.08E-04	6.72E-05	1.07E-07	6.16E-06	21.1	1.34E-03	1.46E-04
S36	60	8	11	5	2.44E-01	1.77E-02	2.51E-04	1.96E-02	4.69E-03	2.48E-04	1.70E-05	9.83E-05	6.10E-05	9.63E-08	5.61E-06	19.2	1.22E-03	1.32E-04
S36	60	8	12	5	2.94E-01	1.99E-02	2.83E-04	2.21E-02	5.29E-03	2.83E-04	1.94E-05	1.12E-04	6.97E-05	1.09E-07	6.41E-06	22.0	1.40E-03	1.49E-04
S36	60	8	13	5	3.16E-01	2.10E-02	2.99E-04	2.33E-02	5.58E-03	3.00E-04	2.06E-05	1.19E-04	7.39E-05	1.15E-07	6.80E-06	23.3	1.48E-03	1.57E-04
S36	60	8	14	5	3.25E-01	2.14E-02	3.04E-04	2.37E-02	5.68E-03	3.06E-04	2.10E-05	1.22E-04	7.54E-05	1.17E-07	6.93E-06	23.8	1.51E-03	1.60E-04
S36	60	8	15	5	3.39E-01	2.22E-02	3.15E-04	2.46E-02	5.88E-03	3.17E-04	2.18E-05	1.26E-04	7.82E-05	1.21E-07	7.19E-06	24.7	1.57E-03	1.65E-04
S36	60	8	16	5	3.67E-01	2.40E-02	3.41E-04	2.66E-02	6.38E-03	3.44E-04	2.37E-05	1.37E-04	8.47E-05	1.31E-07	7.79E-06	26.7	1.70E-03	1.80E-04
S36	60	8	17	5	4.52E-01	2.97E-02	4.21E-04	3.29E-02	7.88E-03	4.24E-04	2.92E-05	1.69E-04	1.05E-04	1.62E-07	9.62E-06	33.0	2.10E-03	2.22E-04
S36	60	8	18	5	4.80E-01	3.19E-02	4.53E-04	3.54E-02	8.48E-03	4.55E-04	3.13E-05	1.81E-04	1.12E-04	1.74E-07	1.03E-05	35.4	2.25E-03	2.38E-04
S36	60	8	19	5	3.28E-01	2.22E-02	3.15E-04	2.46E-02	5.88E-03	3.15E-04	2.17E-05	1.25E-04	7.76E-05	1.21E-07	7.14E-06	24.5	1.56E-03	1.65E-04
S36	60	8	20	5	2.06E-01	1.47E-02	2.08E-04	1.62E-02	3.89E-03	2.06E-04	1.41E-05	8.18E-05	5.07E-05	7.99E-08	4.67E-06	16.0	1.02E-03	1.09E-04
S36	60	8	21	5	1.67E-01	1.24E-02	1.76E-04	1.37E-02	3.29E-03	1.73E-04	1.19E-05	6.87E-05	4.27E-05	6.76E-08	3.92E-06	13.4	8.54E-04	9.26E-05
S36	60	8	22	5	1.37E-01	1.05E-02	1.49E-04	1.17E-02	2.79E-03	1.46E-04	9.99E-06	5.79E-05	3.62E-05	5.74E-08	3.30E-06	11.3	7.19E-04	7.85E-05
S36	60	8	23	5	1.09E-01	8.64E-03	1.23E-04	9.57E-03	2.29E-03	1.19E-04	8.15E-06	4.72E-05	2.97E-05	4.71E-08	2.69E-06	9.2	5.87E-04	6.45E-05
S36	60	8	24	5	7.77E-02	6.39E-03	9.06E-05	7.07E-03	1.70E-03	8.76E-05	5.99E-06	3.47E-05	2.19E-05	3.48E-08	1.98E-06	6.8	4.31E-04	4.77E-05
S37	60	8	1	5	2.32E-02	1.97E-03	2.80E-05	8.16E-04	1.92E-04	2.69E-05	1.84E-06	1.07E-05	6.77E-06	1.08E-08	6.07E-07	2.1	1.32E-04	1.47E-05
S37	60	8	2	5	1.51E-02	1.31E-03	1.87E-05	5.44E-04	1.28E-04	1.79E-05	1.22E-06	7.07E-06	4.52E-06	7.17E-09	4.03E-07	1.4	8.78E-05	9.81E-06
S37	60	8	3	5	1.30E-02	1.15E-03	1.63E-05	4.76E-04	1.12E-04	1.56E-05	1.06E-06	6.16E-06	3.95E-06	6.27E-09	3.51E-07	1.2	7.64E-05	8.59E-06
S37	60	8	4	5	9.30E-03	8.21E-04	1.17E-05	3.40E-04	8.01E-05	1.11E-05	7.55E-07	4.39E-06	2.82E-06	4.48E-09	2.50E-07	0.9	5.44E-05	6.13E-06
S37	60	8	5	5	1.30E-02	1.15E-03	1.63E-05	4.76E-04	1.12E-04	1.55E-05	1.06E-06	6.13E-06	3.95E-06	6.27E-09	3.49E-07	1.2	7.61E-05	8.59E-06
S37	60	8	6	5	3.16E-02	2.79E-03	3.96E-05	1.16E-03	2.72E-04	3.77E-05	2.56E-06	1.49E-05	9.60E-06	1.52E-08	8.48E-07	2.9	1.85E-04	2.09E-05
S37	60	8	7	5	9.49E-02	8.38E-03	1.19E-04	3.47E-03	8.17E-04	1.13E-04	7.71E-06	4.48E-05	2.88E-05	4.57E-08	2.55E-06	8.7	5.56E-04	6.26E-05
S37	60	8	8	5	1.50E-01	1.28E-02	1.82E-04	5.30E-03	1.25E-03	1.75E-04	1.19E-05	6.92E-05	4.40E-05	6.99E-08	3.94E-06	13.5	8.59E-04	9.57E-05
S37	60	8	9	5	1.31E-01	1.03E-02	1.47E-04	4.28E-03	1.01E-03	1.43E-04	9.78E-06	5.67E-05	3.56E-05	5.64E-08	3.23E-06	11.0	7.05E-04	7.73E-05
S37	60	8	10	5	1.14E-01	8.54E-03	1.21E-04	3.53E-03	8.33E-04	1.19E-04	8.15E-06	4.72E-05	2.94E-05	4.66E-08	2.69E-06	9.2	5.87E-04	6.38E-05
S37	60	8	11	5	1.07E-01	7.72E-03	1.10E-04	3.19E-03	7.53E-04	1.08E-04	7.43E-06	4.30E-05	2.67E-05	4.21E-08	2.45E-06	8.4	5.35E-04	5.76E-05
S37	60	8	12	5	1.29E-01	8.71E-03	1.24E-04	3.60E-03	8.49E-04	1.24E-04	8.50E-06	4.91E-05	3.05E-05	4.75E-08	2.80E-06	9.6	6.12E-04	6.50E-05
S37	60	8	13	5	1.38E-01	9.20E-03	1.31E-04	3.81E-03	8.97E-04	1.31E-04	9.02E-06	5.21E-05	3.23E-05	5.02E-08	2.97E-06	10.2	6.49E-04	6.87E-05
S37	60	8	14	5	1.42E-01	9.36E-03	1.33E-04	3.87E-03	9.13E-04	1.34E-04	9.20E-06	5.31E-05	3.30E-05	5.11E-08	3.03E-06	10.4	6.62E-04	6.99E-05
S37	60	8	15	5	1.48E-01	9.69E-03	1.38E-04	4.01E-03	9.45E-04	1.39E-04	9.54E-06	5.51E-05	3.42E-05	5.29E-08	3.15E-06	10.8	6.86E-04	7.24E-05
S37	60	8	16	5	1.60E-01	1.05E-02	1.49E-04	4.35E-03	1.03E-03	1.50E-04	1.03E-05	5.97E-05	3.70E-05	5.74E-08	3.41E-06	11.7	7.44E-04	7.85E-05
S37	60	8	17	5	1.98E-01	1.30E-02	1.84E-04	5.37E-03	1.27E-03	1.86E-04	1.28E-05	7.37E-05	4.57E-05	7.08E-08	4.21E-06	14.4	9.18E-04	9.69E-05
S37	60	8	18	5	2.10E-01	1.40E-02	1.98E-04	5.78E-03	1.36E-03	1.99E-04	1.37E-05	7.91E-05	4.90E-05	7.62E-08	4.51E-06	15.5	9.85E-04	1.04E-04
S37	60	8	19	5	1.44E-01	9.69E-03	1.38E-04	4.01E-03	9.45E-04	1.38E-04	9.47E-06	5.47E-05	3.39E-05	5.29E-08	3.12E-06	10.7	6.81E-04	7.24E-05
S37	60	8	20	5	8.99E-02	6.41E-03	9.09E-05	2.65E-03	6.25E-04	9.01E-05	6.18E-06	3.58E-05	2.22E-05	3.50E-08	2.04E-06	7.0	4.45E-04	4.78E-05
S37	60	8	21	5	7.31E-02	5.42E-03	7.69E-05	2.24E-03	5.29E-04	7.57E-05	5.19E-06	3.00E-05	1.87E-05	2.96E-08	1.71E-06	5.9	3.74E-04	4.05E-05
S37	60	8	22	5	5.98E-02	4.60E-03	6.53E-05	1.90E-03	4.49E-04	6.38E-05	4.37E-06	2.53E-05	1.58E-05	2.51E-08	1.44E-06	4.9	3.15E-04	3.43E-05
S37	60	8	23	5	4.75E-02	3.78E-03	5.36E-05	1.56E-03	3.68E-04	5.21E-05	3.56E-06	2.07E-05	1.30E-05	2.06E-08	1.18E-06	4.0	2.57E-04	2.82E-05
S37	60	8	24	5	3.40E-02	2.79E-03	3.96E-05	1.16E-03	2.72E-04	3.83E-05	2.62E-06	1.52E-05	9.60E-06	1.52E-08	8.65E-07	3.0	1.89E-04	2.09E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	1	5	2.80E-02	2.38E-03	3.38E-05	9.84E-04	2.32E-04	3.25E-05	2.22E-06	1.29E-05	8.18E-06	1.30E-08	7.33E-07	2.5	1.60E-04	1.78E-05
S38	60	8	2	5	1.82E-02	1.59E-03	2.25E-05	6.56E-04	1.55E-04	2.16E-05	1.47E-06	8.54E-06	5.45E-06	8.65E-09	4.86E-07	1.7	1.06E-04	1.18E-05
S38	60	8	3	5	1.57E-02	1.39E-03	1.97E-05	5.74E-04	1.35E-04	1.88E-05	1.28E-06	7.43E-06	4.77E-06	7.57E-09	4.23E-07	1.4	9.22E-05	1.04E-05
S38	60	8	4	5	1.12E-02	9.92E-04	1.41E-05	4.10E-04	9.67E-05	1.34E-05	9.11E-07	5.30E-06	3.41E-06	5.41E-09	3.01E-07	1.0	6.57E-05	7.40E-06
S38	60	8	5	5	1.57E-02	1.39E-03	1.97E-05	5.74E-04	1.35E-04	1.87E-05	1.27E-06	7.41E-06	4.77E-06	7.57E-09	4.22E-07	1.4	9.19E-05	1.04E-05
S38	60	8	6	5	3.82E-02	3.37E-03	4.78E-05	1.39E-03	3.29E-04	4.55E-05	3.09E-06	1.80E-05	1.16E-05	1.84E-08	1.02E-06	3.5	2.23E-04	2.52E-05
S38	60	8	7	5	1.15E-01	1.01E-02	1.44E-04	4.18E-03	9.86E-04	1.37E-04	9.31E-06	5.41E-05	3.48E-05	5.51E-08	3.08E-06	10.5	6.71E-04	7.55E-05
S38	60	8	8	5	1.81E-01	1.55E-02	2.20E-04	6.40E-03	1.51E-03	2.11E-04	1.44E-05	8.36E-05	5.32E-05	8.44E-08	4.76E-06	16.3	1.04E-03	1.15E-04
S38	60	8	9	5	1.59E-01	1.25E-02	1.77E-04	5.17E-03	1.22E-03	1.73E-04	1.18E-05	6.84E-05	4.29E-05	6.81E-08	3.90E-06	13.3	8.51E-04	9.33E-05
S38	60	8	10	5	1.37E-01	1.03E-02	1.46E-04	4.27E-03	1.01E-03	1.44E-04	9.84E-06	5.70E-05	3.55E-05	5.63E-08	3.25E-06	11.1	7.09E-04	7.70E-05
S38	60	8	11	5	1.29E-01	9.32E-03	1.32E-04	3.86E-03	9.09E-04	1.31E-04	8.97E-06	5.19E-05	3.22E-05	5.08E-08	2.96E-06	10.1	6.46E-04	6.96E-05
S38	60	8	12	5	1.55E-01	1.05E-02	1.49E-04	4.35E-03	1.03E-03	1.49E-04	1.03E-05	5.93E-05	3.68E-05	5.74E-08	3.38E-06	11.6	7.38E-04	7.85E-05
S38	60	8	13	5	1.67E-01	1.11E-02	1.58E-04	4.59E-03	1.08E-03	1.58E-04	1.09E-05	6.29E-05	3.90E-05	6.06E-08	3.59E-06	12.3	7.83E-04	8.29E-05
S38	60	8	14	5	1.71E-01	1.13E-02	1.60E-04	4.68E-03	1.10E-03	1.61E-04	1.11E-05	6.41E-05	3.98E-05	6.17E-08	3.66E-06	12.6	7.99E-04	8.44E-05
S38	60	8	15	5	1.79E-01	1.17E-02	1.66E-04	4.84E-03	1.14E-03	1.67E-04	1.15E-05	6.65E-05	4.13E-05	6.39E-08	3.80E-06	13.0	8.28E-04	8.74E-05
S38	60	8	16	5	1.94E-01	1.27E-02	1.80E-04	5.25E-03	1.24E-03	1.82E-04	1.25E-05	7.21E-05	4.47E-05	6.93E-08	4.11E-06	14.1	8.98E-04	9.48E-05
S38	60	8	17	5	2.38E-01	1.57E-02	2.22E-04	6.48E-03	1.53E-03	2.24E-04	1.54E-05	8.90E-05	5.52E-05	8.55E-08	5.08E-06	17.4	1.11E-03	1.17E-04
S38	60	8	18	5	2.53E-01	1.69E-02	2.39E-04	6.97E-03	1.64E-03	2.40E-04	1.65E-05	9.55E-05	5.92E-05	9.20E-08	5.45E-06	18.7	1.19E-03	1.26E-04
S38	60	8	19	5	1.73E-01	1.17E-02	1.66E-04	4.84E-03	1.14E-03	1.66E-04	1.14E-05	6.61E-05	4.10E-05	6.38E-08	3.77E-06	12.9	8.22E-04	8.74E-05
S38	60	8	20	5	1.08E-01	7.73E-03	1.10E-04	3.20E-03	7.54E-04	1.09E-04	7.47E-06	4.32E-05	2.68E-05	4.22E-08	2.46E-06	8.4	5.37E-04	5.77E-05
S38	60	8	21	5	8.83E-02	6.54E-03	9.29E-05	2.71E-03	6.38E-04	9.14E-05	6.26E-06	3.63E-05	2.25E-05	3.57E-08	2.07E-06	7.1	4.51E-04	4.89E-05
S38	60	8	22	5	7.22E-02	5.55E-03	7.88E-05	2.30E-03	5.42E-04	7.70E-05	5.27E-06	3.06E-05	1.91E-05	3.03E-08	1.74E-06	6.0	3.80E-04	4.15E-05
S38	60	8	23	5	5.73E-02	4.56E-03	6.47E-05	1.89E-03	4.45E-04	6.29E-05	4.30E-06	2.49E-05	1.57E-05	2.49E-08	1.42E-06	4.9	3.10E-04	3.41E-05
S38	60	8	24	5	4.10E-02	3.37E-03	4.78E-05	1.39E-03	3.29E-04	4.63E-05	3.16E-06	1.83E-05	1.16E-05	1.84E-08	1.04E-06	3.6	2.28E-04	2.52E-05
S39	60	8	1	5	3.19E-02	2.71E-03	3.84E-05	1.12E-03	2.64E-04	3.69E-05	2.52E-06	1.46E-05	9.30E-06	1.48E-08	8.33E-07	2.8	1.82E-04	2.02E-05
S39	60	8	2	5	2.07E-02	1.80E-03	2.56E-05	7.47E-04	1.76E-04	2.45E-05	1.67E-06	9.71E-06	6.20E-06	9.84E-09	5.53E-07	1.9	1.21E-04	1.35E-05
S39	60	8	3	5	1.79E-02	1.58E-03	2.24E-05	6.53E-04	1.54E-04	2.14E-05	1.45E-06	8.46E-06	5.43E-06	8.61E-09	4.81E-07	1.6	1.05E-04	1.18E-05
S39	60	8	4	5	1.28E-02	1.13E-03	1.60E-05	4.67E-04	1.10E-04	1.52E-05	1.04E-06	6.02E-06	3.88E-06	6.15E-09	3.43E-07	1.2	7.47E-05	8.42E-06
S39	60	8	5	5	1.79E-02	1.58E-03	2.24E-05	6.53E-04	1.54E-04	2.13E-05	1.45E-06	8.42E-06	5.43E-06	8.61E-09	4.79E-07	1.6	1.05E-04	1.18E-05
S39	60	8	6	5	4.34E-02	3.83E-03	5.44E-05	1.59E-03	3.74E-04	5.17E-05	3.52E-06	2.05E-05	1.32E-05	2.09E-08	1.16E-06	4.0	2.54E-04	2.86E-05
S39	60	8	7	5	1.30E-01	1.15E-02	1.63E-04	4.76E-03	1.12E-03	1.56E-04	1.06E-05	6.15E-05	3.95E-05	6.27E-08	3.50E-06	12.0	7.64E-04	8.59E-05
S39	60	8	8	5	2.06E-01	1.76E-02	2.50E-04	7.28E-03	1.72E-03	2.40E-04	1.64E-05	9.51E-05	6.05E-05	9.60E-08	5.41E-06	18.5	1.18E-03	1.31E-04
S39	60	8	9	5	1.80E-01	1.42E-02	2.02E-04	5.88E-03	1.39E-03	1.96E-04	1.34E-05	7.79E-05	4.89E-05	7.75E-08	4.44E-06	15.2	9.67E-04	1.06E-04
S39	60	8	10	5	1.56E-01	1.17E-02	1.66E-04	4.85E-03	1.14E-03	1.63E-04	1.12E-05	6.48E-05	4.04E-05	6.40E-08	3.70E-06	12.7	8.06E-04	8.76E-05
S39	60	8	11	5	1.47E-01	1.06E-02	1.50E-04	4.39E-03	1.03E-03	1.49E-04	1.02E-05	5.90E-05	3.66E-05	5.78E-08	3.37E-06	11.5	7.34E-04	7.92E-05
S39	60	8	12	5	1.77E-01	1.20E-02	1.70E-04	4.95E-03	1.17E-03	1.70E-04	1.17E-05	6.75E-05	4.18E-05	6.52E-08	3.85E-06	13.2	8.40E-04	8.93E-05
S39	60	8	13	5	1.90E-01	1.26E-02	1.79E-04	5.23E-03	1.23E-03	1.80E-04	1.24E-05	7.15E-05	4.44E-05	6.89E-08	4.08E-06	14.0	8.91E-04	9.43E-05
S39	60	8	14	5	1.95E-01	1.29E-02	1.82E-04	5.32E-03	1.25E-03	1.84E-04	1.26E-05	7.30E-05	4.52E-05	7.02E-08	4.16E-06	14.3	9.08E-04	9.60E-05
S39	60	8	15	5	2.04E-01	1.33E-02	1.89E-04	5.51E-03	1.30E-03	1.90E-04	1.31E-05	7.57E-05	4.69E-05	7.26E-08	4.32E-06	14.8	9.42E-04	9.94E-05
S39	60	8	16	5	2.20E-01	1.44E-02	2.05E-04	5.97E-03	1.41E-03	2.06E-04	1.42E-05	8.20E-05	5.09E-05	7.88E-08	4.68E-06	16.1	1.02E-03	1.08E-04
S39	60	8	17	5	2.71E-01	1.78E-02	2.53E-04	7.37E-03	1.74E-03	2.55E-04	1.75E-05	1.01E-04	6.28E-05	9.72E-08	5.77E-06	19.8	1.26E-03	1.33E-04
S39	60	8	18	5	2.88E-01	1.92E-02	2.72E-04	7.93E-03	1.87E-03	2.73E-04	1.88E-05	1.09E-04	6.73E-05	1.05E-07	6.20E-06	21.3	1.35E-03	1.43E-04
S39	60	8	19	5	1.97E-01	1.33E-02	1.89E-04	5.51E-03	1.30E-03	1.89E-04	1.30E-05	7.52E-05	4.66E-05	7.26E-08	4.29E-06	14.7	9.35E-04	9.94E-05
S39	60	8	20	5	1.23E-01	8.80E-03	1.25E-04	3.64E-03	8.58E-04	1.24E-04	8.49E-06	4.91E-05	3.05E-05	4.80E-08	2.80E-06	9.6	6.11E-04	6.57E-05
S39	60	8	21	5	1.00E-01	7.44E-03	1.06E-04	3.08E-03	7.26E-04	1.04E-04	7.12E-06	4.13E-05	2.56E-05	4.06E-08	2.35E-06	8.1	5.13E-04	5.56E-05
S39	60	8	22	5	8.21E-02	6.32E-03	8.96E-05	2.61E-03	6.16E-04	8.76E-05	6.00E-06	3.48E-05	2.17E-05	3.45E-08	1.98E-06	6.8	4.32E-04	4.72E-05
S39	60	8	23	5	6.52E-02	5.19E-03	7.36E-05	2.15E-03	5.06E-04	7.16E-05	4.89E-06	2.84E-05	1.78E-05	2.83E-08	1.62E-06	5.5	3.52E-04	3.87E-05
S39	60	8	24	5	4.67E-02	3.83E-03	5.44E-05	1.59E-03	3.74E-04	5.26E-05	3.59E-06	2.09E-05	1.32E-05	2.09E-08	1.19E-06	4.1	2.59E-04	2.86E-05
S40	80	11	1	5	3.08E-02	3.12E-03	4.08E-05	1.07E-03	2.70E-04	3.24E-05	2.14E-06	1.30E-05	8.12E-06	1.52E-08	7.44E-07	3.0	1.59E-04	1.62E-05
S40	80	11	2	5	2.00E-02	2.08E-03	2.72E-05	7.12E-04	1.80E-04	2.15E-05	1.42E-06	8.62E-06	5.41E-06	1.01E-08	4.94E-07	2.0	1.06E-04	1.08E-05
S40	80	11	3	5	1.73E-02	1.82E-03	2.38E-05	6.23E-04	1.58E-04	1.87E-05	1.23E-06	7.50E-06	4.74E-06	8.84E-09	4.29E-07	1.7	9.19E-05	9.44E-06
S40	80	11	4	5	1.23E-02	1.30E-03	1.70E-05	4.45E-04	1.13E-04	1.34E-05	8.77E-07	5.34E-06	3.38E-06	6.32E-09	3.06E-07	1.2	6.54E-05	6.74E-06
S40	80	11	5	5	1.73E-02	1.82E-03	2.38E-05	6.23E-04	1.58E-04	1.87E-05	1.23E-06	7.47E-06	4.74E-06	8.84E-09	4.28E-07	1.7	9.15E-05	9.44E-06
S40	80	11	6	5	4.20E-02	4.43E-03	5.78E-05	1.51E-03	3.83E-04	4.54E-05	2.98E-06	1.81E-05	1.15E-05	2.15E-08	1.04E-06	4.2	2.22E-04	2.29E-05
S40	80	11	7	5	1.26E-01	1.33E-02	1.73E-04	4.54E-03	1.15E-03	1.36E-04	8.96E-06	5.46E-05	3.45E-05	6.44E-08	3.12E-06	12.7	6.69E-04	6.88E-05

Table F-7 Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S40	80	11	8	5	1.99E-01	2.03E-02	2.65E-04	6.94E-03	1.76E-03	2.10E-04	1.39E-05	8.43E-05	5.28E-05	9.86E-08	4.83E-06	19.6	1.03E-03	1.05E-04
S40	80	11	9	5	1.74E-01	1.64E-02	2.14E-04	5.61E-03	1.42E-03	1.72E-04	1.14E-05	6.91E-05	4.26E-05	7.96E-08	3.96E-06	16.0	8.48E-04	8.50E-05
S40	80	11	10	5	1.50E-01	1.35E-02	1.77E-04	4.63E-03	1.17E-03	1.43E-04	9.50E-06	5.76E-05	3.52E-05	6.57E-08	3.30E-06	13.4	7.07E-04	7.01E-05
S40	80	11	11	5	1.41E-01	1.22E-02	1.60E-04	4.18E-03	1.06E-03	1.30E-04	8.66E-06	5.24E-05	3.20E-05	5.94E-08	3.01E-06	12.2	6.44E-04	6.34E-05
S40	80	11	12	5	1.69E-01	1.38E-02	1.80E-04	4.72E-03	1.19E-03	1.49E-04	9.92E-06	5.99E-05	3.67E-05	6.70E-08	3.44E-06	13.9	7.37E-04	7.15E-05
S40	80	11	13	5	1.82E-01	1.46E-02	1.90E-04	4.99E-03	1.26E-03	1.58E-04	1.05E-05	6.36E-05	3.89E-05	7.08E-08	3.65E-06	14.7	7.81E-04	7.55E-05
S40	80	11	14	5	1.87E-01	1.48E-02	1.94E-04	5.07E-03	1.28E-03	1.61E-04	1.07E-05	6.48E-05	3.97E-05	7.21E-08	3.72E-06	15.0	7.97E-04	7.69E-05
S40	80	11	15	5	1.95E-01	1.54E-02	2.01E-04	5.25E-03	1.33E-03	1.67E-04	1.11E-05	6.73E-05	4.11E-05	7.46E-08	3.86E-06	15.6	8.27E-04	7.96E-05
S40	80	11	16	5	2.11E-01	1.67E-02	2.18E-04	5.70E-03	1.44E-03	1.81E-04	1.21E-05	7.29E-05	4.46E-05	8.09E-08	4.19E-06	16.9	8.96E-04	8.63E-05
S40	80	11	17	5	2.60E-01	2.06E-02	2.69E-04	7.03E-03	1.78E-03	2.23E-04	1.49E-05	8.99E-05	5.50E-05	9.99E-08	5.17E-06	20.9	1.11E-03	1.07E-04
S40	80	11	18	5	2.76E-01	2.21E-02	2.89E-04	7.57E-03	1.91E-03	2.40E-04	1.60E-05	9.65E-05	5.90E-05	1.07E-07	5.54E-06	22.4	1.19E-03	1.15E-04
S40	80	11	19	5	1.89E-01	1.54E-02	2.01E-04	5.25E-03	1.33E-03	1.66E-04	1.10E-05	6.68E-05	4.08E-05	7.46E-08	3.83E-06	15.5	8.20E-04	7.96E-05
S40	80	11	20	5	1.18E-01	1.02E-02	1.33E-04	3.47E-03	8.78E-04	1.09E-04	7.21E-06	4.36E-05	2.67E-05	4.93E-08	2.50E-06	10.1	5.36E-04	5.26E-05
S40	80	11	21	5	9.65E-02	8.59E-03	1.12E-04	2.94E-03	7.43E-04	9.12E-05	6.05E-06	3.66E-05	2.24E-05	4.17E-08	2.10E-06	8.5	4.50E-04	4.45E-05
S40	80	11	22	5	7.90E-02	7.29E-03	9.52E-05	2.49E-03	6.30E-04	7.68E-05	5.09E-06	3.09E-05	1.90E-05	3.54E-08	1.77E-06	7.2	3.79E-04	3.78E-05
S40	80	11	23	5	6.28E-02	5.99E-03	7.82E-05	2.05E-03	5.18E-04	6.28E-05	4.15E-06	2.52E-05	1.56E-05	2.91E-08	1.44E-06	5.8	3.09E-04	3.10E-05
S40	80	11	24	5	4.50E-02	4.43E-03	5.78E-05	1.51E-03	3.83E-04	4.61E-05	3.05E-06	1.85E-05	1.15E-05	2.15E-08	1.06E-06	4.3	2.27E-04	2.29E-05

Table F-8: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	85	0	1	1.44E-01	1.65E-02	6.54E-04	8.49E-04	7.70E-04	3.85E-04	4.47E-05	2.43E-04	1.58E-04	1.97E-07	1.58E-05	49.2	2.08E-03	1.26E-03
SI1_E	0.59	57	0	1	9.61E-02	9.89E-03	4.36E-04	5.66E-04	5.13E-04	2.56E-04	2.97E-05	1.61E-04	1.05E-04	1.31E-07	1.05E-05	32.4	1.38E-03	8.40E-04
SI1_E	0.59	50	0	1	8.41E-02	8.21E-03	3.82E-04	4.95E-04	4.49E-04	2.24E-04	2.60E-05	1.41E-04	9.21E-05	1.15E-07	9.17E-06	28.0	1.21E-03	7.35E-04
SI1_E	0.59	36	0	1	6.01E-02	5.87E-03	2.73E-04	3.54E-04	3.21E-04	1.60E-04	1.85E-05	1.00E-04	6.58E-05	8.21E-08	6.54E-06	19.9	8.61E-04	5.25E-04
SI1_E	0.59	50	0	1	8.41E-02	8.21E-03	3.82E-04	4.95E-04	4.49E-04	2.23E-04	2.59E-05	1.41E-04	9.21E-05	1.15E-07	9.16E-06	27.8	1.20E-03	7.35E-04
SI1_E	0.59	121	0	1	2.04E-01	1.99E-02	9.27E-04	1.20E-03	1.09E-03	5.43E-04	6.29E-05	3.42E-04	2.24E-04	2.79E-07	2.22E-05	67.5	2.93E-03	1.79E-03
SI1_E	0.59	363	0	1	6.13E-01	5.98E-02	2.78E-03	3.61E-03	3.27E-03	1.63E-03	1.89E-04	1.03E-03	6.71E-04	8.38E-07	6.68E-05	203.6	8.79E-03	5.36E-03
SI1_E	0.59	555	0	1	9.37E-01	1.04E-01	4.25E-03	5.52E-03	5.01E-03	2.50E-03	2.90E-04	1.58E-03	1.03E-03	1.28E-06	1.03E-04	319.0	1.35E-02	8.19E-03
SI1_E	0.59	448	0	1	7.57E-01	1.11E-01	3.44E-03	4.46E-03	4.04E-03	2.04E-03	2.36E-04	1.28E-03	8.29E-04	1.03E-06	8.35E-05	266.3	1.10E-02	6.62E-03
SI1_E	0.59	370	0	1	6.25E-01	1.05E-01	2.86E-03	3.68E-03	3.34E-03	1.69E-03	1.95E-04	1.06E-03	6.84E-04	8.54E-07	6.92E-05	224.4	9.10E-03	5.46E-03
SI1_E	0.59	334	0	1	5.65E-01	1.06E-01	2.63E-03	3.32E-03	3.02E-03	1.53E-03	1.77E-04	9.64E-04	6.19E-04	7.72E-07	6.28E-05	206.3	8.25E-03	4.94E-03
SI1_E	0.59	377	0	1	6.37E-01	1.41E-01	3.06E-03	3.75E-03	3.40E-03	1.74E-03	2.01E-04	1.09E-03	6.98E-04	8.71E-07	7.12E-05	239.7	9.37E-03	5.57E-03
SI1_E	0.59	398	0	1	6.73E-01	1.55E-01	3.26E-03	3.96E-03	3.59E-03	1.84E-03	2.13E-04	1.16E-03	7.37E-04	9.20E-07	7.54E-05	255.3	9.91E-03	5.88E-03
SI1_E	0.59	405	0	1	6.85E-01	1.62E-01	3.33E-03	4.03E-03	3.66E-03	1.87E-03	2.17E-04	1.18E-03	7.50E-04	9.37E-07	7.68E-05	261.0	1.01E-02	5.99E-03
SI1_E	0.59	419	0	1	7.09E-01	1.72E-01	3.46E-03	4.17E-03	3.79E-03	1.94E-03	2.25E-04	1.22E-03	7.77E-04	9.69E-07	7.96E-05	271.4	1.05E-02	6.20E-03
SI1_E	0.59	455	0	1	7.69E-01	1.85E-01	3.75E-03	4.53E-03	4.11E-03	2.10E-03	2.44E-04	1.33E-03	8.43E-04	1.05E-06	8.63E-05	293.8	1.13E-02	6.72E-03
SI1_E	0.59	562	0	1	9.49E-01	2.28E-01	4.62E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	362.4	1.40E-02	8.30E-03
SI1_E	0.59	604	0	1	1.02E+00	2.39E-01	4.95E-03	6.01E-03	5.45E-03	2.79E-03	3.23E-04	1.76E-03	1.12E-03	1.40E-06	1.14E-04	387.6	1.50E-02	8.93E-03
SI1_E	0.59	419	0	1	7.09E-01	1.61E-01	3.41E-03	4.17E-03	3.79E-03	1.93E-03	2.24E-04	1.22E-03	7.77E-04	9.69E-07	7.93E-05	267.2	1.04E-02	6.20E-03
SI1_E	0.59	277	0	1	4.69E-01	9.31E-02	2.20E-03	2.76E-03	2.50E-03	1.27E-03	1.47E-04	8.01E-04	5.13E-04	6.41E-07	5.22E-05	172.3	6.86E-03	4.10E-03
SI1_E	0.59	235	0	1	3.96E-01	7.06E-02	1.83E-03	2.33E-03	2.12E-03	1.07E-03	1.24E-04	6.75E-04	4.34E-04	5.42E-07	4.40E-05	143.2	5.78E-03	3.47E-03
SI1_E	0.59	199	0	1	3.36E-01	5.39E-02	1.53E-03	1.98E-03	1.80E-03	9.07E-04	1.05E-04	5.71E-04	3.69E-04	4.60E-07	3.72E-05	119.6	4.89E-03	2.94E-03
SI1_E	0.59	164	0	1	2.76E-01	3.98E-02	1.25E-03	1.63E-03	1.48E-03	7.43E-04	8.61E-05	4.67E-04	3.03E-04	3.78E-07	3.04E-05	96.8	4.00E-03	2.42E-03
SI1_E	0.59	121	0	1	2.04E-01	2.63E-02	9.27E-04	1.20E-03	1.09E-03	5.47E-04	6.35E-05	3.45E-04	2.24E-04	2.79E-07	2.24E-05	70.6	2.95E-03	1.79E-03
SI1_W	0.59	78	0	1	1.32E-01	1.50E-02	5.98E-04	7.75E-04	7.03E-04	3.52E-04	4.08E-05	2.22E-04	1.44E-04	1.80E-07	1.44E-05	44.9	1.90E-03	1.15E-03
SI1_W	0.59	52	0	1	8.78E-02	9.03E-03	3.99E-04	5.17E-04	4.69E-04	2.34E-04	2.72E-05	1.47E-04	9.62E-05	1.20E-07	9.60E-06	29.6	1.26E-03	7.68E-04
SI1_W	0.59	45	0	1	7.68E-02	7.50E-03	3.49E-04	4.52E-04	4.10E-04	2.04E-04	2.37E-05	1.29E-04	8.42E-05	1.05E-07	8.38E-06	25.6	1.10E-03	6.72E-04
SI1_W	0.59	32	0	1	5.49E-02	5.36E-03	2.49E-04	3.23E-04	2.93E-04	1.46E-04	1.69E-05	9.18E-05	6.01E-05	7.50E-08	5.98E-06	18.2	7.86E-04	4.80E-04
SI1_W	0.59	45	0	1	7.68E-02	7.50E-03	3.49E-04	4.52E-04	4.10E-04	2.04E-04	2.37E-05	1.28E-04	8.42E-05	1.05E-07	8.36E-06	25.4	1.10E-03	6.72E-04
SI1_W	0.59	110	0	1	1.87E-01	1.82E-02	8.47E-04	1.10E-03	9.96E-04	4.96E-04	5.75E-05	3.12E-04	2.04E-04	2.55E-07	2.03E-05	61.6	2.67E-03	1.63E-03
SI1_W	0.59	331	0	1	5.60E-01	5.47E-02	2.54E-03	3.30E-03	2.99E-03	1.49E-03	1.73E-04	9.37E-04	6.13E-04	7.65E-07	6.10E-05	186.0	8.03E-03	4.89E-03
SI1_W	0.59	507	0	1	8.56E-01	9.51E-02	3.89E-03	5.04E-03	4.57E-03	2.29E-03	2.65E-04	1.44E-03	9.38E-04	1.17E-06	9.37E-05	291.4	1.23E-02	7.48E-03
SI1_W	0.59	409	0	1	6.91E-01	1.01E-01	3.14E-03	4.07E-03	3.69E-03	1.86E-03	2.15E-04	1.17E-03	7.57E-04	9.45E-07	7.62E-05	243.2	1.00E-02	6.04E-03
SI1_W	0.59	338	0	1	5.71E-01	9.62E-02	2.62E-03	3.36E-03	3.05E-03	1.54E-03	1.79E-04	9.71E-04	6.25E-04	7.80E-07	6.32E-05	205.0	8.31E-03	4.99E-03
SI1_W	0.59	305	0	1	5.16E-01	9.65E-02	2.40E-03	3.04E-03	2.75E-03	1.40E-03	1.62E-04	8.80E-04	5.65E-04	7.05E-07	5.73E-05	188.4	7.54E-03	4.51E-03
SI1_W	0.59	344	0	1	5.82E-01	1.29E-01	2.79E-03	3.42E-03	3.11E-03	1.59E-03	1.84E-04	9.99E-04	6.37E-04	7.95E-07	6.51E-05	219.0	8.56E-03	5.09E-03
SI1_W	0.59	364	0	1	6.15E-01	1.42E-01	2.98E-03	3.62E-03	3.28E-03	1.68E-03	1.94E-04	1.06E-03	6.73E-04	8.40E-07	6.89E-05	233.2	9.06E-03	5.37E-03
SI1_W	0.59	370	0	1	6.25E-01	1.48E-01	3.04E-03	3.68E-03	3.34E-03	1.71E-03	1.98E-04	1.08E-03	6.86E-04	8.55E-07	7.02E-05	238.4	9.23E-03	5.47E-03
SI1_W	0.59	383	0	1	6.47E-01	1.57E-01	3.16E-03	3.81E-03	3.46E-03	1.77E-03	2.05E-04	1.12E-03	7.10E-04	8.85E-07	7.27E-05	247.9	9.56E-03	5.66E-03
SI1_W	0.59	416	0	1	7.02E-01	1.69E-01	3.43E-03	4.14E-03	3.75E-03	1.92E-03	2.22E-04	1.21E-03	7.70E-04	9.60E-07	7.88E-05	268.4	1.04E-02	6.14E-03
SI1_W	0.59	513	0	1	8.67E-01	2.08E-01	4.22E-03	5.10E-03	4.63E-03	2.37E-03	2.75E-04	1.49E-03	9.50E-04	1.19E-06	9.73E-05	331.0	1.28E-02	7.58E-03
SI1_W	0.59	552	0	1	9.33E-01	2.19E-01	4.52E-03	5.49E-03	4.98E-03	2.55E-03	2.95E-04	1.61E-03	1.02E-03	1.28E-06	1.05E-04	354.0	1.37E-02	8.16E-03
SI1_W	0.59	383	0	1	6.47E-01	1.47E-01	3.11E-03	3.81E-03	3.46E-03	1.77E-03	2.04E-04	1.11E-03	7.09E-04	8.85E-07	7.25E-05	244.1	9.53E-03	5.66E-03
SI1_W	0.59	253	0	1	4.28E-01	8.50E-02	2.01E-03	2.52E-03	2.29E-03	1.16E-03	1.35E-04	7.31E-04	4.69E-04	5.85E-07	4.76E-05	157.3	6.26E-03	3.74E-03
SI1_W	0.59	214	0	1	3.62E-01	6.45E-02	1.67E-03	2.13E-03	1.93E-03	9.79E-04	1.13E-04	6.17E-04	3.97E-04	4.95E-07	4.02E-05	130.8	5.28E-03	3.17E-03
SI1_W	0.59	182	0	1	3.07E-01	4.92E-02	1.39E-03	1.81E-03	1.64E-03	8.28E-04	9.60E-05	5.21E-04	3.37E-04	4.20E-07	3.40E-05	109.2	4.47E-03	2.69E-03
SI1_W	0.59	149	0	1	2.52E-01	3.63E-02	1.15E-03	1.49E-03	1.35E-03	6.78E-04	7.86E-05	4.27E-04	2.77E-04	3.45E-07	2.78E-05	88.4	3.66E-03	2.21E-03
SI1_W	0.59	110	0	1	1.87E-01	2.40E-02	8.47E-04	1.10E-03	9.96E-04	5.00E-04	5.80E-05	3.15E-04	2.04E-04	2.55E-07	2.05E-05	64.5	2.70E-03	1.63E-03
SI2_E	0.51	58	0	1	9.85E-02	1.13E-02	4.47E-04	5.80E-04	5.26E-04	2.63E-04	3.05E-05	1.66E-04	1.08E-04	1.35E-07	1.08E-05	33.6	1.42E-03	8.61E-04
SI2_E	0.51	39	0	1	6.57E-02	6.76E-03	2.98E-04	3.87E-04	3.51E-04	1.75E-04	2.03E-05	1.10E-04	7.19E-05	8.98E-08	7.18E-06	22.2	9.45E-04	5.74E-04
SI2_E	0.51	34	0	1	5.75E-02	5.61E-03	2.61E-04	3.38E-04	3.07E-04	1.53E-04	1.77E-05	9.63E-05	6.30E-05	7.86E-08	6.27E-06	19.2	8.25E-04	5.02E-04
SI2_E	0.51	24	0	1	4.10E-02	4.01E-03	1.86E-04	2.42E-04	2.19E-04	1.09E-04	1.27E-05	6.87E-05	4.50E-05	5.61E-08	4.47E-06	13.6	5.88E-04	3.59E-04
SI2_E	0.51	34	0	1	5.75E-02	5.61E-03	2.61E-04	3.38E-04	3.07E-04	1.53E-04	1.77E-05	9.61E-05	6.30E-05	7.86E-08	6.26E-06	19.0	8.23E-04	5.02E-04
SI2_E	0.51	83	0	1	1.40E-01	1.36E-02	6.33E-04	8.22E-04	7.45E-04	3.71E-04	4.30E-05	2.33E-04	1.53E-04	1.91E-07	1.52E-05	46.1	2.00E-03	1.22E-03
SI2_E	0.51	248	0	1	4.19E-01	4.09E-02	1.90E-03	2.46E-03	2.24E-03	1.11E-03	1.29E-04	7.01E-04	4.59E-04	5.72E-07	4.56E-05	139.1	6.00E-03	3.66E-03
SI2_E	0.51	379	0	1	6.40E-01	7.12E-02	2.91E-03	3.77E-03	3.42E-03	1.71E-03	1.98E-04	1.08E-03	7.02E-04	8.75E-07	7.01E-05	218.0	9.23E-03	5.60E-03
SI2_E	0.51	306	0	1	5.17E-01	7.56E-02	2.35E-03	3.04E-03	2.76E-03	1.39E-03	1.61E-04	8.76E-04	5.67E-04	7.07E-07	5.70E-05	181.9	7.50E-03	4.52E-03
SI2_E	0.51	253	0	1	4.27E-01	7.20E-02	1.96E-03	2.51E-03	2.28E-03	1.15E-03	1.34E-04	7.26E-04	4.68E-04	5.84E-07	4.73E-05	153.4	6.22E-03	3.73E-03
SI2_E	0.51	228	0	1	3.86E-01	7.22E-02	1.80E-03	2.27E-03	2.06E-03	1.05E-03	1.21E-04	6.58E-04	4.23E-04	5.28E-07	4.29E-05	141.0	5.64E-03	3.37E-03
SI2_E	0.51	257	0	1	4.35E-01	9.65E-02	2.09E-03	2.56E-03	2.32E-03	1.19E-03	1.37E-04	7.47E-04	4.77E-04	5.95E-07	4.87E-05	163.8	6.40E-03	3.80E-03
SI2_E	0.51	272	0	1	4.60E-01	1.06E-01	2.23E-03	2.71E-03	2.46E-03	1.26E-03	1.45E-04	7.91E-04	5.04E-04	6.29E-07	5.15E-05	174.4	6.77E-03	4.02E-03
SI2_E	0.51	277	0	1	4.68E-01	1.11E-01	2.28E-03	2.75E-03	2.50E-03	1.28E-03	1.48E-04	8.06E-04	5.13E-04	6.40E-07	5.25E-05	178.3	6.90E-03	4.09E-03
SI2_E	0.51	287	0	1	4.84E-01	1.18E-01	2.37E-03	2.85E-03	2.59E-03	1.33E-03	1.53E-04	8.35E-04	5.31E-04	6.62E-07	5.44E-05	185.4	7.15E-03	4.23E-03
SI2_E	0.51	311	0	1	5.25E-01	1.27E-01	2.56E-03	3.09E-03	2.81E-03	1.44E-03	1.66E-04	9.05E-04	5.76E-04	7.18E-07	5.90E-05	200.8	7.75E-03	4.59E-03
SI2_E	0.51	384	0	1	6.48E-01	1.56E-01	3.16E-03	3.82E-03	3.46E-03	1.77E-03	2.05E-04	1.12E-03	7.11E-04	8.87E-07	7.28E-05	247.6	9.57E-03	5.67E-03
SI2_E	0.51	413	0	1	6.98E-01	1.63E-01	3.38E-03	4.11E-03	3.73E-03	1.91E-03	2.21E-04	1.20E-03	7.65E-04	9.54E-07	7.82E-05	264.8	1.03E-02	6.10E-03
SI2_E	0.51	287	0	1	4.84E-01	1.10E-01	2.33E-03	2.85E-03	2.59E-03	1.32E-03	1.53E-04	8.32E-04	5.31E-04	6.62E-07	5.42E-05	182.6	7.13E-03	4.23E-03
SI2_E	0.51	189	0	1	3.20E-01	6.36E-02	1.50E-03	1.88E-03	1.71E-03	8.69E-04	1.01E-04	5.47E-04	3.51E-04	4.38E-07	3.56E-05	117.7	4.69E-03	2.80E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	160	0	1	2.71E-01	4.83E-02	1.25E-03	1.59E-03	1.45E-03	7.32E-04	8.49E-05	4.61E-04	2.97E-04	3.70E-07	3.00E-05	97.9	3.95E-03	2.37E-03
SI2_E	0.51	136	0	1	2.30E-01	3.68E-02	1.04E-03	1.35E-03	1.23E-03	6.19E-04	7.18E-05	3.90E-04	2.52E-04	3.14E-07	2.54E-05	81.7	3.34E-03	2.01E-03
SI2_E	0.51	112	0	1	1.89E-01	2.72E-02	8.57E-04	1.11E-03	1.01E-03	5.07E-04	5.88E-05	3.19E-04	2.07E-04	2.58E-07	2.08E-05	66.1	2.74E-03	1.65E-03
SI2_E	0.51	83	0	1	1.40E-01	1.80E-02	6.33E-04	8.22E-04	7.45E-04	3.74E-04	4.34E-05	2.35E-04	1.53E-04	1.91E-07	1.53E-05	48.2	2.02E-03	1.22E-03
SI2_W	0.42	56	0	1	9.38E-02	1.07E-02	4.26E-04	5.52E-04	5.01E-04	2.51E-04	2.91E-05	1.58E-04	1.03E-04	1.28E-07	1.03E-05	32.0	1.35E-03	8.20E-04
SI2_W	0.42	37	0	1	6.26E-02	6.44E-03	2.84E-04	3.68E-04	3.34E-04	1.67E-04	1.93E-05	1.05E-04	6.85E-05	8.55E-08	6.84E-06	21.1	9.00E-04	5.47E-04
SI2_W	0.42	32	0	1	5.47E-02	5.35E-03	2.48E-04	3.22E-04	2.92E-04	1.46E-04	1.69E-05	9.17E-05	6.00E-05	7.48E-08	5.97E-06	18.2	7.85E-04	4.79E-04
SI2_W	0.42	23	0	1	3.91E-02	3.82E-03	1.77E-04	2.30E-04	2.09E-04	1.04E-04	1.21E-05	6.54E-05	4.28E-05	5.34E-08	4.26E-06	12.9	5.60E-04	3.42E-04
SI2_W	0.42	32	0	1	5.47E-02	5.35E-03	2.48E-04	3.22E-04	2.92E-04	1.45E-04	1.69E-05	9.15E-05	6.00E-05	7.48E-08	5.96E-06	18.1	7.84E-04	4.79E-04
SI2_W	0.42	79	0	1	1.33E-01	1.30E-02	6.03E-04	7.83E-04	7.10E-04	3.53E-04	4.10E-05	2.22E-04	1.46E-04	1.82E-07	1.45E-05	43.9	1.90E-03	1.16E-03
SI2_W	0.42	236	0	1	3.99E-01	3.90E-02	1.81E-03	2.35E-03	2.13E-03	1.06E-03	1.23E-04	6.68E-04	4.37E-04	5.45E-07	4.35E-05	132.5	5.72E-03	3.49E-03
SI2_W	0.42	361	0	1	6.10E-01	6.78E-02	2.77E-03	3.59E-03	3.26E-03	1.63E-03	1.89E-04	1.03E-03	6.68E-04	8.34E-07	6.68E-05	207.6	8.79E-03	5.33E-03
SI2_W	0.42	292	0	1	4.93E-01	7.20E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.34E-04	5.40E-04	6.74E-07	5.43E-05	173.3	7.15E-03	4.31E-03
SI2_W	0.42	241	0	1	4.07E-01	6.85E-02	1.86E-03	2.39E-03	2.17E-03	1.10E-03	1.27E-04	6.92E-04	4.45E-04	5.56E-07	4.50E-05	146.1	5.92E-03	3.56E-03
SI2_W	0.42	217	0	1	3.67E-01	6.87E-02	1.71E-03	2.16E-03	1.96E-03	9.96E-04	1.15E-04	6.27E-04	4.03E-04	5.03E-07	4.09E-05	134.3	5.37E-03	3.21E-03
SI2_W	0.42	245	0	1	4.14E-01	9.19E-02	1.99E-03	2.44E-03	2.21E-03	1.13E-03	1.31E-04	7.12E-04	4.54E-04	5.67E-07	4.64E-05	156.0	6.10E-03	3.62E-03
SI2_W	0.42	259	0	1	4.38E-01	1.01E-01	2.12E-03	2.58E-03	2.34E-03	1.20E-03	1.38E-04	7.53E-04	4.80E-04	5.99E-07	4.91E-05	166.1	6.45E-03	3.83E-03
SI2_W	0.42	264	0	1	4.46E-01	1.05E-01	2.17E-03	2.62E-03	2.38E-03	1.22E-03	1.41E-04	7.68E-04	4.88E-04	6.10E-07	5.00E-05	169.9	6.57E-03	3.90E-03
SI2_W	0.42	273	0	1	4.61E-01	1.12E-01	2.25E-03	2.72E-03	2.46E-03	1.26E-03	1.46E-04	7.95E-04	5.06E-04	6.31E-07	5.18E-05	176.7	6.81E-03	4.03E-03
SI2_W	0.42	296	0	1	5.00E-01	1.21E-01	2.44E-03	2.95E-03	2.67E-03	1.37E-03	1.58E-04	8.62E-04	5.48E-04	6.84E-07	5.62E-05	191.2	7.39E-03	4.38E-03
SI2_W	0.42	366	0	1	6.18E-01	1.49E-01	3.01E-03	3.64E-03	3.30E-03	1.69E-03	1.96E-04	1.06E-03	6.77E-04	8.45E-07	6.93E-05	235.9	9.12E-03	5.40E-03
SI2_W	0.42	393	0	1	6.65E-01	1.56E-01	3.22E-03	3.91E-03	3.55E-03	1.82E-03	2.10E-04	1.14E-03	7.28E-04	9.09E-07	7.45E-05	252.3	9.79E-03	5.81E-03
SI2_W	0.42	273	0	1	4.61E-01	1.05E-01	2.22E-03	2.72E-03	2.46E-03	1.26E-03	1.46E-04	7.93E-04	5.05E-04	6.31E-07	5.16E-05	173.9	6.79E-03	4.03E-03
SI2_W	0.42	180	0	1	3.05E-01	6.06E-02	1.43E-03	1.80E-03	1.63E-03	8.27E-04	9.58E-05	5.21E-04	3.34E-04	4.17E-07	3.39E-05	112.1	4.46E-03	2.67E-03
SI2_W	0.42	153	0	1	2.58E-01	4.60E-02	1.19E-03	1.52E-03	1.38E-03	6.98E-04	8.08E-05	4.39E-04	2.83E-04	3.53E-07	2.86E-05	93.2	3.76E-03	2.26E-03
SI2_W	0.42	130	0	1	2.19E-01	3.51E-02	9.94E-04	1.29E-03	1.17E-03	5.90E-04	6.84E-05	3.72E-04	2.40E-04	2.99E-07	2.42E-05	77.8	3.18E-03	1.91E-03
SI2_W	0.42	106	0	1	1.80E-01	2.59E-02	8.16E-04	1.06E-03	9.61E-04	4.83E-04	5.60E-05	3.04E-04	1.97E-04	2.46E-07	1.98E-05	63.0	2.61E-03	1.57E-03
SI2_W	0.42	79	0	1	1.33E-01	1.71E-02	6.03E-04	7.83E-04	7.10E-04	3.56E-04	4.13E-05	2.24E-04	1.46E-04	1.82E-07	1.46E-05	45.9	1.92E-03	1.16E-03
SI3_E	0.50	67	0	1	1.13E-01	1.29E-02	5.11E-04	6.63E-04	6.01E-04	3.01E-04	3.49E-05	1.89E-04	1.23E-04	1.54E-07	1.23E-05	38.4	1.62E-03	9.84E-04
SI3_E	0.50	44	0	1	7.51E-02	7.72E-03	3.41E-04	4.42E-04	4.01E-04	2.00E-04	2.32E-05	1.26E-04	8.22E-05	1.03E-07	8.21E-06	25.3	1.08E-03	6.56E-04
SI3_E	0.50	39	0	1	6.57E-02	6.42E-03	2.98E-04	3.87E-04	3.51E-04	1.75E-04	2.03E-05	1.10E-04	7.20E-05	8.98E-08	7.16E-06	21.9	9.43E-04	5.74E-04
SI3_E	0.50	28	0	1	4.69E-02	4.58E-03	2.13E-04	2.76E-04	2.51E-04	1.25E-04	1.45E-05	7.85E-05	5.14E-05	6.41E-08	5.11E-06	15.5	6.72E-04	4.10E-04
SI3_E	0.50	39	0	1	6.57E-02	6.42E-03	2.98E-04	3.87E-04	3.51E-04	1.75E-04	2.02E-05	1.10E-04	7.20E-05	8.98E-08	7.15E-06	21.7	9.41E-04	5.74E-04
SI3_E	0.50	94	0	1	1.60E-01	1.56E-02	7.24E-04	9.39E-04	8.52E-04	4.24E-04	4.92E-05	2.67E-04	1.75E-04	2.18E-07	1.74E-05	52.7	2.29E-03	1.39E-03
SI3_E	0.50	283	0	1	4.79E-01	4.67E-02	2.17E-03	2.82E-03	2.56E-03	1.27E-03	1.48E-04	8.01E-04	5.24E-04	6.54E-07	5.22E-05	159.0	6.86E-03	4.18E-03
SI3_E	0.50	433	0	1	7.32E-01	8.13E-02	3.32E-03	4.31E-03	3.91E-03	1.96E-03	2.27E-04	1.23E-03	8.02E-04	1.00E-06	8.02E-05	249.1	1.05E-02	6.40E-03
SI3_E	0.50	350	0	1	5.91E-01	8.64E-02	2.68E-03	3.48E-03	3.16E-03	1.59E-03	1.84E-04	1.00E-03	6.48E-04	8.08E-07	6.52E-05	208.0	8.57E-03	5.17E-03
SI3_E	0.50	289	0	1	4.88E-01	8.22E-02	2.24E-03	2.87E-03	2.61E-03	1.32E-03	1.53E-04	8.30E-04	5.35E-04	6.67E-07	5.40E-05	175.3	7.11E-03	4.27E-03
SI3_E	0.50	261	0	1	4.41E-01	8.25E-02	2.06E-03	2.60E-03	2.36E-03	1.20E-03	1.38E-04	7.53E-04	4.83E-04	6.03E-07	4.90E-05	161.1	6.45E-03	3.86E-03
SI3_E	0.50	294	0	1	4.97E-01	1.10E-01	2.39E-03	2.93E-03	2.66E-03	1.36E-03	1.57E-04	8.54E-04	5.45E-04	6.80E-07	5.56E-05	187.2	7.32E-03	4.35E-03
SI3_E	0.50	311	0	1	5.25E-01	1.21E-01	2.54E-03	3.09E-03	2.81E-03	1.44E-03	1.66E-04	9.04E-04	5.76E-04	7.19E-07	5.89E-05	199.4	7.74E-03	4.59E-03
SI3_E	0.50	317	0	1	5.35E-01	1.26E-01	2.60E-03	3.15E-03	2.86E-03	1.46E-03	1.69E-04	9.21E-04	5.86E-04	7.31E-07	6.00E-05	203.8	7.89E-03	4.68E-03
SI3_E	0.50	328	0	1	5.54E-01	1.35E-01	2.71E-03	3.26E-03	2.96E-03	1.51E-03	1.75E-04	9.54E-04	6.07E-04	7.57E-07	6.22E-05	212.0	8.17E-03	4.84E-03
SI3_E	0.50	355	0	1	6.01E-01	1.45E-01	2.93E-03	3.54E-03	3.21E-03	1.64E-03	1.90E-04	1.03E-03	6.58E-04	8.21E-07	6.74E-05	229.5	8.86E-03	5.25E-03
SI3_E	0.50	439	0	1	7.41E-01	1.78E-01	3.61E-03	4.36E-03	3.96E-03	2.03E-03	2.35E-04	1.28E-03	8.12E-04	1.01E-06	8.32E-05	283.0	1.09E-02	6.48E-03
SI3_E	0.50	472	0	1	7.98E-01	1.87E-01	3.86E-03	4.70E-03	4.26E-03	2.18E-03	2.52E-04	1.37E-03	8.74E-04	1.09E-06	8.94E-05	302.7	1.18E-02	6.97E-03
SI3_E	0.50	328	0	1	5.54E-01	1.26E-01	2.66E-03	3.26E-03	2.96E-03	1.51E-03	1.75E-04	9.51E-04	6.07E-04	7.57E-07	6.20E-05	208.7	8.15E-03	4.84E-03
SI3_E	0.50	217	0	1	3.66E-01	7.27E-02	1.72E-03	2.15E-03	1.95E-03	9.93E-04	1.15E-04	6.25E-04	4.01E-04	5.00E-07	4.07E-05	134.5	5.36E-03	3.20E-03
SI3_E	0.50	183	0	1	3.10E-01	5.52E-02	1.43E-03	1.82E-03	1.65E-03	8.37E-04	9.70E-05	5.27E-04	3.39E-04	4.23E-07	3.43E-05	111.9	4.52E-03	2.71E-03
SI3_E	0.50	155	0	1	2.63E-01	4.21E-02	1.19E-03	1.55E-03	1.40E-03	7.08E-04	8.20E-05	4.46E-04	2.88E-04	3.59E-07	2.90E-05	93.4	3.82E-03	2.30E-03
SI3_E	0.50	128	0	1	2.16E-01	3.11E-02	9.80E-04	1.27E-03	1.15E-03	5.80E-04	6.72E-05	3.65E-04	2.36E-04	2.95E-07	2.38E-05	75.6	3.13E-03	1.89E-03
SI3_E	0.50	94	0	1	1.60E-01	2.06E-02	7.24E-04	9.39E-04	8.52E-04	4.28E-04	4.96E-05	2.69E-04	1.75E-04	2.18E-07	1.75E-05	55.1	2.31E-03	1.39E-03
SI3_W	0.38	47	0	1	7.93E-02	9.06E-03	3.60E-04	4.67E-04	4.24E-04	2.12E-04	2.46E-05	1.33E-04	8.69E-05	1.08E-07	8.69E-06	27.0	1.14E-03	6.93E-04
SI3_W	0.38	31	0	1	5.29E-02	5.44E-03	2.40E-04	3.11E-04	2.82E-04	1.41E-04	1.64E-05	8.88E-05	5.79E-05	7.23E-08	5.78E-06	17.8	7.60E-04	4.62E-04
SI3_W	0.38	27	0	1	4.63E-02	4.52E-03	2.10E-04	2.72E-04	2.47E-04	1.23E-04	1.43E-05	7.75E-05	5.07E-05	6.32E-08	5.05E-06	15.4	6.64E-04	4.04E-04
SI3_W	0.38	20	0	1	3.30E-02	3.23E-03	1.50E-04	1.95E-04	1.77E-04	8.79E-05	1.02E-05	5.53E-05	3.62E-05	4.52E-08	3.60E-06	10.9	4.74E-04	2.89E-04
SI3_W	0.38	27	0	1	4.63E-02	4.52E-03	2.10E-04	2.72E-04	2.47E-04	1.23E-04	1.43E-05	7.74E-05	5.07E-05	6.32E-08	5.04E-06	15.3	6.63E-04	4.04E-04
SI3_W	0.38	66	0	1	1.12E-01	1.10E-02	5.10E-04	6.62E-04	6.00E-04	2.99E-04	3.46E-05	1.88E-04	1.23E-04	1.54E-07	1.22E-05	37.1	1.61E-03	9.82E-04
SI3_W	0.38	199	0	1	3.37E-01	3.29E-02	1.53E-03	1.98E-03	1.80E-03	8.97E-04	1.04E-04	5.64E-04	3.69E-04	4.61E-07	3.67E-05	112.0	4.83E-03	2.95E-03
SI3_W	0.38	305	0	1	5.15E-01	5.73E-02	2.34E-03	3.04E-03	2.75E-03	1.38E-03	1.60E-04	8.67E-04	5.65E-04	7.05E-07	5.65E-05	175.5	7.43E-03	4.51E-03
SI3_W	0.38	246	0	1	4.16E-01	6.08E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.56E-04	5.69E-07	4.59E-05	146.5	6.04E-03	3.64E-03
SI3_W	0.38	203	0	1	3.44E-01	5.79E-02	1.58E-03	2.02E-03	1.84E-03	9.28E-04	1.08E-04	5.84E-04	3.77E-04	4.70E-07	3.81E-05	123.5	5.01E-03	3.00E-03
SI3_W	0.38	184	0	1	3.11E-01	5.81E-02	1.45E-03	1.83E-03	1.66E-03	8.42E-04	9.75E-05	5.30E-04	3.40E-04	4.25E-07	3.45E-05	113.5	4.54E-03	2.72E-03
SI3_W	0.38	207	0	1	3.50E-01	7.77E-02	1.68E-03	2.06E-03	1.87E-03	9.55E-04	1.11E-04	6.02E-04	3.84E-04	4.79E-07	3.92E-05	131.9	5.15E-03	3.06E-03
SI3_W	0.38	219	0	1	3.70E-01	8.52E-02	1.79E-03	2.18E-03	1.98E-03	1.01E-03	1.17E-04	6.37E-04	4.06E-04	5.06E-07	4.15E-05	140.4	5.45E-03	3.24E-03
SI3_W	0.38	223	0	1	3.77E-01	8.91E-02	1.83E-03	2.22E-03	2.01E-03	1.03E-03	1.19E-04	6.49E-04	4.13E-04	5.15E-07	4.23E-05	143.6	5.56E-03	3.29E-03
SI3_W	0.38	231	0	1	3.90E-01	9.47E-02	1.91E-03	2.30E-03	2.08E-03	1.07E-03	1.24E-04	6.72E-04	4.27E-04	5.33E-07	4.38E-05	149.3	5.76E-03	3.41E-03
SI3_W	0.38	250	0	1	4.23E-01	1.02E-01	2.06E-03	2.49E-03	2.26E-03	1.16E-03	1.34E-04	7.29E-04	4.64E-04	5.78E-07	4.75E-05	161.6	6.24E-03	3.70E-03
SI3_W	0.38	309	0	1	5.22E-01	1.26E-01	2.54E-03	3.07E-03	2.79E-03	1.43E-03	1.65E-04	9.00E-04	5.72E-04	7.14E-07	5.86E-05	199.4	7.70E-03	4.56E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	332	0	1	5.62E-01	1.32E-01	2.72E-03	3.31E-03	3.00E-03	1.53E-03	1.78E-04	9.67E-04	6.16E-04	7.68E-07	6.30E-05	213.2	8.28E-03	4.91E-03
SI3_W	0.38	231	0	1	3.90E-01	8.86E-02	1.88E-03	2.30E-03	2.08E-03	1.06E-03	1.23E-04	6.70E-04	4.27E-04	5.33E-07	4.36E-05	147.0	5.74E-03	3.41E-03
SI3_W	0.38	153	0	1	2.58E-01	5.12E-02	1.21E-03	1.52E-03	1.38E-03	6.99E-04	8.10E-05	4.41E-04	2.82E-04	3.52E-07	2.87E-05	94.8	3.77E-03	2.25E-03
SI3_W	0.38	129	0	1	2.18E-01	3.89E-02	1.01E-03	1.28E-03	1.16E-03	5.90E-04	6.83E-05	3.71E-04	2.39E-04	2.98E-07	2.42E-05	78.8	3.18E-03	1.91E-03
SI3_W	0.38	110	0	1	1.85E-01	2.96E-02	8.40E-04	1.09E-03	9.88E-04	4.99E-04	5.78E-05	3.14E-04	2.03E-04	2.53E-07	2.04E-05	65.8	2.69E-03	1.62E-03
SI3_W	0.38	90	0	1	1.52E-01	2.19E-02	6.90E-04	8.95E-04	8.12E-04	4.09E-04	4.73E-05	2.57E-04	1.67E-04	2.08E-07	1.67E-05	53.2	2.20E-03	1.33E-03
SI3_W	0.38	66	0	1	1.12E-01	1.45E-02	5.10E-04	6.62E-04	6.00E-04	3.01E-04	3.49E-05	1.90E-04	1.23E-04	1.54E-07	1.23E-05	38.8	1.62E-03	9.82E-04
SI4_E	0.32	40	0	1	6.70E-02	7.65E-03	3.04E-04	3.94E-04	3.58E-04	1.79E-04	2.08E-05	1.13E-04	7.34E-05	9.16E-08	7.34E-06	22.8	9.65E-04	5.86E-04
SI4_E	0.32	26	0	1	4.46E-02	4.59E-03	2.03E-04	2.63E-04	2.38E-04	1.19E-04	1.38E-05	7.50E-05	4.89E-05	6.10E-08	4.88E-06	15.1	6.42E-04	3.90E-04
SI4_E	0.32	23	0	1	3.91E-02	3.82E-03	1.77E-04	2.30E-04	2.09E-04	1.04E-04	1.21E-05	6.54E-05	4.28E-05	5.34E-08	4.26E-06	13.0	5.61E-04	3.42E-04
SI4_E	0.32	17	0	1	2.79E-02	2.73E-03	1.27E-04	1.64E-04	1.49E-04	7.42E-05	8.60E-06	4.67E-05	3.06E-05	3.81E-08	3.04E-06	9.2	4.00E-04	2.44E-04
SI4_E	0.32	23	0	1	3.91E-02	3.82E-03	1.77E-04	2.30E-04	2.09E-04	1.04E-04	1.20E-05	6.53E-05	4.28E-05	5.34E-08	4.25E-06	12.9	5.60E-04	3.42E-04
SI4_E	0.32	56	0	1	9.49E-02	9.27E-03	4.31E-04	5.59E-04	5.07E-04	2.52E-04	2.92E-05	1.59E-04	1.04E-04	1.30E-07	1.03E-05	31.3	1.36E-03	8.30E-04
SI4_E	0.32	168	0	1	2.85E-01	2.78E-02	1.29E-03	1.68E-03	1.52E-03	7.57E-04	8.78E-05	4.77E-04	3.12E-04	3.89E-07	3.10E-05	94.6	4.08E-03	2.49E-03
SI4_E	0.32	258	0	1	4.35E-01	4.84E-02	1.98E-03	2.56E-03	2.33E-03	1.16E-03	1.35E-04	7.32E-04	4.77E-04	5.95E-07	4.77E-05	148.2	6.27E-03	3.81E-03
SI4_E	0.32	208	0	1	3.52E-01	5.14E-02	1.60E-03	2.07E-03	1.88E-03	9.46E-04	1.10E-04	5.95E-04	3.85E-04	4.81E-07	3.88E-05	123.7	5.10E-03	3.07E-03
SI4_E	0.32	172	0	1	2.90E-01	4.89E-02	1.33E-03	1.71E-03	1.55E-03	7.84E-04	9.08E-05	4.94E-04	3.18E-04	3.97E-07	3.21E-05	104.3	4.23E-03	2.54E-03
SI4_E	0.32	155	0	1	2.62E-01	4.91E-02	1.22E-03	1.54E-03	1.40E-03	7.11E-04	8.23E-05	4.48E-04	2.87E-04	3.59E-07	2.92E-05	95.8	3.83E-03	2.29E-03
SI4_E	0.32	175	0	1	2.96E-01	6.56E-02	1.42E-03	1.74E-03	1.58E-03	8.07E-04	9.34E-05	5.08E-04	3.24E-04	4.05E-07	3.31E-05	111.4	4.35E-03	2.59E-03
SI4_E	0.32	185	0	1	3.13E-01	7.20E-02	1.51E-03	1.84E-03	1.67E-03	8.54E-04	9.88E-05	5.38E-04	3.42E-04	4.27E-07	3.50E-05	118.6	4.61E-03	2.73E-03
SI4_E	0.32	188	0	1	3.18E-01	7.52E-02	1.55E-03	1.87E-03	1.70E-03	8.70E-04	1.01E-04	5.48E-04	3.49E-04	4.35E-07	3.57E-05	121.2	4.69E-03	2.78E-03
SI4_E	0.32	195	0	1	3.29E-01	8.00E-02	1.61E-03	1.94E-03	1.76E-03	9.01E-04	1.04E-04	5.68E-04	3.61E-04	4.50E-07	3.70E-05	126.1	4.86E-03	2.88E-03
SI4_E	0.32	211	0	1	3.57E-01	8.60E-02	1.74E-03	2.10E-03	1.91E-03	9.77E-04	1.13E-04	6.16E-04	3.91E-04	4.88E-07	4.01E-05	136.5	5.27E-03	3.12E-03
SI4_E	0.32	261	0	1	4.41E-01	1.06E-01	2.15E-03	2.60E-03	2.36E-03	1.21E-03	1.40E-04	7.60E-04	4.83E-04	6.03E-07	4.95E-05	168.4	6.51E-03	3.85E-03
SI4_E	0.32	281	0	1	4.74E-01	1.11E-01	2.30E-03	2.79E-03	2.53E-03	1.30E-03	1.50E-04	8.16E-04	5.20E-04	6.49E-07	5.32E-05	180.1	6.99E-03	4.15E-03
SI4_E	0.32	195	0	1	3.29E-01	7.48E-02	1.58E-03	1.94E-03	1.76E-03	8.98E-04	1.04E-04	5.66E-04	3.61E-04	4.50E-07	3.69E-05	124.1	4.85E-03	2.88E-03
SI4_E	0.32	129	0	1	2.18E-01	4.32E-02	1.02E-03	1.28E-03	1.16E-03	5.91E-04	6.84E-05	3.72E-04	2.38E-04	2.98E-07	2.42E-05	80.0	3.19E-03	1.90E-03
SI4_E	0.32	109	0	1	1.84E-01	3.28E-02	8.49E-04	1.08E-03	9.84E-04	4.98E-04	5.77E-05	3.14E-04	2.02E-04	2.52E-07	2.04E-05	66.5	2.69E-03	1.61E-03
SI4_E	0.32	92	0	1	1.56E-01	2.50E-02	7.09E-04	9.20E-04	8.35E-04	4.21E-04	4.88E-05	2.65E-04	1.71E-04	2.14E-07	1.73E-05	55.5	2.27E-03	1.37E-03
SI4_E	0.32	76	0	1	1.28E-01	1.85E-02	5.83E-04	7.56E-04	6.86E-04	3.45E-04	4.00E-05	2.17E-04	1.41E-04	1.76E-07	1.41E-05	45.0	1.86E-03	1.12E-03
SI4_E	0.32	56	0	1	9.49E-02	1.22E-02	4.31E-04	5.59E-04	5.07E-04	2.54E-04	2.95E-05	1.60E-04	1.04E-04	1.30E-07	1.04E-05	32.8	1.37E-03	8.30E-04
SI4_W	0.32	41	0	1	6.98E-02	7.97E-03	3.17E-04	4.11E-04	3.73E-04	1.87E-04	2.16E-05	1.17E-04	7.64E-05	9.54E-08	7.64E-06	23.8	1.01E-03	6.10E-04
SI4_W	0.32	28	0	1	4.65E-02	4.79E-03	2.11E-04	2.74E-04	2.48E-04	1.24E-04	1.44E-05	7.81E-05	5.10E-05	6.36E-08	5.09E-06	15.7	6.69E-04	4.07E-04
SI4_W	0.32	24	0	1	4.07E-02	3.98E-03	1.85E-04	2.40E-04	2.17E-04	1.08E-04	1.26E-05	6.82E-05	4.46E-05	5.56E-08	4.44E-06	13.6	5.84E-04	3.56E-04
SI4_W	0.32	17	0	1	2.91E-02	2.84E-03	1.32E-04	1.71E-04	1.55E-04	7.73E-05	8.96E-06	4.86E-05	3.19E-05	3.97E-08	3.17E-06	9.6	4.17E-04	2.54E-04
SI4_W	0.32	24	0	1	4.07E-02	3.98E-03	1.85E-04	2.40E-04	2.17E-04	1.08E-04	1.25E-05	6.81E-05	4.46E-05	5.56E-08	4.43E-06	13.4	5.83E-04	3.56E-04
SI4_W	0.32	58	0	1	9.88E-02	9.65E-03	4.49E-04	5.82E-04	5.28E-04	2.63E-04	3.05E-05	1.65E-04	1.08E-04	1.35E-07	1.08E-05	32.7	1.42E-03	8.64E-04
SI4_W	0.32	175	0	1	2.97E-01	2.90E-02	1.35E-03	1.75E-03	1.58E-03	7.89E-04	9.15E-05	4.96E-04	3.25E-04	4.05E-07	3.23E-05	98.5	4.25E-03	2.59E-03
SI4_W	0.32	268	0	1	4.54E-01	5.04E-02	2.06E-03	2.67E-03	2.42E-03	1.21E-03	1.41E-04	7.63E-04	4.97E-04	6.20E-07	4.97E-05	154.4	6.54E-03	3.97E-03
SI4_W	0.32	217	0	1	3.66E-01	5.35E-02	1.66E-03	2.16E-03	1.96E-03	9.85E-04	1.14E-04	6.20E-04	4.01E-04	5.01E-07	4.04E-05	128.9	5.31E-03	3.20E-03
SI4_W	0.32	179	0	1	3.02E-01	5.10E-02	1.39E-03	1.78E-03	1.62E-03	8.17E-04	9.46E-05	5.14E-04	3.31E-04	4.13E-07	3.35E-05	108.6	4.40E-03	2.64E-03
SI4_W	0.32	162	0	1	2.73E-01	5.11E-02	1.27E-03	1.61E-03	1.46E-03	7.41E-04	8.58E-05	4.66E-04	2.99E-04	3.74E-07	3.04E-05	99.8	3.99E-03	2.39E-03
SI4_W	0.32	182	0	1	3.08E-01	6.83E-02	1.48E-03	1.81E-03	1.65E-03	8.40E-04	9.73E-05	5.29E-04	3.38E-04	4.21E-07	3.45E-05	116.0	4.53E-03	2.69E-03
SI4_W	0.32	193	0	1	3.26E-01	7.50E-02	1.58E-03	1.92E-03	1.74E-03	8.89E-04	1.03E-04	5.60E-04	3.57E-04	4.45E-07	3.65E-05	123.5	4.80E-03	2.85E-03
SI4_W	0.32	196	0	1	3.31E-01	7.84E-02	1.61E-03	1.95E-03	1.77E-03	9.06E-04	1.05E-04	5.71E-04	3.63E-04	4.53E-07	3.72E-05	126.3	4.89E-03	2.90E-03
SI4_W	0.32	203	0	1	3.43E-01	8.34E-02	1.68E-03	2.02E-03	1.83E-03	9.39E-04	1.09E-04	5.91E-04	3.76E-04	4.69E-07	3.85E-05	131.4	5.07E-03	3.00E-03
SI4_W	0.32	220	0	1	3.72E-01	8.96E-02	1.81E-03	2.19E-03	1.99E-03	1.02E-03	1.18E-04	6.41E-04	4.08E-04	5.09E-07	4.18E-05	142.2	5.49E-03	3.25E-03
SI4_W	0.32	272	0	1	4.59E-01	1.10E-01	2.24E-03	2.70E-03	2.45E-03	1.26E-03	1.45E-04	7.91E-04	5.03E-04	6.28E-07	5.16E-05	175.4	6.78E-03	4.02E-03
SI4_W	0.32	292	0	1	4.94E-01	1.16E-01	2.39E-03	2.91E-03	2.64E-03	1.35E-03	1.56E-04	8.50E-04	5.42E-04	6.76E-07	5.54E-05	187.6	7.28E-03	4.32E-03
SI4_W	0.32	203	0	1	3.43E-01	7.79E-02	1.65E-03	2.02E-03	1.83E-03	9.36E-04	1.08E-04	5.89E-04	3.76E-04	4.69E-07	3.84E-05	129.3	5.05E-03	3.00E-03
SI4_W	0.32	134	0	1	2.27E-01	4.51E-02	1.06E-03	1.34E-03	1.21E-03	6.15E-04	7.13E-05	3.88E-04	2.48E-04	3.10E-07	2.52E-05	83.4	3.32E-03	1.98E-03
SI4_W	0.32	114	0	1	1.92E-01	3.42E-02	8.85E-04	1.13E-03	1.02E-03	5.19E-04	6.01E-05	3.27E-04	2.10E-04	2.62E-07	2.13E-05	69.3	2.80E-03	1.68E-03
SI4_W	0.32	96	0	1	1.63E-01	2.61E-02	7.39E-04	9.59E-04	8.70E-04	4.39E-04	5.08E-05	2.76E-04	1.78E-04	2.23E-07	1.80E-05	57.9	2.37E-03	1.42E-03
SI4_W	0.32	79	0	1	1.34E-01	1.92E-02	6.07E-04	7.87E-04	7.14E-04	3.59E-04	4.17E-05	2.26E-04	1.47E-04	1.83E-07	1.47E-05	46.8	1.94E-03	1.17E-03
SI4_W	0.32	58	0	1	9.88E-02	1.27E-02	4.49E-04	5.82E-04	5.28E-04	2.65E-04	3.07E-05	1.67E-04	1.08E-04	1.35E-07	1.09E-05	34.2	1.43E-03	8.64E-04
SI5_E	0.58	76	0	1	1.29E-01	1.47E-02	5.83E-04	7.57E-04	6.87E-04	3.44E-04	3.98E-05	2.16E-04	1.41E-04	1.76E-07	1.41E-05	43.8	1.85E-03	1.12E-03
SI5_E	0.58	51	0	1	8.57E-02	8.82E-03	3.89E-04	5.05E-04	4.58E-04	2.29E-04	2.65E-05	1.44E-04	9.39E-05	1.17E-07	9.37E-06	28.9	1.23E-03	7.49E-04
SI5_E	0.58	44	0	1	7.50E-02	7.32E-03	3.40E-04	4.41E-04	4.01E-04	2.00E-04	2.31E-05	1.26E-04	8.21E-05	1.03E-07	8.18E-06	25.0	1.08E-03	6.56E-04
SI5_E	0.58	32	0	1	5.36E-02	5.23E-03	2.43E-04	3.15E-04	2.86E-04	1.42E-04	1.65E-05	8.96E-05	5.87E-05	7.32E-08	5.83E-06	17.7	7.68E-04	4.68E-04
SI5_E	0.58	44	0	1	7.50E-02	7.32E-03	3.40E-04	4.41E-04	4.01E-04	1.99E-04	2.31E-05	1.25E-04	8.21E-05	1.03E-07	8.16E-06	24.8	1.07E-03	6.56E-04
SI5_E	0.58	108	0	1	1.82E-01	1.78E-02	8.27E-04	1.07E-03	9.73E-04	4.84E-04	5.61E-05	3.04E-04	2.00E-04	2.49E-07	1.98E-05	60.2	2.61E-03	1.59E-03
SI5_E	0.58	323	0	1	5.46E-01	5.34E-02	2.48E-03	3.22E-03	2.92E-03	1.45E-03	1.69E-04	9.15E-04	5.99E-04	7.47E-07	5.95E-05	181.5	7.83E-03	4.78E-03
SI5_E	0.58	494	0	1	8.35E-01	9.28E-02	3.79E-03	4.92E-03	4.46E-03	2.23E-03	2.59E-04	1.41E-03	9.15E-04	1.14E-06	9.15E-05	284.4	1.20E-02	7.30E-03
SI5_E	0.58	399	0	1	6.75E-01	9.86E-02	3.06E-03	3.97E-03	3.60E-03	1.82E-03	2.10E-04	1.14E-03	7.39E-04	9.23E-07	7.44E-05	237.4	9.79E-03	5.90E-03
SI5_E	0.58	330	0	1	5.57E-01	9.39E-02	2.55E-03	3.28E-03	2.98E-03	1.50E-03	1.74E-04	9.47E-04	6.10E-04	7.62E-07	6.17E-05	200.1	8.11E-03	4.87E-03
SI5_E	0.58	298	0	1	5.03E-01	9.42E-02	2.35E-03	2.96E-03	2.69E-03	1.36E-03	1.58E-04	8.59E-04	5.52E-04	6.88E-07	5.60E-05	183.9	7.36E-03	4.40E-03
SI5_E	0.58	336	0	1	5.68E-01	1.26E-01	2.73E-03	3.34E-03	3.03E-03	1.55E-03	1.79E-04	9.75E-04	6.22E-04	7.76E-07	6.35E-05	213.7	8.35E-03	4.96E-03
SI5_E	0.58	355	0	1	6.00E-01	1.38E-01	2.90E-03	3.53E-03	3.20E-03	1.64E-03	1.90E-04	1.03E-03	6.57E-04	8.20E-07	6.72E-05	227.6	8.84E-03	5.24E-03
SI5_E	0.58	361	0	1	6.11E-01	1.44E-01	2.97E-03	3.59E-03	3.26E-03	1.67E-03	1.93E-04	1.05E-03	6.69E-04	8.35E-07	6.85E-05	232.7	9.01E-03	5.34E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	374	0	1	6.32E-01	1.54E-01	3.09E-03	3.72E-03	3.38E-03	1.73E-03	2.00E-04	1.09E-03	6.93E-04	8.64E-07	7.10E-05	242.0	9.33E-03	5.53E-03
SI5_E	0.58	406	0	1	6.85E-01	1.65E-01	3.34E-03	4.04E-03	3.66E-03	1.87E-03	2.17E-04	1.18E-03	7.51E-04	9.38E-07	7.70E-05	262.0	1.01E-02	5.99E-03
SI5_E	0.58	501	0	1	8.46E-01	2.03E-01	4.12E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.50E-05	323.1	1.25E-02	7.40E-03
SI5_E	0.58	539	0	1	9.10E-01	2.13E-01	4.41E-03	5.36E-03	4.86E-03	2.49E-03	2.88E-04	1.57E-03	9.98E-04	1.25E-06	1.02E-04	345.6	1.34E-02	7.96E-03
SI5_E	0.58	374	0	1	6.32E-01	1.44E-01	3.04E-03	3.72E-03	3.38E-03	1.72E-03	2.00E-04	1.09E-03	6.92E-04	8.64E-07	7.07E-05	238.2	9.30E-03	5.53E-03
SI5_E	0.58	247	0	1	4.18E-01	8.30E-02	1.96E-03	2.46E-03	2.23E-03	1.13E-03	1.31E-04	7.14E-04	4.58E-04	5.71E-07	4.65E-05	153.6	6.11E-03	3.65E-03
SI5_E	0.58	209	0	1	3.53E-01	6.30E-02	1.63E-03	2.08E-03	1.89E-03	9.56E-04	1.11E-04	6.02E-04	3.87E-04	4.83E-07	3.92E-05	127.7	5.15E-03	3.09E-03
SI5_E	0.58	177	0	1	3.00E-01	4.80E-02	1.36E-03	1.77E-03	1.60E-03	8.08E-04	9.37E-05	5.09E-04	3.29E-04	4.10E-07	3.31E-05	106.6	4.36E-03	2.62E-03
SI5_E	0.58	146	0	1	2.46E-01	3.55E-02	1.12E-03	1.45E-03	1.32E-03	6.62E-04	7.67E-05	4.17E-04	2.70E-04	3.37E-07	2.71E-05	86.3	3.57E-03	2.15E-03
SI5_E	0.58	108	0	1	1.82E-01	2.35E-02	8.27E-04	1.07E-03	9.73E-04	4.88E-04	5.66E-05	3.07E-04	2.00E-04	2.49E-07	2.00E-05	62.9	2.63E-03	1.59E-03
SI5_W	0.59	79	0	1	1.33E-01	1.52E-02	6.03E-04	7.82E-04	7.10E-04	3.55E-04	4.12E-05	2.24E-04	1.46E-04	1.82E-07	1.46E-05	45.3	1.91E-03	1.16E-03
SI5_W	0.59	52	0	1	8.86E-02	9.11E-03	4.02E-04	5.21E-04	4.73E-04	2.36E-04	2.74E-05	1.49E-04	9.70E-05	1.21E-07	9.68E-06	29.9	1.27E-03	7.74E-04
SI5_W	0.59	46	0	1	7.75E-02	7.57E-03	3.52E-04	4.56E-04	4.14E-04	2.06E-04	2.39E-05	1.30E-04	8.49E-05	1.06E-07	8.45E-06	25.8	1.11E-03	6.78E-04
SI5_W	0.59	33	0	1	5.53E-02	5.41E-03	2.51E-04	3.26E-04	2.96E-04	1.47E-04	1.71E-05	9.26E-05	6.06E-05	7.57E-08	6.03E-06	18.3	7.93E-04	4.84E-04
SI5_W	0.59	46	0	1	7.75E-02	7.57E-03	3.52E-04	4.56E-04	4.14E-04	2.06E-04	2.39E-05	1.30E-04	8.49E-05	1.06E-07	8.44E-06	25.6	1.11E-03	6.78E-04
SI5_W	0.59	111	0	1	1.88E-01	1.84E-02	8.54E-04	1.11E-03	1.01E-03	5.00E-04	5.80E-05	3.15E-04	2.06E-04	2.57E-07	2.05E-05	62.2	2.70E-03	1.65E-03
SI5_W	0.59	334	0	1	5.65E-01	5.51E-02	2.56E-03	3.32E-03	3.02E-03	1.50E-03	1.74E-04	9.45E-04	6.19E-04	7.72E-07	6.15E-05	187.6	8.10E-03	4.94E-03
SI5_W	0.59	511	0	1	8.63E-01	9.60E-02	3.92E-03	5.08E-03	4.61E-03	2.31E-03	2.68E-04	1.45E-03	9.46E-04	1.18E-06	9.46E-05	293.9	1.24E-02	7.55E-03
SI5_W	0.59	413	0	1	6.97E-01	1.02E-01	3.17E-03	4.11E-03	3.73E-03	1.88E-03	2.17E-04	1.18E-03	7.64E-04	9.54E-07	7.69E-05	245.4	1.01E-02	6.10E-03
SI5_W	0.59	341	0	1	5.76E-01	9.70E-02	2.64E-03	3.39E-03	3.07E-03	1.55E-03	1.80E-04	9.79E-04	6.31E-04	7.87E-07	6.38E-05	206.8	8.39E-03	5.03E-03
SI5_W	0.59	308	0	1	5.20E-01	9.73E-02	2.43E-03	3.06E-03	2.78E-03	1.41E-03	1.63E-04	8.88E-04	5.70E-04	7.11E-07	5.78E-05	190.1	7.61E-03	4.55E-03
SI5_W	0.59	347	0	1	5.87E-01	1.30E-01	2.82E-03	3.45E-03	3.13E-03	1.60E-03	1.85E-04	1.01E-03	6.43E-04	8.02E-07	6.56E-05	220.9	8.63E-03	5.13E-03
SI5_W	0.59	367	0	1	6.20E-01	1.43E-01	3.00E-03	3.65E-03	3.31E-03	1.69E-03	1.96E-04	1.07E-03	6.79E-04	8.48E-07	6.95E-05	235.2	9.13E-03	5.42E-03
SI5_W	0.59	373	0	1	6.31E-01	1.49E-01	3.07E-03	3.72E-03	3.37E-03	1.72E-03	2.00E-04	1.09E-03	6.92E-04	8.63E-07	7.08E-05	240.5	9.31E-03	5.52E-03
SI5_W	0.59	386	0	1	6.53E-01	1.59E-01	3.19E-03	3.85E-03	3.49E-03	1.79E-03	2.07E-04	1.13E-03	7.16E-04	8.93E-07	7.33E-05	250.1	9.64E-03	5.71E-03
SI5_W	0.59	419	0	1	7.08E-01	1.71E-01	3.46E-03	4.17E-03	3.78E-03	1.94E-03	2.24E-04	1.22E-03	7.77E-04	9.69E-07	7.95E-05	270.8	1.05E-02	6.19E-03
SI5_W	0.59	518	0	1	8.74E-01	2.10E-01	4.26E-03	5.15E-03	4.67E-03	2.39E-03	2.77E-04	1.51E-03	9.58E-04	1.20E-06	9.82E-05	333.9	1.29E-02	7.65E-03
SI5_W	0.59	557	0	1	9.41E-01	2.20E-01	4.56E-03	5.54E-03	5.03E-03	2.57E-03	2.98E-04	1.62E-03	1.03E-03	1.29E-06	1.05E-04	357.1	1.39E-02	8.23E-03
SI5_W	0.59	386	0	1	6.53E-01	1.48E-01	3.14E-03	3.85E-03	3.49E-03	1.78E-03	2.06E-04	1.12E-03	7.16E-04	8.93E-07	7.31E-05	246.2	9.61E-03	5.71E-03
SI5_W	0.59	255	0	1	4.32E-01	8.58E-02	2.03E-03	2.54E-03	2.31E-03	1.17E-03	1.36E-04	7.38E-04	4.73E-04	5.90E-07	4.81E-05	158.7	6.32E-03	3.77E-03
SI5_W	0.59	216	0	1	3.65E-01	6.51E-02	1.68E-03	2.15E-03	1.95E-03	9.88E-04	1.14E-04	6.22E-04	4.00E-04	5.00E-07	4.05E-05	132.0	5.33E-03	3.19E-03
SI5_W	0.59	183	0	1	3.10E-01	4.97E-02	1.41E-03	1.82E-03	1.66E-03	8.35E-04	9.68E-05	5.26E-04	3.40E-04	4.24E-07	3.43E-05	110.2	4.51E-03	2.71E-03
SI5_W	0.59	151	0	1	2.55E-01	3.66E-02	1.16E-03	1.50E-03	1.36E-03	6.84E-04	7.93E-05	4.31E-04	2.79E-04	3.48E-07	2.81E-05	89.2	3.69E-03	2.23E-03
SI5_W	0.59	111	0	1	1.88E-01	2.42E-02	8.54E-04	1.11E-03	1.01E-03	5.04E-04	5.85E-05	3.18E-04	2.06E-04	2.57E-07	2.07E-05	65.1	2.72E-03	1.65E-03
SI6_E	0.43	58	0	1	9.73E-02	1.11E-02	4.42E-04	5.73E-04	5.20E-04	2.60E-04	3.02E-05	1.64E-04	1.07E-04	1.33E-07	1.07E-05	33.2	1.40E-03	8.51E-04
SI6_E	0.43	38	0	1	6.49E-02	6.67E-03	2.94E-04	3.82E-04	3.46E-04	1.73E-04	2.01E-05	1.09E-04	7.11E-05	8.87E-08	7.09E-06	21.9	9.33E-04	5.67E-04
SI6_E	0.43	34	0	1	5.68E-02	5.54E-03	2.58E-04	3.34E-04	3.03E-04	1.51E-04	1.75E-05	9.51E-05	6.22E-05	7.76E-08	6.19E-06	18.9	8.14E-04	4.96E-04
SI6_E	0.43	24	0	1	4.05E-02	3.96E-03	1.84E-04	2.39E-04	2.17E-04	1.08E-04	1.25E-05	6.78E-05	4.44E-05	5.54E-08	4.42E-06	13.4	5.81E-04	3.54E-04
SI6_E	0.43	34	0	1	5.68E-02	5.54E-03	2.58E-04	3.34E-04	3.03E-04	1.51E-04	1.75E-05	9.49E-05	6.22E-05	7.76E-08	6.18E-06	18.7	8.13E-04	4.96E-04
SI6_E	0.43	82	0	1	1.38E-01	1.35E-02	6.26E-04	8.11E-04	7.36E-04	3.66E-04	4.25E-05	2.30E-04	1.51E-04	1.88E-07	1.50E-05	45.5	1.97E-03	1.21E-03
SI6_E	0.43	245	0	1	4.13E-01	4.04E-02	1.88E-03	2.43E-03	2.21E-03	1.10E-03	1.28E-04	6.92E-04	4.53E-04	5.65E-07	4.51E-05	137.4	5.93E-03	3.62E-03
SI6_E	0.43	374	0	1	6.32E-01	7.03E-02	2.87E-03	3.72E-03	3.38E-03	1.69E-03	1.96E-04	1.06E-03	6.93E-04	8.65E-07	6.93E-05	215.3	9.11E-03	5.53E-03
SI6_E	0.43	302	0	1	5.11E-01	7.46E-02	2.32E-03	3.01E-03	2.73E-03	1.37E-03	1.59E-04	8.65E-04	5.60E-04	6.98E-07	5.63E-05	179.7	7.41E-03	4.47E-03
SI6_E	0.43	249	0	1	4.22E-01	7.11E-02	1.93E-03	2.48E-03	2.25E-03	1.14E-03	1.32E-04	7.17E-04	4.62E-04	5.76E-07	4.67E-05	151.5	6.14E-03	3.69E-03
SI6_E	0.43	225	0	1	3.81E-01	7.13E-02	1.78E-03	2.24E-03	2.04E-03	1.03E-03	1.20E-04	6.50E-04	4.18E-04	5.21E-07	4.24E-05	139.2	5.57E-03	3.33E-03
SI6_E	0.43	254	0	1	4.30E-01	9.53E-02	2.06E-03	2.53E-03	2.30E-03	1.17E-03	1.36E-04	7.38E-04	4.71E-04	5.88E-07	4.81E-05	161.8	6.32E-03	3.76E-03
SI6_E	0.43	269	0	1	4.54E-01	1.05E-01	2.20E-03	2.67E-03	2.43E-03	1.24E-03	1.44E-04	7.81E-04	4.98E-04	6.21E-07	5.09E-05	172.3	6.69E-03	3.97E-03
SI6_E	0.43	273	0	1	4.62E-01	1.09E-01	2.25E-03	2.72E-03	2.47E-03	1.26E-03	1.46E-04	7.96E-04	5.06E-04	6.32E-07	5.18E-05	176.1	6.82E-03	4.04E-03
SI6_E	0.43	283	0	1	4.78E-01	1.16E-01	2.34E-03	2.82E-03	2.56E-03	1.31E-03	1.52E-04	8.25E-04	5.24E-04	6.54E-07	5.37E-05	183.2	7.06E-03	4.18E-03
SI6_E	0.43	307	0	1	5.19E-01	1.25E-01	2.53E-03	3.06E-03	2.77E-03	1.42E-03	1.64E-04	8.94E-04	5.69E-04	7.10E-07	5.82E-05	198.3	7.66E-03	4.54E-03
SI6_E	0.43	379	0	1	6.40E-01	1.54E-01	3.12E-03	3.77E-03	3.42E-03	1.75E-03	2.03E-04	1.10E-03	7.02E-04	8.76E-07	7.19E-05	244.6	9.45E-03	5.60E-03
SI6_E	0.43	408	0	1	6.89E-01	1.61E-01	3.34E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.19E-03	7.55E-04	9.42E-07	7.72E-05	261.6	1.02E-02	6.03E-03
SI6_E	0.43	283	0	1	4.78E-01	1.09E-01	2.30E-03	2.82E-03	2.56E-03	1.30E-03	1.51E-04	8.22E-04	5.24E-04	6.54E-07	5.35E-05	180.3	7.04E-03	4.18E-03
SI6_E	0.43	187	0	1	3.16E-01	6.28E-02	1.48E-03	1.86E-03	1.69E-03	8.58E-04	9.94E-05	5.40E-04	3.46E-04	4.32E-07	3.52E-05	116.2	4.63E-03	2.76E-03
SI6_E	0.43	158	0	1	2.68E-01	4.77E-02	1.23E-03	1.58E-03	1.43E-03	7.23E-04	8.38E-05	4.56E-04	2.93E-04	3.66E-07	2.97E-05	96.7	3.90E-03	2.34E-03
SI6_E	0.43	134	0	1	2.27E-01	3.64E-02	1.03E-03	1.34E-03	1.21E-03	6.12E-04	7.09E-05	3.85E-04	2.49E-04	3.10E-07	2.51E-05	80.7	3.30E-03	1.98E-03
SI6_E	0.43	110	0	1	1.86E-01	2.68E-02	8.46E-04	1.10E-03	9.96E-04	5.01E-04	5.81E-05	3.15E-04	2.04E-04	2.55E-07	2.05E-05	65.3	2.70E-03	1.63E-03
SI6_E	0.43	82	0	1	1.38E-01	1.78E-02	6.26E-04	8.11E-04	7.36E-04	3.69E-04	4.28E-05	2.33E-04	1.51E-04	1.88E-07	1.51E-05	47.6	1.99E-03	1.21E-03
SI6_W	0.43	54	0	1	9.19E-02	1.05E-02	4.17E-04	5.41E-04	4.91E-04	2.46E-04	2.85E-05	1.55E-04	1.01E-04	1.26E-07	1.01E-05	31.3	1.32E-03	8.03E-04
SI6_W	0.43	36	0	1	6.12E-02	6.30E-03	2.78E-04	3.61E-04	3.27E-04	1.63E-04	1.89E-05	1.03E-04	6.71E-05	8.37E-08	6.70E-06	20.7	8.81E-04	5.35E-04
SI6_W	0.43	32	0	1	5.36E-02	5.23E-03	2.43E-04	3.16E-04	2.86E-04	1.43E-04	1.65E-05	8.98E-05	5.87E-05	7.33E-08	5.84E-06	17.9	7.69E-04	4.69E-04
SI6_W	0.43	23	0	1	3.83E-02	3.74E-03	1.74E-04	2.25E-04	2.04E-04	1.02E-04	1.18E-05	6.40E-05	4.19E-05	5.23E-08	4.17E-06	12.7	5.49E-04	3.35E-04
SI6_W	0.43	32	0	1	5.36E-02	5.23E-03	2.43E-04	3.16E-04	2.86E-04	1.42E-04	1.65E-05	8.96E-05	5.87E-05	7.33E-08	5.83E-06	17.7	7.68E-04	4.69E-04
SI6_W	0.43	77	0	1	1.30E-01	1.27E-02	5.91E-04	7.66E-04	6.95E-04	3.46E-04	4.01E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.0	1.86E-03	1.14E-03
SI6_W	0.43	231	0	1	3.90E-01	3.81E-02	1.77E-03	2.30E-03	2.09E-03	1.04E-03	1.20E-04	6.54E-04	4.28E-04	5.34E-07	4.26E-05	129.7	5.60E-03	3.41E-03
SI6_W	0.43	353	0	1	5.97E-01	6.64E-02	2.71E-03	3.52E-03	3.19E-03	1.60E-03	1.85E-04	1.00E-03	6.54E-04	8.16E-07	6.54E-05	203.3	8.60E-03	5.22E-03
SI6_W	0.43	285	0	1	4.82E-01	7.05E-02	2.19E-03	2.84E-03	2.58E-03	1.30E-03	1.50E-04	8.17E-04	5.28E-04	6.59E-07	5.32E-05	169.7	7.00E-03	4.22E-03
SI6_W	0.43	236	0	1	3.98E-01	6.71E-02	1.83E-03	2.34E-03	2.13E-03	1.08E-03	1.25E-04	6.77E-04	4.36E-04	5.44E-07	4.41E-05	143.0	5.80E-03	3.48E-03
SI6_W	0.43	213	0	1	3.60E-01	6.73E-02	1.68E-03	2.12E-03	1.92E-03	9.75E-04	1.13E-04	6.14E-04	3.94E-04	4.92E-07	4.00E-05	131.5	5.26E-03	3.15E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	240	0	1	4.06E-01	9.00E-02	1.95E-03	2.39E-03	2.17E-03	1.11E-03	1.28E-04	6.97E-04	4.45E-04	5.55E-07	4.54E-05	152.8	5.97E-03	3.55E-03
SI6_W	0.43	254	0	1	4.29E-01	9.87E-02	2.08E-03	2.52E-03	2.29E-03	1.17E-03	1.36E-04	7.38E-04	4.70E-04	5.86E-07	4.80E-05	162.7	6.32E-03	3.75E-03
SI6_W	0.43	258	0	1	4.36E-01	1.03E-01	2.12E-03	2.57E-03	2.33E-03	1.19E-03	1.38E-04	7.52E-04	4.78E-04	5.97E-07	4.90E-05	166.3	6.44E-03	3.82E-03
SI6_W	0.43	267	0	1	4.52E-01	1.10E-01	2.21E-03	2.66E-03	2.41E-03	1.24E-03	1.43E-04	7.79E-04	4.95E-04	6.18E-07	5.07E-05	173.0	6.67E-03	3.95E-03
SI6_W	0.43	290	0	1	4.90E-01	1.18E-01	2.39E-03	2.88E-03	2.62E-03	1.34E-03	1.55E-04	8.44E-04	5.37E-04	6.70E-07	5.50E-05	187.2	7.23E-03	4.28E-03
SI6_W	0.43	358	0	1	6.05E-01	1.45E-01	2.95E-03	3.56E-03	3.23E-03	1.65E-03	1.92E-04	1.04E-03	6.63E-04	8.27E-07	6.79E-05	230.9	8.92E-03	5.29E-03
SI6_W	0.43	385	0	1	6.51E-01	1.52E-01	3.15E-03	3.83E-03	3.48E-03	1.78E-03	2.06E-04	1.12E-03	7.13E-04	8.90E-07	7.29E-05	247.0	9.59E-03	5.69E-03
SI6_W	0.43	267	0	1	4.52E-01	1.03E-01	2.17E-03	2.66E-03	2.41E-03	1.23E-03	1.43E-04	7.76E-04	4.95E-04	6.18E-07	5.05E-05	170.3	6.65E-03	3.95E-03
SI6_W	0.43	177	0	1	2.99E-01	5.93E-02	1.40E-03	1.76E-03	1.59E-03	8.10E-04	9.38E-05	5.10E-04	3.27E-04	4.08E-07	3.32E-05	109.8	4.37E-03	2.61E-03
SI6_W	0.43	149	0	1	2.53E-01	4.50E-02	1.16E-03	1.49E-03	1.35E-03	6.83E-04	7.91E-05	4.30E-04	2.77E-04	3.45E-07	2.80E-05	91.3	3.68E-03	2.21E-03
SI6_W	0.43	127	0	1	2.14E-01	3.43E-02	9.73E-04	1.26E-03	1.14E-03	5.78E-04	6.69E-05	3.64E-04	2.35E-04	2.93E-07	2.37E-05	76.2	3.12E-03	1.87E-03
SI6_W	0.43	104	0	1	1.76E-01	2.53E-02	7.99E-04	1.04E-03	9.41E-04	4.73E-04	5.48E-05	2.98E-04	1.93E-04	2.41E-07	1.94E-05	61.7	2.55E-03	1.54E-03
SI6_W	0.43	77	0	1	1.30E-01	1.68E-02	5.91E-04	7.66E-04	6.95E-04	3.49E-04	4.04E-05	2.20E-04	1.43E-04	1.78E-07	1.43E-05	45.0	1.88E-03	1.14E-03
SI7_E	0.47	59	0	1	9.89E-02	1.13E-02	4.49E-04	5.82E-04	5.28E-04	2.64E-04	3.07E-05	1.66E-04	1.08E-04	1.35E-07	1.08E-05	33.7	1.43E-03	8.65E-04
SI7_E	0.47	39	0	1	6.60E-02	6.79E-03	2.99E-04	3.88E-04	3.52E-04	1.76E-04	2.04E-05	1.11E-04	7.23E-05	9.02E-08	7.21E-06	22.3	9.49E-04	5.77E-04
SI7_E	0.47	34	0	1	5.77E-02	5.64E-03	2.62E-04	3.40E-04	3.08E-04	1.54E-04	1.78E-05	9.67E-05	6.32E-05	7.89E-08	6.29E-06	19.2	8.28E-04	5.05E-04
SI7_E	0.47	24	0	1	4.12E-02	4.03E-03	1.87E-04	2.43E-04	2.20E-04	1.10E-04	1.27E-05	6.90E-05	4.52E-05	5.64E-08	4.49E-06	13.7	5.91E-04	3.60E-04
SI7_E	0.47	34	0	1	5.77E-02	5.64E-03	2.62E-04	3.40E-04	3.08E-04	1.53E-04	1.78E-05	9.65E-05	6.32E-05	7.89E-08	6.28E-06	19.1	8.27E-04	5.05E-04
SI7_E	0.47	83	0	1	1.40E-01	1.37E-02	6.36E-04	8.25E-04	7.49E-04	3.72E-04	4.32E-05	2.34E-04	1.54E-04	1.92E-07	1.53E-05	46.3	2.01E-03	1.23E-03
SI7_E	0.47	249	0	1	4.20E-01	4.11E-02	1.91E-03	2.48E-03	2.25E-03	1.12E-03	1.30E-04	7.04E-04	4.61E-04	5.75E-07	4.58E-05	139.7	6.03E-03	3.68E-03
SI7_E	0.47	381	0	1	6.43E-01	7.15E-02	2.92E-03	3.79E-03	3.43E-03	1.72E-03	1.99E-04	1.08E-03	7.05E-04	8.79E-07	7.04E-05	218.9	9.27E-03	5.62E-03
SI7_E	0.47	307	0	1	5.19E-01	7.59E-02	2.36E-03	3.06E-03	2.77E-03	1.40E-03	1.62E-04	8.80E-04	5.69E-04	7.10E-07	5.73E-05	182.7	7.53E-03	4.54E-03
SI7_E	0.47	254	0	1	4.29E-01	7.23E-02	1.97E-03	2.52E-03	2.29E-03	1.16E-03	1.34E-04	7.29E-04	4.70E-04	5.86E-07	4.75E-05	154.0	6.25E-03	3.75E-03
SI7_E	0.47	229	0	1	3.87E-01	7.25E-02	1.81E-03	2.28E-03	2.07E-03	1.05E-03	1.22E-04	6.61E-04	4.25E-04	5.30E-07	4.31E-05	141.6	5.66E-03	3.39E-03
SI7_E	0.47	259	0	1	4.37E-01	9.69E-02	2.10E-03	2.57E-03	2.33E-03	1.19E-03	1.38E-04	7.51E-04	4.79E-04	5.98E-07	4.89E-05	164.5	6.43E-03	3.82E-03
SI7_E	0.47	273	0	1	4.62E-01	1.06E-01	2.24E-03	2.72E-03	2.47E-03	1.26E-03	1.46E-04	7.94E-04	5.06E-04	6.31E-07	5.17E-05	175.2	6.80E-03	4.04E-03
SI7_E	0.47	278	0	1	4.70E-01	1.11E-01	2.29E-03	2.77E-03	2.51E-03	1.28E-03	1.49E-04	8.09E-04	5.15E-04	6.43E-07	5.27E-05	179.1	6.93E-03	4.11E-03
SI7_E	0.47	288	0	1	4.86E-01	1.18E-01	2.38E-03	2.86E-03	2.60E-03	1.33E-03	1.54E-04	8.39E-04	5.33E-04	6.65E-07	5.46E-05	186.3	7.18E-03	4.25E-03
SI7_E	0.47	312	0	1	5.28E-01	1.27E-01	2.57E-03	3.11E-03	2.82E-03	1.44E-03	1.67E-04	9.09E-04	5.78E-04	7.22E-07	5.92E-05	201.6	7.79E-03	4.61E-03
SI7_E	0.47	385	0	1	6.51E-01	1.57E-01	3.17E-03	3.83E-03	3.48E-03	1.78E-03	2.06E-04	1.12E-03	7.14E-04	8.91E-07	7.31E-05	248.7	9.61E-03	5.69E-03
SI7_E	0.47	415	0	1	7.01E-01	1.64E-01	3.39E-03	4.13E-03	3.74E-03	1.91E-03	2.22E-04	1.21E-03	7.68E-04	9.58E-07	7.85E-05	266.0	1.03E-02	6.13E-03
SI7_E	0.47	288	0	1	4.86E-01	1.11E-01	2.34E-03	2.86E-03	2.60E-03	1.33E-03	1.54E-04	8.36E-04	5.33E-04	6.65E-07	5.44E-05	183.4	7.16E-03	4.25E-03
SI7_E	0.47	190	0	1	3.22E-01	6.39E-02	1.51E-03	1.89E-03	1.72E-03	8.72E-04	1.01E-04	5.50E-04	3.52E-04	4.40E-07	3.58E-05	118.2	4.71E-03	2.81E-03
SI7_E	0.47	161	0	1	2.72E-01	4.85E-02	1.25E-03	1.60E-03	1.45E-03	7.36E-04	8.52E-05	4.63E-04	2.98E-04	3.72E-07	3.02E-05	98.3	3.97E-03	2.38E-03
SI7_E	0.47	137	0	1	2.31E-01	3.70E-02	1.05E-03	1.36E-03	1.23E-03	6.22E-04	7.21E-05	3.92E-04	2.53E-04	3.16E-07	2.55E-05	82.0	3.36E-03	2.02E-03
SI7_E	0.47	112	0	1	1.90E-01	2.73E-02	8.61E-04	1.12E-03	1.01E-03	5.10E-04	5.91E-05	3.21E-04	2.08E-04	2.59E-07	2.09E-05	66.4	2.75E-03	1.66E-03
SI7_E	0.47	83	0	1	1.40E-01	1.81E-02	6.36E-04	8.25E-04	7.49E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	48.4	2.03E-03	1.23E-03
SI7_W	0.47	67	0	1	1.13E-01	1.29E-02	5.14E-04	6.66E-04	6.05E-04	3.03E-04	3.51E-05	1.90E-04	1.24E-04	1.55E-07	1.24E-05	38.6	1.63E-03	9.90E-04
SI7_W	0.47	45	0	1	7.55E-02	7.76E-03	3.43E-04	4.44E-04	4.03E-04	2.01E-04	2.33E-05	1.27E-04	8.27E-05	1.03E-07	8.25E-06	25.5	1.09E-03	6.60E-04
SI7_W	0.47	39	0	1	6.60E-02	6.45E-03	3.00E-04	3.89E-04	3.53E-04	1.76E-04	2.04E-05	1.11E-04	7.23E-05	9.03E-08	7.20E-06	22.0	9.47E-04	5.77E-04
SI7_W	0.47	28	0	1	4.72E-02	4.61E-03	2.14E-04	2.78E-04	2.52E-04	1.25E-04	1.45E-05	7.89E-05	5.17E-05	6.45E-08	5.14E-06	15.6	6.76E-04	4.12E-04
SI7_W	0.47	39	0	1	6.60E-02	6.45E-03	3.00E-04	3.89E-04	3.53E-04	1.75E-04	2.03E-05	1.10E-04	7.23E-05	9.03E-08	7.19E-06	21.8	9.46E-04	5.77E-04
SI7_W	0.47	95	0	1	1.60E-01	1.57E-02	7.28E-04	9.44E-04	8.56E-04	4.26E-04	4.94E-05	2.68E-04	1.76E-04	2.19E-07	1.75E-05	53.0	2.30E-03	1.40E-03
SI7_W	0.47	285	0	1	4.81E-01	4.70E-02	2.18E-03	2.83E-03	2.57E-03	1.28E-03	1.48E-04	8.05E-04	5.27E-04	6.58E-07	5.24E-05	159.9	6.90E-03	4.21E-03
SI7_W	0.47	435	0	1	7.36E-01	8.18E-02	3.34E-03	4.33E-03	3.93E-03	1.97E-03	2.28E-04	1.24E-03	8.06E-04	1.01E-06	8.06E-05	250.4	1.06E-02	6.43E-03
SI7_W	0.47	352	0	1	5.94E-01	8.68E-02	2.70E-03	3.50E-03	3.17E-03	1.60E-03	1.85E-04	1.01E-03	6.51E-04	8.12E-07	6.55E-05	209.1	8.62E-03	5.20E-03
SI7_W	0.47	290	0	1	4.90E-01	8.27E-02	2.25E-03	2.89E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.71E-07	5.43E-05	176.2	7.14E-03	4.29E-03
SI7_W	0.47	262	0	1	4.43E-01	8.29E-02	2.07E-03	2.61E-03	2.37E-03	1.20E-03	1.39E-04	7.57E-04	4.86E-04	6.06E-07	4.93E-05	162.0	6.48E-03	3.88E-03
SI7_W	0.47	296	0	1	5.00E-01	1.11E-01	2.40E-03	2.94E-03	2.67E-03	1.36E-03	1.58E-04	8.59E-04	5.48E-04	6.84E-07	5.59E-05	188.2	7.35E-03	4.37E-03
SI7_W	0.47	313	0	1	5.28E-01	1.22E-01	2.56E-03	3.11E-03	2.82E-03	1.44E-03	1.67E-04	9.09E-04	5.79E-04	7.22E-07	5.92E-05	200.4	7.78E-03	4.62E-03
SI7_W	0.47	318	0	1	5.38E-01	1.27E-01	2.61E-03	3.17E-03	2.87E-03	1.47E-03	1.70E-04	9.26E-04	5.89E-04	7.35E-07	6.03E-05	204.9	7.93E-03	4.70E-03
SI7_W	0.47	329	0	1	5.56E-01	1.35E-01	2.72E-03	3.28E-03	2.97E-03	1.52E-03	1.76E-04	9.59E-04	6.10E-04	7.61E-07	6.25E-05	213.1	8.22E-03	4.87E-03
SI7_W	0.47	357	0	1	6.04E-01	1.45E-01	2.94E-03	3.55E-03	3.22E-03	1.65E-03	1.91E-04	1.04E-03	6.62E-04	8.26E-07	6.78E-05	230.7	8.91E-03	5.28E-03
SI7_W	0.47	441	0	1	7.45E-01	1.79E-01	3.63E-03	4.39E-03	3.98E-03	2.04E-03	2.36E-04	1.28E-03	8.17E-04	1.02E-06	8.36E-05	284.5	1.10E-02	6.51E-03
SI7_W	0.47	474	0	1	8.02E-01	1.88E-01	3.88E-03	4.72E-03	4.28E-03	2.19E-03	2.54E-04	1.38E-03	8.79E-04	1.10E-06	8.99E-05	304.3	1.18E-02	7.01E-03
SI7_W	0.47	329	0	1	5.56E-01	1.26E-01	2.68E-03	3.28E-03	2.97E-03	1.52E-03	1.76E-04	9.56E-04	6.10E-04	7.61E-07	6.23E-05	209.8	8.19E-03	4.87E-03
SI7_W	0.47	218	0	1	3.68E-01	7.31E-02	1.73E-03	2.17E-03	1.96E-03	9.98E-04	1.16E-04	6.29E-04	4.03E-04	5.03E-07	4.09E-05	135.2	5.38E-03	3.22E-03
SI7_W	0.47	184	0	1	3.11E-01	5.55E-02	1.43E-03	1.83E-03	1.66E-03	8.42E-04	9.75E-05	5.30E-04	3.41E-04	4.26E-07	3.45E-05	112.4	4.54E-03	2.72E-03
SI7_W	0.47	156	0	1	2.64E-01	4.23E-02	1.20E-03	1.55E-03	1.41E-03	7.12E-04	8.25E-05	4.48E-04	2.89E-04	3.61E-07	2.92E-05	93.9	3.84E-03	2.31E-03
SI7_W	0.47	128	0	1	2.17E-01	3.12E-02	9.85E-04	1.28E-03	1.16E-03	5.83E-04	6.76E-05	3.67E-04	2.38E-04	2.97E-07	2.39E-05	76.0	3.14E-03	1.90E-03
SI7_W	0.47	95	0	1	1.60E-01	2.07E-02	7.28E-04	9.44E-04	8.56E-04	4.30E-04	4.98E-05	2.71E-04	1.76E-04	2.19E-07	1.76E-05	55.4	2.32E-03	1.40E-03
SI8_E	0.55	79	0	1	1.33E-01	1.52E-02	6.06E-04	7.85E-04	7.13E-04	3.57E-04	4.13E-05	2.24E-04	1.46E-04	1.82E-07	1.46E-05	45.5	1.92E-03	1.17E-03
SI8_E	0.55	53	0	1	8.89E-02	9.15E-03	4.04E-04	5.24E-04	4.75E-04	2.37E-04	2.75E-05	1.49E-04	9.74E-05	1.22E-07	9.72E-06	30.0	1.28E-03	7.78E-04
SI8_E	0.55	46	0	1	7.78E-02	7.60E-03	3.53E-04	4.58E-04	4.16E-04	2.07E-04	2.40E-05	1.30E-04	8.53E-05	1.06E-07	8.49E-06	25.9	1.12E-03	6.80E-04
SI8_E	0.55	33	0	1	5.56E-02	5.43E-03	2.52E-04	3.27E-04	2.97E-04	1.48E-04	1.71E-05	9.30E-05	6.09E-05	7.60E-08	6.05E-06	18.4	7.97E-04	4.86E-04
SI8_E	0.55	46	0	1	7.78E-02	7.60E-03	3.53E-04	4.58E-04	4.16E-04	2.07E-04	2.40E-05	1.30E-04	8.53E-05	1.06E-07	8.47E-06	25.7	1.11E-03	6.80E-04
SI8_E	0.55	112	0	1	1.89E-01	1.85E-02	8.58E-04	1.11E-03	1.01E-03	5.02E-04	5.82E-05	3.16E-04	2.07E-04	2.58E-07	2.06E-05	62.4	2.71E-03	1.65E-03
SI8_E	0.55	335	0	1	5.67E-01	5.54E-02	2.57E-03	3.34E-03	3.03E-03	1.51E-03	1.75E-04	9.49E-04	6.21E-04	7.75E-07	6.18E-05	188.4	8.13E-03	4.96E-03
SI8_E	0.55	513	0	1	8.67E-01	9.64E-02	3.94E-03	5.10E-03	4.63E-03	2.32E-03	2.69E-04	1.46E-03	9.50E-04	1.19E-06	9.50E-05	295.2	1.25E-02	7.58E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	414	0	1	7.00E-01	1.02E-01	3.18E-03	4.12E-03	3.74E-03	1.88E-03	2.18E-04	1.19E-03	7.67E-04	9.58E-07	7.72E-05	246.4	1.02E-02	6.12E-03
SI8_E	0.55	342	0	1	5.78E-01	9.74E-02	2.65E-03	3.40E-03	3.09E-03	1.56E-03	1.81E-04	9.83E-04	6.33E-04	7.90E-07	6.40E-05	207.7	8.42E-03	5.05E-03
SI8_E	0.55	309	0	1	5.22E-01	9.77E-02	2.44E-03	3.08E-03	2.79E-03	1.42E-03	1.64E-04	8.92E-04	5.72E-04	7.14E-07	5.81E-05	190.9	7.64E-03	4.57E-03
SI8_E	0.55	349	0	1	5.89E-01	1.31E-01	2.83E-03	3.47E-03	3.15E-03	1.61E-03	1.86E-04	1.01E-03	6.45E-04	8.06E-07	6.59E-05	221.8	8.67E-03	5.15E-03
SI8_E	0.55	368	0	1	6.22E-01	1.43E-01	3.01E-03	3.67E-03	3.33E-03	1.70E-03	1.97E-04	1.07E-03	6.82E-04	8.51E-07	6.98E-05	236.2	9.17E-03	5.44E-03
SI8_E	0.55	375	0	1	6.34E-01	1.50E-01	3.08E-03	3.73E-03	3.38E-03	1.73E-03	2.01E-04	1.09E-03	6.94E-04	8.67E-07	7.11E-05	241.5	9.35E-03	5.54E-03
SI8_E	0.55	388	0	1	6.56E-01	1.59E-01	3.20E-03	3.86E-03	3.50E-03	1.79E-03	2.08E-04	1.13E-03	7.19E-04	8.97E-07	7.37E-05	251.1	9.68E-03	5.73E-03
SI8_E	0.55	421	0	1	7.11E-01	1.71E-01	3.47E-03	4.19E-03	3.80E-03	1.95E-03	2.25E-04	1.23E-03	7.80E-04	9.73E-07	7.99E-05	271.9	1.05E-02	6.22E-03
SI8_E	0.55	520	0	1	8.78E-01	2.11E-01	4.28E-03	5.17E-03	4.69E-03	2.40E-03	2.78E-04	1.51E-03	9.62E-04	1.20E-06	9.86E-05	335.3	1.30E-02	7.68E-03
SI8_E	0.55	559	0	1	9.45E-01	2.21E-01	4.58E-03	5.56E-03	5.05E-03	2.58E-03	2.99E-04	1.63E-03	1.04E-03	1.29E-06	1.06E-04	358.6	1.39E-02	8.26E-03
SI8_E	0.55	388	0	1	6.56E-01	1.49E-01	3.15E-03	3.86E-03	3.50E-03	1.79E-03	2.07E-04	1.13E-03	7.19E-04	8.97E-07	7.34E-05	247.2	9.65E-03	5.73E-03
SI8_E	0.55	257	0	1	4.34E-01	8.61E-02	2.03E-03	2.55E-03	2.32E-03	1.18E-03	1.36E-04	7.41E-04	4.75E-04	5.93E-07	4.83E-05	159.4	6.35E-03	3.79E-03
SI8_E	0.55	217	0	1	3.67E-01	6.54E-02	1.69E-03	2.16E-03	1.96E-03	9.92E-04	1.15E-04	6.25E-04	4.02E-04	5.02E-07	4.07E-05	132.5	5.35E-03	3.21E-03
SI8_E	0.55	184	0	1	3.11E-01	4.99E-02	1.41E-03	1.83E-03	1.66E-03	8.39E-04	9.72E-05	5.28E-04	3.41E-04	4.26E-07	3.44E-05	110.6	4.52E-03	2.72E-03
SI8_E	0.55	151	0	1	2.56E-01	3.68E-02	1.16E-03	1.51E-03	1.37E-03	6.87E-04	7.96E-05	4.33E-04	2.80E-04	3.50E-07	2.82E-05	89.6	3.71E-03	2.24E-03
SI8_E	0.55	112	0	1	1.89E-01	2.44E-02	8.58E-04	1.11E-03	1.01E-03	5.07E-04	5.87E-05	3.19E-04	2.07E-04	2.58E-07	2.08E-05	65.3	2.73E-03	1.65E-03
SI8_W	0.48	75	0	1	1.26E-01	1.44E-02	5.72E-04	7.42E-04	6.73E-04	3.37E-04	3.91E-05	2.12E-04	1.38E-04	1.72E-07	1.38E-05	43.0	1.82E-03	1.10E-03
SI8_W	0.48	50	0	1	8.40E-02	8.65E-03	3.82E-04	4.95E-04	4.49E-04	2.24E-04	2.60E-05	1.41E-04	9.21E-05	1.15E-07	9.19E-06	28.4	1.21E-03	7.35E-04
SI8_W	0.48	44	0	1	7.35E-02	7.18E-03	3.34E-04	4.33E-04	3.93E-04	1.96E-04	2.27E-05	1.23E-04	8.06E-05	1.01E-07	8.02E-06	24.5	1.06E-03	6.43E-04
SI8_W	0.48	31	0	1	5.25E-02	5.13E-03	2.38E-04	3.09E-04	2.81E-04	1.40E-04	1.62E-05	8.79E-05	5.76E-05	7.18E-08	5.72E-06	17.4	7.53E-04	4.59E-04
SI8_W	0.48	44	0	1	7.35E-02	7.18E-03	3.34E-04	4.33E-04	3.93E-04	1.95E-04	2.27E-05	1.23E-04	8.06E-05	1.01E-07	8.01E-06	24.3	1.05E-03	6.43E-04
SI8_W	0.48	106	0	1	1.79E-01	1.74E-02	8.11E-04	1.05E-03	9.54E-04	4.75E-04	5.50E-05	2.99E-04	1.96E-04	2.44E-07	1.94E-05	59.0	2.56E-03	1.56E-03
SI8_W	0.48	317	0	1	5.36E-01	5.23E-02	2.43E-03	3.15E-03	2.86E-03	1.43E-03	1.65E-04	8.97E-04	5.87E-04	7.33E-07	5.84E-05	178.1	7.68E-03	4.68E-03
SI8_W	0.48	485	0	1	8.19E-01	9.11E-02	3.72E-03	4.82E-03	4.38E-03	2.19E-03	2.54E-04	1.38E-03	8.98E-04	1.12E-06	8.98E-05	279.0	1.18E-02	7.16E-03
SI8_W	0.48	392	0	1	6.62E-01	9.67E-02	3.00E-03	3.90E-03	3.54E-03	1.78E-03	2.06E-04	1.12E-03	7.25E-04	9.05E-07	7.30E-05	232.9	9.60E-03	5.79E-03
SI8_W	0.48	323	0	1	5.46E-01	9.21E-02	2.50E-03	3.22E-03	2.92E-03	1.48E-03	1.71E-04	9.29E-04	5.99E-04	7.47E-07	6.05E-05	196.3	7.96E-03	4.78E-03
SI8_W	0.48	292	0	1	4.94E-01	9.24E-02	2.30E-03	2.91E-03	2.64E-03	1.34E-03	1.55E-04	8.43E-04	5.41E-04	6.75E-07	5.49E-05	180.4	7.22E-03	4.32E-03
SI8_W	0.48	330	0	1	5.57E-01	1.23E-01	2.68E-03	3.28E-03	2.97E-03	1.52E-03	1.76E-04	9.56E-04	6.10E-04	7.61E-07	6.23E-05	209.6	8.19E-03	4.87E-03
SI8_W	0.48	348	0	1	5.88E-01	1.35E-01	2.85E-03	3.46E-03	3.14E-03	1.61E-03	1.86E-04	1.01E-03	6.45E-04	8.05E-07	6.59E-05	223.2	8.67E-03	5.14E-03
SI8_W	0.48	354	0	1	5.99E-01	1.42E-01	2.91E-03	3.53E-03	3.20E-03	1.64E-03	1.90E-04	1.03E-03	6.56E-04	8.19E-07	6.72E-05	228.2	8.83E-03	5.24E-03
SI8_W	0.48	367	0	1	6.20E-01	1.51E-01	3.03E-03	3.65E-03	3.31E-03	1.70E-03	1.96E-04	1.07E-03	6.79E-04	8.48E-07	6.96E-05	237.4	9.15E-03	5.42E-03
SI8_W	0.48	398	0	1	6.72E-01	1.62E-01	3.28E-03	3.96E-03	3.59E-03	1.84E-03	2.13E-04	1.16E-03	7.37E-04	9.20E-07	7.55E-05	257.0	9.92E-03	5.88E-03
SI8_W	0.48	491	0	1	8.30E-01	2.00E-01	4.04E-03	4.89E-03	4.43E-03	2.27E-03	2.63E-04	1.43E-03	9.10E-04	1.14E-06	9.32E-05	316.9	1.22E-02	7.26E-03
SI8_W	0.48	528	0	1	8.93E-01	2.09E-01	4.33E-03	5.26E-03	4.77E-03	2.44E-03	2.82E-04	1.54E-03	9.79E-04	1.22E-06	1.00E-04	339.0	1.32E-02	7.81E-03
SI8_W	0.48	367	0	1	6.20E-01	1.41E-01	2.98E-03	3.65E-03	3.31E-03	1.69E-03	1.96E-04	1.07E-03	6.79E-04	8.48E-07	6.94E-05	233.7	9.12E-03	5.42E-03
SI8_W	0.48	242	0	1	4.10E-01	8.14E-02	1.92E-03	2.41E-03	2.19E-03	1.11E-03	1.29E-04	7.00E-04	4.49E-04	5.60E-07	4.56E-05	150.6	6.00E-03	3.58E-03
SI8_W	0.48	205	0	1	3.47E-01	6.18E-02	1.60E-03	2.04E-03	1.85E-03	9.37E-04	1.09E-04	5.90E-04	3.80E-04	4.74E-07	3.84E-05	125.2	5.06E-03	3.03E-03
SI8_W	0.48	174	0	1	2.94E-01	4.71E-02	1.34E-03	1.73E-03	1.57E-03	7.93E-04	9.19E-05	4.99E-04	3.22E-04	4.02E-07	3.25E-05	104.6	4.28E-03	2.57E-03
SI8_W	0.48	143	0	1	2.42E-01	3.48E-02	1.10E-03	1.42E-03	1.29E-03	6.49E-04	7.53E-05	4.09E-04	2.65E-04	3.30E-07	2.66E-05	84.6	3.50E-03	2.11E-03
SI8_W	0.48	106	0	1	1.79E-01	2.30E-02	8.11E-04	1.05E-03	9.54E-04	4.79E-04	5.55E-05	3.01E-04	1.96E-04	2.44E-07	1.96E-05	61.7	2.58E-03	1.56E-03
SI9_E	0.75	116	0	1	1.96E-01	2.24E-02	8.88E-04	1.15E-03	1.04E-03	5.23E-04	6.06E-05	3.29E-04	2.14E-04	2.67E-07	2.14E-05	66.7	2.82E-03	1.71E-03
SI9_E	0.75	77	0	1	1.30E-01	1.34E-02	5.92E-04	7.68E-04	6.97E-04	3.48E-04	4.03E-05	2.19E-04	1.43E-04	1.78E-07	1.43E-05	44.0	1.88E-03	1.14E-03
SI9_E	0.75	68	0	1	1.14E-01	1.11E-02	5.18E-04	6.72E-04	6.10E-04	3.04E-04	3.52E-05	1.91E-04	1.25E-04	1.56E-07	1.24E-05	38.0	1.64E-03	9.98E-04
SI9_E	0.75	48	0	1	8.15E-02	7.96E-03	3.70E-04	4.80E-04	4.35E-04	2.17E-04	2.51E-05	1.36E-04	8.93E-05	1.11E-07	8.88E-06	27.0	1.17E-03	7.13E-04
SI9_E	0.75	68	0	1	1.14E-01	1.11E-02	5.18E-04	6.72E-04	6.10E-04	3.03E-04	3.52E-05	1.91E-04	1.25E-04	1.56E-07	1.24E-05	37.7	1.63E-03	9.98E-04
SI9_E	0.75	164	0	1	2.77E-01	2.71E-02	1.26E-03	1.63E-03	1.48E-03	7.37E-04	8.54E-05	4.63E-04	3.04E-04	3.79E-07	3.02E-05	91.6	3.97E-03	2.42E-03
SI9_E	0.75	492	0	1	8.31E-01	8.12E-02	3.77E-03	4.90E-03	4.44E-03	2.21E-03	2.56E-04	1.39E-03	9.11E-04	1.14E-06	9.06E-05	276.3	1.19E-02	7.27E-03
SI9_E	0.75	752	0	1	1.27E+00	1.41E-01	5.77E-03	7.49E-03	6.79E-03	3.40E-03	3.94E-04	2.14E-03	1.39E-03	1.74E-06	1.39E-04	432.9	1.83E-02	1.11E-02
SI9_E	0.75	608	0	1	1.03E+00	1.50E-01	4.66E-03	6.05E-03	5.49E-03	2.76E-03	3.20E-04	1.74E-03	1.13E-03	1.40E-06	1.13E-04	361.3	1.49E-02	8.98E-03
SI9_E	0.75	502	0	1	8.48E-01	1.43E-01	3.89E-03	4.99E-03	4.53E-03	2.29E-03	2.65E-04	1.44E-03	9.29E-04	1.16E-06	9.39E-05	304.6	1.23E-02	7.41E-03
SI9_E	0.75	453	0	1	7.66E-01	1.43E-01	3.57E-03	4.51E-03	4.09E-03	2.08E-03	2.41E-04	1.31E-03	8.40E-04	1.05E-06	8.52E-05	279.9	1.12E-02	6.70E-03
SI9_E	0.75	511	0	1	8.64E-01	1.92E-01	4.15E-03	5.09E-03	4.62E-03	2.36E-03	2.73E-04	1.48E-03	9.47E-04	1.18E-06	9.67E-05	325.3	1.27E-02	7.55E-03
SI9_E	0.75	540	0	1	9.13E-01	2.10E-01	4.42E-03	5.38E-03	4.88E-03	2.49E-03	2.89E-04	1.57E-03	1.00E-03	1.25E-06	1.02E-04	346.4	1.35E-02	7.98E-03
SI9_E	0.75	550	0	1	9.29E-01	2.20E-01	4.52E-03	5.47E-03	4.96E-03	2.54E-03	2.94E-04	1.60E-03	1.02E-03	1.27E-06	1.04E-04	354.1	1.37E-02	8.12E-03
SI9_E	0.75	569	0	1	9.62E-01	2.34E-01	4.70E-03	5.66E-03	5.14E-03	2.63E-03	3.05E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	368.3	1.42E-02	8.41E-03
SI9_E	0.75	617	0	1	1.04E+00	2.51E-01	5.09E-03	6.14E-03	5.57E-03	2.85E-03	3.30E-04	1.80E-03	1.14E-03	1.43E-06	1.17E-04	398.7	1.54E-02	9.12E-03
SI9_E	0.75	762	0	1	1.29E+00	3.10E-01	6.28E-03	7.58E-03	6.88E-03	3.52E-03	4.08E-04	2.22E-03	1.41E-03	1.76E-06	1.45E-04	491.8	1.90E-02	1.13E-02
SI9_E	0.75	820	0	1	1.39E+00	3.25E-01	6.71E-03	8.16E-03	7.40E-03	3.78E-03	4.38E-04	2.38E-03	1.52E-03	1.90E-06	1.55E-04	526.0	2.04E-02	1.21E-02
SI9_E	0.75	569	0	1	9.62E-01	2.19E-01	4.63E-03	5.66E-03	5.14E-03	2.62E-03	3.04E-04	1.65E-03	1.05E-03	1.32E-06	1.08E-04	362.6	1.42E-02	8.41E-03
SI9_E	0.75	376	0	1	6.36E-01	1.26E-01	2.98E-03	3.74E-03	3.40E-03	1.73E-03	2.00E-04	1.09E-03	6.97E-04	8.69E-07	7.08E-05	233.7	9.31E-03	5.56E-03
SI9_E	0.75	318	0	1	5.38E-01	9.59E-02	2.48E-03	3.17E-03	2.87E-03	1.45E-03	1.69E-04	9.16E-04	5.89E-04	7.36E-07	5.97E-05	194.3	7.85E-03	4.70E-03
SI9_E	0.75	270	0	1	4.56E-01	7.31E-02	2.07E-03	2.69E-03	2.44E-03	1.23E-03	1.43E-04	7.75E-04	5.00E-04	6.24E-07	5.04E-05	162.2	6.63E-03	3.99E-03
SI9_E	0.75	222	0	1	3.75E-01	5.40E-02	1.70E-03	2.21E-03	2.00E-03	1.01E-03	1.17E-04	6.34E-04	4.11E-04	5.13E-07	4.13E-05	131.3	5.43E-03	3.28E-03
SI9_E	0.75	164	0	1	2.77E-01	3.57E-02	1.26E-03	1.63E-03	1.48E-03	7.43E-04	8.61E-05	4.68E-04	3.04E-04	3.79E-07	3.04E-05	95.8	4.01E-03	2.42E-03
SI9_W	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI9_W	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03
SI9_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI9_W	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI9_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI9_W	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI9_W	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI9_W	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI9_W	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI9_W	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI9_W	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI9_W	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI9_W	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI9_W	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI9_W	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI9_W	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI9_W	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI9_W	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI9_W	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI9_W	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI9_W	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI9_W	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03
SI9_W	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI10_E	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI10_E	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03
SI10_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI10_E	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI10_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04
SI10_E	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI10_E	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI10_E	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI10_E	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI10_E	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI10_E	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI10_E	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI10_E	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI10_E	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI10_E	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI10_E	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI10_E	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI10_E	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI10_E	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI10_E	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI10_E	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI10_E	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI10_E	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03
SI10_E	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI10_W	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI10_W	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03
SI10_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI10_W	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI10_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04
SI10_W	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI10_W	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI10_W	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI10_W	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI10_W	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI10_W	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI10_W	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI10_W	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI10_W	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI10_W	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI10_W	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI10_W	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI10_W	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI10_W	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI10_W	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI10_W	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI10_W	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI10_W	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03
SI10_W	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI11_E	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI11_E	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI11_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI11_E	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI11_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04
SI11_E	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI11_E	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI11_E	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI11_E	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI11_E	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI11_E	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI11_E	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI11_E	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI11_E	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI11_E	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI11_E	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI11_E	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI11_E	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI11_E	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI11_E	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI11_E	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI11_E	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI11_E	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03
SI11_E	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI11_W	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI11_W	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03
SI11_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI11_W	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI11_W	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04
SI11_W	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI11_W	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI11_W	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI11_W	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI11_W	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI11_W	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI11_W	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI11_W	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI11_W	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI11_W	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI11_W	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI11_W	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI11_W	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI11_W	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI11_W	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI11_W	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI11_W	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI11_W	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03
SI11_W	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI12_E	0.75	105	0	1	1.78E-01	2.03E-02	8.08E-04	1.05E-03	9.51E-04	4.76E-04	5.52E-05	3.00E-04	1.95E-04	2.43E-07	1.95E-05	60.7	2.57E-03	1.56E-03
SI12_E	0.75	70	0	1	1.19E-01	1.22E-02	5.39E-04	6.99E-04	6.34E-04	3.17E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	40.1	1.71E-03	1.04E-03
SI12_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.6	1.49E-03	9.08E-04
SI12_E	0.75	44	0	1	7.42E-02	7.25E-03	3.37E-04	4.37E-04	3.96E-04	1.97E-04	2.29E-05	1.24E-04	8.13E-05	1.01E-07	8.08E-06	24.6	1.06E-03	6.49E-04
SI12_E	0.75	61	0	1	1.04E-01	1.01E-02	4.72E-04	6.12E-04	5.55E-04	2.76E-04	3.20E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.3	1.49E-03	9.08E-04
SI12_E	0.75	149	0	1	2.52E-01	2.46E-02	1.15E-03	1.49E-03	1.35E-03	6.70E-04	7.77E-05	4.22E-04	2.76E-04	3.45E-07	2.75E-05	83.3	3.61E-03	2.21E-03
SI12_E	0.75	448	0	1	7.57E-01	7.39E-02	3.44E-03	4.46E-03	4.04E-03	2.01E-03	2.33E-04	1.27E-03	8.29E-04	1.03E-06	8.25E-05	251.5	1.09E-02	6.62E-03
SI12_E	0.75	685	0	1	1.16E+00	1.29E-01	5.25E-03	6.82E-03	6.18E-03	3.09E-03	3.59E-04	1.95E-03	1.27E-03	1.58E-06	1.27E-04	394.1	1.67E-02	1.01E-02
SI12_E	0.75	553	0	1	9.35E-01	1.37E-01	4.24E-03	5.50E-03	4.99E-03	2.51E-03	2.91E-04	1.58E-03	1.02E-03	1.28E-06	1.03E-04	328.9	1.36E-02	8.17E-03
SI12_E	0.75	457	0	1	7.72E-01	1.30E-01	3.54E-03	4.54E-03	4.12E-03	2.08E-03	2.41E-04	1.31E-03	8.46E-04	1.06E-06	8.55E-05	277.3	1.12E-02	6.75E-03
SI12_E	0.75	413	0	1	6.97E-01	1.30E-01	3.25E-03	4.11E-03	3.73E-03	1.89E-03	2.19E-04	1.19E-03	7.64E-04	9.54E-07	7.75E-05	254.8	1.02E-02	6.10E-03
SI12_E	0.75	465	0	1	7.87E-01	1.74E-01	3.78E-03	4.63E-03	4.20E-03	2.14E-03	2.48E-04	1.35E-03	8.62E-04	1.08E-06	8.80E-05	296.1	1.16E-02	6.88E-03
SI12_E	0.75	492	0	1	8.31E-01	1.91E-01	4.02E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.31E-05	315.3	1.22E-02	7.27E-03
SI12_E	0.75	501	0	1	8.46E-01	2.00E-01	4.11E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.27E-04	1.16E-06	9.49E-05	322.4	1.25E-02	7.40E-03
SI12_E	0.75	518	0	1	8.76E-01	2.13E-01	4.28E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.60E-04	1.20E-06	9.83E-05	335.3	1.29E-02	7.66E-03
SI12_E	0.75	562	0	1	9.50E-01	2.29E-01	4.63E-03	5.59E-03	5.07E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	363.0	1.40E-02	8.30E-03
SI12_E	0.75	694	0	1	1.17E+00	2.82E-01	5.71E-03	6.90E-03	6.26E-03	3.21E-03	3.71E-04	2.02E-03	1.28E-03	1.60E-06	1.32E-04	447.7	1.73E-02	1.03E-02
SI12_E	0.75	746	0	1	1.26E+00	2.96E-01	6.11E-03	7.43E-03	6.74E-03	3.45E-03	3.99E-04	2.17E-03	1.38E-03	1.73E-06	1.41E-04	478.8	1.86E-02	1.10E-02
SI12_E	0.75	518	0	1	8.76E-01	1.99E-01	4.21E-03	5.16E-03	4.68E-03	2.39E-03	2.77E-04	1.50E-03	9.59E-04	1.20E-06	9.80E-05	330.1	1.29E-02	7.66E-03
SI12_E	0.75	343	0	1	5.79E-01	1.15E-01	2.72E-03	3.41E-03	3.09E-03	1.57E-03	1.82E-04	9.89E-04	6.34E-04	7.91E-07	6.44E-05	212.8	8.47E-03	5.06E-03
SI12_E	0.75	290	0	1	4.90E-01	8.73E-02	2.26E-03	2.88E-03	2.62E-03	1.32E-03	1.53E-04	8.34E-04	5.37E-04	6.70E-07	5.43E-05	176.9	7.14E-03	4.28E-03
SI12_E	0.75	246	0	1	4.16E-01	6.66E-02	1.89E-03	2.45E-03	2.22E-03	1.12E-03	1.30E-04	7.05E-04	4.55E-04	5.68E-07	4.59E-05	147.7	6.04E-03	3.63E-03
SI12_E	0.75	202	0	1	3.41E-01	4.91E-02	1.55E-03	2.01E-03	1.82E-03	9.17E-04	1.06E-04	5.77E-04	3.74E-04	4.67E-07	3.76E-05	119.6	4.95E-03	2.98E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	149	0	1	2.52E-01	3.25E-02	1.15E-03	1.49E-03	1.35E-03	6.76E-04	7.84E-05	4.26E-04	2.76E-04	3.45E-07	2.77E-05	87.2	3.65E-03	2.21E-03
SI12_W	0.75	92	0	1	1.56E-01	1.78E-02	7.07E-04	9.17E-04	8.32E-04	4.16E-04	4.82E-05	2.62E-04	1.71E-04	2.13E-07	1.71E-05	53.1	2.24E-03	1.36E-03
SI12_W	0.75	61	0	1	1.04E-01	1.07E-02	4.71E-04	6.11E-04	5.54E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	35.0	1.49E-03	9.07E-04
SI12_W	0.75	54	0	1	9.08E-02	8.87E-03	4.12E-04	5.35E-04	4.85E-04	2.42E-04	2.80E-05	1.52E-04	9.95E-05	1.24E-07	9.90E-06	30.3	1.30E-03	7.94E-04
SI12_W	0.75	38	0	1	6.49E-02	6.34E-03	2.94E-04	3.82E-04	3.47E-04	1.72E-04	2.00E-05	1.09E-04	7.11E-05	8.87E-08	7.07E-06	21.5	9.30E-04	5.67E-04
SI12_W	0.75	54	0	1	9.08E-02	8.87E-03	4.12E-04	5.35E-04	4.85E-04	2.41E-04	2.80E-05	1.52E-04	9.95E-05	1.24E-07	9.89E-06	30.0	1.30E-03	7.94E-04
SI12_W	0.75	131	0	1	2.21E-01	2.15E-02	1.00E-03	1.30E-03	1.18E-03	5.86E-04	6.80E-05	3.69E-04	2.42E-04	3.02E-07	2.40E-05	72.9	3.16E-03	1.93E-03
SI12_W	0.75	392	0	1	6.62E-01	6.46E-02	3.00E-03	3.90E-03	3.53E-03	1.76E-03	2.04E-04	1.11E-03	7.25E-04	9.05E-07	7.21E-05	219.9	9.49E-03	5.79E-03
SI12_W	0.75	599	0	1	1.01E+00	1.12E-01	4.59E-03	5.96E-03	5.41E-03	2.70E-03	3.14E-04	1.70E-03	1.11E-03	1.38E-06	1.11E-04	344.5	1.46E-02	8.85E-03
SI12_W	0.75	484	0	1	8.17E-01	1.19E-01	3.71E-03	4.81E-03	4.37E-03	2.20E-03	2.55E-04	1.38E-03	8.96E-04	1.12E-06	9.01E-05	287.6	1.19E-02	7.15E-03
SI12_W	0.75	399	0	1	6.75E-01	1.14E-01	3.09E-03	3.97E-03	3.60E-03	1.82E-03	2.11E-04	1.15E-03	7.39E-04	9.22E-07	7.47E-05	242.4	9.83E-03	5.90E-03
SI12_W	0.75	361	0	1	6.10E-01	1.14E-01	2.84E-03	3.59E-03	3.26E-03	1.65E-03	1.91E-04	1.04E-03	6.68E-04	8.34E-07	6.78E-05	222.8	8.91E-03	5.33E-03
SI12_W	0.75	407	0	1	6.88E-01	1.52E-01	3.30E-03	4.05E-03	3.67E-03	1.87E-03	2.17E-04	1.18E-03	7.53E-04	9.40E-07	7.69E-05	258.9	1.01E-02	6.01E-03
SI12_W	0.75	430	0	1	7.27E-01	1.67E-01	3.52E-03	4.28E-03	3.88E-03	1.98E-03	2.30E-04	1.25E-03	7.96E-04	9.94E-07	8.14E-05	275.7	1.07E-02	6.35E-03
SI12_W	0.75	438	0	1	7.39E-01	1.75E-01	3.60E-03	4.35E-03	3.95E-03	2.02E-03	2.34E-04	1.27E-03	8.10E-04	1.01E-06	8.30E-05	281.8	1.09E-02	6.47E-03
SI12_W	0.75	453	0	1	7.65E-01	1.86E-01	3.74E-03	4.51E-03	4.09E-03	2.09E-03	2.43E-04	1.32E-03	8.39E-04	1.05E-06	8.60E-05	293.1	1.13E-02	6.69E-03
SI12_W	0.75	491	0	1	8.30E-01	2.00E-01	4.05E-03	4.89E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.10E-04	1.14E-06	9.32E-05	317.3	1.23E-02	7.26E-03
SI12_W	0.75	607	0	1	1.02E+00	2.46E-01	4.99E-03	6.03E-03	5.47E-03	2.80E-03	3.25E-04	1.77E-03	1.12E-03	1.40E-06	1.15E-04	391.4	1.51E-02	8.96E-03
SI12_W	0.75	653	0	1	1.10E+00	2.58E-01	5.34E-03	6.49E-03	5.89E-03	3.01E-03	3.49E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	418.6	1.63E-02	9.64E-03
SI12_W	0.75	453	0	1	7.65E-01	1.74E-01	3.68E-03	4.51E-03	4.09E-03	2.09E-03	2.42E-04	1.32E-03	8.39E-04	1.05E-06	8.57E-05	288.5	1.13E-02	6.69E-03
SI12_W	0.75	299	0	1	5.06E-01	1.01E-01	2.37E-03	2.98E-03	2.70E-03	1.37E-03	1.59E-04	8.65E-04	5.54E-04	6.92E-07	5.63E-05	186.0	7.41E-03	4.42E-03
SI12_W	0.75	253	0	1	4.28E-01	7.63E-02	1.97E-03	2.52E-03	2.29E-03	1.16E-03	1.34E-04	7.29E-04	4.69E-04	5.85E-07	4.75E-05	154.7	6.24E-03	3.74E-03
SI12_W	0.75	215	0	1	3.63E-01	5.82E-02	1.65E-03	2.14E-03	1.94E-03	9.79E-04	1.13E-04	6.16E-04	3.98E-04	4.97E-07	4.01E-05	129.1	5.28E-03	3.18E-03
SI12_W	0.75	177	0	1	2.98E-01	4.29E-02	1.35E-03	1.76E-03	1.59E-03	8.02E-04	9.29E-05	5.05E-04	3.27E-04	4.08E-07	3.29E-05	104.5	4.32E-03	2.61E-03
SI12_W	0.75	131	0	1	2.21E-01	2.84E-02	1.00E-03	1.30E-03	1.18E-03	5.91E-04	6.85E-05	3.72E-04	2.42E-04	3.02E-07	2.42E-05	76.2	3.19E-03	1.93E-03
SI13_E	0.75	112	0	1	1.90E-01	2.17E-02	8.62E-04	1.12E-03	1.01E-03	5.07E-04	5.88E-05	3.19E-04	2.08E-04	2.60E-07	2.08E-05	64.7	2.74E-03	1.66E-03
SI13_E	0.75	75	0	1	1.27E-01	1.30E-02	5.74E-04	7.45E-04	6.76E-04	3.38E-04	3.91E-05	2.12E-04	1.39E-04	1.73E-07	1.38E-05	42.7	1.82E-03	1.11E-03
SI13_E	0.75	66	0	1	1.11E-01	1.08E-02	5.03E-04	6.52E-04	5.91E-04	2.95E-04	3.42E-05	1.85E-04	1.21E-04	1.51E-07	1.21E-05	36.9	1.59E-03	9.68E-04
SI13_E	0.75	47	0	1	7.91E-02	7.72E-03	3.59E-04	4.66E-04	4.22E-04	2.10E-04	2.44E-05	1.32E-04	8.67E-05	1.08E-07	8.61E-06	26.2	1.13E-03	6.91E-04
SI13_E	0.75	66	0	1	1.11E-01	1.08E-02	5.03E-04	6.52E-04	5.91E-04	2.94E-04	3.41E-05	1.85E-04	1.21E-04	1.51E-07	1.21E-05	36.6	1.59E-03	9.68E-04
SI13_E	0.75	159	0	1	2.69E-01	2.63E-02	1.22E-03	1.58E-03	1.44E-03	7.15E-04	8.29E-05	4.50E-04	2.95E-04	3.68E-07	2.93E-05	88.8	3.85E-03	2.35E-03
SI13_E	0.75	477	0	1	8.07E-01	7.88E-02	3.66E-03	4.75E-03	4.31E-03	2.15E-03	2.49E-04	1.35E-03	8.84E-04	1.10E-06	8.79E-05	268.1	1.16E-02	7.05E-03
SI13_E	0.75	730	0	1	1.23E+00	1.37E-01	5.60E-03	7.26E-03	6.59E-03	3.30E-03	3.82E-04	2.08E-03	1.35E-03	1.69E-06	1.35E-04	420.0	1.78E-02	1.08E-02
SI13_E	0.75	590	0	1	9.96E-01	1.46E-01	4.52E-03	5.87E-03	5.32E-03	2.68E-03	3.11E-04	1.69E-03	1.09E-03	1.36E-06	1.10E-04	350.6	1.45E-02	8.71E-03
SI13_E	0.75	487	0	1	8.22E-01	1.39E-01	3.77E-03	4.84E-03	4.39E-03	2.22E-03	2.57E-04	1.40E-03	9.01E-04	1.12E-06	9.11E-05	295.5	1.20E-02	7.19E-03
SI13_E	0.75	440	0	1	7.43E-01	1.39E-01	3.47E-03	4.38E-03	3.97E-03	2.01E-03	2.33E-04	1.27E-03	8.15E-04	1.02E-06	8.26E-05	271.6	1.09E-02	6.50E-03
SI13_E	0.75	496	0	1	8.38E-01	1.86E-01	4.03E-03	4.94E-03	4.48E-03	2.29E-03	2.65E-04	1.44E-03	9.19E-04	1.15E-06	9.38E-05	315.6	1.23E-02	7.33E-03
SI13_E	0.75	524	0	1	8.86E-01	2.04E-01	4.29E-03	5.22E-03	4.73E-03	2.42E-03	2.80E-04	1.52E-03	9.71E-04	1.21E-06	9.93E-05	336.1	1.31E-02	7.74E-03
SI13_E	0.75	534	0	1	9.02E-01	2.13E-01	4.38E-03	5.31E-03	4.82E-03	2.46E-03	2.85E-04	1.55E-03	9.88E-04	1.23E-06	1.01E-04	343.6	1.33E-02	7.88E-03
SI13_E	0.75	552	0	1	9.33E-01	2.27E-01	4.56E-03	5.49E-03	4.98E-03	2.55E-03	2.96E-04	1.61E-03	1.02E-03	1.28E-06	1.05E-04	357.4	1.38E-02	8.16E-03
SI13_E	0.75	599	0	1	1.01E+00	2.44E-01	4.94E-03	5.96E-03	5.41E-03	2.77E-03	3.21E-04	1.74E-03	1.11E-03	1.38E-06	1.14E-04	386.9	1.49E-02	8.85E-03
SI13_E	0.75	739	0	1	1.25E+00	3.01E-01	6.09E-03	7.36E-03	6.67E-03	3.42E-03	3.96E-04	2.15E-03	1.37E-03	1.71E-06	1.40E-04	477.1	1.84E-02	1.09E-02
SI13_E	0.75	796	0	1	1.34E+00	3.15E-01	6.51E-03	7.92E-03	7.18E-03	3.67E-03	4.25E-04	2.31E-03	1.47E-03	1.84E-06	1.51E-04	510.3	1.98E-02	1.18E-02
SI13_E	0.75	552	0	1	9.33E-01	2.12E-01	4.49E-03	5.49E-03	4.98E-03	2.55E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.8	1.37E-02	8.16E-03
SI13_E	0.75	365	0	1	6.17E-01	1.23E-01	2.89E-03	3.63E-03	3.30E-03	1.67E-03	1.94E-04	1.05E-03	6.76E-04	8.44E-07	6.87E-05	226.8	9.03E-03	5.39E-03
SI13_E	0.75	309	0	1	5.22E-01	9.30E-02	2.41E-03	3.07E-03	2.79E-03	1.41E-03	1.64E-04	8.89E-04	5.72E-04	7.14E-07	5.79E-05	188.6	7.61E-03	4.56E-03
SI13_E	0.75	262	0	1	4.43E-01	7.09E-02	2.01E-03	2.61E-03	2.37E-03	1.19E-03	1.38E-04	7.52E-04	4.85E-04	6.06E-07	4.89E-05	157.4	6.44E-03	3.87E-03
SI13_E	0.75	215	0	1	3.64E-01	5.24E-02	1.65E-03	2.14E-03	1.94E-03	9.78E-04	1.13E-04	6.16E-04	3.99E-04	4.97E-07	4.01E-05	127.4	5.27E-03	3.18E-03
SI13_E	0.75	159	0	1	2.69E-01	3.47E-02	1.22E-03	1.58E-03	1.44E-03	7.21E-04	8.35E-05	4.54E-04	2.95E-04	3.68E-07	2.95E-05	93.0	3.89E-03	2.35E-03
SI13_W	0.75	106	0	1	1.79E-01	2.04E-02	8.11E-04	1.05E-03	9.54E-04	4.78E-04	5.54E-05	3.01E-04	1.96E-04	2.44E-07	1.96E-05	60.9	2.57E-03	1.56E-03
SI13_W	0.75	70	0	1	1.19E-01	1.23E-02	5.41E-04	7.01E-04	6.36E-04	3.18E-04	3.68E-05	2.00E-04	1.30E-04	1.63E-07	1.30E-05	40.2	1.71E-03	1.04E-03
SI13_W	0.75	62	0	1	1.04E-01	1.02E-02	4.73E-04	6.13E-04	5.57E-04	2.77E-04	3.22E-05	1.75E-04	1.14E-04	1.42E-07	1.14E-05	34.7	1.50E-03	9.11E-04
SI13_W	0.75	44	0	1	7.44E-02	7.27E-03	3.38E-04	4.38E-04	3.98E-04	1.98E-04	2.29E-05	1.25E-04	8.15E-05	1.02E-07	8.11E-06	24.6	1.07E-03	6.51E-04
SI13_W	0.75	62	0	1	1.04E-01	1.02E-02	4.73E-04	6.13E-04	5.57E-04	2.77E-04	3.21E-05	1.74E-04	1.14E-04	1.42E-07	1.13E-05	34.4	1.49E-03	9.11E-04
SI13_W	0.75	150	0	1	2.53E-01	2.47E-02	1.15E-03	1.49E-03	1.35E-03	6.72E-04	7.80E-05	4.23E-04	2.77E-04	3.46E-07	2.75E-05	83.6	3.62E-03	2.21E-03
SI13_W	0.75	449	0	1	7.59E-01	7.41E-02	3.45E-03	4.47E-03	4.05E-03	2.02E-03	2.34E-04	1.27E-03	8.32E-04	1.04E-06	8.27E-05	252.3	1.09E-02	6.64E-03
SI13_W	0.75	687	0	1	1.16E+00	1.29E-01	5.27E-03	6.84E-03	6.20E-03	3.10E-03	3.60E-04	1.95E-03	1.27E-03	1.59E-06	1.27E-04	395.2	1.67E-02	1.02E-02
SI13_W	0.75	555	0	1	9.38E-01	1.37E-01	4.26E-03	5.52E-03	5.01E-03	2.52E-03	2.92E-04	1.59E-03	1.03E-03	1.28E-06	1.03E-04	329.9	1.36E-02	8.20E-03
SI13_W	0.75	458	0	1	7.74E-01	1.30E-01	3.55E-03	4.56E-03	4.13E-03	2.09E-03	2.42E-04	1.32E-03	8.48E-04	1.06E-06	8.57E-05	278.1	1.13E-02	6.77E-03
SI13_W	0.75	414	0	1	7.00E-01	1.31E-01	3.26E-03	4.12E-03	3.74E-03	1.90E-03	2.20E-04	1.19E-03	7.66E-04	9.57E-07	7.78E-05	255.6	1.02E-02	6.12E-03
SI13_W	0.75	467	0	1	7.89E-01	1.75E-01	3.79E-03	4.64E-03	4.21E-03	2.15E-03	2.49E-04	1.36E-03	8.64E-04	1.08E-06	8.83E-05	297.0	1.16E-02	6.90E-03
SI13_W	0.75	493	0	1	8.33E-01	1.92E-01	4.04E-03	4.91E-03	4.45E-03	2.28E-03	2.64E-04	1.43E-03	9.13E-04	1.14E-06	9.34E-05	316.2	1.23E-02	7.29E-03
SI13_W	0.75	502	0	1	8.48E-01	2.01E-01	4.13E-03	5.00E-03	4.53E-03	2.32E-03	2.69E-04	1.46E-03	9.30E-04	1.16E-06	9.52E-05	323.3	1.25E-02	7.42E-03
SI13_W	0.75	520	0	1	8.78E-01	2.13E-01	4.29E-03	5.17E-03	4.69E-03	2.40E-03	2.78E-04	1.51E-03	9.63E-04	1.20E-06	9.86E-05	336.3	1.30E-02	7.68E-03
SI13_W	0.75	564	0	1	9.53E-01	2.29E-01	4.65E-03	5.61E-03	5.09E-03	2.61E-03	3.02E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	364.0	1.41E-02	8.33E-03
SI13_W	0.75	696	0	1	1.18E+00	2.83E-01	5.73E-03	6.92E-03	6.28E-03	3.22E-03	3.72E-04	2.03E-03	1.29E-03	1.61E-06	1.32E-04	449.0	1.74E-02	1.03E-02
SI13_W	0.75	749	0	1	1.27E+00	2.96E-01	6.13E-03	7.45E-03	6.76E-03	3.46E-03	4.00E-04	2.18E-03	1.39E-03	1.73E-06	1.42E-04	480.2	1.86E-02	1.11E-02
SI13_W	0.75	520	0	1	8.78E-01	1.99E-01	4.22E-03	5.17E-03	4.69E-03	2.40E-03	2.77E-04	1.51E-03	9.62E-04	1.20E-06	9.83E-05	331.0	1.29E-02	7.68E-03
SI13_W	0.75	344	0	1	5.80E-01	1.15E-01	2.72E-03	3.42E-03	3.10E-03	1.58E-03	1.82E-04	9.92E-04	6.36E-04	7.94E-07	6.46E-05	213.4	8.50E-03	5.08E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	291	0	1	4.91E-01	8.75E-02	2.26E-03	2.89E-03	2.62E-03	1.33E-03	1.54E-04	8.36E-04	5.38E-04	6.72E-07	5.45E-05	177.4	7.16E-03	4.29E-03
SI13_W	0.75	247	0	1	4.17E-01	6.68E-02	1.89E-03	2.45E-03	2.23E-03	1.12E-03	1.30E-04	7.07E-04	4.57E-04	5.70E-07	4.61E-05	148.1	6.06E-03	3.64E-03
SI13_W	0.75	203	0	1	3.42E-01	4.93E-02	1.55E-03	2.02E-03	1.83E-03	9.20E-04	1.07E-04	5.79E-04	3.75E-04	4.68E-07	3.77E-05	119.9	4.96E-03	2.99E-03
SI13_W	0.75	150	0	1	2.53E-01	3.26E-02	1.15E-03	1.49E-03	1.35E-03	6.78E-04	7.86E-05	4.27E-04	2.77E-04	3.46E-07	2.78E-05	87.5	3.66E-03	2.21E-03
SI14_E	0.75	119	0	1	2.02E-01	2.30E-02	9.15E-04	1.19E-03	1.08E-03	5.39E-04	6.25E-05	3.39E-04	2.21E-04	2.76E-07	2.21E-05	68.7	2.90E-03	1.76E-03
SI14_E	0.75	80	0	1	1.34E-01	1.38E-02	6.10E-04	7.91E-04	7.18E-04	3.58E-04	4.16E-05	2.26E-04	1.47E-04	1.84E-07	1.47E-05	45.3	1.93E-03	1.17E-03
SI14_E	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.13E-04	3.63E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	39.2	1.69E-03	1.03E-03
SI14_E	0.75	50	0	1	8.40E-02	8.20E-03	3.81E-04	4.94E-04	4.49E-04	2.23E-04	2.59E-05	1.40E-04	9.20E-05	1.15E-07	9.15E-06	27.8	1.20E-03	7.34E-04
SI14_E	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.12E-04	3.62E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	38.8	1.68E-03	1.03E-03
SI14_E	0.75	169	0	1	2.86E-01	2.79E-02	1.30E-03	1.68E-03	1.53E-03	7.59E-04	8.80E-05	4.77E-04	3.13E-04	3.90E-07	3.11E-05	94.3	4.09E-03	2.50E-03
SI14_E	0.75	507	0	1	8.57E-01	8.37E-02	3.89E-03	5.04E-03	4.58E-03	2.28E-03	2.64E-04	1.43E-03	9.38E-04	1.17E-06	9.34E-05	284.6	1.23E-02	7.49E-03
SI14_E	0.75	775	0	1	1.31E+00	1.46E-01	5.95E-03	7.71E-03	7.00E-03	3.50E-03	4.06E-04	2.20E-03	1.44E-03	1.79E-06	1.43E-04	445.9	1.89E-02	1.15E-02
SI14_E	0.75	626	0	1	1.06E+00	1.55E-01	4.80E-03	6.23E-03	5.65E-03	2.85E-03	3.30E-04	1.79E-03	1.16E-03	1.45E-06	1.17E-04	372.3	1.53E-02	9.25E-03
SI14_E	0.75	517	0	1	8.73E-01	1.47E-01	4.00E-03	5.14E-03	4.66E-03	2.36E-03	2.73E-04	1.49E-03	9.57E-04	1.19E-06	9.67E-05	313.8	1.27E-02	7.64E-03
SI14_E	0.75	467	0	1	7.89E-01	1.48E-01	3.68E-03	4.65E-03	4.22E-03	2.14E-03	2.48E-04	1.35E-03	8.65E-04	1.08E-06	8.77E-05	288.4	1.15E-02	6.90E-03
SI14_E	0.75	527	0	1	8.90E-01	1.97E-01	4.28E-03	5.24E-03	4.75E-03	2.43E-03	2.81E-04	1.53E-03	9.75E-04	1.22E-06	9.96E-05	335.1	1.31E-02	7.78E-03
SI14_E	0.75	557	0	1	9.40E-01	2.17E-01	4.55E-03	5.54E-03	5.02E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.29E-06	1.05E-04	356.8	1.39E-02	8.22E-03
SI14_E	0.75	566	0	1	9.57E-01	2.26E-01	4.66E-03	5.64E-03	5.11E-03	2.62E-03	3.03E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.8	1.41E-02	8.37E-03
SI14_E	0.75	586	0	1	9.91E-01	2.41E-01	4.84E-03	5.83E-03	5.29E-03	2.71E-03	3.14E-04	1.71E-03	1.09E-03	1.36E-06	1.11E-04	379.4	1.46E-02	8.66E-03
SI14_E	0.75	636	0	1	1.07E+00	2.59E-01	5.24E-03	6.33E-03	5.74E-03	2.94E-03	3.40E-04	1.85E-03	1.18E-03	1.47E-06	1.21E-04	410.8	1.59E-02	9.40E-03
SI14_E	0.75	785	0	1	1.33E+00	3.19E-01	6.47E-03	7.81E-03	7.09E-03	3.63E-03	4.20E-04	2.29E-03	1.45E-03	1.81E-06	1.49E-04	506.6	1.96E-02	1.16E-02
SI14_E	0.75	845	0	1	1.43E+00	3.34E-01	6.91E-03	8.41E-03	7.63E-03	3.90E-03	4.51E-04	2.46E-03	1.56E-03	1.95E-06	1.60E-04	541.8	2.10E-02	1.25E-02
SI14_E	0.75	586	0	1	9.91E-01	2.25E-01	4.77E-03	5.83E-03	5.29E-03	2.70E-03	3.13E-04	1.70E-03	1.09E-03	1.36E-06	1.11E-04	373.5	1.46E-02	8.66E-03
SI14_E	0.75	388	0	1	6.55E-01	1.30E-01	3.07E-03	3.86E-03	3.50E-03	1.78E-03	2.06E-04	1.12E-03	7.18E-04	8.96E-07	7.29E-05	240.8	9.59E-03	5.73E-03
SI14_E	0.75	328	0	1	5.54E-01	9.87E-02	2.55E-03	3.26E-03	2.96E-03	1.50E-03	1.74E-04	9.44E-04	6.07E-04	7.58E-07	6.15E-05	200.2	8.08E-03	4.85E-03
SI14_E	0.75	278	0	1	4.70E-01	7.53E-02	2.13E-03	2.77E-03	2.51E-03	1.27E-03	1.47E-04	7.98E-04	5.15E-04	6.43E-07	5.20E-05	167.1	6.84E-03	4.11E-03
SI14_E	0.75	229	0	1	3.86E-01	5.56E-02	1.75E-03	2.27E-03	2.06E-03	1.04E-03	1.20E-04	6.54E-04	4.23E-04	5.28E-07	4.26E-05	135.3	5.60E-03	3.38E-03
SI14_E	0.75	169	0	1	2.86E-01	3.68E-02	1.30E-03	1.68E-03	1.53E-03	7.65E-04	8.87E-05	4.82E-04	3.13E-04	3.90E-07	3.14E-05	98.7	4.13E-03	2.50E-03
SI14_W	0.75	119	0	1	2.02E-01	2.30E-02	9.15E-04	1.19E-03	1.08E-03	5.39E-04	6.25E-05	3.39E-04	2.21E-04	2.76E-07	2.21E-05	68.7	2.90E-03	1.76E-03
SI14_W	0.75	80	0	1	1.34E-01	1.38E-02	6.10E-04	7.91E-04	7.18E-04	3.58E-04	4.16E-05	2.26E-04	1.47E-04	1.84E-07	1.47E-05	45.3	1.93E-03	1.17E-03
SI14_W	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.13E-04	3.63E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	39.2	1.69E-03	1.03E-03
SI14_W	0.75	50	0	1	8.40E-02	8.20E-03	3.81E-04	4.94E-04	4.49E-04	2.23E-04	2.59E-05	1.40E-04	9.20E-05	1.15E-07	9.15E-06	27.8	1.20E-03	7.34E-04
SI14_W	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.12E-04	3.62E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	38.8	1.68E-03	1.03E-03
SI14_W	0.75	169	0	1	2.86E-01	2.79E-02	1.30E-03	1.68E-03	1.53E-03	7.59E-04	8.80E-05	4.77E-04	3.13E-04	3.90E-07	3.11E-05	94.3	4.09E-03	2.50E-03
SI14_W	0.75	507	0	1	8.57E-01	8.37E-02	3.89E-03	5.04E-03	4.58E-03	2.28E-03	2.64E-04	1.43E-03	9.38E-04	1.17E-06	9.34E-05	284.6	1.23E-02	7.49E-03
SI14_W	0.75	775	0	1	1.31E+00	1.46E-01	5.95E-03	7.71E-03	7.00E-03	3.50E-03	4.06E-04	2.20E-03	1.44E-03	1.79E-06	1.43E-04	445.9	1.89E-02	1.15E-02
SI14_W	0.75	626	0	1	1.06E+00	1.55E-01	4.80E-03	6.23E-03	5.65E-03	2.85E-03	3.30E-04	1.79E-03	1.16E-03	1.45E-06	1.17E-04	372.3	1.53E-02	9.25E-03
SI14_W	0.75	517	0	1	8.73E-01	1.47E-01	4.00E-03	5.14E-03	4.66E-03	2.36E-03	2.73E-04	1.49E-03	9.57E-04	1.19E-06	9.67E-05	313.8	1.27E-02	7.64E-03
SI14_W	0.75	467	0	1	7.89E-01	1.48E-01	3.68E-03	4.65E-03	4.22E-03	2.14E-03	2.48E-04	1.35E-03	8.65E-04	1.08E-06	8.77E-05	288.4	1.15E-02	6.90E-03
SI14_W	0.75	527	0	1	8.90E-01	1.97E-01	4.28E-03	5.24E-03	4.75E-03	2.43E-03	2.81E-04	1.53E-03	9.75E-04	1.22E-06	9.96E-05	335.1	1.31E-02	7.78E-03
SI14_W	0.75	557	0	1	9.40E-01	2.17E-01	4.55E-03	5.54E-03	5.02E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.29E-06	1.05E-04	356.8	1.39E-02	8.22E-03
SI14_W	0.75	566	0	1	9.57E-01	2.26E-01	4.66E-03	5.64E-03	5.11E-03	2.62E-03	3.03E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.8	1.41E-02	8.37E-03
SI14_W	0.75	586	0	1	9.91E-01	2.41E-01	4.84E-03	5.83E-03	5.29E-03	2.71E-03	3.14E-04	1.71E-03	1.09E-03	1.36E-06	1.11E-04	379.4	1.46E-02	8.66E-03
SI14_W	0.75	636	0	1	1.07E+00	2.59E-01	5.24E-03	6.33E-03	5.74E-03	2.94E-03	3.40E-04	1.85E-03	1.18E-03	1.47E-06	1.21E-04	410.8	1.59E-02	9.40E-03
SI14_W	0.75	785	0	1	1.33E+00	3.19E-01	6.47E-03	7.81E-03	7.09E-03	3.63E-03	4.20E-04	2.29E-03	1.45E-03	1.81E-06	1.49E-04	506.6	1.96E-02	1.16E-02
SI14_W	0.75	845	0	1	1.43E+00	3.34E-01	6.91E-03	8.41E-03	7.63E-03	3.90E-03	4.51E-04	2.46E-03	1.56E-03	1.95E-06	1.60E-04	541.8	2.10E-02	1.25E-02
SI14_W	0.75	586	0	1	9.91E-01	2.25E-01	4.77E-03	5.83E-03	5.29E-03	2.70E-03	3.13E-04	1.70E-03	1.09E-03	1.36E-06	1.11E-04	373.5	1.46E-02	8.66E-03
SI14_W	0.75	388	0	1	6.55E-01	1.30E-01	3.07E-03	3.86E-03	3.50E-03	1.78E-03	2.06E-04	1.12E-03	7.18E-04	8.96E-07	7.29E-05	240.8	9.59E-03	5.73E-03
SI14_W	0.75	328	0	1	5.54E-01	9.87E-02	2.55E-03	3.26E-03	2.96E-03	1.50E-03	1.74E-04	9.44E-04	6.07E-04	7.58E-07	6.15E-05	200.2	8.08E-03	4.85E-03
SI14_W	0.75	278	0	1	4.70E-01	7.53E-02	2.13E-03	2.77E-03	2.51E-03	1.27E-03	1.47E-04	7.98E-04	5.15E-04	6.43E-07	5.20E-05	167.1	6.84E-03	4.11E-03
SI14_W	0.75	229	0	1	3.86E-01	5.56E-02	1.75E-03	2.27E-03	2.06E-03	1.04E-03	1.20E-04	6.54E-04	4.23E-04	5.28E-07	4.26E-05	135.3	5.60E-03	3.38E-03
SI14_W	0.75	169	0	1	2.86E-01	3.68E-02	1.30E-03	1.68E-03	1.53E-03	7.65E-04	8.87E-05	4.82E-04	3.13E-04	3.90E-07	3.14E-05	98.7	4.13E-03	2.50E-03
SI15_E	0.75	119	0	1	2.02E-01	2.30E-02	9.15E-04	1.19E-03	1.08E-03	5.39E-04	6.25E-05	3.39E-04	2.21E-04	2.76E-07	2.21E-05	68.7	2.90E-03	1.76E-03
SI15_E	0.75	80	0	1	1.34E-01	1.38E-02	6.10E-04	7.91E-04	7.18E-04	3.58E-04	4.16E-05	2.26E-04	1.47E-04	1.84E-07	1.47E-05	45.3	1.93E-03	1.17E-03
SI15_E	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.13E-04	3.63E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	39.2	1.69E-03	1.03E-03
SI15_E	0.75	50	0	1	8.40E-02	8.20E-03	3.81E-04	4.94E-04	4.49E-04	2.23E-04	2.59E-05	1.40E-04	9.20E-05	1.15E-07	9.15E-06	27.8	1.20E-03	7.34E-04
SI15_E	0.75	70	0	1	1.18E-01	1.15E-02	5.34E-04	6.92E-04	6.28E-04	3.12E-04	3.62E-05	1.97E-04	1.29E-04	1.61E-07	1.28E-05	38.8	1.68E-03	1.03E-03
SI15_E	0.75	169	0	1	2.86E-01	2.79E-02	1.30E-03	1.68E-03	1.53E-03	7.59E-04	8.80E-05	4.77E-04	3.13E-04	3.90E-07	3.11E-05	94.3	4.09E-03	2.50E-03
SI15_E	0.75	507	0	1	8.57E-01	8.37E-02	3.89E-03	5.04E-03	4.58E-03	2.28E-03	2.64E-04	1.43E-03	9.38E-04	1.17E-06	9.34E-05	284.6	1.23E-02	7.49E-03
SI15_E	0.75	775	0	1	1.31E+00	1.46E-01	5.95E-03	7.71E-03	7.00E-03	3.50E-03	4.06E-04	2.20E-03	1.44E-03	1.79E-06	1.43E-04	445.9	1.89E-02	1.15E-02
SI15_E	0.75	626	0	1	1.06E+00	1.55E-01	4.80E-03	6.23E-03	5.65E-03	2.85E-03	3.30E-04	1.79E-03	1.16E-03	1.45E-06	1.17E-04	372.3	1.53E-02	9.25E-03
SI15_E	0.75	517	0	1	8.73E-01	1.47E-01	4.00E-03	5.14E-03	4.66E-03	2.36E-03	2.73E-04	1.49E-03	9.57E-04	1.19E-06	9.67E-05	313.8	1.27E-02	7.64E-03
SI15_E	0.75	467	0	1	7.89E-01	1.48E-01	3.68E-03	4.65E-03	4.22E-03	2.14E-03	2.48E-04	1.35E-03	8.65E-04	1.08E-06	8.77E-05	288.4	1.15E-02	6.90E-03
SI15_E	0.75	527	0	1	8.90E-01	1.97E-01	4.28E-03	5.24E-03	4.75E-03	2.43E-03	2.81E-04	1.53E-03	9.75E-04	1.22E-06	9.96E-05	335.1	1.31E-02	7.78E-03
SI15_E	0.75	557	0	1	9.40E-01	2.17E-01	4.55E-03	5.54E-03	5.02E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.29E-06	1.05E-04	356.8	1.39E-02	8.22E-03
SI15_E	0.75	566	0	1	9.57E-01	2.26E-01	4.66E-03	5.64E-03	5.11E-03	2.62E-03	3.03E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.8	1.41E-02	8.37E-03
SI15_E	0.75	586	0	1	9.91E-01	2.41E-01	4.84E-03	5.83E-03	5.29E-03	2.71E-03	3.14E-04	1.71E-03	1.09E-03	1.36E-06	1.11E-04	379.4	1.46E-02	8.66E-03
SI15_E	0.75	636	0	1	1.07E+00	2.59E-01	5.24E-03	6.33E-03	5.74E-03	2.94E-03	3.40E-04	1.85E-03	1.18E-03	1.47E-06	1.21E-04	410.8	1.59E-02	9.40E-03
SI15_E	0.75	785	0	1	1.33E+00	3.19E-01	6.47E-03	7.81E-03	7.09E-03	3.63E-03	4.20E-04	2.29E-03	1.45E-03	1.81E-06	1.49E-04	506.6	1.96E-02	1.16E-02

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	845	0	1	1.43E+00	3.34E-01	6.91E-03	8.41E-03	7.63E-03	3.90E-03	4.51E-04	2.46E-03	1.56E-03	1.95E-06	1.60E-04	541.8	2.10E-02	1.25E-02
SI15_E	0.75	586	0	1	9.91E-01	2.25E-01	4.77E-03	5.83E-03	5.29E-03	2.70E-03	3.13E-04	1.70E-03	1.09E-03	1.36E-06	1.11E-04	373.5	1.46E-02	8.66E-03
SI15_E	0.75	388	0	1	6.55E-01	1.30E-01	3.07E-03	3.86E-03	3.50E-03	1.78E-03	2.06E-04	1.12E-03	7.18E-04	8.96E-07	7.29E-05	240.8	9.59E-03	5.73E-03
SI15_E	0.75	328	0	1	5.54E-01	9.87E-02	2.55E-03	3.26E-03	2.96E-03	1.50E-03	1.74E-04	9.44E-04	6.07E-04	7.58E-07	6.15E-05	200.2	8.08E-03	4.85E-03
SI15_E	0.75	278	0	1	4.70E-01	7.53E-02	2.13E-03	2.77E-03	2.51E-03	1.27E-03	1.47E-04	7.98E-04	5.15E-04	6.43E-07	5.20E-05	167.1	6.84E-03	4.11E-03
SI15_E	0.75	229	0	1	3.86E-01	5.56E-02	1.75E-03	2.27E-03	2.06E-03	1.04E-03	1.20E-04	6.54E-04	4.23E-04	5.28E-07	4.26E-05	135.3	5.60E-03	3.38E-03
SI15_E	0.75	169	0	1	2.86E-01	3.68E-02	1.30E-03	1.68E-03	1.53E-03	7.65E-04	8.87E-05	4.82E-04	3.13E-04	3.90E-07	3.14E-05	98.7	4.13E-03	2.50E-03
SI15_W	0.75	142	0	1	2.40E-01	2.75E-02	1.09E-03	1.41E-03	1.28E-03	6.42E-04	7.45E-05	4.04E-04	2.63E-04	3.29E-07	2.63E-05	81.9	3.46E-03	2.10E-03
SI15_W	0.75	95	0	1	1.60E-01	1.65E-02	7.27E-04	9.43E-04	8.56E-04	4.27E-04	4.95E-05	2.69E-04	1.76E-04	2.19E-07	1.75E-05	54.0	2.30E-03	1.40E-03
SI15_W	0.75	83	0	1	1.40E-01	1.37E-02	6.36E-04	8.25E-04	7.49E-04	3.73E-04	4.33E-05	2.35E-04	1.54E-04	1.92E-07	1.53E-05	46.7	2.01E-03	1.23E-03
SI15_W	0.75	59	0	1	1.00E-01	9.78E-03	4.54E-04	5.89E-04	5.35E-04	2.66E-04	3.09E-05	1.68E-04	1.10E-04	1.37E-07	1.09E-05	33.2	1.43E-03	8.75E-04
SI15_W	0.75	83	0	1	1.40E-01	1.37E-02	6.36E-04	8.25E-04	7.49E-04	3.73E-04	4.32E-05	2.34E-04	1.54E-04	1.92E-07	1.53E-05	46.3	2.01E-03	1.23E-03
SI15_W	0.75	201	0	1	3.40E-01	3.32E-02	1.55E-03	2.00E-03	1.82E-03	9.05E-04	1.05E-04	5.69E-04	3.73E-04	4.65E-07	3.71E-05	112.5	4.88E-03	2.98E-03
SI15_W	0.75	604	0	1	1.02E+00	9.97E-02	4.64E-03	6.01E-03	5.45E-03	2.72E-03	3.15E-04	1.71E-03	1.12E-03	1.40E-06	1.11E-04	339.4	1.46E-02	8.93E-03
SI15_W	0.75	924	0	1	1.56E+00	1.74E-01	7.09E-03	9.20E-03	8.34E-03	4.17E-03	4.84E-04	2.63E-03	1.71E-03	2.14E-06	1.71E-04	531.7	2.25E-02	1.37E-02
SI15_W	0.75	747	0	1	1.26E+00	1.84E-01	5.73E-03	7.43E-03	6.74E-03	3.39E-03	3.93E-04	2.14E-03	1.38E-03	1.72E-06	1.39E-04	443.8	1.83E-02	1.10E-02
SI15_W	0.75	616	0	1	1.04E+00	1.76E-01	4.77E-03	6.13E-03	5.56E-03	2.81E-03	3.26E-04	1.77E-03	1.14E-03	1.42E-06	1.15E-04	374.1	1.52E-02	9.10E-03
SI15_W	0.75	557	0	1	9.41E-01	1.76E-01	4.39E-03	5.54E-03	5.03E-03	2.55E-03	2.95E-04	1.61E-03	1.03E-03	1.29E-06	1.05E-04	343.9	1.38E-02	8.23E-03
SI15_W	0.75	628	0	1	1.06E+00	2.35E-01	5.10E-03	6.25E-03	5.67E-03	2.89E-03	3.35E-04	1.82E-03	1.16E-03	1.45E-06	1.19E-04	399.5	1.56E-02	9.28E-03
SI15_W	0.75	664	0	1	1.12E+00	2.58E-01	5.43E-03	6.60E-03	5.99E-03	3.06E-03	3.55E-04	1.93E-03	1.23E-03	1.53E-06	1.26E-04	425.5	1.65E-02	9.80E-03
SI15_W	0.75	675	0	1	1.14E+00	2.70E-01	5.55E-03	6.72E-03	6.10E-03	3.12E-03	3.61E-04	1.97E-03	1.25E-03	1.56E-06	1.28E-04	435.0	1.68E-02	9.98E-03
SI15_W	0.75	699	0	1	1.18E+00	2.87E-01	5.77E-03	6.96E-03	6.31E-03	3.23E-03	3.74E-04	2.04E-03	1.29E-03	1.62E-06	1.33E-04	452.4	1.74E-02	1.03E-02
SI15_W	0.75	758	0	1	1.28E+00	3.09E-01	6.25E-03	7.55E-03	6.85E-03	3.51E-03	4.06E-04	2.21E-03	1.40E-03	1.75E-06	1.44E-04	489.8	1.89E-02	1.12E-02
SI15_W	0.75	936	0	1	1.58E+00	3.80E-01	7.71E-03	9.31E-03	8.45E-03	4.33E-03	5.01E-04	2.73E-03	1.73E-03	2.16E-06	1.78E-04	604.0	2.33E-02	1.38E-02
SI15_W	0.75	1007	0	1	1.70E+00	3.99E-01	8.24E-03	1.00E-02	9.09E-03	4.65E-03	5.38E-04	2.93E-03	1.87E-03	2.33E-06	1.91E-04	646.0	2.51E-02	1.49E-02
SI15_W	0.75	699	0	1	1.18E+00	2.68E-01	5.68E-03	6.96E-03	6.31E-03	3.22E-03	3.73E-04	2.03E-03	1.29E-03	1.62E-06	1.32E-04	445.3	1.74E-02	1.03E-02
SI15_W	0.75	462	0	1	7.81E-01	1.55E-01	3.66E-03	4.60E-03	4.17E-03	2.12E-03	2.45E-04	1.33E-03	8.56E-04	1.07E-06	8.69E-05	287.1	1.14E-02	6.83E-03
SI15_W	0.75	391	0	1	6.61E-01	1.18E-01	3.05E-03	3.89E-03	3.53E-03	1.79E-03	2.07E-04	1.13E-03	7.24E-04	9.04E-07	7.33E-05	238.7	9.64E-03	5.78E-03
SI15_W	0.75	332	0	1	5.61E-01	8.98E-02	2.55E-03	3.30E-03	2.99E-03	1.51E-03	1.75E-04	9.51E-04	6.14E-04	7.67E-07	6.20E-05	199.3	8.15E-03	4.90E-03
SI15_W	0.75	273	0	1	4.61E-01	6.63E-02	2.09E-03	2.71E-03	2.46E-03	1.24E-03	1.43E-04	7.79E-04	5.05E-04	6.30E-07	5.07E-05	161.3	6.67E-03	4.03E-03
SI15_W	0.75	201	0	1	3.40E-01	4.39E-02	1.55E-03	2.00E-03	1.82E-03	9.12E-04	1.06E-04	5.74E-04	3.73E-04	4.65E-07	3.74E-05	117.7	4.92E-03	2.98E-03
SI16_E	0.75	142	0	1	2.40E-01	2.75E-02	1.09E-03	1.41E-03	1.28E-03	6.42E-04	7.45E-05	4.04E-04	2.63E-04	3.29E-07	2.63E-05	81.9	3.46E-03	2.10E-03
SI16_E	0.75	95	0	1	1.60E-01	1.65E-02	7.27E-04	9.43E-04	8.56E-04	4.27E-04	4.95E-05	2.69E-04	1.76E-04	2.19E-07	1.75E-05	54.0	2.30E-03	1.40E-03
SI16_E	0.75	83	0	1	1.40E-01	1.37E-02	6.36E-04	8.25E-04	7.49E-04	3.73E-04	4.33E-05	2.35E-04	1.54E-04	1.92E-07	1.53E-05	46.7	2.01E-03	1.23E-03
SI16_E	0.75	59	0	1	1.00E-01	9.78E-03	4.54E-04	5.89E-04	5.35E-04	2.66E-04	3.09E-05	1.68E-04	1.10E-04	1.37E-07	1.09E-05	33.2	1.43E-03	8.75E-04
SI16_E	0.75	83	0	1	1.40E-01	1.37E-02	6.36E-04	8.25E-04	7.49E-04	3.73E-04	4.32E-05	2.34E-04	1.54E-04	1.92E-07	1.53E-05	46.3	2.01E-03	1.23E-03
SI16_E	0.75	201	0	1	3.40E-01	3.32E-02	1.55E-03	2.00E-03	1.82E-03	9.05E-04	1.05E-04	5.69E-04	3.73E-04	4.65E-07	3.71E-05	112.5	4.88E-03	2.98E-03
SI16_E	0.75	604	0	1	1.02E+00	9.97E-02	4.64E-03	6.01E-03	5.45E-03	2.72E-03	3.15E-04	1.71E-03	1.12E-03	1.40E-06	1.11E-04	339.4	1.46E-02	8.93E-03
SI16_E	0.75	924	0	1	1.56E+00	1.74E-01	7.09E-03	9.20E-03	8.34E-03	4.17E-03	4.84E-04	2.63E-03	1.71E-03	2.14E-06	1.71E-04	531.7	2.25E-02	1.37E-02
SI16_E	0.75	747	0	1	1.26E+00	1.84E-01	5.73E-03	7.43E-03	6.74E-03	3.39E-03	3.93E-04	2.14E-03	1.38E-03	1.72E-06	1.39E-04	443.8	1.83E-02	1.10E-02
SI16_E	0.75	616	0	1	1.04E+00	1.76E-01	4.77E-03	6.13E-03	5.56E-03	2.81E-03	3.26E-04	1.77E-03	1.14E-03	1.42E-06	1.15E-04	374.1	1.52E-02	9.10E-03
SI16_E	0.75	557	0	1	9.41E-01	1.76E-01	4.39E-03	5.54E-03	5.03E-03	2.55E-03	2.95E-04	1.61E-03	1.03E-03	1.29E-06	1.05E-04	343.9	1.38E-02	8.23E-03
SI16_E	0.75	628	0	1	1.06E+00	2.35E-01	5.10E-03	6.25E-03	5.67E-03	2.89E-03	3.35E-04	1.82E-03	1.16E-03	1.45E-06	1.19E-04	399.5	1.56E-02	9.28E-03
SI16_E	0.75	664	0	1	1.12E+00	2.58E-01	5.43E-03	6.60E-03	5.99E-03	3.06E-03	3.55E-04	1.93E-03	1.23E-03	1.53E-06	1.26E-04	425.5	1.65E-02	9.80E-03
SI16_E	0.75	675	0	1	1.14E+00	2.70E-01	5.55E-03	6.72E-03	6.10E-03	3.12E-03	3.61E-04	1.97E-03	1.25E-03	1.56E-06	1.28E-04	435.0	1.68E-02	9.98E-03
SI16_E	0.75	699	0	1	1.18E+00	2.87E-01	5.77E-03	6.96E-03	6.31E-03	3.23E-03	3.74E-04	2.04E-03	1.29E-03	1.62E-06	1.33E-04	452.4	1.74E-02	1.03E-02
SI16_E	0.75	758	0	1	1.28E+00	3.09E-01	6.25E-03	7.55E-03	6.85E-03	3.51E-03	4.06E-04	2.21E-03	1.40E-03	1.75E-06	1.44E-04	489.8	1.89E-02	1.12E-02
SI16_E	0.75	936	0	1	1.58E+00	3.80E-01	7.71E-03	9.31E-03	8.45E-03	4.33E-03	5.01E-04	2.73E-03	1.73E-03	2.16E-06	1.78E-04	604.0	2.33E-02	1.38E-02
SI16_E	0.75	1007	0	1	1.70E+00	3.99E-01	8.24E-03	1.00E-02	9.09E-03	4.65E-03	5.38E-04	2.93E-03	1.87E-03	2.33E-06	1.91E-04	646.0	2.51E-02	1.49E-02
SI16_E	0.75	699	0	1	1.18E+00	2.68E-01	5.68E-03	6.96E-03	6.31E-03	3.22E-03	3.73E-04	2.03E-03	1.29E-03	1.62E-06	1.32E-04	445.3	1.74E-02	1.03E-02
SI16_E	0.75	462	0	1	7.81E-01	1.55E-01	3.66E-03	4.60E-03	4.17E-03	2.12E-03	2.45E-04	1.33E-03	8.56E-04	1.07E-06	8.69E-05	287.1	1.14E-02	6.83E-03
SI16_E	0.75	391	0	1	6.61E-01	1.18E-01	3.05E-03	3.89E-03	3.53E-03	1.79E-03	2.07E-04	1.13E-03	7.24E-04	9.04E-07	7.33E-05	238.7	9.64E-03	5.78E-03
SI16_E	0.75	332	0	1	5.61E-01	8.98E-02	2.55E-03	3.30E-03	2.99E-03	1.51E-03	1.75E-04	9.51E-04	6.14E-04	7.67E-07	6.20E-05	199.3	8.15E-03	4.90E-03
SI16_E	0.75	273	0	1	4.61E-01	6.63E-02	2.09E-03	2.71E-03	2.46E-03	1.24E-03	1.43E-04	7.79E-04	5.05E-04	6.30E-07	5.07E-05	161.3	6.67E-03	4.03E-03
SI16_E	0.75	201	0	1	3.40E-01	4.39E-02	1.55E-03	2.00E-03	1.82E-03	9.12E-04	1.06E-04	5.74E-04	3.73E-04	4.65E-07	3.74E-05	117.7	4.92E-03	2.98E-03
SI16_W	0.75	133	0	1	2.24E-01	2.56E-02	1.02E-03	1.32E-03	1.20E-03	6.00E-04	6.96E-05	3.78E-04	2.46E-04	3.07E-07	2.46E-05	76.5	3.24E-03	1.96E-03
SI16_W	0.75	89	0	1	1.50E-01	1.54E-02	6.79E-04	8.81E-04	7.99E-04	3.99E-04	4.63E-05	2.51E-04	1.64E-04	2.05E-07	1.64E-05	50.5	2.15E-03	1.31E-03
SI16_W	0.75	77	0	1	1.31E-01	1.28E-02	5.94E-04	7.71E-04	6.99E-04	3.49E-04	4.04E-05	2.19E-04	1.43E-04	1.79E-07	1.43E-05	43.6	1.88E-03	1.14E-03
SI16_W	0.75	55	0	1	9.35E-02	9.14E-03	4.25E-04	5.51E-04	5.00E-04	2.49E-04	2.88E-05	1.56E-04	1.02E-04	1.28E-07	1.02E-05	31.0	1.34E-03	8.18E-04
SI16_W	0.75	77	0	1	1.31E-01	1.28E-02	5.94E-04	7.71E-04	6.99E-04	3.48E-04	4.04E-05	2.19E-04	1.43E-04	1.79E-07	1.43E-05	43.3	1.88E-03	1.14E-03
SI16_W	0.75	188	0	1	3.18E-01	3.11E-02	1.44E-03	1.87E-03	1.70E-03	8.45E-04	9.80E-05	5.32E-04	3.48E-04	4.35E-07	3.46E-05	105.1	4.56E-03	2.78E-03
SI16_W	0.75	565	0	1	9.54E-01	9.32E-02	4.33E-03	5.62E-03	5.10E-03	2.54E-03	2.94E-04	1.60E-03	1.05E-03	1.30E-06	1.04E-04	317.1	1.37E-02	8.34E-03
SI16_W	0.75	863	0	1	1.46E+00	1.62E-01	6.62E-03	8.59E-03	7.79E-03	3.90E-03	4.52E-04	2.45E-03	1.60E-03	1.99E-06	1.60E-04	496.7	2.10E-02	1.28E-02
SI16_W	0.75	697	0	1	1.18E+00	1.72E-01	5.35E-03	6.94E-03	6.30E-03	3.17E-03	3.67E-04	2.00E-03	1.29E-03	1.61E-06	1.30E-04	414.6	1.71E-02	1.03E-02
SI16_W	0.75	576	0	1	9.73E-01	1.64E-01	4.46E-03	5.73E-03	5.20E-03	2.63E-03	3.04E-04	1.65E-03	1.07E-03	1.33E-06	1.08E-04	349.5	1.42E-02	8.51E-03
SI16_W	0.75	520	0	1	8.79E-01	1.64E-01	4.10E-03	5.18E-03	4.70E-03	2.38E-03	2.76E-04	1.50E-03	9.63E-04	1.20E-06	9.77E-05	321.2	1.29E-02	7.69E-03
SI16_W	0.75	587	0	1	9.91E-01	2.20E-01	4.76E-03	5.84E-03	5.30E-03	2.70E-03	3.13E-04	1.70E-03	1.09E-03	1.36E-06	1.11E-04	373.3	1.46E-02	8.67E-03
SI16_W	0.75	620	0	1	1.05E+00	2.41E-01	5.07E-03	6.17E-03	5.60E-03	2.86E-03	3.31E-04	1.80E-03	1.15E-03	1.43E-06	1.17E-04	397.5	1.54E-02	9.16E-03
SI16_W	0.75	631	0	1	1.07E+00	2.52E-01	5.19E-03	6.28E-03	5.70E-03	2.91E-03	3.38E-04	1.84E-03	1.17E-03	1.46E-06	1.20E-04	406.4	1.57E-02	9.32E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	653	0	1	1.10E+00	2.68E-01	5.39E-03	6.50E-03	5.90E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	422.6	1.63E-02	9.65E-03
SI16_W	0.75	708	0	1	1.20E+00	2.88E-01	5.84E-03	7.05E-03	6.40E-03	3.27E-03	3.79E-04	2.06E-03	1.31E-03	1.64E-06	1.34E-04	457.6	1.77E-02	1.05E-02
SI16_W	0.75	875	0	1	1.48E+00	3.55E-01	7.20E-03	8.70E-03	7.89E-03	4.04E-03	4.68E-04	2.55E-03	1.62E-03	2.02E-06	1.66E-04	564.3	2.18E-02	1.29E-02
SI16_W	0.75	941	0	1	1.59E+00	3.73E-01	7.70E-03	9.36E-03	8.49E-03	4.34E-03	5.03E-04	2.74E-03	1.74E-03	2.17E-06	1.78E-04	603.6	2.34E-02	1.39E-02
SI16_W	0.75	653	0	1	1.10E+00	2.51E-01	5.31E-03	6.50E-03	5.90E-03	3.01E-03	3.49E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	416.1	1.62E-02	9.65E-03
SI16_W	0.75	432	0	1	7.30E-01	1.45E-01	3.42E-03	4.30E-03	3.90E-03	1.98E-03	2.29E-04	1.25E-03	7.99E-04	9.98E-07	8.12E-05	268.2	1.07E-02	6.38E-03
SI16_W	0.75	365	0	1	6.17E-01	1.10E-01	2.85E-03	3.63E-03	3.30E-03	1.67E-03	1.93E-04	1.05E-03	6.76E-04	8.44E-07	6.85E-05	223.0	9.00E-03	5.40E-03
SI16_W	0.75	310	0	1	5.24E-01	8.39E-02	2.38E-03	3.08E-03	2.80E-03	1.41E-03	1.64E-04	8.89E-04	5.74E-04	7.16E-07	5.79E-05	186.2	7.61E-03	4.58E-03
SI16_W	0.75	255	0	1	4.30E-01	6.19E-02	1.95E-03	2.53E-03	2.30E-03	1.16E-03	1.34E-04	7.28E-04	4.71E-04	5.88E-07	4.74E-05	150.7	6.24E-03	3.76E-03
SI16_W	0.75	188	0	1	3.18E-01	4.10E-02	1.44E-03	1.87E-03	1.70E-03	8.52E-04	9.88E-05	5.37E-04	3.48E-04	4.35E-07	3.49E-05	109.9	4.60E-03	2.78E-03
SI17_E	0.75	133	0	1	2.24E-01	2.56E-02	1.02E-03	1.32E-03	1.20E-03	6.00E-04	6.96E-05	3.78E-04	2.46E-04	3.07E-07	2.46E-05	76.5	3.24E-03	1.96E-03
SI17_E	0.75	89	0	1	1.50E-01	1.54E-02	6.79E-04	8.81E-04	7.99E-04	3.99E-04	4.63E-05	2.51E-04	1.64E-04	2.05E-07	1.64E-05	50.5	2.15E-03	1.31E-03
SI17_E	0.75	77	0	1	1.31E-01	1.28E-02	5.94E-04	7.71E-04	6.99E-04	3.49E-04	4.04E-05	2.19E-04	1.43E-04	1.79E-07	1.43E-05	43.6	1.88E-03	1.14E-03
SI17_E	0.75	55	0	1	9.35E-02	9.14E-03	4.25E-04	5.51E-04	5.00E-04	2.49E-04	2.88E-05	1.56E-04	1.02E-04	1.28E-07	1.02E-05	31.0	1.34E-03	8.18E-04
SI17_E	0.75	77	0	1	1.31E-01	1.28E-02	5.94E-04	7.71E-04	6.99E-04	3.48E-04	4.04E-05	2.19E-04	1.43E-04	1.79E-07	1.43E-05	43.3	1.88E-03	1.14E-03
SI17_E	0.75	188	0	1	3.18E-01	3.11E-02	1.44E-03	1.87E-03	1.70E-03	8.45E-04	9.80E-05	5.32E-04	3.48E-04	4.35E-07	3.46E-05	105.1	4.56E-03	2.78E-03
SI17_E	0.75	565	0	1	9.54E-01	9.32E-02	4.33E-03	5.62E-03	5.10E-03	2.54E-03	2.94E-04	1.60E-03	1.05E-03	1.30E-06	1.04E-04	317.1	1.37E-02	8.34E-03
SI17_E	0.75	863	0	1	1.46E+00	1.62E-01	6.62E-03	8.59E-03	7.79E-03	3.90E-03	4.52E-04	2.45E-03	1.60E-03	1.99E-06	1.60E-04	496.7	2.10E-02	1.28E-02
SI17_E	0.75	697	0	1	1.18E+00	1.72E-01	5.35E-03	6.94E-03	6.30E-03	3.17E-03	3.67E-04	2.00E-03	1.29E-03	1.61E-06	1.30E-04	414.6	1.71E-02	1.03E-02
SI17_E	0.75	576	0	1	9.73E-01	1.64E-01	4.46E-03	5.73E-03	5.20E-03	2.63E-03	3.04E-04	1.65E-03	1.07E-03	1.33E-06	1.08E-04	349.5	1.42E-02	8.51E-03
SI17_E	0.75	520	0	1	8.79E-01	1.64E-01	4.10E-03	5.18E-03	4.70E-03	2.38E-03	2.76E-04	1.50E-03	9.63E-04	1.20E-06	9.77E-05	321.2	1.29E-02	7.69E-03
SI17_E	0.75	587	0	1	9.91E-01	2.20E-01	4.76E-03	5.84E-03	5.30E-03	2.70E-03	3.13E-04	1.70E-03	1.09E-03	1.36E-06	1.11E-04	373.3	1.46E-02	8.67E-03
SI17_E	0.75	620	0	1	1.05E+00	2.41E-01	5.07E-03	6.17E-03	5.60E-03	2.86E-03	3.31E-04	1.80E-03	1.15E-03	1.43E-06	1.17E-04	397.5	1.54E-02	9.16E-03
SI17_E	0.75	631	0	1	1.07E+00	2.52E-01	5.19E-03	6.28E-03	5.70E-03	2.91E-03	3.38E-04	1.84E-03	1.17E-03	1.46E-06	1.20E-04	406.4	1.57E-02	9.32E-03
SI17_E	0.75	653	0	1	1.10E+00	2.68E-01	5.39E-03	6.50E-03	5.90E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	422.6	1.63E-02	9.65E-03
SI17_E	0.75	708	0	1	1.20E+00	2.88E-01	5.84E-03	7.05E-03	6.40E-03	3.27E-03	3.79E-04	2.06E-03	1.31E-03	1.64E-06	1.34E-04	457.6	1.77E-02	1.05E-02
SI17_E	0.75	875	0	1	1.48E+00	3.55E-01	7.20E-03	8.70E-03	7.89E-03	4.04E-03	4.68E-04	2.55E-03	1.62E-03	2.02E-06	1.66E-04	564.3	2.18E-02	1.29E-02
SI17_E	0.75	941	0	1	1.59E+00	3.73E-01	7.70E-03	9.36E-03	8.49E-03	4.34E-03	5.03E-04	2.74E-03	1.74E-03	2.17E-06	1.78E-04	603.6	2.34E-02	1.39E-02
SI17_E	0.75	653	0	1	1.10E+00	2.51E-01	5.31E-03	6.50E-03	5.90E-03	3.01E-03	3.49E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	416.1	1.62E-02	9.65E-03
SI17_E	0.75	432	0	1	7.30E-01	1.45E-01	3.42E-03	4.30E-03	3.90E-03	1.98E-03	2.29E-04	1.25E-03	7.99E-04	9.98E-07	8.12E-05	268.2	1.07E-02	6.38E-03
SI17_E	0.75	365	0	1	6.17E-01	1.10E-01	2.85E-03	3.63E-03	3.30E-03	1.67E-03	1.93E-04	1.05E-03	6.76E-04	8.44E-07	6.85E-05	223.0	9.00E-03	5.40E-03
SI17_E	0.75	310	0	1	5.24E-01	8.39E-02	2.38E-03	3.08E-03	2.80E-03	1.41E-03	1.64E-04	8.89E-04	5.74E-04	7.16E-07	5.79E-05	186.2	7.61E-03	4.58E-03
SI17_E	0.75	255	0	1	4.30E-01	6.19E-02	1.95E-03	2.53E-03	2.30E-03	1.16E-03	1.34E-04	7.28E-04	4.71E-04	5.88E-07	4.74E-05	150.7	6.24E-03	3.76E-03
SI17_E	0.75	188	0	1	3.18E-01	4.10E-02	1.44E-03	1.87E-03	1.70E-03	8.52E-04	9.88E-05	5.37E-04	3.48E-04	4.35E-07	3.49E-05	109.9	4.60E-03	2.78E-03
SI17_W	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI17_W	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI17_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI17_W	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI17_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI17_W	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI17_W	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI17_W	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02
SI17_W	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI17_W	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI17_W	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03
SI17_W	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI17_W	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI17_W	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI17_W	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI17_W	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI17_W	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI17_W	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI17_W	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI17_W	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI17_W	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI17_W	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI17_W	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI17_W	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI18_E	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI18_E	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI18_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI18_E	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI18_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI18_E	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI18_E	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI18_E	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02
SI18_E	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI18_E	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI18_E	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI18_E	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI18_E	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI18_E	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI18_E	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI18_E	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI18_E	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI18_E	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI18_E	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI18_E	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI18_E	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI18_E	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI18_E	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI18_W	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI18_W	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI18_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI18_W	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI18_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI18_W	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI18_W	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI18_W	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02
SI18_W	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI18_W	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI18_W	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03
SI18_W	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI18_W	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI18_W	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI18_W	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI18_W	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI18_W	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI18_W	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI18_W	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI18_W	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI18_W	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI18_W	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI18_W	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI18_W	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI19_E	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI19_E	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI19_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI19_E	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI19_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI19_E	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI19_E	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI19_E	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02
SI19_E	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI19_E	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI19_E	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03
SI19_E	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI19_E	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI19_E	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI19_E	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI19_E	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI19_E	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI19_E	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI19_E	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI19_E	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI19_E	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI19_E	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI19_E	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI19_E	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI19_W	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI19_W	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI19_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI19_W	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI19_W	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI19_W	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI19_W	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI19_W	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_W	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI19_W	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI19_W	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03
SI19_W	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI19_W	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI19_W	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI19_W	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI19_W	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI19_W	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI19_W	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI19_W	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI19_W	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI19_W	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI19_W	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI19_W	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI19_W	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI20_E	0.75	125	0	1	2.11E-01	2.41E-02	9.59E-04	1.24E-03	1.13E-03	5.65E-04	6.54E-05	3.55E-04	2.31E-04	2.89E-07	2.31E-05	72.0	3.04E-03	1.85E-03
SI20_E	0.75	83	0	1	1.41E-01	1.45E-02	6.39E-04	8.29E-04	7.52E-04	3.76E-04	4.35E-05	2.36E-04	1.54E-04	1.92E-07	1.54E-05	47.5	2.02E-03	1.23E-03
SI20_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.28E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	41.1	1.77E-03	1.08E-03
SI20_E	0.75	52	0	1	8.80E-02	8.59E-03	3.99E-04	5.18E-04	4.70E-04	2.34E-04	2.71E-05	1.47E-04	9.64E-05	1.20E-07	9.58E-06	29.1	1.26E-03	7.69E-04
SI20_E	0.75	73	0	1	1.23E-01	1.20E-02	5.59E-04	7.25E-04	6.58E-04	3.27E-04	3.80E-05	2.06E-04	1.35E-04	1.68E-07	1.34E-05	40.7	1.76E-03	1.08E-03
SI20_E	0.75	177	0	1	2.99E-01	2.92E-02	1.36E-03	1.76E-03	1.60E-03	7.95E-04	9.22E-05	5.00E-04	3.28E-04	4.09E-07	3.26E-05	98.8	4.29E-03	2.62E-03
SI20_E	0.75	531	0	1	8.97E-01	8.77E-02	4.07E-03	5.28E-03	4.79E-03	2.39E-03	2.77E-04	1.50E-03	9.83E-04	1.23E-06	9.78E-05	298.3	1.29E-02	7.85E-03
SI20_E	0.75	812	0	1	1.37E+00	1.53E-01	6.23E-03	8.08E-03	7.33E-03	3.67E-03	4.25E-04	2.31E-03	1.50E-03	1.88E-06	1.50E-04	467.3	1.98E-02	1.20E-02
SI20_E	0.75	656	0	1	1.11E+00	1.62E-01	5.03E-03	6.53E-03	5.92E-03	2.98E-03	3.46E-04	1.88E-03	1.21E-03	1.52E-06	1.22E-04	390.1	1.61E-02	9.69E-03
SI20_E	0.75	542	0	1	9.15E-01	1.54E-01	4.20E-03	5.39E-03	4.89E-03	2.47E-03	2.86E-04	1.56E-03	1.00E-03	1.25E-06	1.01E-04	328.8	1.33E-02	8.00E-03
SI20_E	0.75	489	0	1	8.27E-01	1.55E-01	3.86E-03	4.87E-03	4.42E-03	2.24E-03	2.60E-04	1.41E-03	9.06E-04	1.13E-06	9.19E-05	302.2	1.21E-02	7.23E-03
SI20_E	0.75	552	0	1	9.33E-01	2.07E-01	4.48E-03	5.49E-03	4.98E-03	2.54E-03	2.95E-04	1.60E-03	1.02E-03	1.28E-06	1.04E-04	351.1	1.37E-02	8.15E-03
SI20_E	0.75	583	0	1	9.85E-01	2.27E-01	4.77E-03	5.80E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	373.9	1.45E-02	8.62E-03
SI20_E	0.75	594	0	1	1.00E+00	2.37E-01	4.88E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.13E-04	382.3	1.48E-02	8.77E-03
SI20_E	0.75	614	0	1	1.04E+00	2.52E-01	5.07E-03	6.11E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	397.6	1.53E-02	9.08E-03
SI20_E	0.75	666	0	1	1.13E+00	2.71E-01	5.49E-03	6.63E-03	6.02E-03	3.08E-03	3.57E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	430.4	1.66E-02	9.85E-03
SI20_E	0.75	823	0	1	1.39E+00	3.34E-01	6.77E-03	8.19E-03	7.43E-03	3.80E-03	4.40E-04	2.40E-03	1.52E-03	1.90E-06	1.56E-04	530.8	2.05E-02	1.22E-02
SI20_E	0.75	885	0	1	1.50E+00	3.50E-01	7.25E-03	8.81E-03	7.99E-03	4.09E-03	4.73E-04	2.57E-03	1.64E-03	2.05E-06	1.68E-04	567.8	2.20E-02	1.31E-02
SI20_E	0.75	614	0	1	1.04E+00	2.36E-01	4.99E-03	6.11E-03	5.55E-03	2.83E-03	3.28E-04	1.78E-03	1.14E-03	1.42E-06	1.16E-04	391.4	1.53E-02	9.08E-03
SI20_E	0.75	406	0	1	6.86E-01	1.36E-01	3.22E-03	4.04E-03	3.67E-03	1.86E-03	2.16E-04	1.17E-03	7.52E-04	9.39E-07	7.64E-05	252.3	1.00E-02	6.00E-03
SI20_E	0.75	344	0	1	5.81E-01	1.03E-01	2.68E-03	3.42E-03	3.10E-03	1.57E-03	1.82E-04	9.89E-04	6.36E-04	7.94E-07	6.44E-05	209.8	8.47E-03	5.08E-03
SI20_E	0.75	292	0	1	4.93E-01	7.89E-02	2.24E-03	2.90E-03	2.63E-03	1.33E-03	1.54E-04	8.36E-04	5.40E-04	6.74E-07	5.45E-05	175.1	7.16E-03	4.31E-03
SI20_E	0.75	240	0	1	4.05E-01	5.83E-02	1.84E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.85E-04	4.43E-04	5.53E-07	4.46E-05	141.8	5.87E-03	3.54E-03
SI20_E	0.75	177	0	1	2.99E-01	3.85E-02	1.36E-03	1.76E-03	1.60E-03	8.02E-04	9.29E-05	5.05E-04	3.28E-04	4.09E-07	3.29E-05	103.4	4.32E-03	2.62E-03
SI20_W	0.75	109	0	1	1.85E-01	2.11E-02	8.38E-04	1.09E-03	9.86E-04	4.93E-04	5.72E-05	3.11E-04	2.02E-04	2.52E-07	2.02E-05	62.9	2.66E-03	1.61E-03
SI20_W	0.75	73	0	1	1.23E-01	1.27E-02	5.58E-04	7.24E-04	6.57E-04	3.28E-04	3.81E-05	2.07E-04	1.35E-04	1.68E-07	1.34E-05	41.5	1.77E-03	1.08E-03
SI20_W	0.75	64	0	1	1.08E-01	1.05E-02	4.89E-04	6.34E-04	5.75E-04	2.87E-04	3.32E-05	1.80E-04	1.18E-04	1.47E-07	1.17E-05	35.9	1.54E-03	9.41E-04
SI20_W	0.75	46	0	1	7.69E-02	7.51E-03	3.49E-04	4.53E-04	4.11E-04	2.04E-04	2.37E-05	1.29E-04	8.42E-05	1.05E-07	8.37E-06	25.5	1.10E-03	6.72E-04
SI20_W	0.75	64	0	1	1.08E-01	1.05E-02	4.89E-04	6.34E-04	5.75E-04	2.86E-04	3.32E-05	1.80E-04	1.18E-04	1.47E-07	1.17E-05	35.6	1.54E-03	9.41E-04
SI20_W	0.75	155	0	1	2.61E-01	2.55E-02	1.19E-03	1.54E-03	1.40E-03	6.95E-04	8.06E-05	4.37E-04	2.86E-04	3.57E-07	2.85E-05	86.4	3.74E-03	2.29E-03
SI20_W	0.75	464	0	1	7.84E-01	7.66E-02	3.56E-03	4.62E-03	4.19E-03	2.09E-03	2.42E-04	1.31E-03	8.59E-04	1.07E-06	8.55E-05	260.6	1.12E-02	6.86E-03
SI20_W	0.75	710	0	1	1.20E+00	1.33E-01	5.44E-03	7.06E-03	6.41E-03	3.21E-03	3.72E-04	2.02E-03	1.31E-03	1.64E-06	1.31E-04	408.3	1.73E-02	1.05E-02
SI20_W	0.75	573	0	1	9.69E-01	1.42E-01	4.40E-03	5.70E-03	5.17E-03	2.61E-03	3.02E-04	1.64E-03	1.06E-03	1.32E-06	1.07E-04	340.8	1.41E-02	8.47E-03
SI20_W	0.75	473	0	1	8.00E-01	1.35E-01	3.67E-03	4.71E-03	4.27E-03	2.16E-03	2.50E-04	1.36E-03	8.76E-04	1.09E-06	8.86E-05	287.3	1.16E-02	6.99E-03
SI20_W	0.75	428	0	1	7.23E-01	1.35E-01	3.37E-03	4.26E-03	3.86E-03	1.96E-03	2.27E-04	1.23E-03	7.92E-04	9.88E-07	8.03E-05	264.1	1.06E-02	6.32E-03
SI20_W	0.75	482	0	1	8.15E-01	1.81E-01	3.92E-03	4.80E-03	4.35E-03	2.22E-03	2.57E-04	1.40E-03	8.93E-04	1.11E-06	9.12E-05	306.8	1.20E-02	7.13E-03
SI20_W	0.75	510	0	1	8.61E-01	1.98E-01	4.17E-03	5.07E-03	4.60E-03	2.35E-03	2.72E-04	1.48E-03	9.44E-04	1.18E-06	9.65E-05	326.7	1.27E-02	7.53E-03
SI20_W	0.75	519	0	1	8.77E-01	2.07E-01	4.26E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.61E-04	1.20E-06	9.83E-05	334.1	1.29E-02	7.66E-03
SI20_W	0.75	537	0	1	9.07E-01	2.20E-01	4.43E-03	5.34E-03	4.85E-03	2.48E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	347.4	1.34E-02	7.93E-03
SI20_W	0.75	582	0	1	9.84E-01	2.37E-01	4.80E-03	5.79E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	376.1	1.45E-02	8.60E-03
SI20_W	0.75	719	0	1	1.21E+00	2.92E-01	5.92E-03	7.15E-03	6.49E-03	3.32E-03	3.85E-04	2.09E-03	1.33E-03	1.66E-06	1.36E-04	463.9	1.79E-02	1.06E-02
SI20_W	0.75	774	0	1	1.31E+00	3.06E-01	6.33E-03	7.70E-03	6.98E-03	3.57E-03	4.13E-04	2.25E-03	1.43E-03	1.79E-06	1.47E-04	496.1	1.93E-02	1.14E-02
SI20_W	0.75	537	0	1	9.07E-01	2.06E-01	4.36E-03	5.34E-03	4.85E-03	2.47E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	342.0	1.34E-02	7.93E-03
SI20_W	0.75	355	0	1	6.00E-01	1.19E-01	2.81E-03	3.53E-03	3.20E-03	1.63E-03	1.88E-04	1.02E-03	6.57E-04	8.20E-07	6.68E-05	220.5	8.78E-03	5.24E-03
SI20_W	0.75	300	0	1	5.07E-01	9.04E-02	2.34E-03	2.99E-03	2.71E-03	1.37E-03	1.59E-04	8.64E-04	5.56E-04	6.94E-07	5.63E-05	183.3	7.40E-03	4.44E-03
SI20_W	0.75	255	0	1	4.31E-01	6.90E-02	1.95E-03	2.54E-03	2.30E-03	1.16E-03	1.34E-04	7.31E-04	4.72E-04	5.89E-07	4.76E-05	153.0	6.26E-03	3.76E-03
SI20_W	0.75	209	0	1	3.54E-01	5.09E-02	1.61E-03	2.08E-03	1.89E-03	9.51E-04	1.10E-04	5.98E-04	3.88E-04	4.84E-07	3.90E-05	123.9	5.13E-03	3.09E-03
SI20_W	0.75	155	0	1	2.61E-01	3.37E-02	1.19E-03	1.54E-03	1.40E-03	7.01E-04	8.12E-05	4.41E-04	2.86E-04	3.57E-07	2.87E-05	90.4	3.78E-03	2.29E-03
SI21_E	0.75	109	0	1	1.85E-01	2.11E-02	8.38E-04	1.09E-03	9.86E-04	4.93E-04	5.72E-05	3.11E-04	2.02E-04	2.52E-07	2.02E-05	62.9	2.66E-03	1.61E-03
SI21_E	0.75	73	0	1	1.23E-01	1.27E-02	5.58E-04	7.24E-04	6.57E-04	3.28E-04	3.81E-05	2.07E-04	1.35E-04	1.68E-07	1.34E-05	41.5	1.77E-03	1.08E-03
SI21_E	0.75	64	0	1	1.08E-01	1.05E-02	4.89E-04	6.34E-04	5.75E-04	2.87E-04	3.32E-05	1.80E-04	1.18E-04	1.47E-07	1.17E-05	35.9	1.54E-03	9.41E-04
SI21_E	0.75	46	0	1	7.69E-02	7.51E-03	3.49E-04	4.53E-04	4.11E-04	2.04E-04	2.37E-05	1.29E-04	8.42E-05	1.05E-07	8.37E-06	25.5	1.10E-03	6.72E-04
SI21_E	0.75	64	0	1	1.08E-01	1.05E-02	4.89E-04	6.34E-04	5.75E-04	2.86E-04	3.32E-05	1.80E-04	1.18E-04	1.47E-07	1.17E-05	35.6	1.54E-03	9.41E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI21_E	0.75	155	0	1	2.61E-01	2.55E-02	1.19E-03	1.54E-03	1.40E-03	6.95E-04	8.06E-05	4.37E-04	2.86E-04	3.57E-07	2.85E-05	86.4	3.74E-03	2.29E-03
SI21_E	0.75	464	0	1	7.84E-01	7.66E-02	3.56E-03	4.62E-03	4.19E-03	2.09E-03	2.42E-04	1.31E-03	8.59E-04	1.07E-06	8.55E-05	260.6	1.12E-02	6.86E-03
SI21_E	0.75	710	0	1	1.20E+00	1.33E-01	5.44E-03	7.06E-03	6.41E-03	3.21E-03	3.72E-04	2.02E-03	1.31E-03	1.64E-06	1.31E-04	408.3	1.73E-02	1.05E-02
SI21_E	0.75	573	0	1	9.69E-01	1.42E-01	4.40E-03	5.70E-03	5.17E-03	2.61E-03	3.02E-04	1.64E-03	1.06E-03	1.32E-06	1.07E-04	340.8	1.41E-02	8.47E-03
SI21_E	0.75	473	0	1	8.00E-01	1.35E-01	3.67E-03	4.71E-03	4.27E-03	2.16E-03	2.50E-04	1.36E-03	8.76E-04	1.09E-06	8.86E-05	287.3	1.16E-02	6.99E-03
SI21_E	0.75	428	0	1	7.23E-01	1.35E-01	3.37E-03	4.26E-03	3.86E-03	1.96E-03	2.27E-04	1.23E-03	7.92E-04	9.88E-07	8.03E-05	264.1	1.06E-02	6.32E-03
SI21_E	0.75	482	0	1	8.15E-01	1.81E-01	3.92E-03	4.80E-03	4.35E-03	2.22E-03	2.57E-04	1.40E-03	8.93E-04	1.11E-06	9.12E-05	306.8	1.20E-02	7.13E-03
SI21_E	0.75	510	0	1	8.61E-01	1.98E-01	4.17E-03	5.07E-03	4.60E-03	2.35E-03	2.72E-04	1.48E-03	9.44E-04	1.18E-06	9.65E-05	326.7	1.27E-02	7.53E-03
SI21_E	0.75	519	0	1	8.77E-01	2.07E-01	4.26E-03	5.16E-03	4.68E-03	2.40E-03	2.77E-04	1.51E-03	9.61E-04	1.20E-06	9.83E-05	334.1	1.29E-02	7.66E-03
SI21_E	0.75	537	0	1	9.07E-01	2.20E-01	4.43E-03	5.34E-03	4.85E-03	2.48E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	347.4	1.34E-02	7.93E-03
SI21_E	0.75	582	0	1	9.84E-01	2.37E-01	4.80E-03	5.79E-03	5.26E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	376.1	1.45E-02	8.60E-03
SI21_E	0.75	719	0	1	1.21E+00	2.92E-01	5.92E-03	7.15E-03	6.49E-03	3.32E-03	3.85E-04	2.09E-03	1.33E-03	1.66E-06	1.36E-04	463.9	1.79E-02	1.06E-02
SI21_E	0.75	774	0	1	1.31E+00	3.06E-01	6.33E-03	7.70E-03	6.98E-03	3.57E-03	4.13E-04	2.25E-03	1.43E-03	1.79E-06	1.47E-04	496.1	1.93E-02	1.14E-02
SI21_E	0.75	537	0	1	9.07E-01	2.06E-01	4.36E-03	5.34E-03	4.85E-03	2.47E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	342.0	1.34E-02	7.93E-03
SI21_E	0.75	355	0	1	6.00E-01	1.19E-01	2.81E-03	3.53E-03	3.20E-03	1.63E-03	1.88E-04	1.02E-03	6.57E-04	8.20E-07	6.68E-05	220.5	8.78E-03	5.24E-03
SI21_E	0.75	300	0	1	5.07E-01	9.04E-02	2.34E-03	2.99E-03	2.71E-03	1.37E-03	1.59E-04	8.64E-04	5.56E-04	6.94E-07	5.63E-05	183.3	7.40E-03	4.44E-03
SI21_E	0.75	255	0	1	4.31E-01	6.90E-02	1.95E-03	2.54E-03	2.30E-03	1.16E-03	1.34E-04	7.31E-04	4.72E-04	5.89E-07	4.76E-05	153.0	6.26E-03	3.76E-03
SI21_E	0.75	209	0	1	3.54E-01	5.09E-02	1.61E-03	2.08E-03	1.89E-03	9.51E-04	1.10E-04	5.98E-04	3.88E-04	4.84E-07	3.90E-05	123.9	5.13E-03	3.09E-03
SI21_E	0.75	155	0	1	2.61E-01	3.37E-02	1.19E-03	1.54E-03	1.40E-03	7.01E-04	8.12E-05	4.41E-04	2.86E-04	3.57E-07	2.87E-05	90.4	3.78E-03	2.29E-03
SI21_W	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI21_W	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04
SI21_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI21_W	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI21_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI21_W	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI21_W	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI21_W	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI21_W	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI21_W	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI21_W	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI21_W	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI21_W	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI21_W	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI21_W	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI21_W	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI21_W	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI21_W	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI21_W	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI21_W	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI21_W	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI21_W	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI21_W	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03
SI21_W	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI22_E	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI22_E	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04
SI22_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI22_E	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI22_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI22_E	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI22_E	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI22_E	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI22_E	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI22_E	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI22_E	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI22_E	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI22_E	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI22_E	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI22_E	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI22_E	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI22_E	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI22_E	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI22_E	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI22_E	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI22_E	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI22_E	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI22_E	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03
SI22_E	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI22_W	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI22_W	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI22_W	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI22_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI22_W	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI22_W	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI22_W	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI22_W	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI22_W	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI22_W	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI22_W	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI22_W	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI22_W	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI22_W	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI22_W	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI22_W	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI22_W	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI22_W	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI22_W	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI22_W	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI22_W	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI22_W	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03
SI22_W	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI23_E	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI23_E	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04
SI23_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI23_E	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI23_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI23_E	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI23_E	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI23_E	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI23_E	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI23_E	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI23_E	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI23_E	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI23_E	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI23_E	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI23_E	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI23_E	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI23_E	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI23_E	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI23_E	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI23_E	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI23_E	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI23_E	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI23_E	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03
SI23_E	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI23_W	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI23_W	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04
SI23_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI23_W	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI23_W	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI23_W	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI23_W	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI23_W	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI23_W	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI23_W	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI23_W	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI23_W	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI23_W	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI23_W	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI23_W	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI23_W	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI23_W	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI23_W	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI23_W	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI23_W	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI23_W	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI23_W	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI23_W	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI24_E	0.75	94	0	1	1.59E-01	1.82E-02	7.23E-04	9.38E-04	8.51E-04	4.26E-04	4.94E-05	2.68E-04	1.75E-04	2.18E-07	1.75E-05	54.3	2.30E-03	1.39E-03
SI24_E	0.75	63	0	1	1.06E-01	1.09E-02	4.82E-04	6.25E-04	5.67E-04	2.83E-04	3.29E-05	1.78E-04	1.16E-04	1.45E-07	1.16E-05	35.8	1.53E-03	9.29E-04
SI24_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	31.0	1.33E-03	8.13E-04
SI24_E	0.75	39	0	1	6.64E-02	6.48E-03	3.01E-04	3.91E-04	3.55E-04	1.76E-04	2.05E-05	1.11E-04	7.27E-05	9.07E-08	7.23E-06	22.0	9.51E-04	5.80E-04
SI24_E	0.75	55	0	1	9.29E-02	9.08E-03	4.22E-04	5.47E-04	4.96E-04	2.47E-04	2.86E-05	1.55E-04	1.02E-04	1.27E-07	1.01E-05	30.7	1.33E-03	8.13E-04
SI24_E	0.75	134	0	1	2.26E-01	2.20E-02	1.02E-03	1.33E-03	1.21E-03	6.00E-04	6.95E-05	3.77E-04	2.47E-04	3.09E-07	2.46E-05	74.6	3.23E-03	1.97E-03
SI24_E	0.75	401	0	1	6.77E-01	6.61E-02	3.07E-03	3.99E-03	3.62E-03	1.80E-03	2.09E-04	1.13E-03	7.42E-04	9.26E-07	7.38E-05	225.0	9.71E-03	5.92E-03
SI24_E	0.75	613	0	1	1.04E+00	1.15E-01	4.70E-03	6.10E-03	5.53E-03	2.77E-03	3.21E-04	1.74E-03	1.13E-03	1.42E-06	1.13E-04	352.5	1.49E-02	9.05E-03
SI24_E	0.75	495	0	1	8.36E-01	1.22E-01	3.80E-03	4.92E-03	4.47E-03	2.25E-03	2.61E-04	1.42E-03	9.16E-04	1.14E-06	9.22E-05	294.3	1.21E-02	7.31E-03
SI24_E	0.75	409	0	1	6.90E-01	1.16E-01	3.17E-03	4.06E-03	3.69E-03	1.86E-03	2.16E-04	1.17E-03	7.56E-04	9.44E-07	7.65E-05	248.0	1.01E-02	6.04E-03
SI24_E	0.75	369	0	1	6.24E-01	1.17E-01	2.91E-03	3.67E-03	3.33E-03	1.69E-03	1.96E-04	1.06E-03	6.84E-04	8.53E-07	6.94E-05	228.0	9.12E-03	5.46E-03
SI24_E	0.75	416	0	1	7.04E-01	1.56E-01	3.38E-03	4.14E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.71E-04	9.62E-07	7.87E-05	264.9	1.04E-02	6.15E-03
SI24_E	0.75	440	0	1	7.43E-01	1.71E-01	3.60E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.33E-05	282.1	1.10E-02	6.50E-03
SI24_E	0.75	448	0	1	7.57E-01	1.79E-01	3.68E-03	4.46E-03	4.04E-03	2.07E-03	2.40E-04	1.30E-03	8.29E-04	1.03E-06	8.49E-05	288.4	1.12E-02	6.62E-03
SI24_E	0.75	464	0	1	7.83E-01	1.90E-01	3.83E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.80E-05	299.9	1.16E-02	6.85E-03
SI24_E	0.75	503	0	1	8.50E-01	2.05E-01	4.14E-03	5.00E-03	4.54E-03	2.32E-03	2.69E-04	1.46E-03	9.31E-04	1.16E-06	9.54E-05	324.7	1.25E-02	7.43E-03
SI24_E	0.75	621	0	1	1.05E+00	2.52E-01	5.11E-03	6.18E-03	5.60E-03	2.87E-03	3.32E-04	1.81E-03	1.15E-03	1.43E-06	1.18E-04	400.5	1.55E-02	9.17E-03
SI24_E	0.75	668	0	1	1.13E+00	2.64E-01	5.47E-03	6.64E-03	6.03E-03	3.08E-03	3.57E-04	1.94E-03	1.24E-03	1.54E-06	1.26E-04	428.3	1.66E-02	9.87E-03
SI24_E	0.75	464	0	1	7.83E-01	1.78E-01	3.77E-03	4.61E-03	4.18E-03	2.14E-03	2.47E-04	1.35E-03	8.58E-04	1.07E-06	8.77E-05	295.3	1.15E-02	6.85E-03
SI24_E	0.75	306	0	1	5.18E-01	1.03E-01	2.43E-03	3.05E-03	2.77E-03	1.40E-03	1.63E-04	8.85E-04	5.67E-04	7.08E-07	5.76E-05	190.4	7.58E-03	4.53E-03
SI24_E	0.75	259	0	1	4.38E-01	7.81E-02	2.02E-03	2.58E-03	2.34E-03	1.18E-03	1.37E-04	7.46E-04	4.80E-04	5.99E-07	4.86E-05	158.3	6.39E-03	3.83E-03
SI24_E	0.75	220	0	1	3.72E-01	5.95E-02	1.69E-03	2.19E-03	1.99E-03	1.00E-03	1.16E-04	6.31E-04	4.07E-04	5.08E-07	4.11E-05	132.1	5.40E-03	3.25E-03
SI24_E	0.75	181	0	1	3.05E-01	4.40E-02	1.39E-03	1.80E-03	1.63E-03	8.21E-04	9.51E-05	5.17E-04	3.35E-04	4.18E-07	3.36E-05	107.0	4.43E-03	2.67E-03
SI24_E	0.75	134	0	1	2.26E-01	2.91E-02	1.02E-03	1.33E-03	1.21E-03	6.05E-04	7.01E-05	3.81E-04	2.47E-04	3.09E-07	2.48E-05	78.0	3.26E-03	1.97E-03
SI24_W	0.75	82	0	1	1.38E-01	1.57E-02	6.25E-04	8.11E-04	7.36E-04	3.68E-04	4.27E-05	2.32E-04	1.51E-04	1.88E-07	1.51E-05	47.0	1.99E-03	1.20E-03
SI24_W	0.75	54	0	1	9.18E-02	9.45E-03	4.17E-04	5.41E-04	4.90E-04	2.45E-04	2.84E-05	1.54E-04	1.01E-04	1.26E-07	1.00E-05	31.0	1.32E-03	8.03E-04
SI24_W	0.75	48	0	1	8.03E-02	7.85E-03	3.65E-04	4.73E-04	4.29E-04	2.14E-04	2.48E-05	1.35E-04	8.80E-05	1.10E-07	8.76E-06	26.8	1.15E-03	7.02E-04
SI24_W	0.75	34	0	1	5.74E-02	5.61E-03	2.61E-04	3.38E-04	3.07E-04	1.53E-04	1.77E-05	9.60E-05	6.29E-05	7.85E-08	6.25E-06	19.0	8.22E-04	5.02E-04
SI24_W	0.75	48	0	1	8.03E-02	7.85E-03	3.65E-04	4.73E-04	4.29E-04	2.14E-04	2.48E-05	1.34E-04	8.80E-05	1.10E-07	8.75E-06	26.5	1.15E-03	7.02E-04
SI24_W	0.75	115	0	1	1.95E-01	1.91E-02	8.86E-04	1.15E-03	1.04E-03	5.19E-04	6.01E-05	3.26E-04	2.14E-04	2.67E-07	2.12E-05	64.5	2.80E-03	1.71E-03
SI24_W	0.75	346	0	1	5.85E-01	5.72E-02	2.66E-03	3.45E-03	3.13E-03	1.56E-03	1.81E-04	9.80E-04	6.41E-04	8.00E-07	6.38E-05	194.5	8.39E-03	5.12E-03
SI24_W	0.75	530	0	1	8.95E-01	9.95E-02	4.06E-03	5.27E-03	4.78E-03	2.39E-03	2.77E-04	1.51E-03	9.81E-04	1.22E-06	9.81E-05	304.8	1.29E-02	7.83E-03
SI24_W	0.75	428	0	1	7.23E-01	1.06E-01	3.28E-03	4.26E-03	3.86E-03	1.94E-03	2.25E-04	1.22E-03	7.92E-04	9.89E-07	7.97E-05	254.4	1.05E-02	6.32E-03
SI24_W	0.75	353	0	1	5.97E-01	1.01E-01	2.74E-03	3.51E-03	3.19E-03	1.61E-03	1.87E-04	1.02E-03	6.54E-04	8.16E-07	6.61E-05	214.4	8.69E-03	5.22E-03
SI24_W	0.75	319	0	1	5.39E-01	1.01E-01	2.52E-03	3.18E-03	2.88E-03	1.46E-03	1.69E-04	9.21E-04	5.91E-04	7.38E-07	6.00E-05	197.1	7.89E-03	4.72E-03
SI24_W	0.75	360	0	1	6.08E-01	1.35E-01	2.92E-03	3.58E-03	3.25E-03	1.66E-03	1.92E-04	1.04E-03	6.67E-04	8.32E-07	6.81E-05	229.0	8.95E-03	5.32E-03
SI24_W	0.75	380	0	1	6.43E-01	1.48E-01	3.11E-03	3.78E-03	3.43E-03	1.76E-03	2.03E-04	1.11E-03	7.04E-04	8.79E-07	7.20E-05	243.9	9.47E-03	5.62E-03
SI24_W	0.75	387	0	1	6.54E-01	1.55E-01	3.18E-03	3.85E-03	3.49E-03	1.79E-03	2.07E-04	1.13E-03	7.17E-04	8.95E-07	7.34E-05	249.3	9.65E-03	5.72E-03
SI24_W	0.75	401	0	1	6.77E-01	1.65E-01	3.31E-03	3.99E-03	3.62E-03	1.85E-03	2.15E-04	1.17E-03	7.42E-04	9.26E-07	7.61E-05	259.3	1.00E-02	5.92E-03
SI24_W	0.75	435	0	1	7.35E-01	1.77E-01	3.58E-03	4.33E-03	3.92E-03	2.01E-03	2.33E-04	1.27E-03	8.05E-04	1.00E-06	8.25E-05	280.7	1.08E-02	6.42E-03
SI24_W	0.75	537	0	1	9.07E-01	2.18E-01	4.42E-03	5.34E-03	4.84E-03	2.48E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	346.2	1.34E-02	7.93E-03
SI24_W	0.75	577	0	1	9.76E-01	2.29E-01	4.73E-03	5.74E-03	5.21E-03	2.66E-03	3.09E-04	1.68E-03	1.07E-03	1.33E-06	1.09E-04	370.3	1.44E-02	8.53E-03
SI24_W	0.75	401	0	1	6.77E-01	1.54E-01	3.26E-03	3.99E-03	3.62E-03	1.85E-03	2.14E-04	1.16E-03	7.42E-04	9.26E-07	7.58E-05	255.3	9.97E-03	5.92E-03
SI24_W	0.75	265	0	1	4.48E-01	8.89E-02	2.10E-03	2.64E-03	2.39E-03	1.21E-03	1.41E-04	7.65E-04	4.90E-04	6.12E-07	4.98E-05	164.6	6.55E-03	3.91E-03
SI24_W	0.75	224	0	1	3.79E-01	6.75E-02	1.75E-03	2.23E-03	2.02E-03	1.02E-03	1.19E-04	6.45E-04	4.15E-04	5.18E-07	4.20E-05	136.8	5.52E-03	3.31E-03
SI24_W	0.75	190	0	1	3.21E-01	5.15E-02	1.46E-03	1.89E-03	1.72E-03	8.66E-04	1.00E-04	5.45E-04	3.52E-04	4.39E-07	3.55E-05	114.2	4.67E-03	2.81E-03
SI24_W	0.75	156	0	1	2.64E-01	3.80E-02	1.20E-03	1.55E-03	1.41E-03	7.09E-04	8.22E-05	4.47E-04	2.89E-04	3.61E-07	2.91E-05	92.5	3.83E-03	2.31E-03
SI24_W	0.75	115	0	1	1.95E-01	2.51E-02	8.86E-04	1.15E-03	1.04E-03	5.23E-04	6.06E-05	3.29E-04	2.14E-04	2.67E-07	2.14E-05	67.4	2.82E-03	1.71E-03
SI25_E	0.75	82	0	1	1.38E-01	1.57E-02	6.25E-04	8.11E-04	7.36E-04	3.68E-04	4.27E-05	2.32E-04	1.51E-04	1.88E-07	1.51E-05	47.0	1.99E-03	1.20E-03
SI25_E	0.75	54	0	1	9.18E-02	9.45E-03	4.17E-04	5.41E-04	4.90E-04	2.45E-04	2.84E-05	1.54E-04	1.01E-04	1.26E-07	1.00E-05	31.0	1.32E-03	8.03E-04
SI25_E	0.75	48	0	1	8.03E-02	7.85E-03	3.65E-04	4.73E-04	4.29E-04	2.14E-04	2.48E-05	1.35E-04	8.80E-05	1.10E-07	8.76E-06	26.8	1.15E-03	7.02E-04
SI25_E	0.75	34	0	1	5.74E-02	5.61E-03	2.61E-04	3.38E-04	3.07E-04	1.53E-04	1.77E-05	9.60E-05	6.29E-05	7.85E-08	6.25E-06	19.0	8.22E-04	5.02E-04
SI25_E	0.75	48	0	1	8.03E-02	7.85E-03	3.65E-04	4.73E-04	4.29E-04	2.14E-04	2.48E-05	1.34E-04	8.80E-05	1.10E-07	8.75E-06	26.5	1.15E-03	7.02E-04
SI25_E	0.75	115	0	1	1.95E-01	1.91E-02	8.86E-04	1.15E-03	1.04E-03	5.19E-04	6.01E-05	3.26E-04	2.14E-04	2.67E-07	2.12E-05	64.5	2.80E-03	1.71E-03
SI25_E	0.75	346	0	1	5.85E-01	5.72E-02	2.66E-03	3.45E-03	3.13E-03	1.56E-03	1.81E-04	9.80E-04	6.41E-04	8.00E-07	6.38E-05	194.5	8.39E-03	5.12E-03
SI25_E	0.75	530	0	1	8.95E-01	9.95E-02	4.06E-03	5.27E-03	4.78E-03	2.39E-03	2.77E-04	1.51E-03	9.81E-04	1.22E-06	9.81E-05	304.8	1.29E-02	7.83E-03
SI25_E	0.75	428	0	1	7.23E-01	1.06E-01	3.28E-03	4.26E-03	3.86E-03	1.94E-03	2.25E-04	1.22E-03	7.92E-04	9.89E-07	7.97E-05	254.4	1.05E-02	6.32E-03
SI25_E	0.75	353	0	1	5.97E-01	1.01E-01	2.74E-03	3.51E-03	3.19E-03	1.61E-03	1.87E-04	1.02E-03	6.54E-04	8.16E-07	6.61E-05	214.4	8.69E-03	5.22E-03
SI25_E	0.75	319	0	1	5.39E-01	1.01E-01	2.52E-03	3.18E-03	2.88E-03	1.46E-03	1.69E-04	9.21E-04	5.91E-04	7.38E-07	6.00E-05	197.1	7.89E-03	4.72E-03
SI25_E	0.75	360	0	1	6.08E-01	1.35E-01	2.92E-03	3.58E-03	3.25E-03	1.66E-03	1.92E-04	1.04E-03	6.67E-04	8.32E-07	6.81E-05	229.0	8.95E-03	5.32E-03
SI25_E	0.75	380	0	1	6.43E-01	1.48E-01	3.11E-03	3.78E-03	3.43E-03	1.76E-03	2.03E-04	1.11E-03	7.04E-04	8.79E-07	7.20E-05	243.9	9.47E-03	5.62E-03
SI25_E	0.75	387	0	1	6.54E-01	1.55E-01	3.18E-03	3.85E-03	3.49E-03	1.79E-03	2.07E-04	1.13E-03	7.17E-04	8.95E-07	7.34E-05	249.3	9.65E-03	5.72E-03
SI25_E	0.75	401	0	1	6.77E-01	1.65E-01	3.31E-03	3.99E-03	3.62E-03	1.85E-03	2.15E-04	1.17E-03	7.42E-04	9.26E-07	7.61E-05	259.3	1.00E-02	5.92E-03
SI25_E	0.75	435	0	1	7.35E-01	1.77E-01	3.58E-03	4.33E-03	3.92E-03	2.01E-03	2.33E-04	1.27E-03	8.05E-04	1.00E-06	8.25E-05	280.7	1.08E-02	6.42E-03
SI25_E	0.75	537	0	1	9.07E-01	2.18E-01	4.42E-03	5.34E-03	4.84E-03	2.48E-03	2.87E-04	1.56E-03	9.94E-04	1.24E-06	1.02E-04	346.2	1.34E-02	7.93E-03
SI25_E	0.75	577	0	1	9.76E-01	2.29E-01	4.73E-03	5.74E-03	5.21E-03	2.66E-03	3.09E-04	1.68E-03	1.07E-03	1.33E-06	1.09E-04	370.3	1.44E-02	8.53E-03
SI25_E	0.75	401	0	1	6.77E-01	1.54E-01	3.26E-03	3.99E-03	3.62E-03	1.85E-03	2.14E-04	1.16E-03	7.42E-04	9.26E-07	7.58E-05	255.3	9.97E-03	5.92E-03
SI25_E	0.75	265	0	1	4.48E-01	8.89E-02	2.10E-03	2.64E-03	2.39E-03	1.21E-03	1.41E-04	7.65E-04	4.90E-04	6.12E-07	4.98E-05	164.6	6.55E-03	3.91E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	224	0	1	3.79E-01	6.75E-02	1.75E-03	2.23E-03	2.02E-03	1.02E-03	1.19E-04	6.45E-04	4.15E-04	5.18E-07	4.20E-05	136.8	5.52E-03	3.31E-03
SI25_E	0.75	190	0	1	3.21E-01	5.15E-02	1.46E-03	1.89E-03	1.72E-03	8.66E-04	1.00E-04	5.45E-04	3.52E-04	4.39E-07	3.55E-05	114.2	4.67E-03	2.81E-03
SI25_E	0.75	156	0	1	2.64E-01	3.80E-02	1.20E-03	1.55E-03	1.41E-03	7.09E-04	8.22E-05	4.47E-04	2.89E-04	3.61E-07	2.91E-05	92.5	3.83E-03	2.31E-03
SI25_E	0.75	115	0	1	1.95E-01	2.51E-02	8.86E-04	1.15E-03	1.04E-03	5.23E-04	6.06E-05	3.29E-04	2.14E-04	2.67E-07	2.14E-05	67.4	2.82E-03	1.71E-03
SI25_W	0.75	75	0	1	1.26E-01	1.44E-02	5.73E-04	7.44E-04	6.75E-04	3.38E-04	3.91E-05	2.13E-04	1.38E-04	1.73E-07	1.38E-05	43.1	1.82E-03	1.10E-03
SI25_W	0.75	50	0	1	8.42E-02	8.67E-03	3.82E-04	4.96E-04	4.50E-04	2.25E-04	2.60E-05	1.41E-04	9.23E-05	1.15E-07	9.21E-06	28.4	1.21E-03	7.36E-04
SI25_W	0.75	44	0	1	7.37E-02	7.20E-03	3.34E-04	4.34E-04	3.94E-04	1.96E-04	2.27E-05	1.23E-04	8.07E-05	1.01E-07	8.04E-06	24.6	1.06E-03	6.44E-04
SI25_W	0.75	31	0	1	5.26E-02	5.14E-03	2.39E-04	3.10E-04	2.81E-04	1.40E-04	1.62E-05	8.80E-05	5.77E-05	7.19E-08	5.73E-06	17.4	7.54E-04	4.60E-04
SI25_W	0.75	44	0	1	7.37E-02	7.20E-03	3.34E-04	4.34E-04	3.94E-04	1.96E-04	2.27E-05	1.23E-04	8.07E-05	1.01E-07	8.02E-06	24.3	1.06E-03	6.44E-04
SI25_W	0.75	106	0	1	1.79E-01	1.75E-02	8.12E-04	1.05E-03	9.56E-04	4.76E-04	5.51E-05	2.99E-04	1.96E-04	2.45E-07	1.95E-05	59.1	2.56E-03	1.56E-03
SI25_W	0.75	318	0	1	5.37E-01	5.24E-02	2.44E-03	3.16E-03	2.87E-03	1.43E-03	1.66E-04	8.99E-04	5.88E-04	7.34E-07	5.85E-05	178.4	7.70E-03	4.69E-03
SI25_W	0.75	486	0	1	8.21E-01	9.12E-02	3.73E-03	4.83E-03	4.39E-03	2.19E-03	2.54E-04	1.38E-03	8.99E-04	1.12E-06	8.99E-05	279.5	1.18E-02	7.18E-03
SI25_W	0.75	392	0	1	6.63E-01	9.69E-02	3.01E-03	3.90E-03	3.54E-03	1.78E-03	2.07E-04	1.12E-03	7.27E-04	9.07E-07	7.31E-05	233.3	9.62E-03	5.80E-03
SI25_W	0.75	324	0	1	5.47E-01	9.23E-02	2.51E-03	3.22E-03	2.92E-03	1.48E-03	1.71E-04	9.31E-04	6.00E-04	7.48E-07	6.06E-05	196.6	7.97E-03	4.79E-03
SI25_W	0.75	293	0	1	4.95E-01	9.25E-02	2.31E-03	2.91E-03	2.64E-03	1.34E-03	1.55E-04	8.44E-04	5.42E-04	6.76E-07	5.50E-05	180.7	7.23E-03	4.33E-03
SI25_W	0.75	330	0	1	5.58E-01	1.24E-01	2.68E-03	3.28E-03	2.98E-03	1.52E-03	1.76E-04	9.58E-04	6.11E-04	7.63E-07	6.24E-05	210.0	8.21E-03	4.88E-03
SI25_W	0.75	349	0	1	5.89E-01	1.36E-01	2.85E-03	3.47E-03	3.15E-03	1.61E-03	1.86E-04	1.01E-03	6.46E-04	8.06E-07	6.61E-05	223.6	8.69E-03	5.15E-03
SI25_W	0.75	355	0	1	6.00E-01	1.42E-01	2.92E-03	3.53E-03	3.20E-03	1.64E-03	1.90E-04	1.03E-03	6.58E-04	8.20E-07	6.73E-05	228.6	8.85E-03	5.25E-03
SI25_W	0.75	367	0	1	6.21E-01	1.51E-01	3.03E-03	3.66E-03	3.32E-03	1.70E-03	1.97E-04	1.07E-03	6.81E-04	8.49E-07	6.97E-05	237.8	9.17E-03	5.43E-03
SI25_W	0.75	399	0	1	6.74E-01	1.62E-01	3.29E-03	3.97E-03	3.60E-03	1.84E-03	2.13E-04	1.16E-03	7.38E-04	9.21E-07	7.56E-05	257.4	9.94E-03	5.89E-03
SI25_W	0.75	492	0	1	8.31E-01	2.00E-01	4.05E-03	4.90E-03	4.44E-03	2.27E-03	2.63E-04	1.43E-03	9.11E-04	1.14E-06	9.33E-05	317.5	1.23E-02	7.27E-03
SI25_W	0.75	529	0	1	8.95E-01	2.10E-01	4.33E-03	5.27E-03	4.78E-03	2.44E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	339.6	1.32E-02	7.82E-03
SI25_W	0.75	367	0	1	6.21E-01	1.41E-01	2.99E-03	3.66E-03	3.32E-03	1.69E-03	1.96E-04	1.07E-03	6.80E-04	8.49E-07	6.95E-05	234.1	9.14E-03	5.43E-03
SI25_W	0.75	243	0	1	4.10E-01	8.16E-02	1.93E-03	2.42E-03	2.19E-03	1.11E-03	1.29E-04	7.02E-04	4.50E-04	5.61E-07	4.57E-05	150.9	6.01E-03	3.59E-03
SI25_W	0.75	206	0	1	3.47E-01	6.19E-02	1.60E-03	2.05E-03	1.86E-03	9.39E-04	1.09E-04	5.91E-04	3.81E-04	4.75E-07	3.85E-05	125.5	5.07E-03	3.04E-03
SI25_W	0.75	174	0	1	2.95E-01	4.72E-02	1.34E-03	1.74E-03	1.57E-03	7.94E-04	9.20E-05	5.00E-04	3.23E-04	4.03E-07	3.26E-05	104.7	4.28E-03	2.58E-03
SI25_W	0.75	143	0	1	2.42E-01	3.48E-02	1.10E-03	1.43E-03	1.29E-03	6.51E-04	7.54E-05	4.10E-04	2.65E-04	3.31E-07	2.67E-05	84.8	3.51E-03	2.12E-03
SI25_W	0.75	106	0	1	1.79E-01	2.31E-02	8.12E-04	1.05E-03	9.56E-04	4.80E-04	5.56E-05	3.02E-04	1.96E-04	2.45E-07	1.97E-05	61.9	2.59E-03	1.56E-03
SI26_E	0.52	52	0	1	8.78E-02	1.00E-02	3.99E-04	5.17E-04	4.69E-04	2.35E-04	2.72E-05	1.48E-04	9.62E-05	1.20E-07	9.62E-06	29.9	1.27E-03	7.68E-04
SI26_E	0.52	35	0	1	5.85E-02	6.02E-03	2.66E-04	3.45E-04	3.13E-04	1.56E-04	1.81E-05	9.83E-05	6.41E-05	8.00E-08	6.40E-06	19.7	8.42E-04	5.12E-04
SI26_E	0.52	30	0	1	5.12E-02	5.00E-03	2.33E-04	3.02E-04	2.74E-04	1.36E-04	1.58E-05	8.58E-05	5.61E-05	7.00E-08	5.59E-06	17.1	7.35E-04	4.48E-04
SI26_E	0.52	22	0	1	3.66E-02	3.57E-03	1.66E-04	2.15E-04	1.95E-04	9.73E-05	1.13E-05	6.12E-05	4.01E-05	5.00E-08	3.99E-06	12.1	5.24E-04	3.20E-04
SI26_E	0.52	30	0	1	5.12E-02	5.00E-03	2.33E-04	3.02E-04	2.74E-04	1.36E-04	1.58E-05	8.57E-05	5.61E-05	7.00E-08	5.58E-06	16.9	7.34E-04	4.48E-04
SI26_E	0.52	74	0	1	1.24E-01	1.22E-02	5.65E-04	7.32E-04	6.64E-04	3.31E-04	3.83E-05	2.08E-04	1.36E-04	1.70E-07	1.35E-05	41.1	1.78E-03	1.09E-03
SI26_E	0.52	221	0	1	3.73E-01	3.65E-02	1.69E-03	2.20E-03	1.99E-03	9.93E-04	1.15E-04	6.25E-04	4.09E-04	5.10E-07	4.07E-05	124.0	5.35E-03	3.26E-03
SI26_E	0.52	338	0	1	5.71E-01	6.34E-02	2.59E-03	3.36E-03	3.05E-03	1.53E-03	1.77E-04	9.60E-04	6.25E-04	7.80E-07	6.25E-05	194.3	8.22E-03	4.99E-03
SI26_E	0.52	273	0	1	4.61E-01	6.74E-02	2.09E-03	2.71E-03	2.46E-03	1.24E-03	1.44E-04	7.81E-04	5.05E-04	6.30E-07	5.08E-05	162.2	6.69E-03	4.03E-03
SI26_E	0.52	225	0	1	3.80E-01	6.41E-02	1.74E-03	2.24E-03	2.03E-03	1.03E-03	1.19E-04	6.47E-04	4.17E-04	5.20E-07	4.21E-05	136.7	5.54E-03	3.33E-03
SI26_E	0.52	204	0	1	3.44E-01	6.43E-02	1.60E-03	2.02E-03	1.84E-03	9.32E-04	1.08E-04	5.87E-04	3.77E-04	4.70E-07	3.82E-05	125.7	5.03E-03	3.01E-03
SI26_E	0.52	230	0	1	3.88E-01	8.60E-02	1.86E-03	2.28E-03	2.07E-03	1.06E-03	1.22E-04	6.66E-04	4.25E-04	5.30E-07	4.34E-05	146.0	5.71E-03	3.39E-03
SI26_E	0.52	242	0	1	4.10E-01	9.44E-02	1.98E-03	2.41E-03	2.19E-03	1.12E-03	1.30E-04	7.05E-04	4.49E-04	5.60E-07	4.59E-05	155.5	6.04E-03	3.58E-03
SI26_E	0.52	247	0	1	4.17E-01	9.86E-02	2.03E-03	2.46E-03	2.23E-03	1.14E-03	1.32E-04	7.18E-04	4.57E-04	5.70E-07	4.68E-05	159.0	6.15E-03	3.65E-03
SI26_E	0.52	255	0	1	4.32E-01	1.05E-01	2.11E-03	2.54E-03	2.31E-03	1.18E-03	1.37E-04	7.44E-04	4.73E-04	5.90E-07	4.85E-05	165.3	6.37E-03	3.77E-03
SI26_E	0.52	277	0	1	4.68E-01	1.13E-01	2.28E-03	2.76E-03	2.50E-03	1.28E-03	1.48E-04	8.07E-04	5.13E-04	6.40E-07	5.26E-05	179.0	6.91E-03	4.09E-03
SI26_E	0.52	342	0	1	5.78E-01	1.39E-01	2.82E-03	3.40E-03	3.09E-03	1.58E-03	1.83E-04	9.96E-04	6.34E-04	7.91E-07	6.49E-05	220.7	8.53E-03	5.05E-03
SI26_E	0.52	368	0	1	6.22E-01	1.46E-01	3.01E-03	3.66E-03	3.32E-03	1.70E-03	1.97E-04	1.07E-03	6.82E-04	8.51E-07	6.97E-05	236.1	9.17E-03	5.44E-03
SI26_E	0.52	255	0	1	4.32E-01	9.81E-02	2.08E-03	2.54E-03	2.31E-03	1.18E-03	1.36E-04	7.42E-04	4.73E-04	5.90E-07	4.83E-05	162.7	6.35E-03	3.77E-03
SI26_E	0.52	169	0	1	2.85E-01	5.67E-02	1.34E-03	1.68E-03	1.52E-03	7.74E-04	8.97E-05	4.88E-04	3.13E-04	3.90E-07	3.18E-05	104.9	4.18E-03	2.50E-03
SI26_E	0.52	143	0	1	2.41E-01	4.30E-02	1.11E-03	1.42E-03	1.29E-03	6.53E-04	7.56E-05	4.11E-04	2.65E-04	3.30E-07	2.68E-05	87.2	3.52E-03	2.11E-03
SI26_E	0.52	121	0	1	2.05E-01	3.28E-02	9.30E-04	1.21E-03	1.09E-03	5.52E-04	6.40E-05	3.48E-04	2.24E-04	2.80E-07	2.26E-05	72.8	2.98E-03	1.79E-03
SI26_E	0.52	100	0	1	1.68E-01	2.42E-02	7.64E-04	9.91E-04	8.99E-04	4.52E-04	5.24E-05	2.85E-04	1.84E-04	2.30E-07	1.85E-05	59.0	2.44E-03	1.47E-03
SI26_E	0.52	74	0	1	1.24E-01	1.60E-02	5.65E-04	7.32E-04	6.64E-04	3.33E-04	3.86E-05	2.10E-04	1.36E-04	1.70E-07	1.37E-05	43.0	1.80E-03	1.09E-03
SI26_W	0.49	45	0	1	7.67E-02	8.77E-03	3.48E-04	4.52E-04	4.10E-04	2.05E-04	2.38E-05	1.29E-04	8.41E-05	1.05E-07	8.41E-06	26.2	1.11E-03	6.71E-04
SI26_W	0.49	30	0	1	5.11E-02	5.26E-03	2.32E-04	3.01E-04	2.73E-04	1.36E-04	1.58E-05	8.59E-05	5.60E-05	6.99E-08	5.59E-06	17.3	7.36E-04	4.47E-04
SI26_W	0.49	26	0	1	4.48E-02	4.37E-03	2.03E-04	2.63E-04	2.39E-04	1.19E-04	1.38E-05	7.50E-05	4.90E-05	6.12E-08	4.88E-06	14.9	6.42E-04	3.91E-04
SI26_W	0.49	19	0	1	3.20E-02	3.12E-03	1.45E-04	1.88E-04	1.71E-04	8.50E-05	9.85E-06	5.35E-05	3.50E-05	4.37E-08	3.48E-06	10.6	4.58E-04	2.79E-04
SI26_W	0.49	26	0	1	4.48E-02	4.37E-03	2.03E-04	2.63E-04	2.39E-04	1.19E-04	1.38E-05	7.48E-05	4.90E-05	6.12E-08	4.87E-06	14.8	6.41E-04	3.91E-04
SI26_W	0.49	64	0	1	1.09E-01	1.06E-02	4.93E-04	6.40E-04	5.81E-04	2.89E-04	3.35E-05	1.82E-04	1.19E-04	1.49E-07	1.18E-05	35.9	1.56E-03	9.50E-04
SI26_W	0.49	193	0	1	3.26E-01	3.18E-02	1.48E-03	1.92E-03	1.74E-03	8.67E-04	1.01E-04	5.46E-04	3.57E-04	4.46E-07	3.55E-05	108.4	4.68E-03	2.85E-03
SI26_W	0.49	295	0	1	4.99E-01	5.54E-02	2.26E-03	2.94E-03	2.66E-03	1.33E-03	1.54E-04	8.39E-04	5.46E-04	6.82E-07	5.46E-05	169.8	7.19E-03	4.36E-03
SI26_W	0.49	238	0	1	4.03E-01	5.89E-02	1.83E-03	2.37E-03	2.15E-03	1.08E-03	1.26E-04	6.82E-04	4.41E-04	5.51E-07	4.44E-05	141.7	5.84E-03	3.52E-03
SI26_W	0.49	197	0	1	3.32E-01	5.60E-02	1.52E-03	1.96E-03	1.78E-03	8.98E-04	1.04E-04	5.65E-04	3.64E-04	4.55E-07	3.68E-05	119.4	4.84E-03	2.91E-03
SI26_W	0.49	178	0	1	3.00E-01	5.62E-02	1.40E-03	1.77E-03	1.61E-03	8.14E-04	9.43E-05	5.13E-04	3.29E-04	4.11E-07	3.34E-05	109.8	4.39E-03	2.63E-03
SI26_W	0.49	201	0	1	3.39E-01	7.51E-02	1.63E-03	2.00E-03	1.81E-03	9.24E-04	1.07E-04	5.82E-04	3.71E-04	4.63E-07	3.79E-05	127.6	4.98E-03	2.96E-03
SI26_W	0.49	212	0	1	3.58E-01	8.24E-02	1.73E-03	2.11E-03	1.91E-03	9.78E-04	1.13E-04	6.16E-04	3.92E-04	4.90E-07	4.01E-05	135.8	5.28E-03	3.13E-03
SI26_W	0.49	216	0	1	3.64E-01	8.62E-02	1.77E-03	2.15E-03	1.95E-03	9.96E-04	1.15E-04	6.28E-04	3.99E-04	4.98E-07	4.09E-05	138.9	5.38E-03	3.19E-03
SI26_W	0.49	223	0	1	3.77E-01	9.16E-02	1.84E-03	2.22E-03	2.01E-03	1.03E-03	1.20E-04	6.50E-04	4.13E-04	5.16E-07	4.24E-05	144.4	5.57E-03	3.30E-03
SI26_W	0.49	242	0	1	4.09E-01	9.86E-02	2.00E-03	2.41E-03	2.19E-03	1.12E-03	1.30E-04	7.05E-04	4.48E-04	5.60E-07	4.59E-05	156.4	6.04E-03	3.58E-03
SI26_W	0.49	299	0	1	5.05E-01	1.21E-01	2.46E-03	2.97E-03	2.70E-03	1.38E-03	1.60E-04	8.70E-04	5.54E-04	6.91E-07	5.67E-05	192.9	7.45E-03	4.42E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	322	0	1	5.43E-01	1.27E-01	2.63E-03	3.20E-03	2.90E-03	1.48E-03	1.72E-04	9.35E-04	5.96E-04	7.43E-07	6.09E-05	206.3	8.01E-03	4.75E-03
SI26_W	0.49	223	0	1	3.77E-01	8.57E-02	1.81E-03	2.22E-03	2.01E-03	1.03E-03	1.19E-04	6.48E-04	4.13E-04	5.16E-07	4.22E-05	142.2	5.55E-03	3.30E-03
SI26_W	0.49	148	0	1	2.49E-01	4.95E-02	1.17E-03	1.47E-03	1.33E-03	6.77E-04	7.84E-05	4.26E-04	2.73E-04	3.41E-07	2.78E-05	91.7	3.65E-03	2.18E-03
SI26_W	0.49	125	0	1	2.11E-01	3.76E-02	9.73E-04	1.24E-03	1.13E-03	5.70E-04	6.61E-05	3.59E-04	2.31E-04	2.88E-07	2.34E-05	76.2	3.08E-03	1.84E-03
SI26_W	0.49	106	0	1	1.79E-01	2.87E-02	8.13E-04	1.05E-03	9.56E-04	4.82E-04	5.59E-05	3.04E-04	1.96E-04	2.45E-07	1.98E-05	63.6	2.60E-03	1.57E-03
SI26_W	0.49	87	0	1	1.47E-01	2.12E-02	6.67E-04	8.66E-04	7.85E-04	3.95E-04	4.58E-05	2.49E-04	1.61E-04	2.01E-07	1.62E-05	51.5	2.13E-03	1.29E-03
SI26_W	0.49	64	0	1	1.09E-01	1.40E-02	4.93E-04	6.40E-04	5.81E-04	2.91E-04	3.38E-05	1.83E-04	1.19E-04	1.49E-07	1.19E-05	37.6	1.57E-03	9.50E-04
SI27_E	0.61	57	0	1	9.70E-02	1.11E-02	4.40E-04	5.71E-04	5.18E-04	2.59E-04	3.01E-05	1.63E-04	1.06E-04	1.33E-07	1.06E-05	33.1	1.40E-03	8.48E-04
SI27_E	0.61	38	0	1	6.47E-02	6.66E-03	2.94E-04	3.81E-04	3.46E-04	1.73E-04	2.00E-05	1.09E-04	7.09E-05	8.84E-08	7.07E-06	21.8	9.30E-04	5.66E-04
SI27_E	0.61	33	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.48E-05	6.20E-05	7.74E-08	6.17E-06	18.9	8.12E-04	4.95E-04
SI27_E	0.61	24	0	1	4.04E-02	3.95E-03	1.84E-04	2.38E-04	2.16E-04	1.07E-04	1.25E-05	6.76E-05	4.43E-05	5.53E-08	4.40E-06	13.4	5.79E-04	3.53E-04
SI27_E	0.61	33	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.50E-04	1.74E-05	9.46E-05	6.20E-05	7.74E-08	6.16E-06	18.7	8.11E-04	4.95E-04
SI27_E	0.61	81	0	1	1.37E-01	1.34E-02	6.24E-04	8.09E-04	7.34E-04	3.65E-04	4.24E-05	2.30E-04	1.51E-04	1.88E-07	1.50E-05	45.4	1.97E-03	1.20E-03
SI27_E	0.61	244	0	1	4.12E-01	4.03E-02	1.87E-03	2.43E-03	2.20E-03	1.10E-03	1.27E-04	6.90E-04	4.52E-04	5.64E-07	4.49E-05	137.0	5.91E-03	3.61E-03
SI27_E	0.61	373	0	1	6.31E-01	7.01E-02	2.86E-03	3.71E-03	3.37E-03	1.69E-03	1.95E-04	1.06E-03	6.91E-04	8.62E-07	6.91E-05	214.7	9.09E-03	5.51E-03
SI27_E	0.61	301	0	1	5.09E-01	7.44E-02	2.31E-03	3.00E-03	2.72E-03	1.37E-03	1.59E-04	8.63E-04	5.58E-04	6.96E-07	5.62E-05	179.2	7.39E-03	4.45E-03
SI27_E	0.61	249	0	1	4.20E-01	7.09E-02	1.93E-03	2.48E-03	2.25E-03	1.14E-03	1.32E-04	7.15E-04	4.61E-04	5.75E-07	4.66E-05	151.1	6.12E-03	3.68E-03
SI27_E	0.61	225	0	1	3.80E-01	7.11E-02	1.77E-03	2.24E-03	2.03E-03	1.03E-03	1.19E-04	6.49E-04	4.16E-04	5.20E-07	4.22E-05	138.8	5.56E-03	3.32E-03
SI27_E	0.61	254	0	1	4.29E-01	9.50E-02	2.06E-03	2.52E-03	2.29E-03	1.17E-03	1.35E-04	7.36E-04	4.70E-04	5.86E-07	4.79E-05	161.3	6.30E-03	3.75E-03
SI27_E	0.61	268	0	1	4.53E-01	1.04E-01	2.19E-03	2.67E-03	2.42E-03	1.24E-03	1.43E-04	7.79E-04	4.96E-04	6.19E-07	5.07E-05	171.8	6.67E-03	3.96E-03
SI27_E	0.61	273	0	1	4.61E-01	1.09E-01	2.24E-03	2.71E-03	2.46E-03	1.26E-03	1.46E-04	7.94E-04	5.05E-04	6.30E-07	5.17E-05	175.6	6.80E-03	4.03E-03
SI27_E	0.61	282	0	1	4.77E-01	1.16E-01	2.33E-03	2.81E-03	2.55E-03	1.31E-03	1.51E-04	8.22E-04	5.23E-04	6.52E-07	5.36E-05	182.7	7.04E-03	4.17E-03
SI27_E	0.61	306	0	1	5.17E-01	1.25E-01	2.52E-03	3.05E-03	2.76E-03	1.42E-03	1.64E-04	8.92E-04	5.67E-04	7.08E-07	5.81E-05	197.8	7.64E-03	4.52E-03
SI27_E	0.61	378	0	1	6.39E-01	1.54E-01	3.11E-03	3.76E-03	3.41E-03	1.75E-03	2.02E-04	1.10E-03	7.00E-04	8.74E-07	7.17E-05	243.9	9.43E-03	5.58E-03
SI27_E	0.61	407	0	1	6.87E-01	1.61E-01	3.33E-03	4.05E-03	3.67E-03	1.88E-03	2.17E-04	1.18E-03	7.53E-04	9.40E-07	7.70E-05	260.9	1.01E-02	6.01E-03
SI27_E	0.61	282	0	1	4.77E-01	1.08E-01	2.29E-03	2.81E-03	2.55E-03	1.30E-03	1.51E-04	8.20E-04	5.23E-04	6.52E-07	5.34E-05	179.8	7.02E-03	4.17E-03
SI27_E	0.61	187	0	1	3.15E-01	6.26E-02	1.48E-03	1.86E-03	1.68E-03	8.56E-04	9.91E-05	5.39E-04	3.45E-04	4.31E-07	3.51E-05	115.9	4.62E-03	2.76E-03
SI27_E	0.61	158	0	1	2.67E-01	4.75E-02	1.23E-03	1.57E-03	1.43E-03	7.21E-04	8.36E-05	4.54E-04	2.92E-04	3.65E-07	2.96E-05	96.4	3.89E-03	2.33E-03
SI27_E	0.61	134	0	1	2.26E-01	3.63E-02	1.03E-03	1.33E-03	1.21E-03	6.10E-04	7.07E-05	3.84E-04	2.48E-04	3.10E-07	2.50E-05	80.5	3.29E-03	1.98E-03
SI27_E	0.61	110	0	1	1.86E-01	2.68E-02	8.44E-04	1.09E-03	9.93E-04	5.00E-04	5.79E-05	3.15E-04	2.04E-04	2.54E-07	2.05E-05	65.1	2.69E-03	1.63E-03
SI27_E	0.61	81	0	1	1.37E-01	1.77E-02	6.24E-04	8.09E-04	7.34E-04	3.68E-04	4.27E-05	2.32E-04	1.51E-04	1.88E-07	1.51E-05	47.5	1.99E-03	1.20E-03
SI27_W	0.66	66	0	1	1.11E-01	1.26E-02	5.02E-04	6.52E-04	5.91E-04	2.96E-04	3.43E-05	1.86E-04	1.21E-04	1.51E-07	1.21E-05	37.7	1.60E-03	9.68E-04
SI27_W	0.66	44	0	1	7.38E-02	7.59E-03	3.35E-04	4.34E-04	3.94E-04	1.97E-04	2.28E-05	1.24E-04	8.09E-05	1.01E-07	8.07E-06	24.9	1.06E-03	6.45E-04
SI27_W	0.66	38	0	1	6.46E-02	6.31E-03	2.93E-04	3.80E-04	3.45E-04	1.72E-04	1.99E-05	1.08E-04	7.07E-05	8.83E-08	7.04E-06	21.5	9.27E-04	5.65E-04
SI27_W	0.66	27	0	1	4.61E-02	4.50E-03	2.09E-04	2.72E-04	2.46E-04	1.23E-04	1.42E-05	7.72E-05	5.05E-05	6.31E-08	5.02E-06	15.3	6.61E-04	4.03E-04
SI27_W	0.66	38	0	1	6.46E-02	6.31E-03	2.93E-04	3.80E-04	3.45E-04	1.72E-04	1.99E-05	1.08E-04	7.07E-05	8.83E-08	7.03E-06	21.3	9.25E-04	5.65E-04
SI27_W	0.66	93	0	1	1.57E-01	1.53E-02	7.12E-04	9.23E-04	8.38E-04	4.17E-04	4.83E-05	2.62E-04	1.72E-04	2.14E-07	1.71E-05	51.8	2.25E-03	1.37E-03
SI27_W	0.66	278	0	1	4.70E-01	4.59E-02	2.14E-03	2.77E-03	2.51E-03	1.25E-03	1.45E-04	7.88E-04	5.15E-04	6.43E-07	5.13E-05	156.3	6.75E-03	4.11E-03
SI27_W	0.66	426	0	1	7.19E-01	8.00E-02	3.27E-03	4.24E-03	3.84E-03	1.92E-03	2.23E-04	1.21E-03	7.88E-04	9.84E-07	7.88E-05	244.9	1.04E-02	6.29E-03
SI27_W	0.66	344	0	1	5.81E-01	8.49E-02	2.64E-03	3.42E-03	3.10E-03	1.56E-03	1.81E-04	9.84E-04	6.37E-04	7.95E-07	6.41E-05	204.5	8.43E-03	5.08E-03
SI27_W	0.66	284	0	1	4.80E-01	8.09E-02	2.20E-03	2.82E-03	2.56E-03	1.30E-03	1.50E-04	8.16E-04	5.26E-04	6.56E-07	5.31E-05	172.3	6.99E-03	4.19E-03
SI27_W	0.66	257	0	1	4.34E-01	8.11E-02	2.02E-03	2.55E-03	2.32E-03	1.17E-03	1.36E-04	7.40E-04	4.75E-04	5.93E-07	4.82E-05	158.4	6.34E-03	3.79E-03
SI27_W	0.66	289	0	1	4.89E-01	1.08E-01	2.35E-03	2.88E-03	2.61E-03	1.33E-03	1.54E-04	8.40E-04	5.36E-04	6.69E-07	5.47E-05	184.1	7.19E-03	4.27E-03
SI27_W	0.66	306	0	1	5.17E-01	1.19E-01	2.50E-03	3.04E-03	2.76E-03	1.41E-03	1.63E-04	8.89E-04	5.66E-04	7.06E-07	5.79E-05	196.0	7.61E-03	4.52E-03
SI27_W	0.66	311	0	1	5.26E-01	1.24E-01	2.56E-03	3.10E-03	2.81E-03	1.44E-03	1.66E-04	9.06E-04	5.76E-04	7.19E-07	5.90E-05	200.4	7.76E-03	4.60E-03
SI27_W	0.66	322	0	1	5.44E-01	1.32E-01	2.66E-03	3.20E-03	2.91E-03	1.49E-03	1.72E-04	9.38E-04	5.97E-04	7.44E-07	6.11E-05	208.4	8.04E-03	4.76E-03
SI27_W	0.66	349	0	1	5.90E-01	1.42E-01	2.88E-03	3.48E-03	3.15E-03	1.61E-03	1.87E-04	1.02E-03	6.47E-04	8.07E-07	6.63E-05	225.6	8.71E-03	5.16E-03
SI27_W	0.66	431	0	1	7.29E-01	1.75E-01	3.55E-03	4.29E-03	3.89E-03	1.99E-03	2.31E-04	1.26E-03	7.99E-04	9.97E-07	8.18E-05	278.2	1.08E-02	6.37E-03
SI27_W	0.66	464	0	1	7.84E-01	1.84E-01	3.80E-03	4.62E-03	4.19E-03	2.14E-03	2.48E-04	1.35E-03	8.59E-04	1.07E-06	8.79E-05	297.6	1.16E-02	6.86E-03
SI27_W	0.66	322	0	1	5.44E-01	1.24E-01	2.62E-03	3.20E-03	2.91E-03	1.48E-03	1.72E-04	9.35E-04	5.96E-04	7.44E-07	6.09E-05	205.1	8.01E-03	4.76E-03
SI27_W	0.66	213	0	1	3.60E-01	7.15E-02	1.69E-03	2.12E-03	1.92E-03	9.76E-04	1.13E-04	6.15E-04	3.94E-04	4.92E-07	4.00E-05	132.3	5.27E-03	3.15E-03
SI27_W	0.66	180	0	1	3.04E-01	5.42E-02	1.40E-03	1.79E-03	1.63E-03	8.23E-04	9.54E-05	5.18E-04	3.34E-04	4.16E-07	3.38E-05	110.0	4.44E-03	2.66E-03
SI27_W	0.66	153	0	1	2.58E-01	4.14E-02	1.17E-03	1.52E-03	1.38E-03	6.96E-04	8.07E-05	4.38E-04	2.83E-04	3.53E-07	2.85E-05	91.8	3.75E-03	2.26E-03
SI27_W	0.66	126	0	1	2.12E-01	3.05E-02	9.63E-04	1.25E-03	1.13E-03	5.70E-04	6.61E-05	3.59E-04	2.32E-04	2.90E-07	2.34E-05	74.3	3.07E-03	1.85E-03
SI27_W	0.66	93	0	1	1.57E-01	2.02E-02	7.12E-04	9.23E-04	8.38E-04	4.20E-04	4.87E-05	2.65E-04	1.72E-04	2.14E-07	1.72E-05	54.2	2.27E-03	1.37E-03
SI28_E	0.55	55	0	1	9.26E-02	1.06E-02	4.21E-04	5.45E-04	4.95E-04	2.48E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.02E-05	31.6	1.34E-03	8.10E-04
SI28_E	0.55	37	0	1	6.18E-02	6.36E-03	2.80E-04	3.64E-04	3.30E-04	1.65E-04	1.91E-05	1.04E-04	6.77E-05	8.44E-08	6.75E-06	20.8	8.88E-04	5.40E-04
SI28_E	0.55	32	0	1	5.40E-02	5.28E-03	2.45E-04	3.18E-04	2.89E-04	1.44E-04	1.67E-05	9.05E-05	5.92E-05	7.39E-08	5.89E-06	18.0	7.75E-04	4.72E-04
SI28_E	0.55	23	0	1	3.86E-02	3.77E-03	1.75E-04	2.27E-04	2.06E-04	1.03E-04	1.19E-05	6.46E-05	4.23E-05	5.28E-08	4.20E-06	12.8	5.53E-04	3.37E-04
SI28_E	0.55	32	0	1	5.40E-02	5.28E-03	2.45E-04	3.18E-04	2.89E-04	1.44E-04	1.67E-05	9.04E-05	5.92E-05	7.39E-08	5.88E-06	17.9	7.74E-04	4.72E-04
SI28_E	0.55	78	0	1	1.31E-01	1.28E-02	5.96E-04	7.73E-04	7.01E-04	3.49E-04	4.04E-05	2.19E-04	1.44E-04	1.79E-07	1.43E-05	43.4	1.88E-03	1.15E-03
SI28_E	0.55	233	0	1	3.94E-01	3.85E-02	1.79E-03	2.32E-03	2.10E-03	1.05E-03	1.21E-04	6.59E-04	4.31E-04	5.38E-07	4.29E-05	130.8	5.65E-03	3.44E-03
SI28_E	0.55	356	0	1	6.02E-01	6.69E-02	2.73E-03	3.55E-03	3.22E-03	1.61E-03	1.87E-04	1.01E-03	6.60E-04	8.23E-07	6.60E-05	205.0	8.68E-03	5.26E-03
SI28_E	0.55	288	0	1	4.86E-01	7.11E-02	2.21E-03	2.86E-03	2.60E-03	1.31E-03	1.52E-04	8.24E-04	5.33E-04	6.65E-07	5.36E-05	171.1	7.05E-03	4.25E-03
SI28_E	0.55	238	0	1	4.01E-01	6.77E-02	1.84E-03	2.36E-03	2.14E-03	1.08E-03	1.26E-04	6.83E-04	4.40E-04	5.49E-07	4.45E-05	144.2	5.85E-03	3.51E-03
SI28_E	0.55	215	0	1	3.63E-01	6.79E-02	1.69E-03	2.14E-03	1.94E-03	9.83E-04	1.14E-04	6.19E-04	3.98E-04	4.96E-07	4.03E-05	132.6	5.30E-03	3.17E-03
SI28_E	0.55	242	0	1	4.09E-01	9.07E-02	1.97E-03	2.41E-03	2.19E-03	1.12E-03	1.29E-04	7.03E-04	4.48E-04	5.60E-07	4.58E-05	154.0	6.02E-03	3.58E-03
SI28_E	0.55	256	0	1	4.32E-01	9.96E-02	2.09E-03	2.55E-03	2.31E-03	1.18E-03	1.37E-04	7.44E-04	4.74E-04	5.91E-07	4.85E-05	164.0	6.37E-03	3.78E-03
SI28_E	0.55	260	0	1	4.40E-01	1.04E-01	2.14E-03	2.59E-03	2.35E-03	1.20E-03	1.39E-04	7.58E-04	4.82E-04	6.02E-07	4.94E-05	167.7	6.49E-03	3.85E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI28_E	0.55	270	0	1	4.55E-01	1.11E-01	2.23E-03	2.68E-03	2.43E-03	1.25E-03	1.44E-04	7.85E-04	4.99E-04	6.23E-07	5.12E-05	174.4	6.73E-03	3.98E-03
SI28_E	0.55	292	0	1	4.94E-01	1.19E-01	2.41E-03	2.91E-03	2.64E-03	1.35E-03	1.56E-04	8.52E-04	5.42E-04	6.76E-07	5.55E-05	188.8	7.29E-03	4.32E-03
SI28_E	0.55	361	0	1	6.10E-01	1.47E-01	2.97E-03	3.59E-03	3.26E-03	1.67E-03	1.93E-04	1.05E-03	6.68E-04	8.34E-07	6.85E-05	232.9	9.00E-03	5.33E-03
SI28_E	0.55	388	0	1	6.56E-01	1.54E-01	3.18E-03	3.86E-03	3.51E-03	1.79E-03	2.08E-04	1.13E-03	7.19E-04	8.97E-07	7.36E-05	249.1	9.67E-03	5.74E-03
SI28_E	0.55	270	0	1	4.55E-01	1.03E-01	2.19E-03	2.68E-03	2.43E-03	1.24E-03	1.44E-04	7.83E-04	4.99E-04	6.23E-07	5.10E-05	171.7	6.70E-03	3.98E-03
SI28_E	0.55	178	0	1	3.01E-01	5.98E-02	1.41E-03	1.77E-03	1.61E-03	8.17E-04	9.46E-05	5.15E-04	3.30E-04	4.12E-07	3.35E-05	110.7	4.41E-03	2.63E-03
SI28_E	0.55	151	0	1	2.55E-01	4.54E-02	1.17E-03	1.50E-03	1.36E-03	6.89E-04	7.98E-05	4.34E-04	2.79E-04	3.48E-07	2.83E-05	92.0	3.72E-03	2.23E-03
SI28_E	0.55	128	0	1	2.16E-01	3.46E-02	9.81E-04	1.27E-03	1.15E-03	5.83E-04	6.75E-05	3.67E-04	2.37E-04	2.96E-07	2.39E-05	76.8	3.14E-03	1.89E-03
SI28_E	0.55	105	0	1	1.78E-01	2.56E-02	8.06E-04	1.05E-03	9.48E-04	4.77E-04	5.53E-05	3.00E-04	1.95E-04	2.43E-07	1.96E-05	62.2	2.57E-03	1.55E-03
SI28_E	0.55	78	0	1	1.31E-01	1.69E-02	5.96E-04	7.73E-04	7.01E-04	3.52E-04	4.08E-05	2.21E-04	1.44E-04	1.79E-07	1.44E-05	45.4	1.90E-03	1.15E-03
SI28_W	0.63	67	0	1	1.14E-01	1.30E-02	5.17E-04	6.70E-04	6.08E-04	3.04E-04	3.53E-05	1.92E-04	1.25E-04	1.56E-07	1.25E-05	38.8	1.64E-03	9.96E-04
SI28_W	0.63	45	0	1	7.59E-02	7.81E-03	3.45E-04	4.47E-04	4.06E-04	2.03E-04	2.35E-05	1.27E-04	8.32E-05	1.04E-07	8.30E-06	25.6	1.09E-03	6.64E-04
SI28_W	0.63	39	0	1	6.64E-02	6.49E-03	3.02E-04	3.91E-04	3.55E-04	1.77E-04	2.05E-05	1.11E-04	7.28E-05	9.08E-08	7.24E-06	22.1	9.53E-04	5.81E-04
SI28_W	0.63	28	0	1	4.74E-02	4.63E-03	2.15E-04	2.79E-04	2.53E-04	1.26E-04	1.46E-05	7.94E-05	5.20E-05	6.49E-08	5.17E-06	15.7	6.80E-04	4.15E-04
SI28_W	0.63	39	0	1	6.64E-02	6.49E-03	3.02E-04	3.91E-04	3.55E-04	1.77E-04	2.05E-05	1.11E-04	7.28E-05	9.08E-08	7.23E-06	21.9	9.52E-04	5.81E-04
SI28_W	0.63	95	0	1	1.61E-01	1.58E-02	7.32E-04	9.50E-04	8.62E-04	4.29E-04	4.97E-05	2.70E-04	1.77E-04	2.21E-07	1.76E-05	53.3	2.31E-03	1.41E-03
SI28_W	0.63	286	0	1	4.84E-01	4.73E-02	2.20E-03	2.85E-03	2.59E-03	1.29E-03	1.49E-04	8.10E-04	5.30E-04	6.62E-07	5.28E-05	160.8	6.94E-03	4.23E-03
SI28_W	0.63	438	0	1	7.40E-01	8.23E-02	3.36E-03	4.36E-03	3.95E-03	1.98E-03	2.29E-04	1.25E-03	8.11E-04	1.01E-06	8.11E-05	252.0	1.07E-02	6.47E-03
SI28_W	0.63	354	0	1	5.98E-01	8.74E-02	2.71E-03	3.52E-03	3.19E-03	1.61E-03	1.86E-04	1.01E-03	6.55E-04	8.17E-07	6.59E-05	210.3	8.67E-03	5.23E-03
SI28_W	0.63	292	0	1	4.93E-01	8.32E-02	2.26E-03	2.91E-03	2.64E-03	1.33E-03	1.54E-04	8.39E-04	5.41E-04	6.75E-07	5.47E-05	177.3	7.19E-03	4.31E-03
SI28_W	0.63	264	0	1	4.46E-01	8.34E-02	2.08E-03	2.63E-03	2.38E-03	1.21E-03	1.40E-04	7.61E-04	4.89E-04	6.10E-07	4.96E-05	163.0	6.52E-03	3.90E-03
SI28_W	0.63	298	0	1	5.03E-01	1.12E-01	2.42E-03	2.96E-03	2.69E-03	1.37E-03	1.59E-04	8.64E-04	5.51E-04	6.88E-07	5.63E-05	189.3	7.40E-03	4.40E-03
SI28_W	0.63	314	0	1	5.31E-01	1.22E-01	2.57E-03	3.13E-03	2.84E-03	1.45E-03	1.68E-04	9.14E-04	5.82E-04	7.27E-07	5.96E-05	201.6	7.83E-03	4.65E-03
SI28_W	0.63	320	0	1	5.41E-01	1.28E-01	2.63E-03	3.18E-03	2.89E-03	1.48E-03	1.71E-04	9.32E-04	5.93E-04	7.40E-07	6.07E-05	206.1	7.98E-03	4.73E-03
SI28_W	0.63	331	0	1	5.60E-01	1.36E-01	2.74E-03	3.30E-03	2.99E-03	1.53E-03	1.77E-04	9.65E-04	6.14E-04	7.66E-07	6.29E-05	214.4	8.27E-03	4.90E-03
SI28_W	0.63	359	0	1	6.07E-01	1.46E-01	2.96E-03	3.58E-03	3.24E-03	1.66E-03	1.92E-04	1.05E-03	6.66E-04	8.31E-07	6.82E-05	232.1	8.96E-03	5.31E-03
SI28_W	0.63	444	0	1	7.50E-01	1.80E-01	3.65E-03	4.41E-03	4.00E-03	2.05E-03	2.37E-04	1.29E-03	8.22E-04	1.03E-06	8.41E-05	286.3	1.11E-02	6.55E-03
SI28_W	0.63	477	0	1	8.07E-01	1.89E-01	3.91E-03	4.75E-03	4.31E-03	2.20E-03	2.55E-04	1.39E-03	8.84E-04	1.10E-06	9.04E-05	306.2	1.19E-02	7.05E-03
SI28_W	0.63	331	0	1	5.60E-01	1.27E-01	2.69E-03	3.30E-03	2.99E-03	1.53E-03	1.77E-04	9.62E-04	6.13E-04	7.66E-07	6.27E-05	211.1	8.24E-03	4.90E-03
SI28_W	0.63	219	0	1	3.70E-01	7.35E-02	1.74E-03	2.18E-03	1.98E-03	1.00E-03	1.16E-04	6.33E-04	4.05E-04	5.06E-07	4.12E-05	136.1	5.42E-03	3.24E-03
SI28_W	0.63	185	0	1	3.13E-01	5.58E-02	1.44E-03	1.84E-03	1.67E-03	8.47E-04	9.81E-05	5.33E-04	3.43E-04	4.28E-07	3.47E-05	113.1	4.57E-03	2.74E-03
SI28_W	0.63	157	0	1	2.66E-01	4.26E-02	1.21E-03	1.56E-03	1.42E-03	7.16E-04	8.30E-05	4.51E-04	2.91E-04	3.63E-07	2.94E-05	94.4	3.86E-03	2.32E-03
SI28_W	0.63	129	0	1	2.18E-01	3.14E-02	9.91E-04	1.29E-03	1.17E-03	5.87E-04	6.80E-05	3.69E-04	2.39E-04	2.98E-07	2.40E-05	76.4	3.16E-03	1.91E-03
SI28_W	0.63	95	0	1	1.61E-01	2.08E-02	7.32E-04	9.50E-04	8.62E-04	4.32E-04	5.01E-05	2.72E-04	1.77E-04	2.21E-07	1.77E-05	55.8	2.33E-03	1.41E-03
SI29_E	0.75	80	0	1	1.36E-01	1.55E-02	6.17E-04	8.00E-04	7.26E-04	3.63E-04	4.21E-05	2.29E-04	1.49E-04	1.86E-07	1.49E-05	46.3	1.96E-03	1.19E-03
SI29_E	0.75	54	0	1	9.06E-02	9.32E-03	4.11E-04	5.33E-04	4.84E-04	2.42E-04	2.80E-05	1.52E-04	9.92E-05	1.24E-07	9.90E-06	30.6	1.30E-03	7.92E-04
SI29_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.45E-05	1.33E-04	8.68E-05	1.08E-07	8.64E-06	26.4	1.14E-03	6.93E-04
SI29_E	0.75	34	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.47E-05	6.20E-05	7.74E-08	6.17E-06	18.7	8.11E-04	4.95E-04
SI29_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.44E-05	1.33E-04	8.68E-05	1.08E-07	8.63E-06	26.2	1.14E-03	6.93E-04
SI29_E	0.75	114	0	1	1.92E-01	1.88E-02	8.74E-04	1.13E-03	1.03E-03	5.12E-04	5.93E-05	3.22E-04	2.11E-04	2.63E-07	2.10E-05	63.6	2.76E-03	1.68E-03
SI29_E	0.75	342	0	1	5.77E-01	5.64E-02	2.62E-03	3.40E-03	3.08E-03	1.54E-03	1.78E-04	9.67E-04	6.33E-04	7.89E-07	6.29E-05	191.9	8.28E-03	5.05E-03
SI29_E	0.75	523	0	1	8.83E-01	9.82E-02	4.01E-03	5.20E-03	4.72E-03	2.36E-03	2.74E-04	1.49E-03	9.68E-04	1.21E-06	9.67E-05	300.6	1.27E-02	7.72E-03
SI29_E	0.75	422	0	1	7.13E-01	1.04E-01	3.24E-03	4.20E-03	3.81E-03	1.92E-03	2.22E-04	1.21E-03	7.82E-04	9.75E-07	7.87E-05	251.0	1.03E-02	6.24E-03
SI29_E	0.75	348	0	1	5.89E-01	9.92E-02	2.70E-03	3.47E-03	3.15E-03	1.59E-03	1.84E-04	1.00E-03	6.45E-04	8.05E-07	6.52E-05	211.5	8.58E-03	5.15E-03
SI29_E	0.75	315	0	1	5.32E-01	9.95E-02	2.48E-03	3.13E-03	2.84E-03	1.44E-03	1.67E-04	9.08E-04	5.83E-04	7.28E-07	5.92E-05	194.4	7.78E-03	4.65E-03
SI29_E	0.75	355	0	1	6.00E-01	1.33E-01	2.88E-03	3.53E-03	3.21E-03	1.64E-03	1.89E-04	1.03E-03	6.58E-04	8.21E-07	6.71E-05	225.9	8.83E-03	5.25E-03
SI29_E	0.75	375	0	1	6.34E-01	1.46E-01	3.07E-03	3.73E-03	3.39E-03	1.73E-03	2.01E-04	1.09E-03	6.95E-04	8.67E-07	7.11E-05	240.6	9.34E-03	5.54E-03
SI29_E	0.75	382	0	1	6.45E-01	1.53E-01	3.14E-03	3.80E-03	3.45E-03	1.76E-03	2.04E-04	1.11E-03	7.07E-04	8.83E-07	7.24E-05	246.0	9.52E-03	5.64E-03
SI29_E	0.75	395	0	1	6.68E-01	1.62E-01	3.26E-03	3.93E-03	3.57E-03	1.83E-03	2.12E-04	1.15E-03	7.32E-04	9.14E-07	7.50E-05	255.8	9.86E-03	5.84E-03
SI29_E	0.75	429	0	1	7.25E-01	1.75E-01	3.53E-03	4.27E-03	3.87E-03	1.98E-03	2.29E-04	1.25E-03	7.94E-04	9.91E-07	8.13E-05	276.9	1.07E-02	6.34E-03
SI29_E	0.75	529	0	1	8.94E-01	2.15E-01	4.36E-03	5.27E-03	4.78E-03	2.45E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	341.6	1.32E-02	7.82E-03
SI29_E	0.75	570	0	1	9.62E-01	2.25E-01	4.66E-03	5.67E-03	5.14E-03	2.63E-03	3.04E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	365.3	1.42E-02	8.41E-03
SI29_E	0.75	395	0	1	6.68E-01	1.52E-01	3.21E-03	3.93E-03	3.57E-03	1.82E-03	2.11E-04	1.15E-03	7.32E-04	9.14E-07	7.48E-05	251.8	9.83E-03	5.84E-03
SI29_E	0.75	261	0	1	4.42E-01	8.77E-02	2.07E-03	2.60E-03	2.36E-03	1.20E-03	1.39E-04	7.55E-04	4.84E-04	6.04E-07	4.92E-05	162.3	6.46E-03	3.86E-03
SI29_E	0.75	221	0	1	3.74E-01	6.66E-02	1.72E-03	2.20E-03	2.00E-03	1.01E-03	1.17E-04	6.36E-04	4.09E-04	5.11E-07	4.14E-05	135.0	5.45E-03	3.27E-03
SI29_E	0.75	188	0	1	3.17E-01	5.08E-02	1.44E-03	1.87E-03	1.69E-03	8.54E-04	9.90E-05	5.38E-04	3.47E-04	4.33E-07	3.50E-05	112.7	4.61E-03	2.77E-03
SI29_E	0.75	154	0	1	2.60E-01	3.75E-02	1.18E-03	1.53E-03	1.39E-03	7.00E-04	8.11E-05	4.41E-04	2.85E-04	3.56E-07	2.87E-05	91.2	3.77E-03	2.28E-03
SI29_E	0.75	114	0	1	1.92E-01	2.48E-02	8.74E-04	1.13E-03	1.03E-03	5.16E-04	5.98E-05	3.25E-04	2.11E-04	2.63E-07	2.11E-05	66.5	2.78E-03	1.68E-03
SI29_W	0.75	80	0	1	1.36E-01	1.55E-02	6.17E-04	8.00E-04	7.26E-04	3.63E-04	4.21E-05	2.29E-04	1.49E-04	1.86E-07	1.49E-05	46.3	1.96E-03	1.19E-03
SI29_W	0.75	54	0	1	9.06E-02	9.32E-03	4.11E-04	5.33E-04	4.84E-04	2.42E-04	2.80E-05	1.52E-04	9.92E-05	1.24E-07	9.90E-06	30.6	1.30E-03	7.92E-04
SI29_W	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.45E-05	1.33E-04	8.68E-05	1.08E-07	8.64E-06	26.4	1.14E-03	6.93E-04
SI29_W	0.75	34	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.47E-05	6.20E-05	7.74E-08	6.17E-06	18.7	8.11E-04	4.95E-04
SI29_W	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.44E-05	1.33E-04	8.68E-05	1.08E-07	8.63E-06	26.2	1.14E-03	6.93E-04
SI29_W	0.75	114	0	1	1.92E-01	1.88E-02	8.74E-04	1.13E-03	1.03E-03	5.12E-04	5.93E-05	3.22E-04	2.11E-04	2.63E-07	2.10E-05	63.6	2.76E-03	1.68E-03
SI29_W	0.75	342	0	1	5.77E-01	5.64E-02	2.62E-03	3.40E-03	3.08E-03	1.54E-03	1.78E-04	9.67E-04	6.33E-04	7.89E-07	6.29E-05	191.9	8.28E-03	5.05E-03
SI29_W	0.75	523	0	1	8.83E-01	9.82E-02	4.01E-03	5.20E-03	4.72E-03	2.36E-03	2.74E-04	1.49E-03	9.68E-04	1.21E-06	9.67E-05	300.6	1.27E-02	7.72E-03
SI29_W	0.75	422	0	1	7.13E-01	1.04E-01	3.24E-03	4.20E-03	3.81E-03	1.92E-03	2.22E-04	1.21E-03	7.82E-04	9.75E-07	7.87E-05	251.0	1.03E-02	6.24E-03
SI29_W	0.75	348	0	1	5.89E-01	9.92E-02	2.70E-03	3.47E-03	3.15E-03	1.59E-03	1.84E-04	1.00E-03	6.45E-04	8.05E-07	6.52E-05	211.5	8.58E-03	5.15E-03
SI29_W	0.75	315	0	1	5.32E-01	9.95E-02	2.48E-03	3.13E-03	2.84E-03	1.44E-03	1.67E-04	9.08E-04	5.83E-04	7.28E-07	5.92E-05	194.4	7.78E-03	4.65E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_W	0.75	355	0	1	6.00E-01	1.33E-01	2.88E-03	3.53E-03	3.21E-03	1.64E-03	1.89E-04	1.03E-03	6.58E-04	8.21E-07	6.71E-05	225.9	8.83E-03	5.25E-03
SI29_W	0.75	375	0	1	6.34E-01	1.46E-01	3.07E-03	3.73E-03	3.39E-03	1.73E-03	2.01E-04	1.09E-03	6.95E-04	8.67E-07	7.11E-05	240.6	9.34E-03	5.54E-03
SI29_W	0.75	382	0	1	6.45E-01	1.53E-01	3.14E-03	3.80E-03	3.45E-03	1.76E-03	2.04E-04	1.11E-03	7.07E-04	8.83E-07	7.24E-05	246.0	9.52E-03	5.64E-03
SI29_W	0.75	395	0	1	6.68E-01	1.62E-01	3.26E-03	3.93E-03	3.57E-03	1.83E-03	2.12E-04	1.15E-03	7.32E-04	9.14E-07	7.50E-05	255.8	9.86E-03	5.84E-03
SI29_W	0.75	429	0	1	7.25E-01	1.75E-01	3.53E-03	4.27E-03	3.87E-03	1.98E-03	2.29E-04	1.25E-03	7.94E-04	9.91E-07	8.13E-05	276.9	1.07E-02	6.34E-03
SI29_W	0.75	529	0	1	8.94E-01	2.15E-01	4.36E-03	5.27E-03	4.78E-03	2.45E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	341.6	1.32E-02	7.82E-03
SI29_W	0.75	570	0	1	9.62E-01	2.25E-01	4.66E-03	5.67E-03	5.14E-03	2.63E-03	3.04E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	365.3	1.42E-02	8.41E-03
SI29_W	0.75	395	0	1	6.68E-01	1.52E-01	3.21E-03	3.93E-03	3.57E-03	1.82E-03	2.11E-04	1.15E-03	7.32E-04	9.14E-07	7.48E-05	251.8	9.83E-03	5.84E-03
SI29_W	0.75	261	0	1	4.42E-01	8.77E-02	2.07E-03	2.60E-03	2.36E-03	1.20E-03	1.39E-04	7.55E-04	4.84E-04	6.04E-07	4.92E-05	162.3	6.46E-03	3.86E-03
SI29_W	0.75	221	0	1	3.74E-01	6.66E-02	1.72E-03	2.20E-03	2.00E-03	1.01E-03	1.17E-04	6.36E-04	4.09E-04	5.11E-07	4.14E-05	135.0	5.45E-03	3.27E-03
SI29_W	0.75	188	0	1	3.17E-01	5.08E-02	1.44E-03	1.87E-03	1.69E-03	8.54E-04	9.90E-05	5.38E-04	3.47E-04	4.33E-07	3.50E-05	112.7	4.61E-03	2.77E-03
SI29_W	0.75	154	0	1	2.60E-01	3.75E-02	1.18E-03	1.53E-03	1.39E-03	7.00E-04	8.11E-05	4.41E-04	2.85E-04	3.56E-07	2.87E-05	91.2	3.77E-03	2.28E-03
SI29_W	0.75	114	0	1	1.92E-01	2.48E-02	8.74E-04	1.13E-03	1.03E-03	5.16E-04	5.98E-05	3.25E-04	2.11E-04	2.63E-07	2.11E-05	66.5	2.78E-03	1.68E-03
SI30_E	0.75	80	0	1	1.36E-01	1.55E-02	6.17E-04	8.00E-04	7.26E-04	3.63E-04	4.21E-05	2.29E-04	1.49E-04	1.86E-07	1.49E-05	46.3	1.96E-03	1.19E-03
SI30_E	0.75	54	0	1	9.06E-02	9.32E-03	4.11E-04	5.33E-04	4.84E-04	2.42E-04	2.80E-05	1.52E-04	9.92E-05	1.24E-07	9.90E-06	30.6	1.30E-03	7.92E-04
SI30_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.45E-05	1.33E-04	8.68E-05	1.08E-07	8.64E-06	26.4	1.14E-03	6.93E-04
SI30_E	0.75	34	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.47E-05	6.20E-05	7.74E-08	6.17E-06	18.7	8.11E-04	4.95E-04
SI30_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.44E-05	1.33E-04	8.68E-05	1.08E-07	8.63E-06	26.2	1.14E-03	6.93E-04
SI30_E	0.75	114	0	1	1.92E-01	1.88E-02	8.74E-04	1.13E-03	1.03E-03	5.12E-04	5.93E-05	3.22E-04	2.11E-04	2.63E-07	2.10E-05	63.6	2.76E-03	1.68E-03
SI30_E	0.75	342	0	1	5.77E-01	5.64E-02	2.62E-03	3.40E-03	3.08E-03	1.54E-03	1.78E-04	9.67E-04	6.33E-04	7.89E-07	6.29E-05	191.9	8.28E-03	5.05E-03
SI30_E	0.75	523	0	1	8.83E-01	9.82E-02	4.01E-03	5.20E-03	4.72E-03	2.36E-03	2.74E-04	1.49E-03	9.68E-04	1.21E-06	9.67E-05	300.6	1.27E-02	7.72E-03
SI30_E	0.75	422	0	1	7.13E-01	1.04E-01	3.24E-03	4.20E-03	3.81E-03	1.92E-03	2.22E-04	1.21E-03	7.82E-04	9.75E-07	7.87E-05	251.0	1.03E-02	6.24E-03
SI30_E	0.75	348	0	1	5.89E-01	9.92E-02	2.70E-03	3.47E-03	3.15E-03	1.59E-03	1.84E-04	1.00E-03	6.45E-04	8.05E-07	6.52E-05	211.5	8.58E-03	5.15E-03
SI30_E	0.75	315	0	1	5.32E-01	9.95E-02	2.48E-03	3.13E-03	2.84E-03	1.44E-03	1.67E-04	9.08E-04	5.83E-04	7.28E-07	5.92E-05	194.4	7.78E-03	4.65E-03
SI30_E	0.75	355	0	1	6.00E-01	1.33E-01	2.88E-03	3.53E-03	3.21E-03	1.64E-03	1.89E-04	1.03E-03	6.58E-04	8.21E-07	6.71E-05	225.9	8.83E-03	5.25E-03
SI30_E	0.75	375	0	1	6.34E-01	1.46E-01	3.07E-03	3.73E-03	3.39E-03	1.73E-03	2.01E-04	1.09E-03	6.95E-04	8.67E-07	7.11E-05	240.6	9.34E-03	5.54E-03
SI30_E	0.75	382	0	1	6.45E-01	1.53E-01	3.14E-03	3.80E-03	3.45E-03	1.76E-03	2.04E-04	1.11E-03	7.07E-04	8.83E-07	7.24E-05	246.0	9.52E-03	5.64E-03
SI30_E	0.75	395	0	1	6.68E-01	1.62E-01	3.26E-03	3.93E-03	3.57E-03	1.83E-03	2.12E-04	1.15E-03	7.32E-04	9.14E-07	7.50E-05	255.8	9.86E-03	5.84E-03
SI30_E	0.75	429	0	1	7.25E-01	1.75E-01	3.53E-03	4.27E-03	3.87E-03	1.98E-03	2.29E-04	1.25E-03	7.94E-04	9.91E-07	8.13E-05	276.9	1.07E-02	6.34E-03
SI30_E	0.75	529	0	1	8.94E-01	2.15E-01	4.36E-03	5.27E-03	4.78E-03	2.45E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	341.6	1.32E-02	7.82E-03
SI30_E	0.75	570	0	1	9.62E-01	2.25E-01	4.66E-03	5.67E-03	5.14E-03	2.63E-03	3.04E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	365.3	1.42E-02	8.41E-03
SI30_E	0.75	395	0	1	6.68E-01	1.52E-01	3.21E-03	3.93E-03	3.57E-03	1.82E-03	2.11E-04	1.15E-03	7.32E-04	9.14E-07	7.48E-05	251.8	9.83E-03	5.84E-03
SI30_E	0.75	261	0	1	4.42E-01	8.77E-02	2.07E-03	2.60E-03	2.36E-03	1.20E-03	1.39E-04	7.55E-04	4.84E-04	6.04E-07	4.92E-05	162.3	6.46E-03	3.86E-03
SI30_E	0.75	221	0	1	3.74E-01	6.66E-02	1.72E-03	2.20E-03	2.00E-03	1.01E-03	1.17E-04	6.36E-04	4.09E-04	5.11E-07	4.14E-05	135.0	5.45E-03	3.27E-03
SI30_E	0.75	188	0	1	3.17E-01	5.08E-02	1.44E-03	1.87E-03	1.69E-03	8.54E-04	9.90E-05	5.38E-04	3.47E-04	4.33E-07	3.50E-05	112.7	4.61E-03	2.77E-03
SI30_E	0.75	154	0	1	2.60E-01	3.75E-02	1.18E-03	1.53E-03	1.39E-03	7.00E-04	8.11E-05	4.41E-04	2.85E-04	3.56E-07	2.87E-05	91.2	3.77E-03	2.28E-03
SI30_E	0.75	114	0	1	1.92E-01	2.48E-02	8.74E-04	1.13E-03	1.03E-03	5.16E-04	5.98E-05	3.25E-04	2.11E-04	2.63E-07	2.11E-05	66.5	2.78E-03	1.68E-03
SI30_W	0.75	80	0	1	1.36E-01	1.55E-02	6.17E-04	8.00E-04	7.26E-04	3.63E-04	4.21E-05	2.29E-04	1.49E-04	1.86E-07	1.49E-05	46.3	1.96E-03	1.19E-03
SI30_W	0.75	54	0	1	9.06E-02	9.32E-03	4.11E-04	5.33E-04	4.84E-04	2.42E-04	2.80E-05	1.52E-04	9.92E-05	1.24E-07	9.90E-06	30.6	1.30E-03	7.92E-04
SI30_W	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.45E-05	1.33E-04	8.68E-05	1.08E-07	8.64E-06	26.4	1.14E-03	6.93E-04
SI30_W	0.75	34	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.47E-05	6.20E-05	7.74E-08	6.17E-06	18.7	8.11E-04	4.95E-04
SI30_W	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.44E-05	1.33E-04	8.68E-05	1.08E-07	8.63E-06	26.2	1.14E-03	6.93E-04
SI30_W	0.75	114	0	1	1.92E-01	1.88E-02	8.74E-04	1.13E-03	1.03E-03	5.12E-04	5.93E-05	3.22E-04	2.11E-04	2.63E-07	2.10E-05	63.6	2.76E-03	1.68E-03
SI30_W	0.75	342	0	1	5.77E-01	5.64E-02	2.62E-03	3.40E-03	3.08E-03	1.54E-03	1.78E-04	9.67E-04	6.33E-04	7.89E-07	6.29E-05	191.9	8.28E-03	5.05E-03
SI30_W	0.75	523	0	1	8.83E-01	9.82E-02	4.01E-03	5.20E-03	4.72E-03	2.36E-03	2.74E-04	1.49E-03	9.68E-04	1.21E-06	9.67E-05	300.6	1.27E-02	7.72E-03
SI30_W	0.75	422	0	1	7.13E-01	1.04E-01	3.24E-03	4.20E-03	3.81E-03	1.92E-03	2.22E-04	1.21E-03	7.82E-04	9.75E-07	7.87E-05	251.0	1.03E-02	6.24E-03
SI30_W	0.75	348	0	1	5.89E-01	9.92E-02	2.70E-03	3.47E-03	3.15E-03	1.59E-03	1.84E-04	1.00E-03	6.45E-04	8.05E-07	6.52E-05	211.5	8.58E-03	5.15E-03
SI30_W	0.75	315	0	1	5.32E-01	9.95E-02	2.48E-03	3.13E-03	2.84E-03	1.44E-03	1.67E-04	9.08E-04	5.83E-04	7.28E-07	5.92E-05	194.4	7.78E-03	4.65E-03
SI30_W	0.75	355	0	1	6.00E-01	1.33E-01	2.88E-03	3.53E-03	3.21E-03	1.64E-03	1.89E-04	1.03E-03	6.58E-04	8.21E-07	6.71E-05	225.9	8.83E-03	5.25E-03
SI30_W	0.75	375	0	1	6.34E-01	1.46E-01	3.07E-03	3.73E-03	3.39E-03	1.73E-03	2.01E-04	1.09E-03	6.95E-04	8.67E-07	7.11E-05	240.6	9.34E-03	5.54E-03
SI30_W	0.75	382	0	1	6.45E-01	1.53E-01	3.14E-03	3.80E-03	3.45E-03	1.76E-03	2.04E-04	1.11E-03	7.07E-04	8.83E-07	7.24E-05	246.0	9.52E-03	5.64E-03
SI30_W	0.75	395	0	1	6.68E-01	1.62E-01	3.26E-03	3.93E-03	3.57E-03	1.83E-03	2.12E-04	1.15E-03	7.32E-04	9.14E-07	7.50E-05	255.8	9.86E-03	5.84E-03
SI30_W	0.75	429	0	1	7.25E-01	1.75E-01	3.53E-03	4.27E-03	3.87E-03	1.98E-03	2.29E-04	1.25E-03	7.94E-04	9.91E-07	8.13E-05	276.9	1.07E-02	6.34E-03
SI30_W	0.75	529	0	1	8.94E-01	2.15E-01	4.36E-03	5.27E-03	4.78E-03	2.45E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	341.6	1.32E-02	7.82E-03
SI30_W	0.75	570	0	1	9.62E-01	2.25E-01	4.66E-03	5.67E-03	5.14E-03	2.63E-03	3.04E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	365.3	1.42E-02	8.41E-03
SI30_W	0.75	395	0	1	6.68E-01	1.52E-01	3.21E-03	3.93E-03	3.57E-03	1.82E-03	2.11E-04	1.15E-03	7.32E-04	9.14E-07	7.48E-05	251.8	9.83E-03	5.84E-03
SI30_W	0.75	261	0	1	4.42E-01	8.77E-02	2.07E-03	2.60E-03	2.36E-03	1.20E-03	1.39E-04	7.55E-04	4.84E-04	6.04E-07	4.92E-05	162.3	6.46E-03	3.86E-03
SI30_W	0.75	221	0	1	3.74E-01	6.66E-02	1.72E-03	2.20E-03	2.00E-03	1.01E-03	1.17E-04	6.36E-04	4.09E-04	5.11E-07	4.14E-05	135.0	5.45E-03	3.27E-03
SI30_W	0.75	188	0	1	3.17E-01	5.08E-02	1.44E-03	1.87E-03	1.69E-03	8.54E-04	9.90E-05	5.38E-04	3.47E-04	4.33E-07	3.50E-05	112.7	4.61E-03	2.77E-03
SI30_W	0.75	154	0	1	2.60E-01	3.75E-02	1.18E-03	1.53E-03	1.39E-03	7.00E-04	8.11E-05	4.41E-04	2.85E-04	3.56E-07	2.87E-05	91.2	3.77E-03	2.28E-03
SI30_W	0.75	114	0	1	1.92E-01	2.48E-02	8.74E-04	1.13E-03	1.03E-03	5.16E-04	5.98E-05	3.25E-04	2.11E-04	2.63E-07	2.11E-05	66.5	2.78E-03	1.68E-03
SI31_E	0.75	80	0	1	1.36E-01	1.55E-02	6.17E-04	8.00E-04	7.26E-04	3.63E-04	4.21E-05	2.29E-04	1.49E-04	1.86E-07	1.49E-05	46.3	1.96E-03	1.19E-03
SI31_E	0.75	54	0	1	9.06E-02	9.32E-03	4.11E-04	5.33E-04	4.84E-04	2.42E-04	2.80E-05	1.52E-04	9.92E-05	1.24E-07	9.90E-06	30.6	1.30E-03	7.92E-04
SI31_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.45E-05	1.33E-04	8.68E-05	1.08E-07	8.64E-06	26.4	1.14E-03	6.93E-04
SI31_E	0.75	34	0	1	5.66E-02	5.53E-03	2.57E-04	3.33E-04	3.02E-04	1.51E-04	1.75E-05	9.47E-05	6.20E-05	7.74E-08	6.17E-06	18.7	8.11E-04	4.95E-04
SI31_E	0.75	47	0	1	7.93E-02	7.74E-03	3.60E-04	4.67E-04	4.23E-04	2.11E-04	2.44E-05	1.33E-04	8.68E-05	1.08E-07	8.63E-06	26.2	1.14E-03	6.93E-04
SI31_E	0.75	114	0	1	1.92E-01	1.88E-02	8.74E-04	1.13E-03	1.03E-03	5.12E-04	5.93E-05	3.22E-04	2.11E-04	2.63E-07	2.10E-05	63.6	2.76E-03	1.68E-03
SI31_E	0.75	342	0	1	5.77E-01	5.64E-02	2.62E-03	3.40E-03	3.08E-03	1.54E-03	1.78E-04	9.67E-04	6.33E-04	7.89E-07	6.29E-05	191.9	8.28E-03	5.05E-03
SI31_E	0.75	523	0	1	8.83E-01	9.82E-02	4.01E-03	5.20E-03	4.72E-03	2.36E-03	2.74E-04	1.49E-03	9.68E-04	1.21E-06	9.67E-05	300.6	1.27E-02	7.72E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI31_E	0.75	422	0	1	7.13E-01	1.04E-01	3.24E-03	4.20E-03	3.81E-03	1.92E-03	2.22E-04	1.21E-03	7.82E-04	9.75E-07	7.87E-05	251.0	1.03E-02	6.24E-03
SI31_E	0.75	348	0	1	5.89E-01	9.92E-02	2.70E-03	3.47E-03	3.15E-03	1.59E-03	1.84E-04	1.00E-03	6.45E-04	8.05E-07	6.52E-05	211.5	8.58E-03	5.15E-03
SI31_E	0.75	315	0	1	5.32E-01	9.95E-02	2.48E-03	3.13E-03	2.84E-03	1.44E-03	1.67E-04	9.08E-04	5.83E-04	7.28E-07	5.92E-05	194.4	7.78E-03	4.65E-03
SI31_E	0.75	355	0	1	6.00E-01	1.33E-01	2.88E-03	3.53E-03	3.21E-03	1.64E-03	1.89E-04	1.03E-03	6.58E-04	8.21E-07	6.71E-05	225.9	8.83E-03	5.25E-03
SI31_E	0.75	375	0	1	6.34E-01	1.46E-01	3.07E-03	3.73E-03	3.39E-03	1.73E-03	2.01E-04	1.09E-03	6.95E-04	8.67E-07	7.11E-05	240.6	9.34E-03	5.54E-03
SI31_E	0.75	382	0	1	6.45E-01	1.53E-01	3.14E-03	3.80E-03	3.45E-03	1.76E-03	2.04E-04	1.11E-03	7.07E-04	8.83E-07	7.24E-05	246.0	9.52E-03	5.64E-03
SI31_E	0.75	395	0	1	6.68E-01	1.62E-01	3.26E-03	3.93E-03	3.57E-03	1.83E-03	2.12E-04	1.15E-03	7.32E-04	9.14E-07	7.50E-05	255.8	9.86E-03	5.84E-03
SI31_E	0.75	429	0	1	7.25E-01	1.75E-01	3.53E-03	4.27E-03	3.87E-03	1.98E-03	2.29E-04	1.25E-03	7.94E-04	9.91E-07	8.13E-05	276.9	1.07E-02	6.34E-03
SI31_E	0.75	529	0	1	8.94E-01	2.15E-01	4.36E-03	5.27E-03	4.78E-03	2.45E-03	2.83E-04	1.54E-03	9.80E-04	1.22E-06	1.00E-04	341.6	1.32E-02	7.82E-03
SI31_E	0.75	570	0	1	9.62E-01	2.25E-01	4.66E-03	5.67E-03	5.14E-03	2.63E-03	3.04E-04	1.66E-03	1.05E-03	1.32E-06	1.08E-04	365.3	1.42E-02	8.41E-03
SI31_E	0.75	395	0	1	6.68E-01	1.52E-01	3.21E-03	3.93E-03	3.57E-03	1.82E-03	2.11E-04	1.15E-03	7.32E-04	9.14E-07	7.48E-05	251.8	9.83E-03	5.84E-03
SI31_E	0.75	261	0	1	4.42E-01	8.77E-02	2.07E-03	2.60E-03	2.36E-03	1.20E-03	1.39E-04	7.55E-04	4.84E-04	6.04E-07	4.92E-05	162.3	6.46E-03	3.86E-03
SI31_E	0.75	221	0	1	3.74E-01	6.66E-02	1.72E-03	2.20E-03	2.00E-03	1.01E-03	1.17E-04	6.36E-04	4.09E-04	5.11E-07	4.14E-05	135.0	5.45E-03	3.27E-03
SI31_E	0.75	188	0	1	3.17E-01	5.08E-02	1.44E-03	1.87E-03	1.69E-03	8.54E-04	9.90E-05	5.38E-04	3.47E-04	4.33E-07	3.50E-05	112.7	4.61E-03	2.77E-03
SI31_E	0.75	154	0	1	2.60E-01	3.75E-02	1.18E-03	1.53E-03	1.39E-03	7.00E-04	8.11E-05	4.41E-04	2.85E-04	3.56E-07	2.87E-05	91.2	3.77E-03	2.28E-03
SI31_E	0.75	114	0	1	1.92E-01	2.48E-02	8.74E-04	1.13E-03	1.03E-03	5.16E-04	5.98E-05	3.25E-04	2.11E-04	2.63E-07	2.11E-05	66.5	2.78E-03	1.68E-03
SI31_W	0.75	88	0	1	1.49E-01	1.70E-02	6.75E-04	8.75E-04	7.94E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.03E-07	1.63E-05	50.7	2.14E-03	1.30E-03
SI31_W	0.75	59	0	1	9.91E-02	1.02E-02	4.50E-04	5.83E-04	5.29E-04	2.64E-04	3.06E-05	1.66E-04	1.09E-04	1.35E-07	1.08E-05	33.4	1.43E-03	8.66E-04
SI31_W	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.31E-04	2.68E-05	1.45E-04	9.50E-05	1.19E-07	9.46E-06	28.9	1.24E-03	7.58E-04
SI31_W	0.75	37	0	1	6.19E-02	6.05E-03	2.81E-04	3.65E-04	3.31E-04	1.65E-04	1.91E-05	1.04E-04	6.78E-05	8.47E-08	6.74E-06	20.5	8.87E-04	5.41E-04
SI31_W	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.30E-04	2.67E-05	1.45E-04	9.50E-05	1.19E-07	9.44E-06	28.6	1.24E-03	7.58E-04
SI31_W	0.75	125	0	1	2.11E-01	2.06E-02	9.56E-04	1.24E-03	1.12E-03	5.60E-04	6.49E-05	3.52E-04	2.31E-04	2.88E-07	2.29E-05	69.6	3.02E-03	1.84E-03
SI31_W	0.75	374	0	1	6.32E-01	6.17E-02	2.87E-03	3.72E-03	3.37E-03	1.68E-03	1.95E-04	1.06E-03	6.92E-04	8.63E-07	6.88E-05	209.9	9.06E-03	5.52E-03
SI31_W	0.75	572	0	1	9.66E-01	1.07E-01	4.38E-03	5.69E-03	5.16E-03	2.58E-03	2.99E-04	1.62E-03	1.06E-03	1.32E-06	1.06E-04	328.8	1.39E-02	8.45E-03
SI31_W	0.75	462	0	1	7.80E-01	1.14E-01	3.54E-03	4.59E-03	4.17E-03	2.10E-03	2.43E-04	1.32E-03	8.55E-04	1.07E-06	8.60E-05	274.5	1.13E-02	6.82E-03
SI31_W	0.75	381	0	1	6.44E-01	1.09E-01	2.95E-03	3.79E-03	3.44E-03	1.74E-03	2.02E-04	1.10E-03	7.06E-04	8.81E-07	7.13E-05	231.4	9.38E-03	5.63E-03
SI31_W	0.75	344	0	1	5.82E-01	1.09E-01	2.71E-03	3.43E-03	3.11E-03	1.58E-03	1.83E-04	9.93E-04	6.38E-04	7.96E-07	6.47E-05	212.7	8.51E-03	5.09E-03
SI31_W	0.75	388	0	1	6.56E-01	1.46E-01	3.15E-03	3.86E-03	3.51E-03	1.79E-03	2.07E-04	1.13E-03	7.19E-04	8.98E-07	7.34E-05	247.1	9.66E-03	5.74E-03
SI31_W	0.75	410	0	1	6.94E-01	1.60E-01	3.36E-03	4.08E-03	3.70E-03	1.89E-03	2.19E-04	1.19E-03	7.60E-04	9.48E-07	7.77E-05	263.1	1.02E-02	6.06E-03
SI31_W	0.75	418	0	1	7.06E-01	1.67E-01	3.43E-03	4.16E-03	3.77E-03	1.93E-03	2.23E-04	1.22E-03	7.74E-04	9.65E-07	7.92E-05	269.0	1.04E-02	6.17E-03
SI31_W	0.75	432	0	1	7.31E-01	1.78E-01	3.57E-03	4.30E-03	3.90E-03	2.00E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.21E-05	279.8	1.08E-02	6.39E-03
SI31_W	0.75	469	0	1	7.93E-01	1.91E-01	3.87E-03	4.67E-03	4.23E-03	2.17E-03	2.51E-04	1.37E-03	8.69E-04	1.08E-06	8.90E-05	302.9	1.17E-02	6.93E-03
SI31_W	0.75	579	0	1	9.78E-01	2.35E-01	4.77E-03	5.76E-03	5.23E-03	2.68E-03	3.10E-04	1.69E-03	1.07E-03	1.34E-06	1.10E-04	373.6	1.44E-02	8.55E-03
SI31_W	0.75	623	0	1	1.05E+00	2.47E-01	5.10E-03	6.20E-03	5.62E-03	2.88E-03	3.33E-04	1.81E-03	1.15E-03	1.44E-06	1.18E-04	399.6	1.55E-02	9.20E-03
SI31_W	0.75	432	0	1	7.31E-01	1.66E-01	3.51E-03	4.30E-03	3.90E-03	1.99E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.18E-05	275.4	1.08E-02	6.39E-03
SI31_W	0.75	286	0	1	4.83E-01	9.60E-02	2.27E-03	2.84E-03	2.58E-03	1.31E-03	1.52E-04	8.25E-04	5.29E-04	6.60E-07	5.38E-05	177.6	7.07E-03	4.22E-03
SI31_W	0.75	242	0	1	4.09E-01	7.28E-02	1.88E-03	2.41E-03	2.18E-03	1.11E-03	1.28E-04	6.96E-04	4.48E-04	5.59E-07	4.53E-05	147.6	5.96E-03	3.57E-03
SI31_W	0.75	205	0	1	3.47E-01	5.55E-02	1.57E-03	2.04E-03	1.85E-03	9.35E-04	1.08E-04	5.88E-04	3.80E-04	4.74E-07	3.83E-05	123.2	5.04E-03	3.03E-03
SI31_W	0.75	169	0	1	2.85E-01	4.10E-02	1.29E-03	1.68E-03	1.52E-03	7.65E-04	8.87E-05	4.82E-04	3.12E-04	3.89E-07	3.14E-05	99.8	4.13E-03	2.49E-03
SI31_W	0.75	125	0	1	2.11E-01	2.71E-02	9.56E-04	1.24E-03	1.12E-03	5.64E-04	6.54E-05	3.55E-04	2.31E-04	2.88E-07	2.31E-05	72.8	3.04E-03	1.84E-03
SI32_E	0.75	88	0	1	1.49E-01	1.70E-02	6.75E-04	8.75E-04	7.94E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.03E-07	1.63E-05	50.7	2.14E-03	1.30E-03
SI32_E	0.75	59	0	1	9.91E-02	1.02E-02	4.50E-04	5.83E-04	5.29E-04	2.64E-04	3.06E-05	1.66E-04	1.09E-04	1.35E-07	1.08E-05	33.4	1.43E-03	8.66E-04
SI32_E	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.31E-04	2.68E-05	1.45E-04	9.50E-05	1.19E-07	9.46E-06	28.9	1.24E-03	7.58E-04
SI32_E	0.75	37	0	1	6.19E-02	6.05E-03	2.81E-04	3.65E-04	3.31E-04	1.65E-04	1.91E-05	1.04E-04	6.78E-05	8.47E-08	6.74E-06	20.5	8.87E-04	5.41E-04
SI32_E	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.30E-04	2.67E-05	1.45E-04	9.50E-05	1.19E-07	9.44E-06	28.6	1.24E-03	7.58E-04
SI32_E	0.75	125	0	1	2.11E-01	2.06E-02	9.56E-04	1.24E-03	1.12E-03	5.60E-04	6.49E-05	3.52E-04	2.31E-04	2.88E-07	2.29E-05	69.6	3.02E-03	1.84E-03
SI32_E	0.75	374	0	1	6.32E-01	6.17E-02	2.87E-03	3.72E-03	3.37E-03	1.68E-03	1.95E-04	1.06E-03	6.92E-04	8.63E-07	6.88E-05	209.9	9.06E-03	5.52E-03
SI32_E	0.75	572	0	1	9.66E-01	1.07E-01	4.38E-03	5.69E-03	5.16E-03	2.58E-03	2.99E-04	1.62E-03	1.06E-03	1.32E-06	1.06E-04	328.8	1.39E-02	8.45E-03
SI32_E	0.75	462	0	1	7.80E-01	1.14E-01	3.54E-03	4.59E-03	4.17E-03	2.10E-03	2.43E-04	1.32E-03	8.55E-04	1.07E-06	8.60E-05	274.5	1.13E-02	6.82E-03
SI32_E	0.75	381	0	1	6.44E-01	1.09E-01	2.95E-03	3.79E-03	3.44E-03	1.74E-03	2.02E-04	1.10E-03	7.06E-04	8.81E-07	7.13E-05	231.4	9.38E-03	5.63E-03
SI32_E	0.75	344	0	1	5.82E-01	1.09E-01	2.71E-03	3.43E-03	3.11E-03	1.58E-03	1.83E-04	9.93E-04	6.38E-04	7.96E-07	6.47E-05	212.7	8.51E-03	5.09E-03
SI32_E	0.75	388	0	1	6.56E-01	1.46E-01	3.15E-03	3.86E-03	3.51E-03	1.79E-03	2.07E-04	1.13E-03	7.19E-04	8.98E-07	7.34E-05	247.1	9.66E-03	5.74E-03
SI32_E	0.75	410	0	1	6.94E-01	1.60E-01	3.36E-03	4.08E-03	3.70E-03	1.89E-03	2.19E-04	1.19E-03	7.60E-04	9.48E-07	7.77E-05	263.1	1.02E-02	6.06E-03
SI32_E	0.75	418	0	1	7.06E-01	1.67E-01	3.43E-03	4.16E-03	3.77E-03	1.93E-03	2.23E-04	1.22E-03	7.74E-04	9.65E-07	7.92E-05	269.0	1.04E-02	6.17E-03
SI32_E	0.75	432	0	1	7.31E-01	1.78E-01	3.57E-03	4.30E-03	3.90E-03	2.00E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.21E-05	279.8	1.08E-02	6.39E-03
SI32_E	0.75	469	0	1	7.93E-01	1.91E-01	3.87E-03	4.67E-03	4.23E-03	2.17E-03	2.51E-04	1.37E-03	8.69E-04	1.08E-06	8.90E-05	302.9	1.17E-02	6.93E-03
SI32_E	0.75	579	0	1	9.78E-01	2.35E-01	4.77E-03	5.76E-03	5.23E-03	2.68E-03	3.10E-04	1.69E-03	1.07E-03	1.34E-06	1.10E-04	373.6	1.44E-02	8.55E-03
SI32_E	0.75	623	0	1	1.05E+00	2.47E-01	5.10E-03	6.20E-03	5.62E-03	2.88E-03	3.33E-04	1.81E-03	1.15E-03	1.44E-06	1.18E-04	399.6	1.55E-02	9.20E-03
SI32_E	0.75	432	0	1	7.31E-01	1.66E-01	3.51E-03	4.30E-03	3.90E-03	1.99E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.18E-05	275.4	1.08E-02	6.39E-03
SI32_E	0.75	286	0	1	4.83E-01	9.60E-02	2.27E-03	2.84E-03	2.58E-03	1.31E-03	1.52E-04	8.25E-04	5.29E-04	6.60E-07	5.38E-05	177.6	7.07E-03	4.22E-03
SI32_E	0.75	242	0	1	4.09E-01	7.28E-02	1.88E-03	2.41E-03	2.18E-03	1.11E-03	1.28E-04	6.96E-04	4.48E-04	5.59E-07	4.53E-05	147.6	5.96E-03	3.57E-03
SI32_E	0.75	205	0	1	3.47E-01	5.55E-02	1.57E-03	2.04E-03	1.85E-03	9.35E-04	1.08E-04	5.88E-04	3.80E-04	4.74E-07	3.83E-05	123.2	5.04E-03	3.03E-03
SI32_E	0.75	169	0	1	2.85E-01	4.10E-02	1.29E-03	1.68E-03	1.52E-03	7.65E-04	8.87E-05	4.82E-04	3.12E-04	3.89E-07	3.14E-05	99.8	4.13E-03	2.49E-03
SI32_E	0.75	125	0	1	2.11E-01	2.71E-02	9.56E-04	1.24E-03	1.12E-03	5.64E-04	6.54E-05	3.55E-04	2.31E-04	2.88E-07	2.31E-05	72.8	3.04E-03	1.84E-03
SI32_W	0.75	88	0	1	1.49E-01	1.70E-02	6.75E-04	8.75E-04	7.94E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.03E-07	1.63E-05	50.7	2.14E-03	1.30E-03
SI32_W	0.75	59	0	1	9.91E-02	1.02E-02	4.50E-04	5.83E-04	5.29E-04	2.64E-04	3.06E-05	1.66E-04	1.09E-04	1.35E-07	1.08E-05	33.4	1.43E-03	8.66E-04
SI32_W	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.31E-04	2.68E-05	1.45E-04	9.50E-05	1.19E-07	9.46E-06	28.9	1.24E-03	7.58E-04
SI32_W	0.75	37	0	1	6.19E-02	6.05E-03	2.81E-04	3.65E-04	3.31E-04	1.65E-04	1.91E-05	1.04E-04	6.78E-05	8.47E-08	6.74E-06	20.5	8.87E-04	5.41E-04
SI32_W	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.30E-04	2.67E-05	1.45E-04	9.50E-05	1.19E-07	9.44E-06	28.6	1.24E-03	7.58E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_W	0.75	125	0	1	2.11E-01	2.06E-02	9.56E-04	1.24E-03	1.12E-03	5.60E-04	6.49E-05	3.52E-04	2.31E-04	2.88E-07	2.29E-05	69.6	3.02E-03	1.84E-03
SI32_W	0.75	374	0	1	6.32E-01	6.17E-02	2.87E-03	3.72E-03	3.37E-03	1.68E-03	1.95E-04	1.06E-03	6.92E-04	8.63E-07	6.88E-05	209.9	9.06E-03	5.52E-03
SI32_W	0.75	572	0	1	9.66E-01	1.07E-01	4.38E-03	5.69E-03	5.16E-03	2.58E-03	2.99E-04	1.62E-03	1.06E-03	1.32E-06	1.06E-04	328.8	1.39E-02	8.45E-03
SI32_W	0.75	462	0	1	7.80E-01	1.14E-01	3.54E-03	4.59E-03	4.17E-03	2.10E-03	2.43E-04	1.32E-03	8.55E-04	1.07E-06	8.60E-05	274.5	1.13E-02	6.82E-03
SI32_W	0.75	381	0	1	6.44E-01	1.09E-01	2.95E-03	3.79E-03	3.44E-03	1.74E-03	2.02E-04	1.10E-03	7.06E-04	8.81E-07	7.13E-05	231.4	9.38E-03	5.63E-03
SI32_W	0.75	344	0	1	5.82E-01	1.09E-01	2.71E-03	3.43E-03	3.11E-03	1.58E-03	1.83E-04	9.93E-04	6.38E-04	7.96E-07	6.47E-05	212.7	8.51E-03	5.09E-03
SI32_W	0.75	388	0	1	6.56E-01	1.46E-01	3.15E-03	3.86E-03	3.51E-03	1.79E-03	2.07E-04	1.13E-03	7.19E-04	8.98E-07	7.34E-05	247.1	9.66E-03	5.74E-03
SI32_W	0.75	410	0	1	6.94E-01	1.60E-01	3.36E-03	4.08E-03	3.70E-03	1.89E-03	2.19E-04	1.19E-03	7.60E-04	9.48E-07	7.77E-05	263.1	1.02E-02	6.06E-03
SI32_W	0.75	418	0	1	7.06E-01	1.67E-01	3.43E-03	4.16E-03	3.77E-03	1.93E-03	2.23E-04	1.22E-03	7.74E-04	9.65E-07	7.92E-05	269.0	1.04E-02	6.17E-03
SI32_W	0.75	432	0	1	7.31E-01	1.78E-01	3.57E-03	4.30E-03	3.90E-03	2.00E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.21E-05	279.8	1.08E-02	6.39E-03
SI32_W	0.75	469	0	1	7.93E-01	1.91E-01	3.87E-03	4.67E-03	4.23E-03	2.17E-03	2.51E-04	1.37E-03	8.69E-04	1.08E-06	8.90E-05	302.9	1.17E-02	6.93E-03
SI32_W	0.75	579	0	1	9.78E-01	2.35E-01	4.77E-03	5.76E-03	5.23E-03	2.68E-03	3.10E-04	1.69E-03	1.07E-03	1.34E-06	1.10E-04	373.6	1.44E-02	8.55E-03
SI32_W	0.75	623	0	1	1.05E+00	2.47E-01	5.10E-03	6.20E-03	5.62E-03	2.88E-03	3.33E-04	1.81E-03	1.15E-03	1.44E-06	1.18E-04	399.6	1.55E-02	9.20E-03
SI32_W	0.75	432	0	1	7.31E-01	1.66E-01	3.51E-03	4.30E-03	3.90E-03	1.99E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.18E-05	275.4	1.08E-02	6.39E-03
SI32_W	0.75	286	0	1	4.83E-01	9.60E-02	2.27E-03	2.84E-03	2.58E-03	1.31E-03	1.52E-04	8.25E-04	5.29E-04	6.60E-07	5.38E-05	177.6	7.07E-03	4.22E-03
SI32_W	0.75	242	0	1	4.09E-01	7.28E-02	1.88E-03	2.41E-03	2.18E-03	1.11E-03	1.28E-04	6.96E-04	4.48E-04	5.59E-07	4.53E-05	147.6	5.96E-03	3.57E-03
SI32_W	0.75	205	0	1	3.47E-01	5.55E-02	1.57E-03	2.04E-03	1.85E-03	9.35E-04	1.08E-04	5.88E-04	3.80E-04	4.74E-07	3.83E-05	123.2	5.04E-03	3.03E-03
SI32_W	0.75	169	0	1	2.85E-01	4.10E-02	1.29E-03	1.68E-03	1.52E-03	7.65E-04	8.87E-05	4.82E-04	3.12E-04	3.89E-07	3.14E-05	99.8	4.13E-03	2.49E-03
SI32_W	0.75	125	0	1	2.11E-01	2.71E-02	9.56E-04	1.24E-03	1.12E-03	5.64E-04	6.54E-05	3.55E-04	2.31E-04	2.88E-07	2.31E-05	72.8	3.04E-03	1.84E-03
SI33_E	0.75	88	0	1	1.49E-01	1.70E-02	6.75E-04	8.75E-04	7.94E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.03E-07	1.63E-05	50.7	2.14E-03	1.30E-03
SI33_E	0.75	59	0	1	9.91E-02	1.02E-02	4.50E-04	5.83E-04	5.29E-04	2.64E-04	3.06E-05	1.66E-04	1.09E-04	1.35E-07	1.08E-05	33.4	1.43E-03	8.66E-04
SI33_E	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.31E-04	2.68E-05	1.45E-04	9.50E-05	1.19E-07	9.46E-06	28.9	1.24E-03	7.58E-04
SI33_E	0.75	37	0	1	6.19E-02	6.05E-03	2.81E-04	3.65E-04	3.31E-04	1.65E-04	1.91E-05	1.04E-04	6.78E-05	8.47E-08	6.74E-06	20.5	8.87E-04	5.41E-04
SI33_E	0.75	51	0	1	8.67E-02	8.47E-03	3.94E-04	5.10E-04	4.63E-04	2.30E-04	2.67E-05	1.45E-04	9.50E-05	1.19E-07	9.44E-06	28.6	1.24E-03	7.58E-04
SI33_E	0.75	125	0	1	2.11E-01	2.06E-02	9.56E-04	1.24E-03	1.12E-03	5.60E-04	6.49E-05	3.52E-04	2.31E-04	2.88E-07	2.29E-05	69.6	3.02E-03	1.84E-03
SI33_E	0.75	374	0	1	6.32E-01	6.17E-02	2.87E-03	3.72E-03	3.37E-03	1.68E-03	1.95E-04	1.06E-03	6.92E-04	8.63E-07	6.88E-05	209.9	9.06E-03	5.52E-03
SI33_E	0.75	572	0	1	9.66E-01	1.07E-01	4.38E-03	5.69E-03	5.16E-03	2.58E-03	2.99E-04	1.62E-03	1.06E-03	1.32E-06	1.06E-04	328.8	1.39E-02	8.45E-03
SI33_E	0.75	462	0	1	7.80E-01	1.14E-01	3.54E-03	4.59E-03	4.17E-03	2.10E-03	2.43E-04	1.32E-03	8.55E-04	1.07E-06	8.60E-05	274.5	1.13E-02	6.82E-03
SI33_E	0.75	381	0	1	6.44E-01	1.09E-01	2.95E-03	3.79E-03	3.44E-03	1.74E-03	2.02E-04	1.10E-03	7.06E-04	8.81E-07	7.13E-05	231.4	9.38E-03	5.63E-03
SI33_E	0.75	344	0	1	5.82E-01	1.09E-01	2.71E-03	3.43E-03	3.11E-03	1.58E-03	1.83E-04	9.93E-04	6.38E-04	7.96E-07	6.47E-05	212.7	8.51E-03	5.09E-03
SI33_E	0.75	388	0	1	6.56E-01	1.46E-01	3.15E-03	3.86E-03	3.51E-03	1.79E-03	2.07E-04	1.13E-03	7.19E-04	8.98E-07	7.34E-05	247.1	9.66E-03	5.74E-03
SI33_E	0.75	410	0	1	6.94E-01	1.60E-01	3.36E-03	4.08E-03	3.70E-03	1.89E-03	2.19E-04	1.19E-03	7.60E-04	9.48E-07	7.77E-05	263.1	1.02E-02	6.06E-03
SI33_E	0.75	418	0	1	7.06E-01	1.67E-01	3.43E-03	4.16E-03	3.77E-03	1.93E-03	2.23E-04	1.22E-03	7.74E-04	9.65E-07	7.92E-05	269.0	1.04E-02	6.17E-03
SI33_E	0.75	432	0	1	7.31E-01	1.78E-01	3.57E-03	4.30E-03	3.90E-03	2.00E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.21E-05	279.8	1.08E-02	6.39E-03
SI33_E	0.75	469	0	1	7.93E-01	1.91E-01	3.87E-03	4.67E-03	4.23E-03	2.17E-03	2.51E-04	1.37E-03	8.69E-04	1.08E-06	8.90E-05	302.9	1.17E-02	6.93E-03
SI33_E	0.75	579	0	1	9.78E-01	2.35E-01	4.77E-03	5.76E-03	5.23E-03	2.68E-03	3.10E-04	1.69E-03	1.07E-03	1.34E-06	1.10E-04	373.6	1.44E-02	8.55E-03
SI33_E	0.75	623	0	1	1.05E+00	2.47E-01	5.10E-03	6.20E-03	5.62E-03	2.88E-03	3.33E-04	1.81E-03	1.15E-03	1.44E-06	1.18E-04	399.6	1.55E-02	9.20E-03
SI33_E	0.75	432	0	1	7.31E-01	1.66E-01	3.51E-03	4.30E-03	3.90E-03	1.99E-03	2.31E-04	1.26E-03	8.01E-04	9.99E-07	8.18E-05	275.4	1.08E-02	6.39E-03
SI33_E	0.75	286	0	1	4.83E-01	9.60E-02	2.27E-03	2.84E-03	2.58E-03	1.31E-03	1.52E-04	8.25E-04	5.29E-04	6.60E-07	5.38E-05	177.6	7.07E-03	4.22E-03
SI33_E	0.75	242	0	1	4.09E-01	7.28E-02	1.88E-03	2.41E-03	2.18E-03	1.11E-03	1.28E-04	6.96E-04	4.48E-04	5.59E-07	4.53E-05	147.6	5.96E-03	3.57E-03
SI33_E	0.75	205	0	1	3.47E-01	5.55E-02	1.57E-03	2.04E-03	1.85E-03	9.35E-04	1.08E-04	5.88E-04	3.80E-04	4.74E-07	3.83E-05	123.2	5.04E-03	3.03E-03
SI33_E	0.75	169	0	1	2.85E-01	4.10E-02	1.29E-03	1.68E-03	1.52E-03	7.65E-04	8.87E-05	4.82E-04	3.12E-04	3.89E-07	3.14E-05	99.8	4.13E-03	2.49E-03
SI33_E	0.75	125	0	1	2.11E-01	2.71E-02	9.56E-04	1.24E-03	1.12E-03	5.64E-04	6.54E-05	3.55E-04	2.31E-04	2.88E-07	2.31E-05	72.8	3.04E-03	1.84E-03
SI33_W	0.75	100	0	1	1.68E-01	1.92E-02	7.64E-04	9.91E-04	8.99E-04	4.50E-04	5.22E-05	2.83E-04	1.84E-04	2.30E-07	1.84E-05	57.4	2.43E-03	1.47E-03
SI33_W	0.75	66	0	1	1.12E-01	1.15E-02	5.09E-04	6.61E-04	5.99E-04	2.99E-04	3.47E-05	1.88E-04	1.23E-04	1.53E-07	1.23E-05	37.9	1.61E-03	9.81E-04
SI33_W	0.75	58	0	1	9.82E-02	9.59E-03	4.46E-04	5.78E-04	5.25E-04	2.61E-04	3.03E-05	1.64E-04	1.08E-04	1.34E-07	1.07E-05	32.7	1.41E-03	8.59E-04
SI33_W	0.75	42	0	1	7.01E-02	6.85E-03	3.18E-04	4.13E-04	3.75E-04	1.86E-04	2.16E-05	1.17E-04	7.69E-05	9.59E-08	7.64E-06	23.2	1.01E-03	6.13E-04
SI33_W	0.75	58	0	1	9.82E-02	9.59E-03	4.46E-04	5.78E-04	5.25E-04	2.61E-04	3.03E-05	1.64E-04	1.08E-04	1.34E-07	1.07E-05	32.4	1.41E-03	8.59E-04
SI33_W	0.75	141	0	1	2.38E-01	2.33E-02	1.08E-03	1.40E-03	1.27E-03	6.34E-04	7.35E-05	3.99E-04	2.61E-04	3.26E-07	2.60E-05	78.8	3.42E-03	2.09E-03
SI33_W	0.75	423	0	1	7.15E-01	6.99E-02	3.25E-03	4.21E-03	3.82E-03	1.90E-03	2.21E-04	1.20E-03	7.84E-04	9.78E-07	7.80E-05	237.8	1.03E-02	6.26E-03
SI33_W	0.75	648	0	1	1.09E+00	1.22E-01	4.97E-03	6.44E-03	5.84E-03	2.92E-03	3.39E-04	1.84E-03	1.20E-03	1.50E-06	1.20E-04	372.5	1.58E-02	9.57E-03
SI33_W	0.75	523	0	1	8.84E-01	1.29E-01	4.01E-03	5.20E-03	4.72E-03	2.38E-03	2.75E-04	1.50E-03	9.68E-04	1.21E-06	9.75E-05	310.9	1.28E-02	7.73E-03
SI33_W	0.75	432	0	1	7.29E-01	1.23E-01	3.34E-03	4.29E-03	3.90E-03	1.97E-03	2.28E-04	1.24E-03	7.99E-04	9.97E-07	8.08E-05	262.1	1.06E-02	6.38E-03
SI33_W	0.75	390	0	1	6.59E-01	1.23E-01	3.07E-03	3.88E-03	3.52E-03	1.79E-03	2.07E-04	1.13E-03	7.22E-04	9.02E-07	7.33E-05	240.9	9.64E-03	5.76E-03
SI33_W	0.75	440	0	1	7.43E-01	1.65E-01	3.57E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.32E-05	279.9	1.09E-02	6.50E-03
SI33_W	0.75	465	0	1	7.86E-01	1.81E-01	3.80E-03	4.63E-03	4.20E-03	2.15E-03	2.48E-04	1.35E-03	8.61E-04	1.07E-06	8.80E-05	298.1	1.16E-02	6.87E-03
SI33_W	0.75	473	0	1	8.00E-01	1.89E-01	3.89E-03	4.71E-03	4.27E-03	2.19E-03	2.53E-04	1.38E-03	8.76E-04	1.09E-06	8.97E-05	304.7	1.18E-02	6.99E-03
SI33_W	0.75	490	0	1	8.28E-01	2.01E-01	4.04E-03	4.87E-03	4.42E-03	2.26E-03	2.62E-04	1.43E-03	9.07E-04	1.13E-06	9.30E-05	316.9	1.22E-02	7.24E-03
SI33_W	0.75	531	0	1	8.98E-01	2.16E-01	4.38E-03	5.29E-03	4.80E-03	2.46E-03	2.84E-04	1.55E-03	9.84E-04	1.23E-06	1.01E-04	343.1	1.33E-02	7.85E-03
SI33_W	0.75	656	0	1	1.11E+00	2.67E-01	5.40E-03	6.53E-03	5.92E-03	3.03E-03	3.51E-04	1.91E-03	1.21E-03	1.52E-06	1.24E-04	423.2	1.64E-02	9.69E-03
SI33_W	0.75	706	0	1	1.19E+00	2.79E-01	5.78E-03	7.02E-03	6.37E-03	3.26E-03	3.77E-04	2.05E-03	1.31E-03	1.63E-06	1.34E-04	452.6	1.76E-02	1.04E-02
SI33_W	0.75	490	0	1	8.28E-01	1.88E-01	3.98E-03	4.87E-03	4.42E-03	2.26E-03	2.61E-04	1.42E-03	9.07E-04	1.13E-06	9.26E-05	312.0	1.22E-02	7.24E-03
SI33_W	0.75	324	0	1	5.47E-01	1.09E-01	2.57E-03	3.22E-03	2.92E-03	1.48E-03	1.72E-04	9.35E-04	5.99E-04	7.48E-07	6.09E-05	201.1	8.01E-03	4.78E-03
SI33_W	0.75	274	0	1	4.63E-01	8.25E-02	2.13E-03	2.73E-03	2.47E-03	1.25E-03	1.45E-04	7.88E-04	5.07E-04	6.33E-07	5.13E-05	167.2	6.75E-03	4.05E-03
SI33_W	0.75	232	0	1	3.93E-01	6.29E-02	1.78E-03	2.31E-03	2.10E-03	1.06E-03	1.23E-04	6.67E-04	4.30E-04	5.37E-07	4.34E-05	139.6	5.71E-03	3.43E-03
SI33_W	0.75	191	0	1	3.23E-01	4.64E-02	1.46E-03	1.90E-03	1.72E-03	8.67E-04	1.00E-04	5.46E-04	3.54E-04	4.41E-07	3.55E-05	113.0	4.68E-03	2.82E-03
SI33_W	0.75	141	0	1	2.38E-01	3.07E-02	1.08E-03	1.40E-03	1.27E-03	6.39E-04	7.41E-05	4.02E-04	2.61E-04	3.26E-07	2.62E-05	82.4	3.45E-03	2.09E-03
SI34_E	0.75	100	0	1	1.68E-01	1.92E-02	7.64E-04	9.91E-04	8.99E-04	4.50E-04	5.22E-05	2.83E-04	1.84E-04	2.30E-07	1.84E-05	57.4	2.43E-03	1.47E-03
SI34_E	0.75	66	0	1	1.12E-01	1.15E-02	5.09E-04	6.61E-04	5.99E-04	2.99E-04	3.47E-05	1.88E-04	1.23E-04	1.53E-07	1.23E-05	37.9	1.61E-03	9.81E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI34_E	0.75	58	0	1	9.82E-02	9.59E-03	4.46E-04	5.78E-04	5.25E-04	2.61E-04	3.03E-05	1.64E-04	1.08E-04	1.34E-07	1.07E-05	32.7	1.41E-03	8.59E-04
SI34_E	0.75	42	0	1	7.01E-02	6.85E-03	3.18E-04	4.13E-04	3.75E-04	1.86E-04	2.16E-05	1.17E-04	7.69E-05	9.59E-08	7.64E-06	23.2	1.01E-03	6.13E-04
SI34_E	0.75	58	0	1	9.82E-02	9.59E-03	4.46E-04	5.78E-04	5.25E-04	2.61E-04	3.03E-05	1.64E-04	1.08E-04	1.34E-07	1.07E-05	32.4	1.41E-03	8.59E-04
SI34_E	0.75	141	0	1	2.38E-01	2.33E-02	1.08E-03	1.40E-03	1.27E-03	6.34E-04	7.35E-05	3.99E-04	2.61E-04	3.26E-07	2.60E-05	78.8	3.42E-03	2.09E-03
SI34_E	0.75	423	0	1	7.15E-01	6.99E-02	3.25E-03	4.21E-03	3.82E-03	1.90E-03	2.21E-04	1.20E-03	7.84E-04	9.78E-07	7.80E-05	237.8	1.03E-02	6.26E-03
SI34_E	0.75	648	0	1	1.09E+00	1.22E-01	4.97E-03	6.44E-03	5.84E-03	2.92E-03	3.39E-04	1.84E-03	1.20E-03	1.50E-06	1.20E-04	372.5	1.58E-02	9.57E-03
SI34_E	0.75	523	0	1	8.84E-01	1.29E-01	4.01E-03	5.20E-03	4.72E-03	2.38E-03	2.75E-04	1.50E-03	9.68E-04	1.21E-06	9.75E-05	310.9	1.28E-02	7.73E-03
SI34_E	0.75	432	0	1	7.29E-01	1.23E-01	3.34E-03	4.29E-03	3.90E-03	1.97E-03	2.28E-04	1.24E-03	7.99E-04	9.97E-07	8.08E-05	262.1	1.06E-02	6.38E-03
SI34_E	0.75	390	0	1	6.59E-01	1.23E-01	3.07E-03	3.88E-03	3.52E-03	1.79E-03	2.07E-04	1.13E-03	7.22E-04	9.02E-07	7.33E-05	240.9	9.64E-03	5.76E-03
SI34_E	0.75	440	0	1	7.43E-01	1.65E-01	3.57E-03	4.38E-03	3.97E-03	2.03E-03	2.35E-04	1.28E-03	8.15E-04	1.02E-06	8.32E-05	279.9	1.09E-02	6.50E-03
SI34_E	0.75	465	0	1	7.86E-01	1.81E-01	3.80E-03	4.63E-03	4.20E-03	2.15E-03	2.48E-04	1.35E-03	8.61E-04	1.07E-06	8.80E-05	298.1	1.16E-02	6.87E-03
SI34_E	0.75	473	0	1	8.00E-01	1.89E-01	3.89E-03	4.71E-03	4.27E-03	2.19E-03	2.53E-04	1.38E-03	8.76E-04	1.09E-06	8.97E-05	304.7	1.18E-02	6.99E-03
SI34_E	0.75	490	0	1	8.28E-01	2.01E-01	4.04E-03	4.87E-03	4.42E-03	2.26E-03	2.62E-04	1.43E-03	9.07E-04	1.13E-06	9.30E-05	316.9	1.22E-02	7.24E-03
SI34_E	0.75	531	0	1	8.98E-01	2.16E-01	4.38E-03	5.29E-03	4.80E-03	2.46E-03	2.84E-04	1.55E-03	9.84E-04	1.23E-06	1.01E-04	343.1	1.33E-02	7.85E-03
SI34_E	0.75	656	0	1	1.11E+00	2.67E-01	5.40E-03	6.53E-03	5.92E-03	3.03E-03	3.51E-04	1.91E-03	1.21E-03	1.52E-06	1.24E-04	423.2	1.64E-02	9.69E-03
SI34_E	0.75	706	0	1	1.19E+00	2.79E-01	5.78E-03	7.02E-03	6.37E-03	3.26E-03	3.77E-04	2.05E-03	1.31E-03	1.63E-06	1.34E-04	452.6	1.76E-02	1.04E-02
SI34_E	0.75	490	0	1	8.28E-01	1.88E-01	3.98E-03	4.87E-03	4.42E-03	2.26E-03	2.61E-04	1.42E-03	9.07E-04	1.13E-06	9.26E-05	312.0	1.22E-02	7.24E-03
SI34_E	0.75	324	0	1	5.47E-01	1.09E-01	2.57E-03	3.22E-03	2.92E-03	1.48E-03	1.72E-04	9.35E-04	5.99E-04	7.48E-07	6.09E-05	201.1	8.01E-03	4.78E-03
SI34_E	0.75	274	0	1	4.63E-01	8.25E-02	2.13E-03	2.73E-03	2.47E-03	1.25E-03	1.45E-04	7.88E-04	5.07E-04	6.33E-07	5.13E-05	167.2	6.75E-03	4.05E-03
SI34_E	0.75	232	0	1	3.93E-01	6.29E-02	1.78E-03	2.31E-03	2.10E-03	1.06E-03	1.23E-04	6.67E-04	4.30E-04	5.37E-07	4.34E-05	139.6	5.71E-03	3.43E-03
SI34_E	0.75	191	0	1	3.23E-01	4.64E-02	1.46E-03	1.90E-03	1.72E-03	8.67E-04	1.00E-04	5.46E-04	3.54E-04	4.41E-07	3.55E-05	113.0	4.68E-03	2.82E-03
SI34_E	0.75	141	0	1	2.38E-01	3.07E-02	1.08E-03	1.40E-03	1.27E-03	6.39E-04	7.41E-05	4.02E-04	2.61E-04	3.26E-07	2.62E-05	82.4	3.45E-03	2.09E-03
SI34_W	0.75	113	0	1	1.91E-01	2.18E-02	8.66E-04	1.12E-03	1.02E-03	5.10E-04	5.91E-05	3.21E-04	2.09E-04	2.61E-07	2.09E-05	65.1	2.75E-03	1.67E-03
SI34_W	0.75	75	0	1	1.27E-01	1.31E-02	5.77E-04	7.49E-04	6.79E-04	3.39E-04	3.93E-05	2.14E-04	1.39E-04	1.74E-07	1.39E-05	42.9	1.83E-03	1.11E-03
SI34_W	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.44E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	37.1	1.60E-03	9.73E-04
SI34_W	0.75	47	0	1	7.95E-02	7.77E-03	3.61E-04	4.68E-04	4.25E-04	2.11E-04	2.45E-05	1.33E-04	8.71E-05	1.09E-07	8.66E-06	26.3	1.14E-03	6.95E-04
SI34_W	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.43E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	36.8	1.59E-03	9.73E-04
SI34_W	0.75	160	0	1	2.70E-01	2.64E-02	1.23E-03	1.59E-03	1.44E-03	7.18E-04	8.33E-05	4.52E-04	2.96E-04	3.70E-07	2.94E-05	89.3	3.87E-03	2.36E-03
SI34_W	0.75	480	0	1	8.11E-01	7.92E-02	3.68E-03	4.77E-03	4.33E-03	2.16E-03	2.50E-04	1.36E-03	8.89E-04	1.11E-06	8.84E-05	269.5	1.16E-02	7.09E-03
SI34_W	0.75	734	0	1	1.24E+00	1.38E-01	5.63E-03	7.30E-03	6.62E-03	3.31E-03	3.84E-04	2.09E-03	1.36E-03	1.70E-06	1.36E-04	422.2	1.79E-02	1.08E-02
SI34_W	0.75	593	0	1	1.00E+00	1.46E-01	4.55E-03	5.90E-03	5.35E-03	2.69E-03	3.12E-04	1.70E-03	1.10E-03	1.37E-06	1.10E-04	352.4	1.45E-02	8.76E-03
SI34_W	0.75	489	0	1	8.27E-01	1.39E-01	3.79E-03	4.87E-03	4.42E-03	2.23E-03	2.59E-04	1.41E-03	9.06E-04	1.13E-06	9.16E-05	297.1	1.20E-02	7.23E-03
SI34_W	0.75	442	0	1	7.47E-01	1.40E-01	3.48E-03	4.40E-03	3.99E-03	2.03E-03	2.35E-04	1.28E-03	8.19E-04	1.02E-06	8.31E-05	273.1	1.09E-02	6.53E-03
SI34_W	0.75	499	0	1	8.43E-01	1.87E-01	4.05E-03	4.96E-03	4.50E-03	2.30E-03	2.66E-04	1.45E-03	9.23E-04	1.15E-06	9.43E-05	317.3	1.24E-02	7.37E-03
SI34_W	0.75	527	0	1	8.90E-01	2.05E-01	4.31E-03	5.24E-03	4.76E-03	2.43E-03	2.82E-04	1.53E-03	9.76E-04	1.22E-06	9.98E-05	337.8	1.31E-02	7.79E-03
SI34_W	0.75	536	0	1	9.06E-01	2.14E-01	4.41E-03	5.34E-03	4.84E-03	2.48E-03	2.87E-04	1.56E-03	9.93E-04	1.24E-06	1.02E-04	345.4	1.34E-02	7.92E-03
SI34_W	0.75	555	0	1	9.38E-01	2.28E-01	4.58E-03	5.52E-03	5.01E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.28E-06	1.05E-04	359.2	1.39E-02	8.20E-03
SI34_W	0.75	602	0	1	1.02E+00	2.45E-01	4.96E-03	5.99E-03	5.44E-03	2.78E-03	3.22E-04	1.75E-03	1.12E-03	1.39E-06	1.14E-04	388.9	1.50E-02	8.90E-03
SI34_W	0.75	743	0	1	1.26E+00	3.02E-01	6.12E-03	7.40E-03	6.71E-03	3.44E-03	3.98E-04	2.16E-03	1.38E-03	1.72E-06	1.41E-04	479.7	1.85E-02	1.10E-02
SI34_W	0.75	800	0	1	1.35E+00	3.17E-01	6.55E-03	7.96E-03	7.22E-03	3.69E-03	4.27E-04	2.33E-03	1.48E-03	1.85E-06	1.51E-04	513.0	1.99E-02	1.18E-02
SI34_W	0.75	555	0	1	9.38E-01	2.13E-01	4.51E-03	5.52E-03	5.01E-03	2.56E-03	2.96E-04	1.61E-03	1.03E-03	1.28E-06	1.05E-04	353.6	1.38E-02	8.20E-03
SI34_W	0.75	367	0	1	6.20E-01	1.23E-01	2.91E-03	3.65E-03	3.31E-03	1.68E-03	1.95E-04	1.06E-03	6.79E-04	8.48E-07	6.90E-05	228.0	9.08E-03	5.42E-03
SI34_W	0.75	311	0	1	5.25E-01	9.35E-02	2.42E-03	3.09E-03	2.80E-03	1.42E-03	1.64E-04	8.93E-04	5.75E-04	7.18E-07	5.82E-05	189.6	7.65E-03	4.59E-03
SI34_W	0.75	263	0	1	4.45E-01	7.13E-02	2.02E-03	2.62E-03	2.38E-03	1.20E-03	1.39E-04	7.56E-04	4.88E-04	6.09E-07	4.92E-05	158.2	6.47E-03	3.89E-03
SI34_W	0.75	216	0	1	3.66E-01	5.26E-02	1.66E-03	2.15E-03	1.95E-03	9.83E-04	1.14E-04	6.19E-04	4.01E-04	5.00E-07	4.03E-05	128.1	5.30E-03	3.20E-03
SI34_W	0.75	160	0	1	2.70E-01	3.48E-02	1.23E-03	1.59E-03	1.44E-03	7.25E-04	8.40E-05	4.56E-04	2.96E-04	3.70E-07	2.97E-05	93.4	3.91E-03	2.36E-03
SI35_E	0.75	113	0	1	1.91E-01	2.18E-02	8.66E-04	1.12E-03	1.02E-03	5.10E-04	5.91E-05	3.21E-04	2.09E-04	2.61E-07	2.09E-05	65.1	2.75E-03	1.67E-03
SI35_E	0.75	75	0	1	1.27E-01	1.31E-02	5.77E-04	7.49E-04	6.79E-04	3.39E-04	3.93E-05	2.14E-04	1.39E-04	1.74E-07	1.39E-05	42.9	1.83E-03	1.11E-03
SI35_E	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.44E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	37.1	1.60E-03	9.73E-04
SI35_E	0.75	47	0	1	7.95E-02	7.77E-03	3.61E-04	4.68E-04	4.25E-04	2.11E-04	2.45E-05	1.33E-04	8.71E-05	1.09E-07	8.66E-06	26.3	1.14E-03	6.95E-04
SI35_E	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.43E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	36.8	1.59E-03	9.73E-04
SI35_E	0.75	160	0	1	2.70E-01	2.64E-02	1.23E-03	1.59E-03	1.44E-03	7.18E-04	8.33E-05	4.52E-04	2.96E-04	3.70E-07	2.94E-05	89.3	3.87E-03	2.36E-03
SI35_E	0.75	480	0	1	8.11E-01	7.92E-02	3.68E-03	4.77E-03	4.33E-03	2.16E-03	2.50E-04	1.36E-03	8.89E-04	1.11E-06	8.84E-05	269.5	1.16E-02	7.09E-03
SI35_E	0.75	734	0	1	1.24E+00	1.38E-01	5.63E-03	7.30E-03	6.62E-03	3.31E-03	3.84E-04	2.09E-03	1.36E-03	1.70E-06	1.36E-04	422.2	1.79E-02	1.08E-02
SI35_E	0.75	593	0	1	1.00E+00	1.46E-01	4.55E-03	5.90E-03	5.35E-03	2.69E-03	3.12E-04	1.70E-03	1.10E-03	1.37E-06	1.10E-04	352.4	1.45E-02	8.76E-03
SI35_E	0.75	489	0	1	8.27E-01	1.39E-01	3.79E-03	4.87E-03	4.42E-03	2.23E-03	2.59E-04	1.41E-03	9.06E-04	1.13E-06	9.16E-05	297.1	1.20E-02	7.23E-03
SI35_E	0.75	442	0	1	7.47E-01	1.40E-01	3.48E-03	4.40E-03	3.99E-03	2.03E-03	2.35E-04	1.28E-03	8.19E-04	1.02E-06	8.31E-05	273.1	1.09E-02	6.53E-03
SI35_E	0.75	499	0	1	8.43E-01	1.87E-01	4.05E-03	4.96E-03	4.50E-03	2.30E-03	2.66E-04	1.45E-03	9.23E-04	1.15E-06	9.43E-05	317.3	1.24E-02	7.37E-03
SI35_E	0.75	527	0	1	8.90E-01	2.05E-01	4.31E-03	5.24E-03	4.76E-03	2.43E-03	2.82E-04	1.53E-03	9.76E-04	1.22E-06	9.98E-05	337.8	1.31E-02	7.79E-03
SI35_E	0.75	536	0	1	9.06E-01	2.14E-01	4.41E-03	5.34E-03	4.84E-03	2.48E-03	2.87E-04	1.56E-03	9.93E-04	1.24E-06	1.02E-04	345.4	1.34E-02	7.92E-03
SI35_E	0.75	555	0	1	9.38E-01	2.28E-01	4.58E-03	5.52E-03	5.01E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.28E-06	1.05E-04	359.2	1.39E-02	8.20E-03
SI35_E	0.75	602	0	1	1.02E+00	2.45E-01	4.96E-03	5.99E-03	5.44E-03	2.78E-03	3.22E-04	1.75E-03	1.12E-03	1.39E-06	1.14E-04	388.9	1.50E-02	8.90E-03
SI35_E	0.75	743	0	1	1.26E+00	3.02E-01	6.12E-03	7.40E-03	6.71E-03	3.44E-03	3.98E-04	2.16E-03	1.38E-03	1.72E-06	1.41E-04	479.7	1.85E-02	1.10E-02
SI35_E	0.75	800	0	1	1.35E+00	3.17E-01	6.55E-03	7.96E-03	7.22E-03	3.69E-03	4.27E-04	2.33E-03	1.48E-03	1.85E-06	1.51E-04	513.0	1.99E-02	1.18E-02
SI35_E	0.75	555	0	1	9.38E-01	2.13E-01	4.51E-03	5.52E-03	5.01E-03	2.56E-03	2.96E-04	1.61E-03	1.03E-03	1.28E-06	1.05E-04	353.6	1.38E-02	8.20E-03
SI35_E	0.75	367	0	1	6.20E-01	1.23E-01	2.91E-03	3.65E-03	3.31E-03	1.68E-03	1.95E-04	1.06E-03	6.79E-04	8.48E-07	6.90E-05	228.0	9.08E-03	5.42E-03
SI35_E	0.75	311	0	1	5.25E-01	9.35E-02	2.42E-03	3.09E-03	2.80E-03	1.42E-03	1.64E-04	8.93E-04	5.75E-04	7.18E-07	5.82E-05	189.6	7.65E-03	4.59E-03
SI35_E	0.75	263	0	1	4.45E-01	7.13E-02	2.02E-03	2.62E-03	2.38E-03	1.20E-03	1.39E-04	7.56E-04	4.88E-04	6.09E-07	4.92E-05	158.2	6.47E-03	3.89E-03
SI35_E	0.75	216	0	1	3.66E-01	5.26E-02	1.66E-03	2.15E-03	1.95E-03	9.83E-04	1.14E-04	6.19E-04	4.01E-04	5.00E-07	4.03E-05	128.1	5.30E-03	3.20E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	160	0	1	2.70E-01	3.48E-02	1.23E-03	1.59E-03	1.44E-03	7.25E-04	8.40E-05	4.56E-04	2.96E-04	3.70E-07	2.97E-05	93.4	3.91E-03	2.36E-03
SI35_W	0.75	113	0	1	1.91E-01	2.18E-02	8.66E-04	1.12E-03	1.02E-03	5.10E-04	5.91E-05	3.21E-04	2.09E-04	2.61E-07	2.09E-05	65.1	2.75E-03	1.67E-03
SI35_W	0.75	75	0	1	1.27E-01	1.31E-02	5.77E-04	7.49E-04	6.79E-04	3.39E-04	3.93E-05	2.14E-04	1.39E-04	1.74E-07	1.39E-05	42.9	1.83E-03	1.11E-03
SI35_W	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.44E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	37.1	1.60E-03	9.73E-04
SI35_W	0.75	47	0	1	7.95E-02	7.77E-03	3.61E-04	4.68E-04	4.25E-04	2.11E-04	2.45E-05	1.33E-04	8.71E-05	1.09E-07	8.66E-06	26.3	1.14E-03	6.95E-04
SI35_W	0.75	66	0	1	1.11E-01	1.09E-02	5.05E-04	6.55E-04	5.95E-04	2.96E-04	3.43E-05	1.86E-04	1.22E-04	1.52E-07	1.21E-05	36.8	1.59E-03	9.73E-04
SI35_W	0.75	160	0	1	2.70E-01	2.64E-02	1.23E-03	1.59E-03	1.44E-03	7.18E-04	8.33E-05	4.52E-04	2.96E-04	3.70E-07	2.94E-05	89.3	3.87E-03	2.36E-03
SI35_W	0.75	480	0	1	8.11E-01	7.92E-02	3.68E-03	4.77E-03	4.33E-03	2.16E-03	2.50E-04	1.36E-03	8.89E-04	1.11E-06	8.84E-05	269.5	1.16E-02	7.09E-03
SI35_W	0.75	734	0	1	1.24E+00	1.38E-01	5.63E-03	7.30E-03	6.62E-03	3.31E-03	3.84E-04	2.09E-03	1.36E-03	1.70E-06	1.36E-04	422.2	1.79E-02	1.08E-02
SI35_W	0.75	593	0	1	1.00E+00	1.46E-01	4.55E-03	5.90E-03	5.35E-03	2.69E-03	3.12E-04	1.70E-03	1.10E-03	1.37E-06	1.10E-04	352.4	1.45E-02	8.76E-03
SI35_W	0.75	489	0	1	8.27E-01	1.39E-01	3.79E-03	4.87E-03	4.42E-03	2.23E-03	2.59E-04	1.41E-03	9.06E-04	1.13E-06	9.16E-05	297.1	1.20E-02	7.23E-03
SI35_W	0.75	442	0	1	7.47E-01	1.40E-01	3.48E-03	4.40E-03	3.99E-03	2.03E-03	2.35E-04	1.28E-03	8.19E-04	1.02E-06	8.31E-05	273.1	1.09E-02	6.53E-03
SI35_W	0.75	499	0	1	8.43E-01	1.87E-01	4.05E-03	4.96E-03	4.50E-03	2.30E-03	2.66E-04	1.45E-03	9.23E-04	1.15E-06	9.43E-05	317.3	1.24E-02	7.37E-03
SI35_W	0.75	527	0	1	8.90E-01	2.05E-01	4.31E-03	5.24E-03	4.76E-03	2.43E-03	2.82E-04	1.53E-03	9.76E-04	1.22E-06	9.98E-05	337.8	1.31E-02	7.79E-03
SI35_W	0.75	536	0	1	9.06E-01	2.14E-01	4.41E-03	5.34E-03	4.84E-03	2.48E-03	2.87E-04	1.56E-03	9.93E-04	1.24E-06	1.02E-04	345.4	1.34E-02	7.92E-03
SI35_W	0.75	555	0	1	9.38E-01	2.28E-01	4.58E-03	5.52E-03	5.01E-03	2.57E-03	2.97E-04	1.62E-03	1.03E-03	1.28E-06	1.05E-04	359.2	1.39E-02	8.20E-03
SI35_W	0.75	602	0	1	1.02E+00	2.45E-01	4.96E-03	5.99E-03	5.44E-03	2.78E-03	3.22E-04	1.75E-03	1.12E-03	1.39E-06	1.14E-04	388.9	1.50E-02	8.90E-03
SI35_W	0.75	743	0	1	1.26E+00	3.02E-01	6.12E-03	7.40E-03	6.71E-03	3.44E-03	3.98E-04	2.16E-03	1.38E-03	1.72E-06	1.41E-04	479.7	1.85E-02	1.10E-02
SI35_W	0.75	800	0	1	1.35E+00	3.17E-01	6.55E-03	7.96E-03	7.22E-03	3.69E-03	4.27E-04	2.33E-03	1.48E-03	1.85E-06	1.51E-04	513.0	1.99E-02	1.18E-02
SI35_W	0.75	555	0	1	9.38E-01	2.13E-01	4.51E-03	5.52E-03	5.01E-03	2.56E-03	2.96E-04	1.61E-03	1.03E-03	1.28E-06	1.05E-04	353.6	1.38E-02	8.20E-03
SI35_W	0.75	367	0	1	6.20E-01	1.23E-01	2.91E-03	3.65E-03	3.31E-03	1.68E-03	1.95E-04	1.06E-03	6.79E-04	8.48E-07	6.90E-05	228.0	9.08E-03	5.42E-03
SI35_W	0.75	311	0	1	5.25E-01	9.35E-02	2.42E-03	3.09E-03	2.80E-03	1.42E-03	1.64E-04	8.93E-04	5.75E-04	7.18E-07	5.82E-05	189.6	7.65E-03	4.59E-03
SI35_W	0.75	263	0	1	4.45E-01	7.13E-02	2.02E-03	2.62E-03	2.38E-03	1.20E-03	1.39E-04	7.56E-04	4.88E-04	6.09E-07	4.92E-05	158.2	6.47E-03	3.89E-03
SI35_W	0.75	216	0	1	3.66E-01	5.26E-02	1.66E-03	2.15E-03	1.95E-03	9.83E-04	1.14E-04	6.19E-04	4.01E-04	5.00E-07	4.03E-05	128.1	5.30E-03	3.20E-03
SI35_W	0.75	160	0	1	2.70E-01	3.48E-02	1.23E-03	1.59E-03	1.44E-03	7.25E-04	8.40E-05	4.56E-04	2.96E-04	3.70E-07	2.97E-05	93.4	3.91E-03	2.36E-03
SI36_E	0.75	120	0	1	2.04E-01	2.33E-02	9.24E-04	1.20E-03	1.09E-03	5.44E-04	6.31E-05	3.43E-04	2.23E-04	2.78E-07	2.23E-05	69.4	2.94E-03	1.78E-03
SI36_E	0.75	80	0	1	1.36E-01	1.40E-02	6.16E-04	7.99E-04	7.25E-04	3.62E-04	4.20E-05	2.28E-04	1.49E-04	1.86E-07	1.48E-05	45.8	1.95E-03	1.19E-03
SI36_E	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	39.6	1.70E-03	1.04E-03
SI36_E	0.75	50	0	1	8.48E-02	8.29E-03	3.85E-04	5.00E-04	4.53E-04	2.26E-04	2.62E-05	1.42E-04	9.30E-05	1.16E-07	9.24E-06	28.1	1.22E-03	7.42E-04
SI36_E	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.66E-05	1.99E-04	1.30E-04	1.62E-07	1.29E-05	39.2	1.70E-03	1.04E-03
SI36_E	0.75	171	0	1	2.88E-01	2.82E-02	1.31E-03	1.70E-03	1.54E-03	7.67E-04	8.89E-05	4.82E-04	3.16E-04	3.94E-07	3.14E-05	95.3	4.13E-03	2.52E-03
SI36_E	0.75	512	0	1	8.65E-01	8.45E-02	3.93E-03	5.10E-03	4.62E-03	2.30E-03	2.67E-04	1.45E-03	9.48E-04	1.18E-06	9.43E-05	287.6	1.24E-02	7.57E-03
SI36_E	0.75	783	0	1	1.32E+00	1.47E-01	6.01E-03	7.79E-03	7.07E-03	3.54E-03	4.10E-04	2.23E-03	1.45E-03	1.81E-06	1.45E-04	450.6	1.91E-02	1.16E-02
SI36_E	0.75	633	0	1	1.07E+00	1.56E-01	4.85E-03	6.29E-03	5.71E-03	2.88E-03	3.33E-04	1.81E-03	1.17E-03	1.46E-06	1.18E-04	376.1	1.55E-02	9.35E-03
SI36_E	0.75	522	0	1	8.82E-01	1.49E-01	4.05E-03	5.20E-03	4.71E-03	2.38E-03	2.76E-04	1.50E-03	9.67E-04	1.21E-06	9.77E-05	317.0	1.29E-02	7.71E-03
SI36_E	0.75	472	0	1	7.98E-01	1.49E-01	3.72E-03	4.70E-03	4.26E-03	2.16E-03	2.50E-04	1.36E-03	8.74E-04	1.09E-06	8.87E-05	291.4	1.17E-02	6.97E-03
SI36_E	0.75	532	0	1	8.99E-01	1.99E-01	4.32E-03	5.30E-03	4.80E-03	2.45E-03	2.84E-04	1.54E-03	9.85E-04	1.23E-06	1.01E-04	338.6	1.32E-02	7.86E-03
SI36_E	0.75	562	0	1	9.50E-01	2.19E-01	4.60E-03	5.59E-03	5.08E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	360.5	1.40E-02	8.31E-03
SI36_E	0.75	572	0	1	9.67E-01	2.29E-01	4.70E-03	5.69E-03	5.17E-03	2.64E-03	3.06E-04	1.67E-03	1.06E-03	1.32E-06	1.09E-04	368.6	1.43E-02	8.46E-03
SI36_E	0.75	592	0	1	1.00E+00	2.43E-01	4.89E-03	5.89E-03	5.35E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.12E-04	383.4	1.48E-02	8.75E-03
SI36_E	0.75	643	0	1	1.09E+00	2.62E-01	5.30E-03	6.39E-03	5.80E-03	2.97E-03	3.44E-04	1.87E-03	1.19E-03	1.49E-06	1.22E-04	415.0	1.60E-02	9.50E-03
SI36_E	0.75	793	0	1	1.34E+00	3.22E-01	6.53E-03	7.89E-03	7.16E-03	3.67E-03	4.24E-04	2.31E-03	1.47E-03	1.83E-06	1.50E-04	511.9	1.98E-02	1.17E-02
SI36_E	0.75	854	0	1	1.44E+00	3.38E-01	6.99E-03	8.49E-03	7.70E-03	3.94E-03	4.56E-04	2.48E-03	1.58E-03	1.97E-06	1.62E-04	547.5	2.13E-02	1.26E-02
SI36_E	0.75	592	0	1	1.00E+00	2.27E-01	4.82E-03	5.89E-03	5.35E-03	2.73E-03	3.16E-04	1.72E-03	1.10E-03	1.37E-06	1.12E-04	377.4	1.47E-02	8.75E-03
SI36_E	0.75	392	0	1	6.62E-01	1.31E-01	3.10E-03	3.90E-03	3.54E-03	1.80E-03	2.08E-04	1.13E-03	7.25E-04	9.05E-07	7.37E-05	243.3	9.69E-03	5.79E-03
SI36_E	0.75	331	0	1	5.60E-01	9.98E-02	2.58E-03	3.30E-03	2.99E-03	1.51E-03	1.75E-04	9.53E-04	6.14E-04	7.66E-07	6.21E-05	202.3	8.17E-03	4.90E-03
SI36_E	0.75	281	0	1	4.75E-01	7.61E-02	2.16E-03	2.80E-03	2.54E-03	1.28E-03	1.48E-04	8.06E-04	5.21E-04	6.50E-07	5.25E-05	168.9	6.91E-03	4.15E-03
SI36_E	0.75	231	0	1	3.90E-01	5.62E-02	1.77E-03	2.30E-03	2.08E-03	1.05E-03	1.22E-04	6.60E-04	4.28E-04	5.34E-07	4.30E-05	136.7	5.66E-03	3.41E-03
SI36_E	0.75	171	0	1	2.88E-01	3.72E-02	1.31E-03	1.70E-03	1.54E-03	7.73E-04	8.96E-05	4.87E-04	3.16E-04	3.94E-07	3.17E-05	99.7	4.17E-03	2.52E-03
SI36_W	0.75	120	0	1	2.04E-01	2.33E-02	9.24E-04	1.20E-03	1.09E-03	5.44E-04	6.31E-05	3.43E-04	2.23E-04	2.78E-07	2.23E-05	69.4	2.94E-03	1.78E-03
SI36_W	0.75	80	0	1	1.36E-01	1.40E-02	6.16E-04	7.99E-04	7.25E-04	3.62E-04	4.20E-05	2.28E-04	1.49E-04	1.86E-07	1.48E-05	45.8	1.95E-03	1.19E-03
SI36_W	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	39.6	1.70E-03	1.04E-03
SI36_W	0.75	50	0	1	8.48E-02	8.29E-03	3.85E-04	5.00E-04	4.53E-04	2.26E-04	2.62E-05	1.42E-04	9.30E-05	1.16E-07	9.24E-06	28.1	1.22E-03	7.42E-04
SI36_W	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.66E-05	1.99E-04	1.30E-04	1.62E-07	1.29E-05	39.2	1.70E-03	1.04E-03
SI36_W	0.75	171	0	1	2.88E-01	2.82E-02	1.31E-03	1.70E-03	1.54E-03	7.67E-04	8.89E-05	4.82E-04	3.16E-04	3.94E-07	3.14E-05	95.3	4.13E-03	2.52E-03
SI36_W	0.75	512	0	1	8.65E-01	8.45E-02	3.93E-03	5.10E-03	4.62E-03	2.30E-03	2.67E-04	1.45E-03	9.48E-04	1.18E-06	9.43E-05	287.6	1.24E-02	7.57E-03
SI36_W	0.75	783	0	1	1.32E+00	1.47E-01	6.01E-03	7.79E-03	7.07E-03	3.54E-03	4.10E-04	2.23E-03	1.45E-03	1.81E-06	1.45E-04	450.6	1.91E-02	1.16E-02
SI36_W	0.75	633	0	1	1.07E+00	1.56E-01	4.85E-03	6.29E-03	5.71E-03	2.88E-03	3.33E-04	1.81E-03	1.17E-03	1.46E-06	1.18E-04	376.1	1.55E-02	9.35E-03
SI36_W	0.75	522	0	1	8.82E-01	1.49E-01	4.05E-03	5.20E-03	4.71E-03	2.38E-03	2.76E-04	1.50E-03	9.67E-04	1.21E-06	9.77E-05	317.0	1.29E-02	7.71E-03
SI36_W	0.75	472	0	1	7.98E-01	1.49E-01	3.72E-03	4.70E-03	4.26E-03	2.16E-03	2.50E-04	1.36E-03	8.74E-04	1.09E-06	8.87E-05	291.4	1.17E-02	6.97E-03
SI36_W	0.75	532	0	1	8.99E-01	1.99E-01	4.32E-03	5.30E-03	4.80E-03	2.45E-03	2.84E-04	1.54E-03	9.85E-04	1.23E-06	1.01E-04	338.6	1.32E-02	7.86E-03
SI36_W	0.75	562	0	1	9.50E-01	2.19E-01	4.60E-03	5.59E-03	5.08E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	360.5	1.40E-02	8.31E-03
SI36_W	0.75	572	0	1	9.67E-01	2.29E-01	4.70E-03	5.69E-03	5.17E-03	2.64E-03	3.06E-04	1.67E-03	1.06E-03	1.32E-06	1.09E-04	368.6	1.43E-02	8.46E-03
SI36_W	0.75	592	0	1	1.00E+00	2.43E-01	4.89E-03	5.89E-03	5.35E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.12E-04	383.4	1.48E-02	8.75E-03
SI36_W	0.75	643	0	1	1.09E+00	2.62E-01	5.30E-03	6.39E-03	5.80E-03	2.97E-03	3.44E-04	1.87E-03	1.19E-03	1.49E-06	1.22E-04	415.0	1.60E-02	9.50E-03
SI36_W	0.75	793	0	1	1.34E+00	3.22E-01	6.53E-03	7.89E-03	7.16E-03	3.67E-03	4.24E-04	2.31E-03	1.47E-03	1.83E-06	1.50E-04	511.9	1.98E-02	1.17E-02
SI36_W	0.75	854	0	1	1.44E+00	3.38E-01	6.99E-03	8.49E-03	7.70E-03	3.94E-03	4.56E-04	2.48E-03	1.58E-03	1.97E-06	1.62E-04	547.5	2.13E-02	1.26E-02
SI36_W	0.75	592	0	1	1.00E+00	2.27E-01	4.82E-03	5.89E-03	5.35E-03	2.73E-03	3.16E-04	1.72E-03	1.10E-03	1.37E-06	1.12E-04	377.4	1.47E-02	8.75E-03
SI36_W	0.75	392	0	1	6.62E-01	1.31E-01	3.10E-03	3.90E-03	3.54E-03	1.80E-03	2.08E-04	1.13E-03	7.25E-04	9.05E-07	7.37E-05	243.3	9.69E-03	5.79E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_W	0.75	331	0	1	5.60E-01	9.98E-02	2.58E-03	3.30E-03	2.99E-03	1.51E-03	1.75E-04	9.53E-04	6.14E-04	7.66E-07	6.21E-05	202.3	8.17E-03	4.90E-03
SI36_W	0.75	281	0	1	4.75E-01	7.61E-02	2.16E-03	2.80E-03	2.54E-03	1.28E-03	1.48E-04	8.06E-04	5.21E-04	6.50E-07	5.25E-05	168.9	6.91E-03	4.15E-03
SI36_W	0.75	231	0	1	3.90E-01	5.62E-02	1.77E-03	2.30E-03	2.08E-03	1.05E-03	1.22E-04	6.60E-04	4.28E-04	5.34E-07	4.30E-05	136.7	5.66E-03	3.41E-03
SI36_W	0.75	171	0	1	2.88E-01	3.72E-02	1.31E-03	1.70E-03	1.54E-03	7.73E-04	8.96E-05	4.87E-04	3.16E-04	3.94E-07	3.17E-05	99.7	4.17E-03	2.52E-03
SI37_E	0.75	120	0	1	2.04E-01	2.33E-02	9.24E-04	1.20E-03	1.09E-03	5.44E-04	6.31E-05	3.43E-04	2.23E-04	2.78E-07	2.23E-05	69.4	2.94E-03	1.78E-03
SI37_E	0.75	80	0	1	1.36E-01	1.40E-02	6.16E-04	7.99E-04	7.25E-04	3.62E-04	4.20E-05	2.28E-04	1.49E-04	1.86E-07	1.48E-05	45.8	1.95E-03	1.19E-03
SI37_E	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.67E-05	1.99E-04	1.30E-04	1.62E-07	1.30E-05	39.6	1.70E-03	1.04E-03
SI37_E	0.75	50	0	1	8.48E-02	8.29E-03	3.85E-04	5.00E-04	4.53E-04	2.26E-04	2.62E-05	1.42E-04	9.30E-05	1.16E-07	9.24E-06	28.1	1.22E-03	7.42E-04
SI37_E	0.75	70	0	1	1.19E-01	1.16E-02	5.39E-04	6.99E-04	6.34E-04	3.16E-04	3.66E-05	1.99E-04	1.30E-04	1.62E-07	1.29E-05	39.2	1.70E-03	1.04E-03
SI37_E	0.75	171	0	1	2.88E-01	2.82E-02	1.31E-03	1.70E-03	1.54E-03	7.67E-04	8.89E-05	4.82E-04	3.16E-04	3.94E-07	3.14E-05	95.3	4.13E-03	2.52E-03
SI37_E	0.75	512	0	1	8.65E-01	8.45E-02	3.93E-03	5.10E-03	4.62E-03	2.30E-03	2.67E-04	1.45E-03	9.48E-04	1.18E-06	9.43E-05	287.6	1.24E-02	7.57E-03
SI37_E	0.75	783	0	1	1.32E+00	1.47E-01	6.01E-03	7.79E-03	7.07E-03	3.54E-03	4.10E-04	2.23E-03	1.45E-03	1.81E-06	1.45E-04	450.6	1.91E-02	1.16E-02
SI37_E	0.75	633	0	1	1.07E+00	1.56E-01	4.85E-03	6.29E-03	5.71E-03	2.88E-03	3.33E-04	1.81E-03	1.17E-03	1.46E-06	1.18E-04	376.1	1.55E-02	9.35E-03
SI37_E	0.75	522	0	1	8.82E-01	1.49E-01	4.05E-03	5.20E-03	4.71E-03	2.38E-03	2.76E-04	1.50E-03	9.67E-04	1.21E-06	9.77E-05	317.0	1.29E-02	7.71E-03
SI37_E	0.75	472	0	1	7.98E-01	1.49E-01	3.72E-03	4.70E-03	4.26E-03	2.16E-03	2.50E-04	1.36E-03	8.74E-04	1.09E-06	8.87E-05	291.4	1.17E-02	6.97E-03
SI37_E	0.75	532	0	1	8.99E-01	1.99E-01	4.32E-03	5.30E-03	4.80E-03	2.45E-03	2.84E-04	1.54E-03	9.85E-04	1.23E-06	1.01E-04	338.6	1.32E-02	7.86E-03
SI37_E	0.75	562	0	1	9.50E-01	2.19E-01	4.60E-03	5.59E-03	5.08E-03	2.60E-03	3.01E-04	1.64E-03	1.04E-03	1.30E-06	1.07E-04	360.5	1.40E-02	8.31E-03
SI37_E	0.75	572	0	1	9.67E-01	2.29E-01	4.70E-03	5.69E-03	5.17E-03	2.64E-03	3.06E-04	1.67E-03	1.06E-03	1.32E-06	1.09E-04	368.6	1.43E-02	8.46E-03
SI37_E	0.75	592	0	1	1.00E+00	2.43E-01	4.89E-03	5.89E-03	5.35E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.12E-04	383.4	1.48E-02	8.75E-03
SI37_E	0.75	643	0	1	1.09E+00	2.62E-01	5.30E-03	6.39E-03	5.80E-03	2.97E-03	3.44E-04	1.87E-03	1.19E-03	1.49E-06	1.22E-04	415.0	1.60E-02	9.50E-03
SI37_E	0.75	793	0	1	1.34E+00	3.22E-01	6.53E-03	7.89E-03	7.16E-03	3.67E-03	4.24E-04	2.31E-03	1.47E-03	1.83E-06	1.50E-04	511.9	1.98E-02	1.17E-02
SI37_E	0.75	854	0	1	1.44E+00	3.38E-01	6.99E-03	8.49E-03	7.70E-03	3.94E-03	4.56E-04	2.48E-03	1.58E-03	1.97E-06	1.62E-04	547.5	2.13E-02	1.26E-02
SI37_E	0.75	592	0	1	1.00E+00	2.27E-01	4.82E-03	5.89E-03	5.35E-03	2.73E-03	3.16E-04	1.72E-03	1.10E-03	1.37E-06	1.12E-04	377.4	1.47E-02	8.75E-03
SI37_E	0.75	392	0	1	6.62E-01	1.31E-01	3.10E-03	3.90E-03	3.54E-03	1.80E-03	2.08E-04	1.13E-03	7.25E-04	9.05E-07	7.37E-05	243.3	9.69E-03	5.79E-03
SI37_E	0.75	331	0	1	5.60E-01	9.98E-02	2.58E-03	3.30E-03	2.99E-03	1.51E-03	1.75E-04	9.53E-04	6.14E-04	7.66E-07	6.21E-05	202.3	8.17E-03	4.90E-03
SI37_E	0.75	281	0	1	4.75E-01	7.61E-02	2.16E-03	2.80E-03	2.54E-03	1.28E-03	1.48E-04	8.06E-04	5.21E-04	6.50E-07	5.25E-05	168.9	6.91E-03	4.15E-03
SI37_E	0.75	231	0	1	3.90E-01	5.62E-02	1.77E-03	2.30E-03	2.08E-03	1.05E-03	1.22E-04	6.60E-04	4.28E-04	5.34E-07	4.30E-05	136.7	5.66E-03	3.41E-03
SI37_E	0.75	171	0	1	2.88E-01	3.72E-02	1.31E-03	1.70E-03	1.54E-03	7.73E-04	8.96E-05	4.87E-04	3.16E-04	3.94E-07	3.17E-05	99.7	4.17E-03	2.52E-03
SI37_W	0.75	124	0	1	2.10E-01	2.40E-02	9.54E-04	1.24E-03	1.12E-03	5.62E-04	6.51E-05	3.54E-04	2.30E-04	2.87E-07	2.30E-05	71.6	3.03E-03	1.84E-03
SI37_W	0.75	83	0	1	1.40E-01	1.44E-02	6.36E-04	8.25E-04	7.48E-04	3.74E-04	4.33E-05	2.35E-04	1.53E-04	1.91E-07	1.53E-05	47.3	2.01E-03	1.22E-03
SI37_W	0.75	73	0	1	1.23E-01	1.20E-02	5.56E-04	7.22E-04	6.55E-04	3.26E-04	3.78E-05	2.05E-04	1.34E-04	1.68E-07	1.34E-05	40.9	1.76E-03	1.07E-03
SI37_W	0.75	52	0	1	8.75E-02	8.55E-03	3.97E-04	5.15E-04	4.68E-04	2.33E-04	2.70E-05	1.46E-04	9.59E-05	1.20E-07	9.54E-06	29.0	1.25E-03	7.65E-04
SI37_W	0.75	73	0	1	1.23E-01	1.20E-02	5.56E-04	7.22E-04	6.55E-04	3.26E-04	3.78E-05	2.05E-04	1.34E-04	1.68E-07	1.33E-05	40.5	1.76E-03	1.07E-03
SI37_W	0.75	176	0	1	2.98E-01	2.91E-02	1.35E-03	1.75E-03	1.59E-03	7.91E-04	9.17E-05	4.98E-04	3.26E-04	4.07E-07	3.24E-05	98.3	4.26E-03	2.60E-03
SI37_W	0.75	528	0	1	8.93E-01	8.72E-02	4.05E-03	5.26E-03	4.77E-03	2.38E-03	2.75E-04	1.49E-03	9.78E-04	1.22E-06	9.73E-05	296.7	1.28E-02	7.81E-03
SI37_W	0.75	808	0	1	1.37E+00	1.52E-01	6.20E-03	8.04E-03	7.29E-03	3.65E-03	4.23E-04	2.30E-03	1.50E-03	1.87E-06	1.50E-04	464.9	1.97E-02	1.19E-02
SI37_W	0.75	653	0	1	1.10E+00	1.61E-01	5.01E-03	6.49E-03	5.89E-03	2.97E-03	3.44E-04	1.87E-03	1.21E-03	1.51E-06	1.22E-04	388.1	1.60E-02	9.64E-03
SI37_W	0.75	539	0	1	9.10E-01	1.53E-01	4.17E-03	5.36E-03	4.86E-03	2.46E-03	2.85E-04	1.55E-03	9.98E-04	1.24E-06	1.01E-04	327.1	1.33E-02	7.96E-03
SI37_W	0.75	487	0	1	8.23E-01	1.54E-01	3.84E-03	4.85E-03	4.40E-03	2.23E-03	2.58E-04	1.40E-03	9.02E-04	1.13E-06	9.15E-05	300.7	1.20E-02	7.19E-03
SI37_W	0.75	549	0	1	9.28E-01	2.06E-01	4.46E-03	5.46E-03	4.96E-03	2.53E-03	2.93E-04	1.59E-03	1.02E-03	1.27E-06	1.04E-04	349.4	1.37E-02	8.11E-03
SI37_W	0.75	580	0	1	9.80E-01	2.26E-01	4.75E-03	5.77E-03	5.24E-03	2.68E-03	3.10E-04	1.69E-03	1.07E-03	1.34E-06	1.10E-04	372.0	1.44E-02	8.57E-03
SI37_W	0.75	591	0	1	9.98E-01	2.36E-01	4.85E-03	5.88E-03	5.33E-03	2.73E-03	3.16E-04	1.72E-03	1.09E-03	1.36E-06	1.12E-04	380.3	1.47E-02	8.73E-03
SI37_W	0.75	611	0	1	1.03E+00	2.51E-01	5.05E-03	6.08E-03	5.52E-03	2.83E-03	3.27E-04	1.78E-03	1.13E-03	1.41E-06	1.16E-04	395.6	1.53E-02	9.03E-03
SI37_W	0.75	663	0	1	1.12E+00	2.70E-01	5.46E-03	6.60E-03	5.99E-03	3.06E-03	3.55E-04	1.93E-03	1.23E-03	1.53E-06	1.26E-04	428.2	1.65E-02	9.80E-03
SI37_W	0.75	819	0	1	1.38E+00	3.33E-01	6.74E-03	8.14E-03	7.39E-03	3.78E-03	4.38E-04	2.38E-03	1.52E-03	1.89E-06	1.55E-04	528.2	2.04E-02	1.21E-02
SI37_W	0.75	881	0	1	1.49E+00	3.49E-01	7.21E-03	8.76E-03	7.95E-03	4.06E-03	4.71E-04	2.56E-03	1.63E-03	2.04E-06	1.67E-04	564.9	2.19E-02	1.30E-02
SI37_W	0.75	611	0	1	1.03E+00	2.35E-01	4.97E-03	6.08E-03	5.52E-03	2.82E-03	3.26E-04	1.77E-03	1.13E-03	1.41E-06	1.16E-04	389.4	1.52E-02	9.03E-03
SI37_W	0.75	404	0	1	6.83E-01	1.36E-01	3.20E-03	4.02E-03	3.65E-03	1.85E-03	2.15E-04	1.17E-03	7.48E-04	9.34E-07	7.60E-05	251.0	9.99E-03	5.97E-03
SI37_W	0.75	342	0	1	5.78E-01	1.03E-01	2.66E-03	3.40E-03	3.09E-03	1.56E-03	1.81E-04	9.84E-04	6.33E-04	7.90E-07	6.41E-05	208.7	8.43E-03	5.05E-03
SI37_W	0.75	290	0	1	4.90E-01	7.85E-02	2.23E-03	2.89E-03	2.62E-03	1.32E-03	1.53E-04	8.32E-04	5.37E-04	6.70E-07	5.42E-05	174.2	7.13E-03	4.29E-03
SI37_W	0.75	238	0	1	4.03E-01	5.80E-02	1.83E-03	2.37E-03	2.15E-03	1.08E-03	1.25E-04	6.81E-04	4.41E-04	5.51E-07	4.44E-05	141.1	5.84E-03	3.52E-03
SI37_W	0.75	176	0	1	2.98E-01	3.84E-02	1.35E-03	1.75E-03	1.59E-03	7.98E-04	9.25E-05	5.02E-04	3.26E-04	4.07E-07	3.27E-05	102.9	4.30E-03	2.60E-03
SI38_E	0.36	59	0	1	1.00E-01	1.14E-02	4.54E-04	5.89E-04	5.34E-04	2.67E-04	3.10E-05	1.68E-04	1.10E-04	1.37E-07	1.10E-05	34.1	1.44E-03	8.75E-04
SI38_E	0.36	39	0	1	6.67E-02	6.86E-03	3.03E-04	3.93E-04	3.56E-04	1.78E-04	2.06E-05	1.12E-04	7.31E-05	9.12E-08	7.29E-06	22.5	9.59E-04	5.83E-04
SI38_E	0.36	35	0	1	5.84E-02	5.70E-03	2.65E-04	3.44E-04	3.12E-04	1.55E-04	1.80E-05	9.78E-05	6.39E-05	7.98E-08	6.37E-06	19.5	8.37E-04	5.10E-04
SI38_E	0.36	25	0	1	4.17E-02	4.07E-03	1.89E-04	2.45E-04	2.23E-04	1.11E-04	1.29E-05	6.97E-05	4.57E-05	5.70E-08	4.54E-06	13.8	5.97E-04	3.64E-04
SI38_E	0.36	35	0	1	5.84E-02	5.70E-03	2.65E-04	3.44E-04	3.12E-04	1.55E-04	1.80E-05	9.76E-05	6.39E-05	7.98E-08	6.35E-06	19.3	8.36E-04	5.10E-04
SI38_E	0.36	84	0	1	1.42E-01	1.38E-02	6.43E-04	8.35E-04	7.57E-04	3.77E-04	4.37E-05	2.37E-04	1.55E-04	1.94E-07	1.54E-05	46.8	2.03E-03	1.24E-03
SI38_E	0.36	252	0	1	4.25E-01	4.15E-02	1.93E-03	2.50E-03	2.27E-03	1.13E-03	1.31E-04	7.12E-04	4.66E-04	5.81E-07	4.63E-05	141.3	6.10E-03	3.72E-03
SI38_E	0.36	385	0	1	6.50E-01	7.23E-02	2.95E-03	3.83E-03	3.47E-03	1.74E-03	2.01E-04	1.09E-03	7.13E-04	8.89E-07	7.12E-05	221.4	9.37E-03	5.69E-03
SI38_E	0.36	311	0	1	5.25E-01	7.68E-02	2.38E-03	3.09E-03	2.81E-03	1.41E-03	1.64E-04	8.89E-04	5.76E-04	7.18E-07	5.79E-05	184.8	7.62E-03	4.59E-03
SI38_E	0.36	257	0	1	4.34E-01	7.31E-02	1.99E-03	2.55E-03	2.32E-03	1.17E-03	1.36E-04	7.37E-04	4.75E-04	5.93E-07	4.80E-05	155.8	6.32E-03	3.79E-03
SI38_E	0.36	232	0	1	3.92E-01	7.33E-02	1.83E-03	2.31E-03	2.09E-03	1.06E-03	1.23E-04	6.69E-04	4.29E-04	5.36E-07	4.36E-05	143.2	5.73E-03	3.43E-03
SI38_E	0.36	261	0	1	4.42E-01	9.80E-02	2.12E-03	2.60E-03	2.36E-03	1.20E-03	1.40E-04	7.59E-04	4.84E-04	6.04E-07	4.94E-05	166.4	6.50E-03	3.86E-03
SI38_E	0.36	276	0	1	4.67E-01	1.08E-01	2.26E-03	2.75E-03	2.49E-03	1.28E-03	1.48E-04	8.03E-04	5.12E-04	6.39E-07	5.23E-05	177.1	6.88E-03	4.08E-03
SI38_E	0.36	281	0	1	4.75E-01	1.12E-01	2.31E-03	2.80E-03	2.54E-03	1.30E-03	1.50E-04	8.19E-04	5.21E-04	6.50E-07	5.33E-05	181.1	7.01E-03	4.16E-03
SI38_E	0.36	291	0	1	4.92E-01	1.20E-01	2.40E-03	2.90E-03	2.63E-03	1.35E-03	1.56E-04	8.48E-04	5.39E-04	6.73E-07	5.52E-05	188.4	7.26E-03	4.30E-03
SI38_E	0.36	316	0	1	5.34E-01	1.29E-01	2.60E-03	3.14E-03	2.85E-03	1.46E-03	1.69E-04	9.20E-04	5.85E-04	7.30E-07	5.99E-05	203.9	7.88E-03	4.67E-03
SI38_E	0.36	390	0	1	6.59E-01	1.58E-01	3.21E-03	3.88E-03	3.52E-03	1.80E-03	2.09E-04	1.13E-03	7.22E-04	9.01E-07	7.39E-05	251.5	9.72E-03	5.76E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI38_E	0.36	419	0	1	7.09E-01	1.66E-01	3.43E-03	4.17E-03	3.79E-03	1.94E-03	2.24E-04	1.22E-03	7.77E-04	9.69E-07	7.94E-05	269.0	1.04E-02	6.20E-03
SI38_E	0.36	291	0	1	4.92E-01	1.12E-01	2.37E-03	2.90E-03	2.63E-03	1.34E-03	1.55E-04	8.45E-04	5.39E-04	6.73E-07	5.51E-05	185.4	7.24E-03	4.30E-03
SI38_E	0.36	192	0	1	3.25E-01	6.46E-02	1.53E-03	1.91E-03	1.74E-03	8.82E-04	1.02E-04	5.56E-04	3.56E-04	4.45E-07	3.62E-05	119.5	4.76E-03	2.84E-03
SI38_E	0.36	163	0	1	2.75E-01	4.90E-02	1.27E-03	1.62E-03	1.47E-03	7.44E-04	8.62E-05	4.68E-04	3.01E-04	3.76E-07	3.05E-05	99.4	4.01E-03	2.41E-03
SI38_E	0.36	138	0	1	2.33E-01	3.74E-02	1.06E-03	1.37E-03	1.25E-03	6.29E-04	7.29E-05	3.96E-04	2.56E-04	3.19E-07	2.58E-05	83.0	3.39E-03	2.04E-03
SI38_E	0.36	113	0	1	1.92E-01	2.76E-02	8.70E-04	1.13E-03	1.02E-03	5.15E-04	5.97E-05	3.24E-04	2.10E-04	2.62E-07	2.11E-05	67.2	2.78E-03	1.68E-03
SI38_E	0.36	84	0	1	1.42E-01	1.83E-02	6.43E-04	8.35E-04	7.57E-04	3.80E-04	4.40E-05	2.39E-04	1.55E-04	1.94E-07	1.56E-05	49.0	2.05E-03	1.24E-03
SI38_W	0.39	64	0	1	1.08E-01	1.23E-02	4.90E-04	6.36E-04	5.77E-04	2.89E-04	3.35E-05	1.82E-04	1.18E-04	1.48E-07	1.18E-05	36.8	1.56E-03	9.45E-04
SI38_W	0.39	43	0	1	7.20E-02	7.41E-03	3.27E-04	4.24E-04	3.85E-04	1.92E-04	2.23E-05	1.21E-04	7.89E-05	9.85E-08	7.88E-06	24.3	1.04E-03	6.30E-04
SI38_W	0.39	37	0	1	6.30E-02	6.16E-03	2.86E-04	3.71E-04	3.37E-04	1.68E-04	1.95E-05	1.06E-04	6.91E-05	8.62E-08	6.87E-06	21.0	9.04E-04	5.51E-04
SI38_W	0.39	27	0	1	4.50E-02	4.40E-03	2.04E-04	2.65E-04	2.40E-04	1.20E-04	1.39E-05	7.53E-05	4.93E-05	6.16E-08	4.90E-06	14.9	6.45E-04	3.94E-04
SI38_W	0.39	37	0	1	6.30E-02	6.16E-03	2.86E-04	3.71E-04	3.37E-04	1.68E-04	1.94E-05	1.05E-04	6.91E-05	8.62E-08	6.86E-06	20.8	9.03E-04	5.51E-04
SI38_W	0.39	91	0	1	1.53E-01	1.50E-02	6.95E-04	9.01E-04	8.18E-04	4.07E-04	4.72E-05	2.56E-04	1.68E-04	2.09E-07	1.67E-05	50.6	2.19E-03	1.34E-03
SI38_W	0.39	272	0	1	4.59E-01	4.49E-02	2.08E-03	2.70E-03	2.45E-03	1.22E-03	1.42E-04	7.69E-04	5.03E-04	6.28E-07	5.01E-05	152.6	6.59E-03	4.02E-03
SI38_W	0.39	416	0	1	7.02E-01	7.81E-02	3.19E-03	4.14E-03	3.75E-03	1.88E-03	2.18E-04	1.18E-03	7.70E-04	9.60E-07	7.69E-05	239.1	1.01E-02	6.14E-03
SI38_W	0.39	336	0	1	5.67E-01	8.29E-02	2.58E-03	3.34E-03	3.03E-03	1.53E-03	1.77E-04	9.61E-04	6.22E-04	7.76E-07	6.26E-05	199.6	8.23E-03	4.96E-03
SI38_W	0.39	277	0	1	4.68E-01	7.89E-02	2.15E-03	2.76E-03	2.50E-03	1.26E-03	1.47E-04	7.96E-04	5.13E-04	6.40E-07	5.19E-05	168.2	6.82E-03	4.09E-03
SI38_W	0.39	250	0	1	4.23E-01	7.92E-02	1.97E-03	2.49E-03	2.26E-03	1.15E-03	1.33E-04	7.22E-04	4.64E-04	5.79E-07	4.70E-05	154.6	6.19E-03	3.70E-03
SI38_W	0.39	282	0	1	4.77E-01	1.06E-01	2.29E-03	2.81E-03	2.55E-03	1.30E-03	1.51E-04	8.20E-04	5.23E-04	6.53E-07	5.34E-05	179.7	7.02E-03	4.17E-03
SI38_W	0.39	298	0	1	5.04E-01	1.16E-01	2.44E-03	2.97E-03	2.69E-03	1.38E-03	1.59E-04	8.68E-04	5.53E-04	6.90E-07	5.65E-05	191.3	7.43E-03	4.41E-03
SI38_W	0.39	304	0	1	5.13E-01	1.21E-01	2.50E-03	3.02E-03	2.74E-03	1.40E-03	1.62E-04	8.84E-04	5.63E-04	7.02E-07	5.76E-05	195.6	7.57E-03	4.49E-03
SI38_W	0.39	314	0	1	5.31E-01	1.29E-01	2.60E-03	3.13E-03	2.84E-03	1.45E-03	1.68E-04	9.16E-04	5.82E-04	7.27E-07	5.97E-05	203.4	7.84E-03	4.64E-03
SI38_W	0.39	341	0	1	5.76E-01	1.39E-01	2.81E-03	3.39E-03	3.08E-03	1.58E-03	1.83E-04	9.93E-04	6.32E-04	7.88E-07	6.47E-05	220.2	8.51E-03	5.04E-03
SI38_W	0.39	421	0	1	7.11E-01	1.71E-01	3.47E-03	4.19E-03	3.80E-03	1.95E-03	2.25E-04	1.23E-03	7.80E-04	9.73E-07	7.98E-05	271.6	1.05E-02	6.22E-03
SI38_W	0.39	453	0	1	7.65E-01	1.79E-01	3.71E-03	4.51E-03	4.09E-03	2.09E-03	2.42E-04	1.32E-03	8.39E-04	1.05E-06	8.58E-05	290.5	1.13E-02	6.69E-03
SI38_W	0.39	314	0	1	5.31E-01	1.21E-01	2.56E-03	3.13E-03	2.84E-03	1.45E-03	1.68E-04	9.13E-04	5.82E-04	7.27E-07	5.95E-05	200.3	7.82E-03	4.64E-03
SI38_W	0.39	208	0	1	3.51E-01	6.98E-02	1.65E-03	2.07E-03	1.88E-03	9.53E-04	1.10E-04	6.00E-04	3.85E-04	4.80E-07	3.91E-05	129.1	5.14E-03	3.07E-03
SI38_W	0.39	176	0	1	2.97E-01	5.29E-02	1.37E-03	1.75E-03	1.59E-03	8.03E-04	9.31E-05	5.06E-04	3.26E-04	4.06E-07	3.30E-05	107.3	4.33E-03	2.60E-03
SI38_W	0.39	149	0	1	2.52E-01	4.04E-02	1.14E-03	1.48E-03	1.35E-03	6.80E-04	7.87E-05	4.28E-04	2.76E-04	3.45E-07	2.79E-05	89.6	3.66E-03	2.20E-03
SI38_W	0.39	123	0	1	2.07E-01	2.98E-02	9.40E-04	1.22E-03	1.11E-03	5.57E-04	6.45E-05	3.50E-04	2.27E-04	2.83E-07	2.28E-05	72.5	3.00E-03	1.81E-03
SI38_W	0.39	91	0	1	1.53E-01	1.97E-02	6.95E-04	9.01E-04	8.18E-04	4.10E-04	4.76E-05	2.58E-04	1.68E-04	2.09E-07	1.68E-05	52.9	2.21E-03	1.34E-03
SI39_E	0.25	40	0	1	6.81E-02	7.78E-03	3.09E-04	4.01E-04	3.64E-04	1.82E-04	2.11E-05	1.15E-04	7.46E-05	9.31E-08	7.46E-06	23.2	9.82E-04	5.95E-04
SI39_E	0.25	27	0	1	4.54E-02	4.67E-03	2.06E-04	2.67E-04	2.43E-04	1.21E-04	1.40E-05	7.62E-05	4.97E-05	6.21E-08	4.96E-06	15.3	6.53E-04	3.97E-04
SI39_E	0.25	24	0	1	3.97E-02	3.88E-03	1.80E-04	2.34E-04	2.12E-04	1.06E-04	1.23E-05	6.65E-05	4.35E-05	5.43E-08	4.33E-06	13.2	5.70E-04	3.47E-04
SI39_E	0.25	17	0	1	2.84E-02	2.77E-03	1.29E-04	1.67E-04	1.52E-04	7.54E-05	8.75E-06	4.75E-05	3.11E-05	3.88E-08	3.09E-06	9.4	4.07E-04	2.48E-04
SI39_E	0.25	24	0	1	3.97E-02	3.88E-03	1.80E-04	2.34E-04	2.12E-04	1.06E-04	1.22E-05	6.64E-05	4.35E-05	5.43E-08	4.32E-06	13.1	5.69E-04	3.47E-04
SI39_E	0.25	57	0	1	9.65E-02	9.42E-03	4.38E-04	5.68E-04	5.15E-04	2.56E-04	2.97E-05	1.61E-04	1.06E-04	1.32E-07	1.05E-05	31.9	1.38E-03	8.44E-04
SI39_E	0.25	171	0	1	2.89E-01	2.83E-02	1.31E-03	1.70E-03	1.55E-03	7.70E-04	8.93E-05	4.85E-04	3.17E-04	3.96E-07	3.15E-05	96.2	4.15E-03	2.53E-03
SI39_E	0.25	262	0	1	4.43E-01	4.92E-02	2.01E-03	2.61E-03	2.36E-03	1.18E-03	1.37E-04	7.45E-04	4.85E-04	6.05E-07	4.85E-05	150.7	6.38E-03	3.87E-03
SI39_E	0.25	212	0	1	3.58E-01	5.22E-02	1.62E-03	2.11E-03	1.91E-03	9.62E-04	1.11E-04	6.05E-04	3.92E-04	4.89E-07	3.94E-05	125.8	5.19E-03	3.13E-03
SI39_E	0.25	175	0	1	2.95E-01	4.97E-02	1.35E-03	1.74E-03	1.58E-03	7.97E-04	9.23E-05	5.02E-04	3.23E-04	4.04E-07	3.27E-05	106.0	4.30E-03	2.58E-03
SI39_E	0.25	158	0	1	2.67E-01	4.99E-02	1.24E-03	1.57E-03	1.42E-03	7.23E-04	8.37E-05	4.55E-04	2.92E-04	3.65E-07	2.96E-05	97.5	3.90E-03	2.33E-03
SI39_E	0.25	178	0	1	3.01E-01	6.67E-02	1.44E-03	1.77E-03	1.61E-03	8.20E-04	9.50E-05	5.17E-04	3.30E-04	4.11E-07	3.37E-05	113.2	4.42E-03	2.63E-03
SI39_E	0.25	188	0	1	3.18E-01	7.32E-02	1.54E-03	1.87E-03	1.70E-03	8.68E-04	1.01E-04	5.47E-04	3.48E-04	4.35E-07	3.56E-05	120.6	4.68E-03	2.78E-03
SI39_E	0.25	191	0	1	3.23E-01	7.65E-02	1.57E-03	1.90E-03	1.73E-03	8.84E-04	1.02E-04	5.57E-04	3.55E-04	4.42E-07	3.63E-05	123.3	4.77E-03	2.83E-03
SI39_E	0.25	198	0	1	3.35E-01	8.14E-02	1.64E-03	1.97E-03	1.79E-03	9.16E-04	1.06E-04	5.77E-04	3.67E-04	4.58E-07	3.76E-05	128.2	4.94E-03	2.93E-03
SI39_E	0.25	215	0	1	3.63E-01	8.75E-02	1.77E-03	2.14E-03	1.94E-03	9.93E-04	1.15E-04	6.26E-04	3.98E-04	4.97E-07	4.08E-05	138.8	5.36E-03	3.18E-03
SI39_E	0.25	265	0	1	4.48E-01	1.08E-01	2.18E-03	2.64E-03	2.39E-03	1.23E-03	1.42E-04	7.72E-04	4.91E-04	6.13E-07	5.03E-05	171.2	6.62E-03	3.92E-03
SI39_E	0.25	285	0	1	4.82E-01	1.13E-01	2.34E-03	2.84E-03	2.58E-03	1.32E-03	1.53E-04	8.30E-04	5.29E-04	6.60E-07	5.41E-05	183.1	7.11E-03	4.22E-03
SI39_E	0.25	198	0	1	3.35E-01	7.61E-02	1.61E-03	1.97E-03	1.79E-03	9.13E-04	1.06E-04	5.75E-04	3.67E-04	4.58E-07	3.75E-05	126.2	4.93E-03	2.93E-03
SI39_E	0.25	131	0	1	2.21E-01	4.40E-02	1.04E-03	1.30E-03	1.18E-03	6.01E-04	6.96E-05	3.78E-04	2.42E-04	3.03E-07	2.46E-05	81.4	3.24E-03	1.94E-03
SI39_E	0.25	111	0	1	1.87E-01	3.34E-02	8.63E-04	1.10E-03	1.00E-03	5.06E-04	5.87E-05	3.19E-04	2.05E-04	2.56E-07	2.08E-05	67.7	2.73E-03	1.64E-03
SI39_E	0.25	94	0	1	1.59E-01	2.55E-02	7.21E-04	9.36E-04	8.49E-04	4.28E-04	4.96E-05	2.70E-04	1.74E-04	2.17E-07	1.76E-05	56.5	2.31E-03	1.39E-03
SI39_E	0.25	77	0	1	1.31E-01	1.88E-02	5.92E-04	7.69E-04	6.97E-04	3.51E-04	4.07E-05	2.21E-04	1.43E-04	1.78E-07	1.44E-05	45.7	1.89E-03	1.14E-03
SI39_E	0.25	57	0	1	9.65E-02	1.24E-02	4.38E-04	5.68E-04	5.15E-04	2.59E-04	3.00E-05	1.63E-04	1.06E-04	1.32E-07	1.06E-05	33.3	1.39E-03	8.44E-04
SI39_W	0.17	27	0	1	4.54E-02	5.18E-03	2.06E-04	2.67E-04	2.42E-04	1.21E-04	1.41E-05	7.63E-05	4.97E-05	6.20E-08	4.97E-06	15.5	6.54E-04	3.97E-04
SI39_W	0.17	18	0	1	3.02E-02	3.11E-03	1.37E-04	1.78E-04	1.62E-04	8.07E-05	9.35E-06	5.08E-05	3.31E-05	4.13E-08	3.31E-06	10.2	4.35E-04	2.64E-04
SI39_W	0.17	16	0	1	2.65E-02	2.58E-03	1.20E-04	1.56E-04	1.41E-04	7.04E-05	8.17E-06	4.43E-05	2.90E-05	3.62E-08	2.89E-06	8.8	3.80E-04	2.31E-04
SI39_W	0.17	11	0	1	1.89E-02	1.85E-03	8.58E-05	1.11E-04	1.01E-04	5.02E-05	5.83E-06	3.16E-05	2.07E-05	2.58E-08	2.06E-06	6.3	2.71E-04	1.65E-04
SI39_W	0.17	16	0	1	2.65E-02	2.58E-03	1.20E-04	1.56E-04	1.41E-04	7.03E-05	8.15E-06	4.42E-05	2.90E-05	3.62E-08	2.88E-06	8.7	3.79E-04	2.31E-04
SI39_W	0.17	38	0	1	6.43E-02	6.28E-03	2.92E-04	3.78E-04	3.43E-04	1.71E-04	1.98E-05	1.07E-04	7.04E-05	8.78E-08	7.00E-06	21.2	9.20E-04	5.62E-04
SI39_W	0.17	114	0	1	1.93E-01	1.88E-02	8.75E-04	1.13E-03	1.03E-03	5.13E-04	5.95E-05	3.23E-04	2.11E-04	2.64E-07	2.10E-05	64.1	2.76E-03	1.69E-03
SI39_W	0.17	174	0	1	2.95E-01	3.28E-02	1.34E-03	1.74E-03	1.57E-03	7.88E-04	9.13E-05	4.96E-04	3.23E-04	4.03E-07	3.23E-05	100.4	4.25E-03	2.58E-03
SI39_W	0.17	141	0	1	2.38E-01	3.48E-02	1.08E-03	1.40E-03	1.27E-03	6.40E-04	7.42E-05	4.03E-04	2.61E-04	3.26E-07	2.63E-05	83.8	3.45E-03	2.08E-03
SI39_W	0.17	116	0	1	1.97E-01	3.31E-02	9.01E-04	1.16E-03	1.05E-03	5.31E-04	6.15E-05	3.34E-04	2.15E-04	2.69E-07	2.18E-05	70.6	2.86E-03	1.72E-03
SI39_W	0.17	105	0	1	1.78E-01	3.32E-02	8.28E-04	1.05E-03	9.49E-04	4.81E-04	5.58E-05	3.03E-04	1.95E-04	2.43E-07	1.97E-05	64.9	2.60E-03	1.55E-03
SI39_W	0.17	119	0	1	2.00E-01	4.44E-02	9.62E-04	1.18E-03	1.07E-03	5.46E-04	6.33E-05	3.44E-04	2.19E-04	2.74E-07	2.24E-05	75.4	2.95E-03	1.75E-03
SI39_W	0.17	125	0	1	2.12E-01	4.87E-02	1.02E-03	1.25E-03	1.13E-03	5.78E-04	6.69E-05	3.64E-04	2.32E-04	2.89E-07	2.37E-05	80.3	3.12E-03	1.85E-03
SI39_W	0.17	127	0	1	2.15E-01	5.09E-02	1.05E-03	1.27E-03	1.15E-03	5.89E-04	6.82E-05	3.71E-04	2.36E-04	2.95E-07	2.42E-05	82.1	3.18E-03	1.88E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_W	0.17	132	0	1	2.23E-01	5.42E-02	1.09E-03	1.31E-03	1.19E-03	6.10E-04	7.07E-05	3.84E-04	2.44E-04	3.05E-07	2.50E-05	85.4	3.29E-03	1.95E-03
SI39_W	0.17	143	0	1	2.42E-01	5.83E-02	1.18E-03	1.42E-03	1.29E-03	6.62E-04	7.66E-05	4.17E-04	2.65E-04	3.31E-07	2.72E-05	92.4	3.57E-03	2.12E-03
SI39_W	0.17	177	0	1	2.99E-01	7.18E-02	1.45E-03	1.76E-03	1.59E-03	8.17E-04	9.45E-05	5.15E-04	3.27E-04	4.08E-07	3.35E-05	114.0	4.41E-03	2.61E-03
SI39_W	0.17	190	0	1	3.21E-01	7.53E-02	1.56E-03	1.89E-03	1.72E-03	8.77E-04	1.02E-04	5.53E-04	3.52E-04	4.39E-07	3.60E-05	121.9	4.73E-03	2.81E-03
SI39_W	0.17	132	0	1	2.23E-01	5.07E-02	1.07E-03	1.31E-03	1.19E-03	6.08E-04	7.04E-05	3.83E-04	2.44E-04	3.05E-07	2.50E-05	84.1	3.28E-03	1.95E-03
SI39_W	0.17	87	0	1	1.47E-01	2.93E-02	6.92E-04	8.68E-04	7.87E-04	4.00E-04	4.63E-05	2.52E-04	1.62E-04	2.02E-07	1.64E-05	54.2	2.16E-03	1.29E-03
SI39_W	0.17	74	0	1	1.25E-01	2.22E-02	5.75E-04	7.34E-04	6.66E-04	3.37E-04	3.91E-05	2.12E-04	1.37E-04	1.71E-07	1.38E-05	45.1	1.82E-03	1.09E-03
SI39_W	0.17	63	0	1	1.06E-01	1.70E-02	4.80E-04	6.23E-04	5.65E-04	2.85E-04	3.30E-05	1.80E-04	1.16E-04	1.45E-07	1.17E-05	37.6	1.54E-03	9.25E-04
SI39_W	0.17	51	0	1	8.69E-02	1.25E-02	3.95E-04	5.12E-04	4.64E-04	2.34E-04	2.71E-05	1.47E-04	9.52E-05	1.19E-07	9.58E-06	30.4	1.26E-03	7.60E-04
SI39_W	0.17	38	0	1	6.43E-02	8.28E-03	2.92E-04	3.78E-04	3.43E-04	1.72E-04	2.00E-05	1.08E-04	7.04E-05	8.79E-08	7.06E-06	22.2	9.29E-04	5.62E-04
SI40_E	0.49	76	0	1	1.29E-01	1.47E-02	5.84E-04	7.57E-04	6.87E-04	3.44E-04	3.98E-05	2.16E-04	1.41E-04	1.76E-07	1.41E-05	43.8	1.85E-03	1.12E-03
SI40_E	0.49	51	0	1	8.57E-02	8.82E-03	3.89E-04	5.05E-04	4.58E-04	2.29E-04	2.65E-05	1.44E-04	9.39E-05	1.17E-07	9.37E-06	28.9	1.23E-03	7.49E-04
SI40_E	0.49	44	0	1	7.50E-02	7.32E-03	3.40E-04	4.42E-04	4.01E-04	2.00E-04	2.31E-05	1.26E-04	8.22E-05	1.03E-07	8.18E-06	25.0	1.08E-03	6.56E-04
SI40_E	0.49	32	0	1	5.36E-02	5.23E-03	2.43E-04	3.15E-04	2.86E-04	1.42E-04	1.65E-05	8.96E-05	5.87E-05	7.32E-08	5.83E-06	17.7	7.68E-04	4.68E-04
SI40_E	0.49	44	0	1	7.50E-02	7.32E-03	3.40E-04	4.42E-04	4.01E-04	1.99E-04	2.31E-05	1.25E-04	8.22E-05	1.03E-07	8.16E-06	24.8	1.07E-03	6.56E-04
SI40_E	0.49	108	0	1	1.82E-01	1.78E-02	8.27E-04	1.07E-03	9.73E-04	4.84E-04	5.61E-05	3.05E-04	2.00E-04	2.49E-07	1.98E-05	60.2	2.61E-03	1.59E-03
SI40_E	0.49	323	0	1	5.46E-01	5.34E-02	2.48E-03	3.22E-03	2.92E-03	1.45E-03	1.69E-04	9.15E-04	5.99E-04	7.47E-07	5.96E-05	181.6	7.84E-03	4.78E-03
SI40_E	0.49	494	0	1	8.36E-01	9.29E-02	3.79E-03	4.92E-03	4.46E-03	2.23E-03	2.59E-04	1.41E-03	9.15E-04	1.14E-06	9.15E-05	284.4	1.20E-02	7.31E-03
SI40_E	0.49	399	0	1	6.75E-01	9.86E-02	3.06E-03	3.97E-03	3.60E-03	1.82E-03	2.10E-04	1.14E-03	7.39E-04	9.23E-07	7.44E-05	237.4	9.79E-03	5.90E-03
SI40_E	0.49	330	0	1	5.57E-01	9.39E-02	2.55E-03	3.28E-03	2.98E-03	1.50E-03	1.74E-04	9.47E-04	6.10E-04	7.62E-07	6.17E-05	200.1	8.11E-03	4.87E-03
SI40_E	0.49	298	0	1	5.03E-01	9.42E-02	2.35E-03	2.96E-03	2.69E-03	1.36E-03	1.58E-04	8.59E-04	5.52E-04	6.88E-07	5.60E-05	184.0	7.36E-03	4.40E-03
SI40_E	0.49	336	0	1	5.68E-01	1.26E-01	2.73E-03	3.34E-03	3.03E-03	1.55E-03	1.79E-04	9.75E-04	6.22E-04	7.76E-07	6.35E-05	213.7	8.35E-03	4.96E-03
SI40_E	0.49	355	0	1	6.00E-01	1.38E-01	2.90E-03	3.53E-03	3.20E-03	1.64E-03	1.90E-04	1.03E-03	6.57E-04	8.20E-07	6.72E-05	227.6	8.84E-03	5.25E-03
SI40_E	0.49	361	0	1	6.11E-01	1.44E-01	2.97E-03	3.60E-03	3.26E-03	1.67E-03	1.93E-04	1.05E-03	6.69E-04	8.35E-07	6.85E-05	232.7	9.01E-03	5.34E-03
SI40_E	0.49	374	0	1	6.32E-01	1.54E-01	3.09E-03	3.72E-03	3.38E-03	1.73E-03	2.00E-04	1.09E-03	6.93E-04	8.64E-07	7.10E-05	242.0	9.33E-03	5.53E-03
SI40_E	0.49	406	0	1	6.86E-01	1.65E-01	3.34E-03	4.04E-03	3.66E-03	1.88E-03	2.17E-04	1.18E-03	7.51E-04	9.38E-07	7.70E-05	262.0	1.01E-02	5.99E-03
SI40_E	0.49	501	0	1	8.46E-01	2.04E-01	4.12E-03	4.98E-03	4.52E-03	2.31E-03	2.68E-04	1.46E-03	9.28E-04	1.16E-06	9.50E-05	323.1	1.25E-02	7.40E-03
SI40_E	0.49	539	0	1	9.11E-01	2.13E-01	4.41E-03	5.36E-03	4.86E-03	2.49E-03	2.88E-04	1.57E-03	9.98E-04	1.25E-06	1.02E-04	345.6	1.34E-02	7.96E-03
SI40_E	0.49	374	0	1	6.32E-01	1.44E-01	3.04E-03	3.72E-03	3.38E-03	1.72E-03	2.00E-04	1.09E-03	6.93E-04	8.64E-07	7.07E-05	238.2	9.30E-03	5.53E-03
SI40_E	0.49	247	0	1	4.18E-01	8.30E-02	1.96E-03	2.46E-03	2.23E-03	1.13E-03	1.31E-04	7.14E-04	4.58E-04	5.71E-07	4.65E-05	153.6	6.12E-03	3.65E-03
SI40_E	0.49	209	0	1	3.54E-01	6.30E-02	1.63E-03	2.08E-03	1.89E-03	9.56E-04	1.11E-04	6.02E-04	3.87E-04	4.83E-07	3.92E-05	127.7	5.16E-03	3.09E-03
SI40_E	0.49	177	0	1	3.00E-01	4.80E-02	1.36E-03	1.77E-03	1.60E-03	8.08E-04	9.37E-05	5.09E-04	3.29E-04	4.10E-07	3.31E-05	106.6	4.36E-03	2.62E-03
SI40_E	0.49	146	0	1	2.46E-01	3.55E-02	1.12E-03	1.45E-03	1.32E-03	6.62E-04	7.67E-05	4.17E-04	2.70E-04	3.37E-07	2.71E-05	86.3	3.57E-03	2.15E-03
SI40_E	0.49	108	0	1	1.82E-01	2.35E-02	8.27E-04	1.07E-03	9.73E-04	4.88E-04	5.66E-05	3.07E-04	2.00E-04	2.49E-07	2.00E-05	63.0	2.63E-03	1.59E-03
SI40_W	0.50	74	0	1	1.25E-01	1.42E-02	5.65E-04	7.33E-04	6.65E-04	3.33E-04	3.86E-05	2.10E-04	1.36E-04	1.70E-07	1.36E-05	42.5	1.79E-03	1.09E-03
SI40_W	0.50	49	0	1	8.30E-02	8.54E-03	3.77E-04	4.89E-04	4.43E-04	2.21E-04	2.57E-05	1.39E-04	9.09E-05	1.13E-07	9.08E-06	28.0	1.19E-03	7.26E-04
SI40_W	0.50	43	0	1	7.26E-02	7.09E-03	3.30E-04	4.28E-04	3.88E-04	1.93E-04	2.24E-05	1.22E-04	7.96E-05	9.93E-08	7.92E-06	24.2	1.04E-03	6.35E-04
SI40_W	0.50	31	0	1	5.19E-02	5.07E-03	2.36E-04	3.05E-04	2.77E-04	1.38E-04	1.60E-05	8.68E-05	5.68E-05	7.09E-08	5.65E-06	17.2	7.44E-04	4.54E-04
SI40_W	0.50	43	0	1	7.26E-02	7.09E-03	3.30E-04	4.28E-04	3.88E-04	1.93E-04	2.24E-05	1.21E-04	7.96E-05	9.93E-08	7.91E-06	24.0	1.04E-03	6.35E-04
SI40_W	0.50	104	0	1	1.76E-01	1.72E-02	8.01E-04	1.04E-03	9.42E-04	4.69E-04	5.44E-05	2.95E-04	1.93E-04	2.41E-07	1.92E-05	58.3	2.53E-03	1.54E-03
SI40_W	0.50	313	0	1	5.29E-01	5.17E-02	2.40E-03	3.12E-03	2.83E-03	1.41E-03	1.63E-04	8.86E-04	5.80E-04	7.23E-07	5.77E-05	175.9	7.59E-03	4.63E-03
SI40_W	0.50	479	0	1	8.09E-01	8.99E-02	3.67E-03	4.77E-03	4.32E-03	2.16E-03	2.51E-04	1.36E-03	8.87E-04	1.11E-06	8.86E-05	275.5	1.17E-02	7.08E-03
SI40_W	0.50	387	0	1	6.54E-01	9.55E-02	2.97E-03	3.85E-03	3.49E-03	1.76E-03	2.04E-04	1.11E-03	7.16E-04	8.94E-07	7.21E-05	230.0	9.48E-03	5.72E-03
SI40_W	0.50	319	0	1	5.40E-01	9.09E-02	2.47E-03	3.18E-03	2.88E-03	1.46E-03	1.69E-04	9.18E-04	5.91E-04	7.38E-07	5.98E-05	193.8	7.86E-03	4.72E-03
SI40_W	0.50	289	0	1	4.88E-01	9.12E-02	2.27E-03	2.87E-03	2.60E-03	1.32E-03	1.53E-04	8.32E-04	5.34E-04	6.67E-07	5.42E-05	178.2	7.13E-03	4.26E-03
SI40_W	0.50	325	0	1	5.50E-01	1.22E-01	2.64E-03	3.24E-03	2.94E-03	1.50E-03	1.74E-04	9.45E-04	6.03E-04	7.52E-07	6.15E-05	207.0	8.09E-03	4.81E-03
SI40_W	0.50	344	0	1	5.81E-01	1.34E-01	2.81E-03	3.42E-03	3.10E-03	1.59E-03	1.84E-04	1.00E-03	6.37E-04	7.95E-07	6.51E-05	220.5	8.56E-03	5.08E-03
SI40_W	0.50	350	0	1	5.91E-01	1.40E-01	2.88E-03	3.48E-03	3.16E-03	1.62E-03	1.87E-04	1.02E-03	6.48E-04	8.09E-07	6.63E-05	225.4	8.72E-03	5.17E-03
SI40_W	0.50	362	0	1	6.12E-01	1.49E-01	2.99E-03	3.60E-03	3.27E-03	1.68E-03	1.94E-04	1.06E-03	6.71E-04	8.37E-07	6.87E-05	234.4	9.04E-03	5.35E-03
SI40_W	0.50	393	0	1	6.64E-01	1.60E-01	3.24E-03	3.91E-03	3.55E-03	1.82E-03	2.10E-04	1.14E-03	7.28E-04	9.08E-07	7.45E-05	253.8	9.80E-03	5.81E-03
SI40_W	0.50	485	0	1	8.20E-01	1.97E-01	3.99E-03	4.83E-03	4.38E-03	2.24E-03	2.60E-04	1.41E-03	8.98E-04	1.12E-06	9.20E-05	313.0	1.21E-02	7.17E-03
SI40_W	0.50	522	0	1	8.82E-01	2.07E-01	4.27E-03	5.19E-03	4.71E-03	2.41E-03	2.79E-04	1.52E-03	9.66E-04	1.21E-06	9.89E-05	334.8	1.30E-02	7.71E-03
SI40_W	0.50	362	0	1	6.12E-01	1.39E-01	2.94E-03	3.60E-03	3.27E-03	1.67E-03	1.93E-04	1.05E-03	6.71E-04	8.37E-07	6.85E-05	230.8	9.01E-03	5.35E-03
SI40_W	0.50	239	0	1	4.05E-01	8.04E-02	1.90E-03	2.38E-03	2.16E-03	1.10E-03	1.27E-04	6.92E-04	4.43E-04	5.53E-07	4.50E-05	148.8	5.92E-03	3.54E-03
SI40_W	0.50	203	0	1	3.42E-01	6.10E-02	1.58E-03	2.02E-03	1.83E-03	9.26E-04	1.07E-04	5.83E-04	3.75E-04	4.68E-07	3.80E-05	123.7	4.99E-03	2.99E-03
SI40_W	0.50	172	0	1	2.91E-01	4.65E-02	1.32E-03	1.71E-03	1.55E-03	7.83E-04	9.07E-05	4.93E-04	3.18E-04	3.97E-07	3.21E-05	103.3	4.22E-03	2.54E-03
SI40_W	0.50	141	0	1	2.39E-01	3.43E-02	1.08E-03	1.41E-03	1.27E-03	6.41E-04	7.43E-05	4.04E-04	2.61E-04	3.26E-07	2.63E-05	83.6	3.46E-03	2.09E-03
SI40_W	0.50	104	0	1	1.76E-01	2.27E-02	8.01E-04	1.04E-03	9.42E-04	4.73E-04	5.48E-05	2.98E-04	1.93E-04	2.41E-07	1.94E-05	61.0	2.55E-03	1.54E-03
SI41_E	0.75	111	0	1	1.87E-01	2.13E-02	8.48E-04	1.10E-03	9.98E-04	4.99E-04	5.79E-05	3.14E-04	2.05E-04	2.55E-07	2.05E-05	63.7	2.69E-03	1.63E-03
SI41_E	0.75	74	0	1	1.25E-01	1.28E-02	5.65E-04	7.33E-04	6.65E-04	3.32E-04	3.85E-05	2.09E-04	1.36E-04	1.70E-07	1.36E-05	42.0	1.79E-03	1.09E-03
SI41_E	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.83E-04	1.19E-04	1.49E-07	1.19E-05	36.3	1.56E-03	9.53E-04
SI41_E	0.75	46	0	1	7.78E-02	7.60E-03	3.53E-04	4.58E-04	4.16E-04	2.07E-04	2.40E-05	1.30E-04	8.53E-05	1.06E-07	8.48E-06	25.8	1.12E-03	6.80E-04
SI41_E	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.82E-04	1.19E-04	1.49E-07	1.19E-05	36.0	1.56E-03	9.53E-04
SI41_E	0.75	157	0	1	2.65E-01	2.58E-02	1.20E-03	1.56E-03	1.41E-03	7.03E-04	8.15E-05	4.42E-04	2.90E-04	3.62E-07	2.88E-05	87.4	3.79E-03	2.31E-03
SI41_E	0.75	470	0	1	7.94E-01	7.75E-02	3.60E-03	4.67E-03	4.24E-03	2.11E-03	2.45E-04	1.33E-03	8.70E-04	1.09E-06	8.65E-05	263.8	1.14E-02	6.94E-03
SI41_E	0.75	718	0	1	1.21E+00	1.35E-01	5.51E-03	7.15E-03	6.48E-03	3.24E-03	3.76E-04	2.04E-03	1.33E-03	1.66E-06	1.33E-04	413.3	1.75E-02	1.06E-02
SI41_E	0.75	580	0	1	9.80E-01	1.43E-01	4.45E-03	5.77E-03	5.24E-03	2.64E-03	3.06E-04	1.66E-03	1.07E-03	1.34E-06	1.08E-04	345.0	1.42E-02	8.57E-03
SI41_E	0.75	479	0	1	8.09E-01	1.36E-01	3.71E-03	4.77E-03	4.32E-03	2.19E-03	2.53E-04	1.38E-03	8.87E-04	1.11E-06	8.96E-05	290.8	1.18E-02	7.08E-03
SI41_E	0.75	433	0	1	7.31E-01	1.37E-01	3.41E-03	4.31E-03	3.91E-03	1.98E-03	2.30E-04	1.25E-03	8.01E-04	1.00E-06	8.13E-05	267.3	1.07E-02	6.40E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI41_E	0.75	488	0	1	8.25E-01	1.83E-01	3.96E-03	4.86E-03	4.41E-03	2.25E-03	2.60E-04	1.42E-03	9.04E-04	1.13E-06	9.23E-05	310.6	1.21E-02	7.21E-03
SI41_E	0.75	516	0	1	8.72E-01	2.01E-01	4.22E-03	5.13E-03	4.66E-03	2.38E-03	2.76E-04	1.50E-03	9.55E-04	1.19E-06	9.77E-05	330.7	1.28E-02	7.62E-03
SI41_E	0.75	525	0	1	8.87E-01	2.10E-01	4.31E-03	5.22E-03	4.74E-03	2.43E-03	2.81E-04	1.53E-03	9.72E-04	1.21E-06	9.95E-05	338.1	1.31E-02	7.76E-03
SI41_E	0.75	543	0	1	9.18E-01	2.23E-01	4.49E-03	5.41E-03	4.91E-03	2.51E-03	2.91E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	351.6	1.36E-02	8.03E-03
SI41_E	0.75	589	0	1	9.96E-01	2.40E-01	4.86E-03	5.86E-03	5.32E-03	2.72E-03	3.15E-04	1.72E-03	1.09E-03	1.36E-06	1.12E-04	380.7	1.47E-02	8.71E-03
SI41_E	0.75	728	0	1	1.23E+00	2.96E-01	5.99E-03	7.24E-03	6.57E-03	3.36E-03	3.89E-04	2.12E-03	1.35E-03	1.68E-06	1.38E-04	469.5	1.81E-02	1.08E-02
SI41_E	0.75	783	0	1	1.32E+00	3.10E-01	6.41E-03	7.79E-03	7.07E-03	3.61E-03	4.18E-04	2.28E-03	1.45E-03	1.81E-06	1.48E-04	502.1	1.95E-02	1.16E-02
SI41_E	0.75	543	0	1	9.18E-01	2.09E-01	4.42E-03	5.41E-03	4.91E-03	2.50E-03	2.90E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	346.1	1.35E-02	8.03E-03
SI41_E	0.75	359	0	1	6.07E-01	1.21E-01	2.85E-03	3.57E-03	3.24E-03	1.65E-03	1.91E-04	1.04E-03	6.65E-04	8.30E-07	6.76E-05	223.2	8.88E-03	5.31E-03
SI41_E	0.75	304	0	1	5.14E-01	9.15E-02	2.37E-03	3.02E-03	2.74E-03	1.39E-03	1.61E-04	8.75E-04	5.63E-04	7.02E-07	5.70E-05	185.5	7.49E-03	4.49E-03
SI41_E	0.75	258	0	1	4.36E-01	6.98E-02	1.98E-03	2.57E-03	2.33E-03	1.17E-03	1.36E-04	7.40E-04	4.77E-04	5.96E-07	4.82E-05	154.9	6.33E-03	3.81E-03
SI41_E	0.75	212	0	1	3.58E-01	5.15E-02	1.62E-03	2.11E-03	1.91E-03	9.62E-04	1.11E-04	6.06E-04	3.92E-04	4.89E-07	3.94E-05	125.4	5.19E-03	3.13E-03
SI41_E	0.75	157	0	1	2.65E-01	3.41E-02	1.20E-03	1.56E-03	1.41E-03	7.09E-04	8.22E-05	4.46E-04	2.90E-04	3.62E-07	2.91E-05	91.5	3.82E-03	2.31E-03
SI41_W	0.75	111	0	1	1.87E-01	2.13E-02	8.48E-04	1.10E-03	9.98E-04	4.99E-04	5.79E-05	3.14E-04	2.05E-04	2.55E-07	2.05E-05	63.7	2.69E-03	1.63E-03
SI41_W	0.75	74	0	1	1.25E-01	1.28E-02	5.65E-04	7.33E-04	6.65E-04	3.32E-04	3.85E-05	2.09E-04	1.36E-04	1.70E-07	1.36E-05	42.0	1.79E-03	1.09E-03
SI41_W	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.83E-04	1.19E-04	1.49E-07	1.19E-05	36.3	1.56E-03	9.53E-04
SI41_W	0.75	46	0	1	7.78E-02	7.60E-03	3.53E-04	4.58E-04	4.16E-04	2.07E-04	2.40E-05	1.30E-04	8.53E-05	1.06E-07	8.48E-06	25.8	1.12E-03	6.80E-04
SI41_W	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.82E-04	1.19E-04	1.49E-07	1.19E-05	36.0	1.56E-03	9.53E-04
SI41_W	0.75	157	0	1	2.65E-01	2.58E-02	1.20E-03	1.56E-03	1.41E-03	7.03E-04	8.15E-05	4.42E-04	2.90E-04	3.62E-07	2.88E-05	87.4	3.79E-03	2.31E-03
SI41_W	0.75	470	0	1	7.94E-01	7.75E-02	3.60E-03	4.67E-03	4.24E-03	2.11E-03	2.45E-04	1.33E-03	8.70E-04	1.09E-06	8.65E-05	263.8	1.14E-02	6.94E-03
SI41_W	0.75	718	0	1	1.21E+00	1.35E-01	5.51E-03	7.15E-03	6.48E-03	3.24E-03	3.76E-04	2.04E-03	1.33E-03	1.66E-06	1.33E-04	413.3	1.75E-02	1.06E-02
SI41_W	0.75	580	0	1	9.80E-01	1.43E-01	4.45E-03	5.77E-03	5.24E-03	2.64E-03	3.06E-04	1.66E-03	1.07E-03	1.34E-06	1.08E-04	345.0	1.42E-02	8.57E-03
SI41_W	0.75	479	0	1	8.09E-01	1.36E-01	3.71E-03	4.77E-03	4.32E-03	2.19E-03	2.53E-04	1.38E-03	8.87E-04	1.11E-06	8.96E-05	290.8	1.18E-02	7.08E-03
SI41_W	0.75	433	0	1	7.31E-01	1.37E-01	3.41E-03	4.31E-03	3.91E-03	1.98E-03	2.30E-04	1.25E-03	8.01E-04	1.00E-06	8.13E-05	267.3	1.07E-02	6.40E-03
SI41_W	0.75	488	0	1	8.25E-01	1.83E-01	3.96E-03	4.86E-03	4.41E-03	2.25E-03	2.60E-04	1.42E-03	9.04E-04	1.13E-06	9.23E-05	310.6	1.21E-02	7.21E-03
SI41_W	0.75	516	0	1	8.72E-01	2.01E-01	4.22E-03	5.13E-03	4.66E-03	2.38E-03	2.76E-04	1.50E-03	9.55E-04	1.19E-06	9.77E-05	330.7	1.28E-02	7.62E-03
SI41_W	0.75	525	0	1	8.87E-01	2.10E-01	4.31E-03	5.22E-03	4.74E-03	2.43E-03	2.81E-04	1.53E-03	9.72E-04	1.21E-06	9.95E-05	338.1	1.31E-02	7.76E-03
SI41_W	0.75	543	0	1	9.18E-01	2.23E-01	4.49E-03	5.41E-03	4.91E-03	2.51E-03	2.91E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	351.6	1.36E-02	8.03E-03
SI41_W	0.75	589	0	1	9.96E-01	2.40E-01	4.86E-03	5.86E-03	5.32E-03	2.72E-03	3.15E-04	1.72E-03	1.09E-03	1.36E-06	1.12E-04	380.7	1.47E-02	8.71E-03
SI41_W	0.75	728	0	1	1.23E+00	2.96E-01	5.99E-03	7.24E-03	6.57E-03	3.36E-03	3.89E-04	2.12E-03	1.35E-03	1.68E-06	1.38E-04	469.5	1.81E-02	1.08E-02
SI41_W	0.75	783	0	1	1.32E+00	3.10E-01	6.41E-03	7.79E-03	7.07E-03	3.61E-03	4.18E-04	2.28E-03	1.45E-03	1.81E-06	1.48E-04	502.1	1.95E-02	1.16E-02
SI41_W	0.75	543	0	1	9.18E-01	2.09E-01	4.42E-03	5.41E-03	4.91E-03	2.50E-03	2.90E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	346.1	1.35E-02	8.03E-03
SI41_W	0.75	359	0	1	6.07E-01	1.21E-01	2.85E-03	3.57E-03	3.24E-03	1.65E-03	1.91E-04	1.04E-03	6.65E-04	8.30E-07	6.76E-05	223.2	8.88E-03	5.31E-03
SI41_W	0.75	304	0	1	5.14E-01	9.15E-02	2.37E-03	3.02E-03	2.74E-03	1.39E-03	1.61E-04	8.75E-04	5.63E-04	7.02E-07	5.70E-05	185.5	7.49E-03	4.49E-03
SI41_W	0.75	258	0	1	4.36E-01	6.98E-02	1.98E-03	2.57E-03	2.33E-03	1.17E-03	1.36E-04	7.40E-04	4.77E-04	5.96E-07	4.82E-05	154.9	6.33E-03	3.81E-03
SI41_W	0.75	212	0	1	3.58E-01	5.15E-02	1.62E-03	2.11E-03	1.91E-03	9.62E-04	1.11E-04	6.06E-04	3.92E-04	4.89E-07	3.94E-05	125.4	5.19E-03	3.13E-03
SI41_W	0.75	157	0	1	2.65E-01	3.41E-02	1.20E-03	1.56E-03	1.41E-03	7.09E-04	8.22E-05	4.46E-04	2.90E-04	3.62E-07	2.91E-05	91.5	3.82E-03	2.31E-03
SI42_E	0.75	111	0	1	1.87E-01	2.13E-02	8.48E-04	1.10E-03	9.98E-04	4.99E-04	5.79E-05	3.14E-04	2.05E-04	2.55E-07	2.05E-05	63.7	2.69E-03	1.63E-03
SI42_E	0.75	74	0	1	1.25E-01	1.28E-02	5.65E-04	7.33E-04	6.65E-04	3.32E-04	3.85E-05	2.09E-04	1.36E-04	1.70E-07	1.36E-05	42.0	1.79E-03	1.09E-03
SI42_E	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.83E-04	1.19E-04	1.49E-07	1.19E-05	36.3	1.56E-03	9.53E-04
SI42_E	0.75	46	0	1	7.78E-02	7.60E-03	3.53E-04	4.58E-04	4.16E-04	2.07E-04	2.40E-05	1.30E-04	8.53E-05	1.06E-07	8.48E-06	25.8	1.12E-03	6.80E-04
SI42_E	0.75	64	0	1	1.09E-01	1.06E-02	4.95E-04	6.41E-04	5.82E-04	2.90E-04	3.36E-05	1.82E-04	1.19E-04	1.49E-07	1.19E-05	36.0	1.56E-03	9.53E-04
SI42_E	0.75	157	0	1	2.65E-01	2.58E-02	1.20E-03	1.56E-03	1.41E-03	7.03E-04	8.15E-05	4.42E-04	2.90E-04	3.62E-07	2.88E-05	87.4	3.79E-03	2.31E-03
SI42_E	0.75	470	0	1	7.94E-01	7.75E-02	3.60E-03	4.67E-03	4.24E-03	2.11E-03	2.45E-04	1.33E-03	8.70E-04	1.09E-06	8.65E-05	263.8	1.14E-02	6.94E-03
SI42_E	0.75	718	0	1	1.21E+00	1.35E-01	5.51E-03	7.15E-03	6.48E-03	3.24E-03	3.76E-04	2.04E-03	1.33E-03	1.66E-06	1.33E-04	413.3	1.75E-02	1.06E-02
SI42_E	0.75	580	0	1	9.80E-01	1.43E-01	4.45E-03	5.77E-03	5.24E-03	2.64E-03	3.06E-04	1.66E-03	1.07E-03	1.34E-06	1.08E-04	345.0	1.42E-02	8.57E-03
SI42_E	0.75	479	0	1	8.09E-01	1.36E-01	3.71E-03	4.77E-03	4.32E-03	2.19E-03	2.53E-04	1.38E-03	8.87E-04	1.11E-06	8.96E-05	290.8	1.18E-02	7.08E-03
SI42_E	0.75	433	0	1	7.31E-01	1.37E-01	3.41E-03	4.31E-03	3.91E-03	1.98E-03	2.30E-04	1.25E-03	8.01E-04	1.00E-06	8.13E-05	267.3	1.07E-02	6.40E-03
SI42_E	0.75	488	0	1	8.25E-01	1.83E-01	3.96E-03	4.86E-03	4.41E-03	2.25E-03	2.60E-04	1.42E-03	9.04E-04	1.13E-06	9.23E-05	310.6	1.21E-02	7.21E-03
SI42_E	0.75	516	0	1	8.72E-01	2.01E-01	4.22E-03	5.13E-03	4.66E-03	2.38E-03	2.76E-04	1.50E-03	9.55E-04	1.19E-06	9.77E-05	330.7	1.28E-02	7.62E-03
SI42_E	0.75	525	0	1	8.87E-01	2.10E-01	4.31E-03	5.22E-03	4.74E-03	2.43E-03	2.81E-04	1.53E-03	9.72E-04	1.21E-06	9.95E-05	338.1	1.31E-02	7.76E-03
SI42_E	0.75	543	0	1	9.18E-01	2.23E-01	4.49E-03	5.41E-03	4.91E-03	2.51E-03	2.91E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	351.6	1.36E-02	8.03E-03
SI42_E	0.75	589	0	1	9.96E-01	2.40E-01	4.86E-03	5.86E-03	5.32E-03	2.72E-03	3.15E-04	1.72E-03	1.09E-03	1.36E-06	1.12E-04	380.7	1.47E-02	8.71E-03
SI42_E	0.75	728	0	1	1.23E+00	2.96E-01	5.99E-03	7.24E-03	6.57E-03	3.36E-03	3.89E-04	2.12E-03	1.35E-03	1.68E-06	1.38E-04	469.5	1.81E-02	1.08E-02
SI42_E	0.75	783	0	1	1.32E+00	3.10E-01	6.41E-03	7.79E-03	7.07E-03	3.61E-03	4.18E-04	2.28E-03	1.45E-03	1.81E-06	1.48E-04	502.1	1.95E-02	1.16E-02
SI42_E	0.75	543	0	1	9.18E-01	2.09E-01	4.42E-03	5.41E-03	4.91E-03	2.50E-03	2.90E-04	1.58E-03	1.01E-03	1.26E-06	1.03E-04	346.1	1.35E-02	8.03E-03
SI42_E	0.75	359	0	1	6.07E-01	1.21E-01	2.85E-03	3.57E-03	3.24E-03	1.65E-03	1.91E-04	1.04E-03	6.65E-04	8.30E-07	6.76E-05	223.2	8.88E-03	5.31E-03
SI42_E	0.75	304	0	1	5.14E-01	9.15E-02	2.37E-03	3.02E-03	2.74E-03	1.39E-03	1.61E-04	8.75E-04	5.63E-04	7.02E-07	5.70E-05	185.5	7.49E-03	4.49E-03
SI42_E	0.75	258	0	1	4.36E-01	6.98E-02	1.98E-03	2.57E-03	2.33E-03	1.17E-03	1.36E-04	7.40E-04	4.77E-04	5.96E-07	4.82E-05	154.9	6.33E-03	3.81E-03
SI42_E	0.75	212	0	1	3.58E-01	5.15E-02	1.62E-03	2.11E-03	1.91E-03	9.62E-04	1.11E-04	6.06E-04	3.92E-04	4.89E-07	3.94E-05	125.4	5.19E-03	3.13E-03
SI42_E	0.75	157	0	1	2.65E-01	3.41E-02	1.20E-03	1.56E-03	1.41E-03	7.09E-04	8.22E-05	4.46E-04	2.90E-04	3.62E-07	2.91E-05	91.5	3.82E-03	2.31E-03
SI42_W	0.75	87	0	1	1.47E-01	1.68E-02	6.66E-04	8.64E-04	7.84E-04	3.92E-04	4.55E-05	2.47E-04	1.61E-04	2.01E-07	1.61E-05	50.0	2.12E-03	1.28E-03
SI42_W	0.75	58	0	1	9.78E-02	1.01E-02	4.44E-04	5.76E-04	5.23E-04	2.61E-04	3.03E-05	1.64E-04	1.07E-04	1.34E-07	1.07E-05	33.0	1.41E-03	8.55E-04
SI42_W	0.75	51	0	1	8.56E-02	8.36E-03	3.89E-04	5.04E-04	4.57E-04	2.28E-04	2.64E-05	1.43E-04	9.38E-05	1.17E-07	9.34E-06	28.5	1.23E-03	7.49E-04
SI42_W	0.75	36	0	1	6.11E-02	5.97E-03	2.78E-04	3.60E-04	3.27E-04	1.63E-04	1.89E-05	1.02E-04	6.70E-05	8.36E-08	6.66E-06	20.3	8.76E-04	5.35E-04
SI42_W	0.75	51	0	1	8.56E-02	8.36E-03	3.89E-04	5.04E-04	4.57E-04	2.28E-04	2.64E-05	1.43E-04	9.38E-05	1.17E-07	9.32E-06	28.3	1.23E-03	7.49E-04
SI42_W	0.75	123	0	1	2.08E-01	2.03E-02	9.44E-04	1.22E-03	1.11E-03	5.53E-04	6.41E-05	3.48E-04	2.28E-04	2.84E-07	2.26E-05	68.7	2.98E-03	1.82E-03
SI42_W	0.75	369	0	1	6.24E-01	6.09E-02	2.83E-03	3.67E-03	3.33E-03	1.66E-03	1.92E-04	1.04E-03	6.83E-04	8.53E-07	6.80E-05	207.3	8.95E-03	5.45E-03
SI42_W	0.75	565	0	1	9.54E-01	1.06E-01	4.33E-03	5.62E-03	5.10E-03	2.55E-03	2.96E-04	1.60E-03	1.05E-03	1.30E-06	1.04E-04	324.7	1.37E-02	8.34E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_W	0.75	456	0	1	7.70E-01	1.13E-01	3.50E-03	4.54E-03	4.12E-03	2.07E-03	2.40E-04	1.30E-03	8.44E-04	1.05E-06	8.50E-05	271.1	1.12E-02	6.74E-03
SI42_W	0.75	376	0	1	6.36E-01	1.07E-01	2.92E-03	3.74E-03	3.40E-03	1.72E-03	1.99E-04	1.08E-03	6.97E-04	8.70E-07	7.04E-05	228.5	9.26E-03	5.56E-03
SI42_W	0.75	340	0	1	5.75E-01	1.08E-01	2.68E-03	3.38E-03	3.07E-03	1.56E-03	1.80E-04	9.81E-04	6.30E-04	7.86E-07	6.39E-05	210.0	8.40E-03	5.03E-03
SI42_W	0.75	384	0	1	6.48E-01	1.44E-01	3.11E-03	3.82E-03	3.46E-03	1.77E-03	2.05E-04	1.11E-03	7.10E-04	8.86E-07	7.25E-05	244.0	9.54E-03	5.67E-03
SI42_W	0.75	405	0	1	6.85E-01	1.58E-01	3.32E-03	4.03E-03	3.66E-03	1.87E-03	2.17E-04	1.18E-03	7.51E-04	9.37E-07	7.68E-05	259.9	1.01E-02	5.99E-03
SI42_W	0.75	413	0	1	6.97E-01	1.65E-01	3.39E-03	4.10E-03	3.72E-03	1.91E-03	2.21E-04	1.20E-03	7.64E-04	9.53E-07	7.82E-05	265.7	1.03E-02	6.10E-03
SI42_W	0.75	427	0	1	7.22E-01	1.75E-01	3.53E-03	4.25E-03	3.85E-03	1.97E-03	2.29E-04	1.24E-03	7.91E-04	9.87E-07	8.10E-05	276.3	1.07E-02	6.31E-03
SI42_W	0.75	463	0	1	7.83E-01	1.89E-01	3.82E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.58E-04	1.07E-06	8.79E-05	299.1	1.16E-02	6.84E-03
SI42_W	0.75	572	0	1	9.66E-01	2.32E-01	4.71E-03	5.69E-03	5.16E-03	2.64E-03	3.06E-04	1.66E-03	1.06E-03	1.32E-06	1.08E-04	368.9	1.43E-02	8.45E-03
SI42_W	0.75	615	0	1	1.04E+00	2.44E-01	5.04E-03	6.12E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	394.6	1.53E-02	9.09E-03
SI42_W	0.75	427	0	1	7.22E-01	1.64E-01	3.47E-03	4.25E-03	3.85E-03	1.97E-03	2.28E-04	1.24E-03	7.91E-04	9.87E-07	8.08E-05	272.0	1.06E-02	6.31E-03
SI42_W	0.75	282	0	1	4.77E-01	9.48E-02	2.24E-03	2.81E-03	2.55E-03	1.29E-03	1.50E-04	8.15E-04	5.23E-04	6.52E-07	5.31E-05	175.4	6.98E-03	4.17E-03
SI42_W	0.75	239	0	1	4.04E-01	7.19E-02	1.86E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.87E-04	4.42E-04	5.52E-07	4.48E-05	145.8	5.89E-03	3.53E-03
SI42_W	0.75	203	0	1	3.42E-01	5.49E-02	1.55E-03	2.02E-03	1.83E-03	9.23E-04	1.07E-04	5.81E-04	3.75E-04	4.68E-07	3.78E-05	121.7	4.98E-03	2.99E-03
SI42_W	0.75	166	0	1	2.81E-01	4.05E-02	1.28E-03	1.66E-03	1.50E-03	7.56E-04	8.76E-05	4.76E-04	3.08E-04	3.85E-07	3.10E-05	98.5	4.08E-03	2.46E-03
SI42_W	0.75	123	0	1	2.08E-01	2.68E-02	9.44E-04	1.22E-03	1.11E-03	5.57E-04	6.46E-05	3.51E-04	2.28E-04	2.84E-07	2.28E-05	71.9	3.01E-03	1.82E-03
SI43_E	0.75	99	0	1	1.67E-01	1.91E-02	7.57E-04	9.82E-04	8.91E-04	4.46E-04	5.17E-05	2.81E-04	1.83E-04	2.28E-07	1.83E-05	56.9	2.40E-03	1.46E-03
SI43_E	0.75	66	0	1	1.11E-01	1.14E-02	5.05E-04	6.55E-04	5.94E-04	2.97E-04	3.44E-05	1.87E-04	1.22E-04	1.52E-07	1.22E-05	37.5	1.60E-03	9.72E-04
SI43_E	0.75	58	0	1	9.73E-02	9.50E-03	4.42E-04	5.73E-04	5.20E-04	2.59E-04	3.00E-05	1.63E-04	1.07E-04	1.33E-07	1.06E-05	32.4	1.40E-03	8.51E-04
SI43_E	0.75	41	0	1	6.95E-02	6.79E-03	3.15E-04	4.09E-04	3.71E-04	1.85E-04	2.14E-05	1.16E-04	7.61E-05	9.50E-08	7.57E-06	23.0	9.96E-04	6.08E-04
SI43_E	0.75	58	0	1	9.73E-02	9.50E-03	4.42E-04	5.73E-04	5.20E-04	2.59E-04	3.00E-05	1.63E-04	1.07E-04	1.33E-07	1.06E-05	32.1	1.39E-03	8.51E-04
SI43_E	0.75	140	0	1	2.36E-01	2.31E-02	1.07E-03	1.39E-03	1.26E-03	6.28E-04	7.28E-05	3.95E-04	2.59E-04	3.23E-07	2.57E-05	78.0	3.38E-03	2.07E-03
SI43_E	0.75	419	0	1	7.09E-01	6.92E-02	3.22E-03	4.17E-03	3.79E-03	1.89E-03	2.19E-04	1.19E-03	7.77E-04	9.69E-07	7.73E-05	235.5	1.02E-02	6.20E-03
SI43_E	0.75	641	0	1	1.08E+00	1.20E-01	4.92E-03	6.38E-03	5.79E-03	2.90E-03	3.36E-04	1.82E-03	1.19E-03	1.48E-06	1.19E-04	369.0	1.56E-02	9.48E-03
SI43_E	0.75	518	0	1	8.75E-01	1.28E-01	3.97E-03	5.15E-03	4.68E-03	2.35E-03	2.73E-04	1.48E-03	9.59E-04	1.20E-06	9.65E-05	308.0	1.27E-02	7.65E-03
SI43_E	0.75	428	0	1	7.23E-01	1.22E-01	3.31E-03	4.25E-03	3.86E-03	1.95E-03	2.26E-04	1.23E-03	7.92E-04	9.88E-07	8.00E-05	259.6	1.05E-02	6.32E-03
SI43_E	0.75	387	0	1	6.53E-01	1.22E-01	3.05E-03	3.85E-03	3.49E-03	1.77E-03	2.05E-04	1.11E-03	7.16E-04	8.93E-07	7.26E-05	238.6	9.55E-03	5.71E-03
SI43_E	0.75	436	0	1	7.37E-01	1.63E-01	3.54E-03	4.34E-03	3.93E-03	2.01E-03	2.33E-04	1.27E-03	8.07E-04	1.01E-06	8.24E-05	277.3	1.08E-02	6.44E-03
SI43_E	0.75	461	0	1	7.78E-01	1.79E-01	3.77E-03	4.58E-03	4.16E-03	2.13E-03	2.46E-04	1.34E-03	8.53E-04	1.06E-06	8.72E-05	295.3	1.15E-02	6.80E-03
SI43_E	0.75	469	0	1	7.92E-01	1.87E-01	3.85E-03	4.66E-03	4.23E-03	2.17E-03	2.51E-04	1.36E-03	8.68E-04	1.08E-06	8.89E-05	301.9	1.17E-02	6.93E-03
SI43_E	0.75	485	0	1	8.20E-01	1.99E-01	4.01E-03	4.83E-03	4.38E-03	2.24E-03	2.60E-04	1.41E-03	8.99E-04	1.12E-06	9.21E-05	314.0	1.21E-02	7.17E-03
SI43_E	0.75	526	0	1	8.89E-01	2.14E-01	4.34E-03	5.24E-03	4.75E-03	2.43E-03	2.82E-04	1.53E-03	9.75E-04	1.22E-06	9.98E-05	339.9	1.31E-02	7.78E-03
SI43_E	0.75	650	0	1	1.10E+00	2.64E-01	5.35E-03	6.46E-03	5.86E-03	3.00E-03	3.48E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	419.2	1.62E-02	9.60E-03
SI43_E	0.75	699	0	1	1.18E+00	2.77E-01	5.72E-03	6.95E-03	6.31E-03	3.23E-03	3.74E-04	2.03E-03	1.29E-03	1.62E-06	1.32E-04	448.4	1.74E-02	1.03E-02
SI43_E	0.75	485	0	1	8.20E-01	1.86E-01	3.94E-03	4.83E-03	4.38E-03	2.24E-03	2.59E-04	1.41E-03	8.98E-04	1.12E-06	9.18E-05	309.1	1.21E-02	7.17E-03
SI43_E	0.75	321	0	1	5.42E-01	1.08E-01	2.54E-03	3.19E-03	2.90E-03	1.47E-03	1.70E-04	9.26E-04	5.94E-04	7.41E-07	6.03E-05	199.3	7.93E-03	4.74E-03
SI43_E	0.75	271	0	1	4.59E-01	8.17E-02	2.11E-03	2.70E-03	2.45E-03	1.24E-03	1.44E-04	7.81E-04	5.02E-04	6.27E-07	5.09E-05	165.7	6.69E-03	4.01E-03
SI43_E	0.75	230	0	1	3.89E-01	6.23E-02	1.77E-03	2.29E-03	2.08E-03	1.05E-03	1.22E-04	6.60E-04	4.26E-04	5.32E-07	4.30E-05	138.3	5.66E-03	3.40E-03
SI43_E	0.75	189	0	1	3.20E-01	4.60E-02	1.45E-03	1.88E-03	1.71E-03	8.59E-04	9.95E-05	5.41E-04	3.50E-04	4.37E-07	3.52E-05	112.0	4.63E-03	2.79E-03
SI43_E	0.75	140	0	1	2.36E-01	3.04E-02	1.07E-03	1.39E-03	1.26E-03	6.33E-04	7.34E-05	3.99E-04	2.59E-04	3.23E-07	2.60E-05	81.7	3.41E-03	2.07E-03
SI43_W	0.75	86	0	1	1.45E-01	1.66E-02	6.58E-04	8.54E-04	7.75E-04	3.88E-04	4.49E-05	2.44E-04	1.59E-04	1.98E-07	1.59E-05	49.4	2.09E-03	1.27E-03
SI43_W	0.75	57	0	1	9.67E-02	9.95E-03	4.39E-04	5.69E-04	5.16E-04	2.58E-04	2.99E-05	1.62E-04	1.06E-04	1.32E-07	1.06E-05	32.6	1.39E-03	8.45E-04
SI43_W	0.75	50	0	1	8.46E-02	8.26E-03	3.84E-04	4.98E-04	4.52E-04	2.25E-04	2.61E-05	1.42E-04	9.27E-05	1.16E-07	9.23E-06	28.2	1.21E-03	7.40E-04
SI43_W	0.75	36	0	1	6.04E-02	5.90E-03	2.74E-04	3.56E-04	3.23E-04	1.61E-04	1.86E-05	1.01E-04	6.62E-05	8.26E-08	6.58E-06	20.0	8.66E-04	5.28E-04
SI43_W	0.75	50	0	1	8.46E-02	8.26E-03	3.84E-04	4.98E-04	4.52E-04	2.25E-04	2.61E-05	1.41E-04	9.27E-05	1.16E-07	9.21E-06	27.9	1.21E-03	7.40E-04
SI43_W	0.75	122	0	1	2.05E-01	2.01E-02	9.33E-04	1.21E-03	1.10E-03	5.46E-04	6.33E-05	3.44E-04	2.25E-04	2.81E-07	2.24E-05	67.9	2.94E-03	1.80E-03
SI43_W	0.75	365	0	1	6.16E-01	6.02E-02	2.80E-03	3.63E-03	3.29E-03	1.64E-03	1.90E-04	1.03E-03	6.75E-04	8.43E-07	6.72E-05	204.8	8.84E-03	5.39E-03
SI43_W	0.75	558	0	1	9.43E-01	1.05E-01	4.28E-03	5.55E-03	5.04E-03	2.52E-03	2.92E-04	1.59E-03	1.03E-03	1.29E-06	1.03E-04	320.9	1.36E-02	8.24E-03
SI43_W	0.75	451	0	1	7.61E-01	1.11E-01	3.46E-03	4.48E-03	4.07E-03	2.05E-03	2.37E-04	1.29E-03	8.34E-04	1.04E-06	8.40E-05	267.9	1.10E-02	6.66E-03
SI43_W	0.75	372	0	1	6.28E-01	1.06E-01	2.88E-03	3.70E-03	3.36E-03	1.70E-03	1.97E-04	1.07E-03	6.89E-04	8.59E-07	6.96E-05	225.8	9.15E-03	5.49E-03
SI43_W	0.75	336	0	1	5.68E-01	1.06E-01	2.65E-03	3.34E-03	3.03E-03	1.54E-03	1.78E-04	9.69E-04	6.22E-04	7.77E-07	6.31E-05	207.5	8.30E-03	4.97E-03
SI43_W	0.75	379	0	1	6.40E-01	1.42E-01	3.08E-03	3.77E-03	3.42E-03	1.75E-03	2.02E-04	1.10E-03	7.02E-04	8.76E-07	7.17E-05	241.1	9.42E-03	5.60E-03
SI43_W	0.75	400	0	1	6.77E-01	1.56E-01	3.28E-03	3.98E-03	3.61E-03	1.85E-03	2.14E-04	1.16E-03	7.42E-04	9.26E-07	7.58E-05	256.8	9.97E-03	5.92E-03
SI43_W	0.75	408	0	1	6.89E-01	1.63E-01	3.35E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.19E-03	7.55E-04	9.42E-07	7.73E-05	262.5	1.02E-02	6.02E-03
SI43_W	0.75	422	0	1	7.13E-01	1.73E-01	3.48E-03	4.20E-03	3.81E-03	1.95E-03	2.26E-04	1.23E-03	7.82E-04	9.75E-07	8.01E-05	273.0	1.05E-02	6.23E-03
SI43_W	0.75	458	0	1	7.73E-01	1.86E-01	3.77E-03	4.55E-03	4.13E-03	2.12E-03	2.45E-04	1.33E-03	8.48E-04	1.06E-06	8.68E-05	295.6	1.14E-02	6.76E-03
SI43_W	0.75	565	0	1	9.55E-01	2.30E-01	4.65E-03	5.62E-03	5.10E-03	2.61E-03	3.02E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.5	1.41E-02	8.35E-03
SI43_W	0.75	608	0	1	1.03E+00	2.41E-01	4.98E-03	6.05E-03	5.49E-03	2.81E-03	3.25E-04	1.77E-03	1.13E-03	1.40E-06	1.15E-04	389.9	1.51E-02	8.98E-03
SI43_W	0.75	422	0	1	7.13E-01	1.62E-01	3.43E-03	4.20E-03	3.81E-03	1.94E-03	2.25E-04	1.23E-03	7.81E-04	9.75E-07	7.98E-05	268.8	1.05E-02	6.23E-03
SI43_W	0.75	279	0	1	4.71E-01	9.36E-02	2.21E-03	2.77E-03	2.52E-03	1.28E-03	1.48E-04	8.05E-04	5.16E-04	6.45E-07	5.25E-05	173.3	6.90E-03	4.12E-03
SI43_W	0.75	236	0	1	3.99E-01	7.11E-02	1.84E-03	2.35E-03	2.13E-03	1.08E-03	1.25E-04	6.79E-04	4.37E-04	5.45E-07	4.42E-05	144.1	5.82E-03	3.49E-03
SI43_W	0.75	200	0	1	3.38E-01	5.42E-02	1.54E-03	1.99E-03	1.81E-03	9.12E-04	1.06E-04	5.74E-04	3.71E-04	4.63E-07	3.74E-05	120.3	4.92E-03	2.96E-03
SI43_W	0.75	164	0	1	2.78E-01	4.00E-02	1.26E-03	1.64E-03	1.48E-03	7.47E-04	8.66E-05	4.70E-04	3.05E-04	3.80E-07	3.06E-05	97.4	4.03E-03	2.43E-03
SI43_W	0.75	122	0	1	2.05E-01	2.65E-02	9.33E-04	1.21E-03	1.10E-03	5.51E-04	6.38E-05	3.47E-04	2.25E-04	2.81E-07	2.26E-05	71.0	2.97E-03	1.80E-03
SI44_E	0.75	87	0	1	1.47E-01	1.68E-02	6.66E-04	8.64E-04	7.84E-04	3.92E-04	4.55E-05	2.47E-04	1.61E-04	2.01E-07	1.61E-05	50.0	2.12E-03	1.28E-03
SI44_E	0.75	58	0	1	9.78E-02	1.01E-02	4.44E-04	5.76E-04	5.23E-04	2.61E-04	3.03E-05	1.64E-04	1.07E-04	1.34E-07	1.07E-05	33.0	1.41E-03	8.55E-04
SI44_E	0.75	51	0	1	8.56E-02	8.36E-03	3.89E-04	5.04E-04	4.57E-04	2.28E-04	2.64E-05	1.43E-04	9.38E-05	1.17E-07	9.34E-06	28.5	1.23E-03	7.49E-04
SI44_E	0.75	36	0	1	6.11E-02	5.97E-03	2.78E-04	3.60E-04	3.27E-04	1.63E-04	1.89E-05	1.02E-04	6.70E-05	8.36E-08	6.66E-06	20.3	8.76E-04	5.35E-04
SI44_E	0.75	51	0	1	8.56E-02	8.36E-03	3.89E-04	5.04E-04	4.57E-04	2.28E-04	2.64E-05	1.43E-04	9.38E-05	1.17E-07	9.32E-06	28.3	1.23E-03	7.49E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_E	0.75	123	0	1	2.08E-01	2.03E-02	9.44E-04	1.22E-03	1.11E-03	5.53E-04	6.41E-05	3.48E-04	2.28E-04	2.84E-07	2.26E-05	68.7	2.98E-03	1.82E-03
SI44_E	0.75	369	0	1	6.24E-01	6.09E-02	2.83E-03	3.67E-03	3.33E-03	1.66E-03	1.92E-04	1.04E-03	6.83E-04	8.53E-07	6.80E-05	207.3	8.95E-03	5.45E-03
SI44_E	0.75	565	0	1	9.54E-01	1.06E-01	4.33E-03	5.62E-03	5.10E-03	2.55E-03	2.96E-04	1.60E-03	1.05E-03	1.30E-06	1.04E-04	324.7	1.37E-02	8.34E-03
SI44_E	0.75	456	0	1	7.70E-01	1.13E-01	3.50E-03	4.54E-03	4.12E-03	2.07E-03	2.40E-04	1.30E-03	8.44E-04	1.05E-06	8.50E-05	271.1	1.12E-02	6.74E-03
SI44_E	0.75	376	0	1	6.36E-01	1.07E-01	2.92E-03	3.74E-03	3.40E-03	1.72E-03	1.99E-04	1.08E-03	6.97E-04	8.70E-07	7.04E-05	228.5	9.26E-03	5.56E-03
SI44_E	0.75	340	0	1	5.75E-01	1.08E-01	2.68E-03	3.38E-03	3.07E-03	1.56E-03	1.80E-04	9.81E-04	6.30E-04	7.86E-07	6.39E-05	210.0	8.40E-03	5.03E-03
SI44_E	0.75	384	0	1	6.48E-01	1.44E-01	3.11E-03	3.82E-03	3.46E-03	1.77E-03	2.05E-04	1.11E-03	7.10E-04	8.86E-07	7.25E-05	244.0	9.54E-03	5.67E-03
SI44_E	0.75	405	0	1	6.85E-01	1.58E-01	3.32E-03	4.03E-03	3.66E-03	1.87E-03	2.17E-04	1.18E-03	7.51E-04	9.37E-07	7.68E-05	259.9	1.01E-02	5.99E-03
SI44_E	0.75	413	0	1	6.97E-01	1.65E-01	3.39E-03	4.10E-03	3.72E-03	1.91E-03	2.21E-04	1.20E-03	7.64E-04	9.53E-07	7.82E-05	265.7	1.03E-02	6.10E-03
SI44_E	0.75	427	0	1	7.22E-01	1.75E-01	3.53E-03	4.25E-03	3.85E-03	1.97E-03	2.29E-04	1.24E-03	7.91E-04	9.87E-07	8.10E-05	276.3	1.07E-02	6.31E-03
SI44_E	0.75	463	0	1	7.83E-01	1.89E-01	3.82E-03	4.61E-03	4.18E-03	2.14E-03	2.48E-04	1.35E-03	8.58E-04	1.07E-06	8.79E-05	299.1	1.16E-02	6.84E-03
SI44_E	0.75	572	0	1	9.66E-01	2.32E-01	4.71E-03	5.69E-03	5.16E-03	2.64E-03	3.06E-04	1.66E-03	1.06E-03	1.32E-06	1.08E-04	368.9	1.43E-02	8.45E-03
SI44_E	0.75	615	0	1	1.04E+00	2.44E-01	5.04E-03	6.12E-03	5.55E-03	2.84E-03	3.29E-04	1.79E-03	1.14E-03	1.42E-06	1.17E-04	394.6	1.53E-02	9.09E-03
SI44_E	0.75	427	0	1	7.22E-01	1.64E-01	3.47E-03	4.25E-03	3.85E-03	1.97E-03	2.28E-04	1.24E-03	7.91E-04	9.87E-07	8.08E-05	272.0	1.06E-02	6.31E-03
SI44_E	0.75	282	0	1	4.77E-01	9.48E-02	2.24E-03	2.81E-03	2.55E-03	1.29E-03	1.50E-04	8.15E-04	5.23E-04	6.52E-07	5.31E-05	175.4	6.98E-03	4.17E-03
SI44_E	0.75	239	0	1	4.04E-01	7.19E-02	1.86E-03	2.38E-03	2.16E-03	1.09E-03	1.26E-04	6.87E-04	4.42E-04	5.52E-07	4.48E-05	145.8	5.89E-03	3.53E-03
SI44_E	0.75	203	0	1	3.42E-01	5.49E-02	1.55E-03	2.02E-03	1.83E-03	9.23E-04	1.07E-04	5.81E-04	3.75E-04	4.68E-07	3.78E-05	121.7	4.98E-03	2.99E-03
SI44_E	0.75	166	0	1	2.81E-01	4.05E-02	1.28E-03	1.66E-03	1.50E-03	7.56E-04	8.76E-05	4.76E-04	3.08E-04	3.85E-07	3.10E-05	98.5	4.08E-03	2.46E-03
SI44_E	0.75	123	0	1	2.08E-01	2.68E-02	9.44E-04	1.22E-03	1.11E-03	5.57E-04	6.46E-05	3.51E-04	2.28E-04	2.84E-07	2.28E-05	71.9	3.01E-03	1.82E-03
SI44_W	0.75	85	0	1	1.43E-01	1.64E-02	6.50E-04	8.44E-04	7.65E-04	3.83E-04	4.44E-05	2.41E-04	1.57E-04	1.96E-07	1.57E-05	48.9	2.07E-03	1.25E-03
SI44_W	0.75	57	0	1	9.55E-02	9.83E-03	4.34E-04	5.62E-04	5.10E-04	2.55E-04	2.95E-05	1.60E-04	1.05E-04	1.31E-07	1.04E-05	32.2	1.37E-03	8.35E-04
SI44_W	0.75	49	0	1	8.36E-02	8.16E-03	3.79E-04	4.92E-04	4.46E-04	2.22E-04	2.58E-05	1.40E-04	9.16E-05	1.14E-07	9.12E-06	27.9	1.20E-03	7.31E-04
SI44_W	0.75	35	0	1	5.97E-02	5.83E-03	2.71E-04	3.51E-04	3.19E-04	1.59E-04	1.84E-05	9.99E-05	6.54E-05	8.16E-08	6.50E-06	19.8	8.56E-04	5.22E-04
SI44_W	0.75	49	0	1	8.36E-02	8.16E-03	3.79E-04	4.92E-04	4.46E-04	2.22E-04	2.58E-05	1.40E-04	9.16E-05	1.14E-07	9.10E-06	27.6	1.20E-03	7.31E-04
SI44_W	0.75	120	0	1	2.03E-01	1.98E-02	9.21E-04	1.20E-03	1.08E-03	5.39E-04	6.25E-05	3.39E-04	2.22E-04	2.77E-07	2.21E-05	67.1	2.91E-03	1.77E-03
SI44_W	0.75	360	0	1	6.09E-01	5.95E-02	2.76E-03	3.59E-03	3.25E-03	1.62E-03	1.88E-04	1.02E-03	6.67E-04	8.32E-07	6.64E-05	202.4	8.73E-03	5.32E-03
SI44_W	0.75	551	0	1	9.31E-01	1.03E-01	4.23E-03	5.48E-03	4.97E-03	2.49E-03	2.89E-04	1.57E-03	1.02E-03	1.27E-06	1.02E-04	317.0	1.34E-02	8.14E-03
SI44_W	0.75	445	0	1	7.52E-01	1.10E-01	3.41E-03	4.43E-03	4.02E-03	2.02E-03	2.34E-04	1.27E-03	8.24E-04	1.03E-06	8.29E-05	264.6	1.09E-02	6.58E-03
SI44_W	0.75	367	0	1	6.21E-01	1.05E-01	2.85E-03	3.66E-03	3.32E-03	1.68E-03	1.94E-04	1.06E-03	6.80E-04	8.49E-07	6.88E-05	223.1	9.04E-03	5.43E-03
SI44_W	0.75	332	0	1	5.61E-01	1.05E-01	2.62E-03	3.30E-03	3.00E-03	1.52E-03	1.76E-04	9.58E-04	6.15E-04	7.67E-07	6.24E-05	205.0	8.20E-03	4.91E-03
SI44_W	0.75	374	0	1	6.33E-01	1.40E-01	3.04E-03	3.73E-03	3.38E-03	1.73E-03	2.00E-04	1.09E-03	6.93E-04	8.65E-07	7.08E-05	238.2	9.31E-03	5.53E-03
SI44_W	0.75	396	0	1	6.69E-01	1.54E-01	3.24E-03	3.94E-03	3.57E-03	1.83E-03	2.11E-04	1.15E-03	7.33E-04	9.14E-07	7.49E-05	253.7	9.85E-03	5.85E-03
SI44_W	0.75	403	0	1	6.81E-01	1.61E-01	3.31E-03	4.01E-03	3.64E-03	1.86E-03	2.15E-04	1.17E-03	7.46E-04	9.31E-07	7.63E-05	259.4	1.00E-02	5.95E-03
SI44_W	0.75	417	0	1	7.04E-01	1.71E-01	3.44E-03	4.15E-03	3.76E-03	1.93E-03	2.23E-04	1.21E-03	7.72E-04	9.63E-07	7.91E-05	269.7	1.04E-02	6.16E-03
SI44_W	0.75	452	0	1	7.64E-01	1.84E-01	3.73E-03	4.50E-03	4.08E-03	2.09E-03	2.42E-04	1.32E-03	8.38E-04	1.05E-06	8.58E-05	292.0	1.13E-02	6.68E-03
SI44_W	0.75	558	0	1	9.43E-01	2.27E-01	4.60E-03	5.55E-03	5.04E-03	2.58E-03	2.99E-04	1.63E-03	1.03E-03	1.29E-06	1.06E-04	360.2	1.39E-02	8.25E-03
SI44_W	0.75	601	0	1	1.01E+00	2.38E-01	4.92E-03	5.98E-03	5.42E-03	2.77E-03	3.21E-04	1.75E-03	1.11E-03	1.39E-06	1.14E-04	385.2	1.50E-02	8.87E-03
SI44_W	0.75	417	0	1	7.04E-01	1.60E-01	3.39E-03	4.15E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.72E-04	9.63E-07	7.88E-05	265.5	1.04E-02	6.16E-03
SI44_W	0.75	276	0	1	4.66E-01	9.25E-02	2.18E-03	2.74E-03	2.49E-03	1.26E-03	1.46E-04	7.96E-04	5.10E-04	6.37E-07	5.18E-05	171.2	6.82E-03	4.07E-03
SI44_W	0.75	233	0	1	3.94E-01	7.02E-02	1.82E-03	2.32E-03	2.10E-03	1.07E-03	1.23E-04	6.71E-04	4.32E-04	5.39E-07	4.37E-05	142.3	5.75E-03	3.44E-03
SI44_W	0.75	198	0	1	3.34E-01	5.36E-02	1.52E-03	1.97E-03	1.79E-03	9.01E-04	1.04E-04	5.67E-04	3.66E-04	4.57E-07	3.69E-05	118.8	4.86E-03	2.92E-03
SI44_W	0.75	163	0	1	2.75E-01	3.95E-02	1.25E-03	1.62E-03	1.47E-03	7.38E-04	8.55E-05	4.65E-04	3.01E-04	3.75E-07	3.03E-05	96.2	3.98E-03	2.40E-03
SI44_W	0.75	120	0	1	2.03E-01	2.62E-02	9.21E-04	1.20E-03	1.08E-03	5.44E-04	6.31E-05	3.42E-04	2.22E-04	2.78E-07	2.23E-05	70.2	2.93E-03	1.77E-03
SI45_E	0.75	85	0	1	1.43E-01	1.64E-02	6.50E-04	8.44E-04	7.65E-04	3.83E-04	4.44E-05	2.41E-04	1.57E-04	1.96E-07	1.57E-05	48.9	2.07E-03	1.25E-03
SI45_E	0.75	57	0	1	9.55E-02	9.83E-03	4.34E-04	5.62E-04	5.10E-04	2.55E-04	2.95E-05	1.60E-04	1.05E-04	1.31E-07	1.04E-05	32.2	1.37E-03	8.35E-04
SI45_E	0.75	49	0	1	8.36E-02	8.16E-03	3.79E-04	4.92E-04	4.46E-04	2.22E-04	2.58E-05	1.40E-04	9.16E-05	1.14E-07	9.12E-06	27.9	1.20E-03	7.31E-04
SI45_E	0.75	35	0	1	5.97E-02	5.83E-03	2.71E-04	3.51E-04	3.19E-04	1.59E-04	1.84E-05	9.99E-05	6.54E-05	8.16E-08	6.50E-06	19.8	8.56E-04	5.22E-04
SI45_E	0.75	49	0	1	8.36E-02	8.16E-03	3.79E-04	4.92E-04	4.46E-04	2.22E-04	2.58E-05	1.40E-04	9.16E-05	1.14E-07	9.10E-06	27.6	1.20E-03	7.31E-04
SI45_E	0.75	120	0	1	2.03E-01	1.98E-02	9.21E-04	1.20E-03	1.08E-03	5.39E-04	6.25E-05	3.39E-04	2.22E-04	2.77E-07	2.21E-05	67.1	2.91E-03	1.77E-03
SI45_E	0.75	360	0	1	6.09E-01	5.95E-02	2.76E-03	3.59E-03	3.25E-03	1.62E-03	1.88E-04	1.02E-03	6.67E-04	8.32E-07	6.64E-05	202.4	8.73E-03	5.32E-03
SI45_E	0.75	551	0	1	9.31E-01	1.03E-01	4.23E-03	5.48E-03	4.97E-03	2.49E-03	2.89E-04	1.57E-03	1.02E-03	1.27E-06	1.02E-04	317.0	1.34E-02	8.14E-03
SI45_E	0.75	445	0	1	7.52E-01	1.10E-01	3.41E-03	4.43E-03	4.02E-03	2.02E-03	2.34E-04	1.27E-03	8.24E-04	1.03E-06	8.29E-05	264.6	1.09E-02	6.58E-03
SI45_E	0.75	367	0	1	6.21E-01	1.05E-01	2.85E-03	3.66E-03	3.32E-03	1.68E-03	1.94E-04	1.06E-03	6.80E-04	8.49E-07	6.88E-05	223.1	9.04E-03	5.43E-03
SI45_E	0.75	332	0	1	5.61E-01	1.05E-01	2.62E-03	3.30E-03	3.00E-03	1.52E-03	1.76E-04	9.58E-04	6.15E-04	7.67E-07	6.24E-05	205.0	8.20E-03	4.91E-03
SI45_E	0.75	374	0	1	6.33E-01	1.40E-01	3.04E-03	3.73E-03	3.38E-03	1.73E-03	2.00E-04	1.09E-03	6.93E-04	8.65E-07	7.08E-05	238.2	9.31E-03	5.53E-03
SI45_E	0.75	396	0	1	6.69E-01	1.54E-01	3.24E-03	3.94E-03	3.57E-03	1.83E-03	2.11E-04	1.15E-03	7.33E-04	9.14E-07	7.49E-05	253.7	9.85E-03	5.85E-03
SI45_E	0.75	403	0	1	6.81E-01	1.61E-01	3.31E-03	4.01E-03	3.64E-03	1.86E-03	2.15E-04	1.17E-03	7.46E-04	9.31E-07	7.63E-05	259.4	1.00E-02	5.95E-03
SI45_E	0.75	417	0	1	7.04E-01	1.71E-01	3.44E-03	4.15E-03	3.76E-03	1.93E-03	2.23E-04	1.21E-03	7.72E-04	9.63E-07	7.91E-05	269.7	1.04E-02	6.16E-03
SI45_E	0.75	452	0	1	7.64E-01	1.84E-01	3.73E-03	4.50E-03	4.08E-03	2.09E-03	2.42E-04	1.32E-03	8.38E-04	1.05E-06	8.58E-05	292.0	1.13E-02	6.68E-03
SI45_E	0.75	558	0	1	9.43E-01	2.27E-01	4.60E-03	5.55E-03	5.04E-03	2.58E-03	2.99E-04	1.63E-03	1.03E-03	1.29E-06	1.06E-04	360.2	1.39E-02	8.25E-03
SI45_E	0.75	601	0	1	1.01E+00	2.38E-01	4.92E-03	5.98E-03	5.42E-03	2.77E-03	3.21E-04	1.75E-03	1.11E-03	1.39E-06	1.14E-04	385.2	1.50E-02	8.87E-03
SI45_E	0.75	417	0	1	7.04E-01	1.60E-01	3.39E-03	4.15E-03	3.76E-03	1.92E-03	2.22E-04	1.21E-03	7.72E-04	9.63E-07	7.88E-05	265.5	1.04E-02	6.16E-03
SI45_E	0.75	276	0	1	4.66E-01	9.25E-02	2.18E-03	2.74E-03	2.49E-03	1.26E-03	1.46E-04	7.96E-04	5.10E-04	6.37E-07	5.18E-05	171.2	6.82E-03	4.07E-03
SI45_E	0.75	233	0	1	3.94E-01	7.02E-02	1.82E-03	2.32E-03	2.10E-03	1.07E-03	1.23E-04	6.71E-04	4.32E-04	5.39E-07	4.37E-05	142.3	5.75E-03	3.44E-03
SI45_E	0.75	198	0	1	3.34E-01	5.36E-02	1.52E-03	1.97E-03	1.79E-03	9.01E-04	1.04E-04	5.67E-04	3.66E-04	4.57E-07	3.69E-05	118.8	4.86E-03	2.92E-03
SI45_E	0.75	163	0	1	2.75E-01	3.95E-02	1.25E-03	1.62E-03	1.47E-03	7.38E-04	8.55E-05	4.65E-04	3.01E-04	3.75E-07	3.03E-05	96.2	3.98E-03	2.40E-03
SI45_E	0.75	120	0	1	2.03E-01	2.62E-02	9.21E-04	1.20E-03	1.08E-03	5.44E-04	6.31E-05	3.42E-04	2.22E-04	2.78E-07	2.23E-05	70.2	2.93E-03	1.77E-03
SI45_W	0.75	84	0	1	1.42E-01	1.62E-02	6.43E-04	8.34E-04	7.56E-04	3.79E-04	4.39E-05	2.38E-04	1.55E-04	1.94E-07	1.55E-05	48.3	2.04E-03	1.24E-03
SI45_W	0.75	56	0	1	9.44E-02	9.71E-03	4.28E-04	5.56E-04	5.04E-04	2.52E-04	2.92E-05	1.59E-04	1.03E-04	1.29E-07	1.03E-05	31.8	1.36E-03	8.25E-04

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI45_W	0.75	49	0	1	8.26E-02	8.07E-03	3.75E-04	4.86E-04	4.41E-04	2.20E-04	2.55E-05	1.38E-04	9.05E-05	1.13E-07	9.01E-06	27.5	1.19E-03	7.22E-04
SI45_W	0.75	35	0	1	5.90E-02	5.76E-03	2.68E-04	3.47E-04	3.15E-04	1.57E-04	1.82E-05	9.87E-05	6.46E-05	8.07E-08	6.43E-06	19.5	8.46E-04	5.16E-04
SI45_W	0.75	49	0	1	8.26E-02	8.07E-03	3.75E-04	4.86E-04	4.41E-04	2.20E-04	2.55E-05	1.38E-04	9.05E-05	1.13E-07	8.99E-06	27.3	1.18E-03	7.22E-04
SI45_W	0.75	119	0	1	2.01E-01	1.96E-02	9.11E-04	1.18E-03	1.07E-03	5.33E-04	6.18E-05	3.35E-04	2.20E-04	2.74E-07	2.18E-05	66.3	2.87E-03	1.75E-03
SI45_W	0.75	356	0	1	6.02E-01	5.88E-02	2.73E-03	3.54E-03	3.21E-03	1.60E-03	1.86E-04	1.01E-03	6.59E-04	8.23E-07	6.56E-05	200.0	8.63E-03	5.26E-03
SI45_W	0.75	545	0	1	9.20E-01	1.02E-01	4.18E-03	5.42E-03	4.92E-03	2.46E-03	2.85E-04	1.55E-03	1.01E-03	1.26E-06	1.01E-04	313.3	1.33E-02	8.05E-03
SI45_W	0.75	440	0	1	7.43E-01	1.09E-01	3.37E-03	4.38E-03	3.97E-03	2.00E-03	2.32E-04	1.26E-03	8.14E-04	1.02E-06	8.20E-05	261.5	1.08E-02	6.50E-03
SI45_W	0.75	363	0	1	6.14E-01	1.03E-01	2.81E-03	3.61E-03	3.28E-03	1.66E-03	1.92E-04	1.04E-03	6.72E-04	8.39E-07	6.80E-05	220.4	8.94E-03	5.36E-03
SI45_W	0.75	328	0	1	5.55E-01	1.04E-01	2.59E-03	3.27E-03	2.96E-03	1.50E-03	1.74E-04	9.47E-04	6.08E-04	7.58E-07	6.16E-05	202.6	8.11E-03	4.85E-03
SI45_W	0.75	370	0	1	6.25E-01	1.39E-01	3.00E-03	3.68E-03	3.34E-03	1.71E-03	1.97E-04	1.07E-03	6.85E-04	8.55E-07	7.00E-05	235.4	9.20E-03	5.47E-03
SI45_W	0.75	391	0	1	6.61E-01	1.52E-01	3.20E-03	3.89E-03	3.53E-03	1.80E-03	2.09E-04	1.14E-03	7.24E-04	9.04E-07	7.41E-05	250.7	9.74E-03	5.78E-03
SI45_W	0.75	398	0	1	6.73E-01	1.59E-01	3.27E-03	3.96E-03	3.59E-03	1.84E-03	2.13E-04	1.16E-03	7.37E-04	9.20E-07	7.55E-05	256.3	9.92E-03	5.88E-03
SI45_W	0.75	412	0	1	6.96E-01	1.69E-01	3.40E-03	4.10E-03	3.72E-03	1.90E-03	2.21E-04	1.20E-03	7.63E-04	9.52E-07	7.82E-05	266.6	1.03E-02	6.09E-03
SI45_W	0.75	447	0	1	7.55E-01	1.82E-01	3.68E-03	4.45E-03	4.03E-03	2.07E-03	2.39E-04	1.30E-03	8.28E-04	1.03E-06	8.48E-05	288.6	1.11E-02	6.60E-03
SI45_W	0.75	552	0	1	9.32E-01	2.24E-01	4.54E-03	5.49E-03	4.98E-03	2.55E-03	2.95E-04	1.61E-03	1.02E-03	1.27E-06	1.05E-04	355.9	1.38E-02	8.15E-03
SI45_W	0.75	594	0	1	1.00E+00	2.35E-01	4.86E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.12E-04	380.7	1.48E-02	8.77E-03
SI45_W	0.75	412	0	1	6.96E-01	1.58E-01	3.35E-03	4.10E-03	3.72E-03	1.90E-03	2.20E-04	1.20E-03	7.63E-04	9.52E-07	7.79E-05	262.4	1.02E-02	6.09E-03
SI45_W	0.75	272	0	1	4.60E-01	9.14E-02	2.16E-03	2.71E-03	2.46E-03	1.25E-03	1.45E-04	7.86E-04	5.04E-04	6.29E-07	5.12E-05	169.2	6.74E-03	4.02E-03
SI45_W	0.75	230	0	1	3.89E-01	6.94E-02	1.80E-03	2.29E-03	2.08E-03	1.05E-03	1.22E-04	6.63E-04	4.27E-04	5.32E-07	4.32E-05	140.7	5.68E-03	3.40E-03
SI45_W	0.75	196	0	1	3.30E-01	5.29E-02	1.50E-03	1.95E-03	1.76E-03	8.90E-04	1.03E-04	5.61E-04	3.62E-04	4.52E-07	3.65E-05	117.4	4.80E-03	2.89E-03
SI45_W	0.75	161	0	1	2.71E-01	3.91E-02	1.23E-03	1.60E-03	1.45E-03	7.29E-04	8.45E-05	4.59E-04	2.97E-04	3.71E-07	2.99E-05	95.1	3.93E-03	2.37E-03
SI45_W	0.75	119	0	1	2.01E-01	2.58E-02	9.11E-04	1.18E-03	1.07E-03	5.38E-04	6.23E-05	3.38E-04	2.20E-04	2.74E-07	2.20E-05	69.3	2.90E-03	1.75E-03
SI46_E	0.75	84	0	1	1.42E-01	1.62E-02	6.43E-04	8.34E-04	7.56E-04	3.79E-04	4.39E-05	2.38E-04	1.55E-04	1.94E-07	1.55E-05	48.3	2.04E-03	1.24E-03
SI46_E	0.75	56	0	1	9.44E-02	9.71E-03	4.28E-04	5.56E-04	5.04E-04	2.52E-04	2.92E-05	1.59E-04	1.03E-04	1.29E-07	1.03E-05	31.8	1.36E-03	8.25E-04
SI46_E	0.75	49	0	1	8.26E-02	8.07E-03	3.75E-04	4.86E-04	4.41E-04	2.20E-04	2.55E-05	1.38E-04	9.05E-05	1.13E-07	9.01E-06	27.5	1.19E-03	7.22E-04
SI46_E	0.75	35	0	1	5.90E-02	5.76E-03	2.68E-04	3.47E-04	3.15E-04	1.57E-04	1.82E-05	9.87E-05	6.46E-05	8.07E-08	6.43E-06	19.5	8.46E-04	5.16E-04
SI46_E	0.75	49	0	1	8.26E-02	8.07E-03	3.75E-04	4.86E-04	4.41E-04	2.20E-04	2.55E-05	1.38E-04	9.05E-05	1.13E-07	8.99E-06	27.3	1.18E-03	7.22E-04
SI46_E	0.75	119	0	1	2.01E-01	1.96E-02	9.11E-04	1.18E-03	1.07E-03	5.33E-04	6.18E-05	3.35E-04	2.20E-04	2.74E-07	2.18E-05	66.3	2.87E-03	1.75E-03
SI46_E	0.75	356	0	1	6.02E-01	5.88E-02	2.73E-03	3.54E-03	3.21E-03	1.60E-03	1.86E-04	1.01E-03	6.59E-04	8.23E-07	6.56E-05	200.0	8.63E-03	5.26E-03
SI46_E	0.75	545	0	1	9.20E-01	1.02E-01	4.18E-03	5.42E-03	4.92E-03	2.46E-03	2.85E-04	1.55E-03	1.01E-03	1.26E-06	1.01E-04	313.3	1.33E-02	8.05E-03
SI46_E	0.75	440	0	1	7.43E-01	1.09E-01	3.37E-03	4.38E-03	3.97E-03	2.00E-03	2.32E-04	1.26E-03	8.14E-04	1.02E-06	8.20E-05	261.5	1.08E-02	6.50E-03
SI46_E	0.75	363	0	1	6.14E-01	1.03E-01	2.81E-03	3.61E-03	3.28E-03	1.66E-03	1.92E-04	1.04E-03	6.72E-04	8.39E-07	6.80E-05	220.4	8.94E-03	5.36E-03
SI46_E	0.75	328	0	1	5.55E-01	1.04E-01	2.59E-03	3.27E-03	2.96E-03	1.50E-03	1.74E-04	9.47E-04	6.08E-04	7.58E-07	6.16E-05	202.6	8.11E-03	4.85E-03
SI46_E	0.75	370	0	1	6.25E-01	1.39E-01	3.00E-03	3.68E-03	3.34E-03	1.71E-03	1.97E-04	1.07E-03	6.85E-04	8.55E-07	7.00E-05	235.4	9.20E-03	5.47E-03
SI46_E	0.75	391	0	1	6.61E-01	1.52E-01	3.20E-03	3.89E-03	3.53E-03	1.80E-03	2.09E-04	1.14E-03	7.24E-04	9.04E-07	7.41E-05	250.7	9.74E-03	5.78E-03
SI46_E	0.75	398	0	1	6.73E-01	1.59E-01	3.27E-03	3.96E-03	3.59E-03	1.84E-03	2.13E-04	1.16E-03	7.37E-04	9.20E-07	7.55E-05	256.3	9.92E-03	5.88E-03
SI46_E	0.75	412	0	1	6.96E-01	1.69E-01	3.40E-03	4.10E-03	3.72E-03	1.90E-03	2.21E-04	1.20E-03	7.63E-04	9.52E-07	7.82E-05	266.6	1.03E-02	6.09E-03
SI46_E	0.75	447	0	1	7.55E-01	1.82E-01	3.68E-03	4.45E-03	4.03E-03	2.07E-03	2.39E-04	1.30E-03	8.28E-04	1.03E-06	8.48E-05	288.6	1.11E-02	6.60E-03
SI46_E	0.75	552	0	1	9.32E-01	2.24E-01	4.54E-03	5.49E-03	4.98E-03	2.55E-03	2.95E-04	1.61E-03	1.02E-03	1.27E-06	1.05E-04	355.9	1.38E-02	8.15E-03
SI46_E	0.75	594	0	1	1.00E+00	2.35E-01	4.86E-03	5.91E-03	5.36E-03	2.74E-03	3.17E-04	1.73E-03	1.10E-03	1.37E-06	1.12E-04	380.7	1.48E-02	8.77E-03
SI46_E	0.75	412	0	1	6.96E-01	1.58E-01	3.35E-03	4.10E-03	3.72E-03	1.90E-03	2.20E-04	1.20E-03	7.63E-04	9.52E-07	7.79E-05	262.4	1.02E-02	6.09E-03
SI46_E	0.75	272	0	1	4.60E-01	9.14E-02	2.16E-03	2.71E-03	2.46E-03	1.25E-03	1.45E-04	7.86E-04	5.04E-04	6.29E-07	5.12E-05	169.2	6.74E-03	4.02E-03
SI46_E	0.75	230	0	1	3.89E-01	6.94E-02	1.80E-03	2.29E-03	2.08E-03	1.05E-03	1.22E-04	6.63E-04	4.27E-04	5.32E-07	4.32E-05	140.7	5.68E-03	3.40E-03
SI46_E	0.75	196	0	1	3.30E-01	5.29E-02	1.50E-03	1.95E-03	1.76E-03	8.90E-04	1.03E-04	5.61E-04	3.62E-04	4.52E-07	3.65E-05	117.4	4.80E-03	2.89E-03
SI46_E	0.75	161	0	1	2.71E-01	3.91E-02	1.23E-03	1.60E-03	1.45E-03	7.29E-04	8.45E-05	4.59E-04	2.97E-04	3.71E-07	2.99E-05	95.1	3.93E-03	2.37E-03
SI46_E	0.75	119	0	1	2.01E-01	2.58E-02	9.11E-04	1.18E-03	1.07E-03	5.38E-04	6.23E-05	3.38E-04	2.20E-04	2.74E-07	2.20E-05	69.3	2.90E-03	1.75E-03
SI46_W	0.75	92	0	1	1.56E-01	1.78E-02	7.09E-04	9.19E-04	8.34E-04	4.17E-04	4.84E-05	2.63E-04	1.71E-04	2.13E-07	1.71E-05	53.2	2.25E-03	1.36E-03
SI46_W	0.75	62	0	1	1.04E-01	1.07E-02	4.72E-04	6.13E-04	5.56E-04	2.78E-04	3.22E-05	1.75E-04	1.14E-04	1.42E-07	1.14E-05	35.1	1.50E-03	9.10E-04
SI46_W	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.53E-04	9.98E-05	1.24E-07	9.93E-06	30.3	1.31E-03	7.96E-04
SI46_W	0.75	38	0	1	6.50E-02	6.35E-03	2.95E-04	3.83E-04	3.47E-04	1.73E-04	2.00E-05	1.09E-04	7.13E-05	8.89E-08	7.08E-06	21.5	9.32E-04	5.69E-04
SI46_W	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.52E-04	9.98E-05	1.24E-07	9.91E-06	30.1	1.30E-03	7.96E-04
SI46_W	0.75	131	0	1	2.21E-01	2.16E-02	1.00E-03	1.30E-03	1.18E-03	5.88E-04	6.81E-05	3.70E-04	2.42E-04	3.02E-07	2.41E-05	73.0	3.17E-03	1.93E-03
SI46_W	0.75	393	0	1	6.63E-01	6.48E-02	3.01E-03	3.91E-03	3.54E-03	1.76E-03	2.05E-04	1.11E-03	7.27E-04	9.07E-07	7.23E-05	220.4	9.51E-03	5.80E-03
SI46_W	0.75	600	0	1	1.01E+00	1.13E-01	4.61E-03	5.97E-03	5.42E-03	2.71E-03	3.14E-04	1.71E-03	1.11E-03	1.39E-06	1.11E-04	345.4	1.46E-02	8.87E-03
SI46_W	0.75	485	0	1	8.19E-01	1.20E-01	3.72E-03	4.82E-03	4.38E-03	2.20E-03	2.55E-04	1.39E-03	8.98E-04	1.12E-06	9.04E-05	288.3	1.19E-02	7.16E-03
SI46_W	0.75	400	0	1	6.76E-01	1.14E-01	3.10E-03	3.98E-03	3.61E-03	1.83E-03	2.12E-04	1.15E-03	7.41E-04	9.25E-07	7.49E-05	243.0	9.85E-03	5.91E-03
SI46_W	0.75	362	0	1	6.11E-01	1.14E-01	2.85E-03	3.60E-03	3.27E-03	1.66E-03	1.92E-04	1.04E-03	6.70E-04	8.36E-07	6.80E-05	223.4	8.94E-03	5.35E-03
SI46_W	0.75	408	0	1	6.89E-01	1.53E-01	3.31E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.18E-03	7.55E-04	9.43E-07	7.71E-05	259.5	1.01E-02	6.03E-03
SI46_W	0.75	431	0	1	7.28E-01	1.68E-01	3.53E-03	4.29E-03	3.89E-03	1.99E-03	2.30E-04	1.25E-03	7.98E-04	9.96E-07	8.16E-05	276.4	1.07E-02	6.37E-03
SI46_W	0.75	439	0	1	7.41E-01	1.75E-01	3.61E-03	4.37E-03	3.96E-03	2.03E-03	2.35E-04	1.28E-03	8.13E-04	1.01E-06	8.32E-05	282.6	1.09E-02	6.48E-03
SI46_W	0.75	454	0	1	7.67E-01	1.86E-01	3.75E-03	4.52E-03	4.10E-03	2.10E-03	2.43E-04	1.32E-03	8.41E-04	1.05E-06	8.62E-05	293.9	1.13E-02	6.71E-03
SI46_W	0.75	493	0	1	8.32E-01	2.01E-01	4.06E-03	4.90E-03	4.45E-03	2.28E-03	2.64E-04	1.43E-03	9.12E-04	1.14E-06	9.34E-05	318.1	1.23E-02	7.28E-03
SI46_W	0.75	608	0	1	1.03E+00	2.47E-01	5.01E-03	6.05E-03	5.49E-03	2.81E-03	3.25E-04	1.77E-03	1.13E-03	1.41E-06	1.15E-04	392.4	1.52E-02	8.98E-03
SI46_W	0.75	654	0	1	1.11E+00	2.59E-01	5.36E-03	6.51E-03	5.91E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	419.6	1.63E-02	9.67E-03
SI46_W	0.75	454	0	1	7.67E-01	1.74E-01	3.69E-03	4.52E-03	4.10E-03	2.09E-03	2.42E-04	1.32E-03	8.41E-04	1.05E-06	8.59E-05	289.3	1.13E-02	6.71E-03
SI46_W	0.75	300	0	1	5.07E-01	1.01E-01	2.38E-03	2.99E-03	2.71E-03	1.38E-03	1.59E-04	8.67E-04	5.56E-04	6.94E-07	5.65E-05	186.5	7.43E-03	4.44E-03
SI46_W	0.75	254	0	1	4.29E-01	7.65E-02	1.98E-03	2.53E-03	2.29E-03	1.16E-03	1.34E-04	7.31E-04	4.70E-04	5.87E-07	4.76E-05	155.1	6.26E-03	3.75E-03
SI46_W	0.75	216	0	1	3.64E-01	5.83E-02	1.65E-03	2.14E-03	1.95E-03	9.82E-04	1.14E-04	6.18E-04	3.99E-04	4.98E-07	4.02E-05	129.4	5.29E-03	3.18E-03
SI46_W	0.75	177	0	1	2.99E-01	4.31E-02	1.36E-03	1.76E-03	1.60E-03	8.04E-04	9.32E-05	5.06E-04	3.28E-04	4.09E-07	3.30E-05	104.8	4.34E-03	2.62E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_W	0.75	131	0	1	2.21E-01	2.85E-02	1.00E-03	1.30E-03	1.18E-03	5.93E-04	6.87E-05	3.73E-04	2.42E-04	3.02E-07	2.43E-05	76.4	3.20E-03	1.93E-03
SI47_E	0.75	92	0	1	1.56E-01	1.78E-02	7.09E-04	9.19E-04	8.34E-04	4.17E-04	4.84E-05	2.63E-04	1.71E-04	2.13E-07	1.71E-05	53.2	2.25E-03	1.36E-03
SI47_E	0.75	62	0	1	1.04E-01	1.07E-02	4.72E-04	6.13E-04	5.56E-04	2.78E-04	3.22E-05	1.75E-04	1.14E-04	1.42E-07	1.14E-05	35.1	1.50E-03	9.10E-04
SI47_E	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.53E-04	9.98E-05	1.24E-07	9.93E-06	30.3	1.31E-03	7.96E-04
SI47_E	0.75	38	0	1	6.50E-02	6.35E-03	2.95E-04	3.83E-04	3.47E-04	1.73E-04	2.00E-05	1.09E-04	7.13E-05	8.89E-08	7.08E-06	21.5	9.32E-04	5.69E-04
SI47_E	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.52E-04	9.98E-05	1.24E-07	9.91E-06	30.1	1.30E-03	7.96E-04
SI47_E	0.75	131	0	1	2.21E-01	2.16E-02	1.00E-03	1.30E-03	1.18E-03	5.88E-04	6.81E-05	3.70E-04	2.42E-04	3.02E-07	2.41E-05	73.0	3.17E-03	1.93E-03
SI47_E	0.75	393	0	1	6.63E-01	6.48E-02	3.01E-03	3.91E-03	3.54E-03	1.76E-03	2.05E-04	1.11E-03	7.27E-04	9.07E-07	7.23E-05	220.4	9.51E-03	5.80E-03
SI47_E	0.75	600	0	1	1.01E+00	1.13E-01	4.61E-03	5.97E-03	5.42E-03	2.71E-03	3.14E-04	1.71E-03	1.11E-03	1.39E-06	1.11E-04	345.4	1.46E-02	8.87E-03
SI47_E	0.75	485	0	1	8.19E-01	1.20E-01	3.72E-03	4.82E-03	4.38E-03	2.20E-03	2.55E-04	1.39E-03	8.98E-04	1.12E-06	9.04E-05	288.3	1.19E-02	7.16E-03
SI47_E	0.75	400	0	1	6.76E-01	1.14E-01	3.10E-03	3.98E-03	3.61E-03	1.83E-03	2.12E-04	1.15E-03	7.41E-04	9.25E-07	7.49E-05	243.0	9.85E-03	5.91E-03
SI47_E	0.75	362	0	1	6.11E-01	1.14E-01	2.85E-03	3.60E-03	3.27E-03	1.66E-03	1.92E-04	1.04E-03	6.70E-04	8.36E-07	6.80E-05	223.4	8.94E-03	5.35E-03
SI47_E	0.75	408	0	1	6.89E-01	1.53E-01	3.31E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.18E-03	7.55E-04	9.43E-07	7.71E-05	259.5	1.01E-02	6.03E-03
SI47_E	0.75	431	0	1	7.28E-01	1.68E-01	3.53E-03	4.29E-03	3.89E-03	1.99E-03	2.30E-04	1.25E-03	7.98E-04	9.96E-07	8.16E-05	276.4	1.07E-02	6.37E-03
SI47_E	0.75	439	0	1	7.41E-01	1.75E-01	3.61E-03	4.37E-03	3.96E-03	2.03E-03	2.35E-04	1.28E-03	8.13E-04	1.01E-06	8.32E-05	282.6	1.09E-02	6.48E-03
SI47_E	0.75	454	0	1	7.67E-01	1.86E-01	3.75E-03	4.52E-03	4.10E-03	2.10E-03	2.43E-04	1.32E-03	8.41E-04	1.05E-06	8.62E-05	293.9	1.13E-02	6.71E-03
SI47_E	0.75	493	0	1	8.32E-01	2.01E-01	4.06E-03	4.90E-03	4.45E-03	2.28E-03	2.64E-04	1.43E-03	9.12E-04	1.14E-06	9.34E-05	318.1	1.23E-02	7.28E-03
SI47_E	0.75	608	0	1	1.03E+00	2.47E-01	5.01E-03	6.05E-03	5.49E-03	2.81E-03	3.25E-04	1.77E-03	1.13E-03	1.41E-06	1.15E-04	392.4	1.52E-02	8.98E-03
SI47_E	0.75	654	0	1	1.11E+00	2.59E-01	5.36E-03	6.51E-03	5.91E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	419.6	1.63E-02	9.67E-03
SI47_E	0.75	454	0	1	7.67E-01	1.74E-01	3.69E-03	4.52E-03	4.10E-03	2.09E-03	2.42E-04	1.32E-03	8.41E-04	1.05E-06	8.59E-05	289.3	1.13E-02	6.71E-03
SI47_E	0.75	300	0	1	5.07E-01	1.01E-01	2.38E-03	2.99E-03	2.71E-03	1.38E-03	1.59E-04	8.67E-04	5.56E-04	6.94E-07	5.65E-05	186.5	7.43E-03	4.44E-03
SI47_E	0.75	254	0	1	4.29E-01	7.65E-02	1.98E-03	2.53E-03	2.29E-03	1.16E-03	1.34E-04	7.31E-04	4.70E-04	5.87E-07	4.76E-05	155.1	6.26E-03	3.75E-03
SI47_E	0.75	216	0	1	3.64E-01	5.83E-02	1.65E-03	2.14E-03	1.95E-03	9.82E-04	1.14E-04	6.18E-04	3.99E-04	4.98E-07	4.02E-05	129.4	5.29E-03	3.18E-03
SI47_E	0.75	177	0	1	2.99E-01	4.31E-02	1.36E-03	1.76E-03	1.60E-03	8.04E-04	9.32E-05	5.06E-04	3.28E-04	4.09E-07	3.30E-05	104.8	4.34E-03	2.62E-03
SI47_E	0.75	131	0	1	2.21E-01	2.85E-02	1.00E-03	1.30E-03	1.18E-03	5.93E-04	6.87E-05	3.73E-04	2.42E-04	3.02E-07	2.43E-05	76.4	3.20E-03	1.93E-03
SI47_W	0.75	92	0	1	1.56E-01	1.78E-02	7.09E-04	9.19E-04	8.34E-04	4.17E-04	4.84E-05	2.63E-04	1.71E-04	2.13E-07	1.71E-05	53.2	2.25E-03	1.36E-03
SI47_W	0.75	62	0	1	1.04E-01	1.07E-02	4.72E-04	6.13E-04	5.56E-04	2.78E-04	3.22E-05	1.75E-04	1.14E-04	1.42E-07	1.14E-05	35.1	1.50E-03	9.10E-04
SI47_W	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.53E-04	9.98E-05	1.24E-07	9.93E-06	30.3	1.31E-03	7.96E-04
SI47_W	0.75	38	0	1	6.50E-02	6.35E-03	2.95E-04	3.83E-04	3.47E-04	1.73E-04	2.00E-05	1.09E-04	7.13E-05	8.89E-08	7.08E-06	21.5	9.32E-04	5.69E-04
SI47_W	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.52E-04	9.98E-05	1.24E-07	9.91E-06	30.1	1.30E-03	7.96E-04
SI47_W	0.75	131	0	1	2.21E-01	2.16E-02	1.00E-03	1.30E-03	1.18E-03	5.88E-04	6.81E-05	3.70E-04	2.42E-04	3.02E-07	2.41E-05	73.0	3.17E-03	1.93E-03
SI47_W	0.75	393	0	1	6.63E-01	6.48E-02	3.01E-03	3.91E-03	3.54E-03	1.76E-03	2.05E-04	1.11E-03	7.27E-04	9.07E-07	7.23E-05	220.4	9.51E-03	5.80E-03
SI47_W	0.75	600	0	1	1.01E+00	1.13E-01	4.61E-03	5.97E-03	5.42E-03	2.71E-03	3.14E-04	1.71E-03	1.11E-03	1.39E-06	1.11E-04	345.4	1.46E-02	8.87E-03
SI47_W	0.75	485	0	1	8.19E-01	1.20E-01	3.72E-03	4.82E-03	4.38E-03	2.20E-03	2.55E-04	1.39E-03	8.98E-04	1.12E-06	9.04E-05	288.3	1.19E-02	7.16E-03
SI47_W	0.75	400	0	1	6.76E-01	1.14E-01	3.10E-03	3.98E-03	3.61E-03	1.83E-03	2.12E-04	1.15E-03	7.41E-04	9.25E-07	7.49E-05	243.0	9.85E-03	5.91E-03
SI47_W	0.75	362	0	1	6.11E-01	1.14E-01	2.85E-03	3.60E-03	3.27E-03	1.66E-03	1.92E-04	1.04E-03	6.70E-04	8.36E-07	6.80E-05	223.4	8.94E-03	5.35E-03
SI47_W	0.75	408	0	1	6.89E-01	1.53E-01	3.31E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.18E-03	7.55E-04	9.43E-07	7.71E-05	259.5	1.01E-02	6.03E-03
SI47_W	0.75	431	0	1	7.28E-01	1.68E-01	3.53E-03	4.29E-03	3.89E-03	1.99E-03	2.30E-04	1.25E-03	7.98E-04	9.96E-07	8.16E-05	276.4	1.07E-02	6.37E-03
SI47_W	0.75	439	0	1	7.41E-01	1.75E-01	3.61E-03	4.37E-03	3.96E-03	2.03E-03	2.35E-04	1.28E-03	8.13E-04	1.01E-06	8.32E-05	282.6	1.09E-02	6.48E-03
SI47_W	0.75	454	0	1	7.67E-01	1.86E-01	3.75E-03	4.52E-03	4.10E-03	2.10E-03	2.43E-04	1.32E-03	8.41E-04	1.05E-06	8.62E-05	293.9	1.13E-02	6.71E-03
SI47_W	0.75	493	0	1	8.32E-01	2.01E-01	4.06E-03	4.90E-03	4.45E-03	2.28E-03	2.64E-04	1.43E-03	9.12E-04	1.14E-06	9.34E-05	318.1	1.23E-02	7.28E-03
SI47_W	0.75	608	0	1	1.03E+00	2.47E-01	5.01E-03	6.05E-03	5.49E-03	2.81E-03	3.25E-04	1.77E-03	1.13E-03	1.41E-06	1.15E-04	392.4	1.52E-02	8.98E-03
SI47_W	0.75	654	0	1	1.11E+00	2.59E-01	5.36E-03	6.51E-03	5.91E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	419.6	1.63E-02	9.67E-03
SI47_W	0.75	454	0	1	7.67E-01	1.74E-01	3.69E-03	4.52E-03	4.10E-03	2.09E-03	2.42E-04	1.32E-03	8.41E-04	1.05E-06	8.59E-05	289.3	1.13E-02	6.71E-03
SI47_W	0.75	300	0	1	5.07E-01	1.01E-01	2.38E-03	2.99E-03	2.71E-03	1.38E-03	1.59E-04	8.67E-04	5.56E-04	6.94E-07	5.65E-05	186.5	7.43E-03	4.44E-03
SI47_W	0.75	254	0	1	4.29E-01	7.65E-02	1.98E-03	2.53E-03	2.29E-03	1.16E-03	1.34E-04	7.31E-04	4.70E-04	5.87E-07	4.76E-05	155.1	6.26E-03	3.75E-03
SI47_W	0.75	216	0	1	3.64E-01	5.83E-02	1.65E-03	2.14E-03	1.95E-03	9.82E-04	1.14E-04	6.18E-04	3.99E-04	4.98E-07	4.02E-05	129.4	5.29E-03	3.18E-03
SI47_W	0.75	177	0	1	2.99E-01	4.31E-02	1.36E-03	1.76E-03	1.60E-03	8.04E-04	9.32E-05	5.06E-04	3.28E-04	4.09E-07	3.30E-05	104.8	4.34E-03	2.62E-03
SI47_W	0.75	131	0	1	2.21E-01	2.85E-02	1.00E-03	1.30E-03	1.18E-03	5.93E-04	6.87E-05	3.73E-04	2.42E-04	3.02E-07	2.43E-05	76.4	3.20E-03	1.93E-03
SI48_E	0.75	92	0	1	1.56E-01	1.78E-02	7.09E-04	9.19E-04	8.34E-04	4.17E-04	4.84E-05	2.63E-04	1.71E-04	2.13E-07	1.71E-05	53.2	2.25E-03	1.36E-03
SI48_E	0.75	62	0	1	1.04E-01	1.07E-02	4.72E-04	6.13E-04	5.56E-04	2.78E-04	3.22E-05	1.75E-04	1.14E-04	1.42E-07	1.14E-05	35.1	1.50E-03	9.10E-04
SI48_E	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.53E-04	9.98E-05	1.24E-07	9.93E-06	30.3	1.31E-03	7.96E-04
SI48_E	0.75	38	0	1	6.50E-02	6.35E-03	2.95E-04	3.83E-04	3.47E-04	1.73E-04	2.00E-05	1.09E-04	7.13E-05	8.89E-08	7.08E-06	21.5	9.32E-04	5.69E-04
SI48_E	0.75	54	0	1	9.10E-02	8.89E-03	4.13E-04	5.36E-04	4.86E-04	2.42E-04	2.81E-05	1.52E-04	9.98E-05	1.24E-07	9.91E-06	30.1	1.30E-03	7.96E-04
SI48_E	0.75	131	0	1	2.21E-01	2.16E-02	1.00E-03	1.30E-03	1.18E-03	5.88E-04	6.81E-05	3.70E-04	2.42E-04	3.02E-07	2.41E-05	73.0	3.17E-03	1.93E-03
SI48_E	0.75	393	0	1	6.63E-01	6.48E-02	3.01E-03	3.91E-03	3.54E-03	1.76E-03	2.05E-04	1.11E-03	7.27E-04	9.07E-07	7.23E-05	220.4	9.51E-03	5.80E-03
SI48_E	0.75	600	0	1	1.01E+00	1.13E-01	4.61E-03	5.97E-03	5.42E-03	2.71E-03	3.14E-04	1.71E-03	1.11E-03	1.39E-06	1.11E-04	345.4	1.46E-02	8.87E-03
SI48_E	0.75	485	0	1	8.19E-01	1.20E-01	3.72E-03	4.82E-03	4.38E-03	2.20E-03	2.55E-04	1.39E-03	8.98E-04	1.12E-06	9.04E-05	288.3	1.19E-02	7.16E-03
SI48_E	0.75	400	0	1	6.76E-01	1.14E-01	3.10E-03	3.98E-03	3.61E-03	1.83E-03	2.12E-04	1.15E-03	7.41E-04	9.25E-07	7.49E-05	243.0	9.85E-03	5.91E-03
SI48_E	0.75	362	0	1	6.11E-01	1.14E-01	2.85E-03	3.60E-03	3.27E-03	1.66E-03	1.92E-04	1.04E-03	6.70E-04	8.36E-07	6.80E-05	223.4	8.94E-03	5.35E-03
SI48_E	0.75	408	0	1	6.89E-01	1.53E-01	3.31E-03	4.06E-03	3.68E-03	1.88E-03	2.18E-04	1.18E-03	7.55E-04	9.43E-07	7.71E-05	259.5	1.01E-02	6.03E-03
SI48_E	0.75	431	0	1	7.28E-01	1.68E-01	3.53E-03	4.29E-03	3.89E-03	1.99E-03	2.30E-04	1.25E-03	7.98E-04	9.96E-07	8.16E-05	276.4	1.07E-02	6.37E-03
SI48_E	0.75	439	0	1	7.41E-01	1.75E-01	3.61E-03	4.37E-03	3.96E-03	2.03E-03	2.35E-04	1.28E-03	8.13E-04	1.01E-06	8.32E-05	282.6	1.09E-02	6.48E-03
SI48_E	0.75	454	0	1	7.67E-01	1.86E-01	3.75E-03	4.52E-03	4.10E-03	2.10E-03	2.43E-04	1.32E-03	8.41E-04	1.05E-06	8.62E-05	293.9	1.13E-02	6.71E-03
SI48_E	0.75	493	0	1	8.32E-01	2.01E-01	4.06E-03	4.90E-03	4.45E-03	2.28E-03	2.64E-04	1.43E-03	9.12E-04	1.14E-06	9.34E-05	318.1	1.23E-02	7.28E-03
SI48_E	0.75	608	0	1	1.03E+00	2.47E-01	5.01E-03	6.05E-03	5.49E-03	2.81E-03	3.25E-04	1.77E-03	1.13E-03	1.41E-06	1.15E-04	392.4	1.52E-02	8.98E-03
SI48_E	0.75	654	0	1	1.11E+00	2.59E-01	5.36E-03	6.51E-03	5.91E-03	3.02E-03	3.50E-04	1.90E-03	1.21E-03	1.51E-06	1.24E-04	419.6	1.63E-02	9.67E-03
SI48_E	0.75	454	0	1	7.67E-01	1.74E-01	3.69E-03	4.52E-03	4.10E-03	2.09E-03	2.42E-04	1.32E-03	8.41E-04	1.05E-06	8.59E-05	289.3	1.13E-02	6.71E-03
SI48_E	0.75	300	0	1	5.07E-01	1.01E-01	2.38E-03	2.99E-03	2.71E-03	1.38E-03	1.59E-04	8.67E-04	5.56E-04	6.94E-07	5.65E-05	186.5	7.43E-03	4.44E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI48_E	0.75	254	0	1	4.29E-01	7.65E-02	1.98E-03	2.53E-03	2.29E-03	1.16E-03	1.34E-04	7.31E-04	4.70E-04	5.87E-07	4.76E-05	155.1	6.26E-03	3.75E-03
SI48_E	0.75	216	0	1	3.64E-01	5.83E-02	1.65E-03	2.14E-03	1.95E-03	9.82E-04	1.14E-04	6.18E-04	3.99E-04	4.98E-07	4.02E-05	129.4	5.29E-03	3.18E-03
SI48_E	0.75	177	0	1	2.99E-01	4.31E-02	1.36E-03	1.76E-03	1.60E-03	8.04E-04	9.32E-05	5.06E-04	3.28E-04	4.09E-07	3.30E-05	104.8	4.34E-03	2.62E-03
SI48_E	0.75	131	0	1	2.21E-01	2.85E-02	1.00E-03	1.30E-03	1.18E-03	5.93E-04	6.87E-05	3.73E-04	2.42E-04	3.02E-07	2.43E-05	76.4	3.20E-03	1.93E-03
SI48_W	0.75	101	0	1	1.71E-01	1.95E-02	7.74E-04	1.00E-03	9.11E-04	4.56E-04	5.29E-05	2.87E-04	1.87E-04	2.33E-07	1.87E-05	58.2	2.46E-03	1.49E-03
SI48_W	0.75	67	0	1	1.14E-01	1.17E-02	5.16E-04	6.70E-04	6.07E-04	3.03E-04	3.52E-05	1.91E-04	1.25E-04	1.55E-07	1.24E-05	38.4	1.64E-03	9.94E-04
SI48_W	0.75	59	0	1	9.95E-02	9.72E-03	4.52E-04	5.86E-04	5.32E-04	2.65E-04	3.07E-05	1.67E-04	1.09E-04	1.36E-07	1.09E-05	33.2	1.43E-03	8.70E-04
SI48_W	0.75	42	0	1	7.11E-02	6.94E-03	3.23E-04	4.19E-04	3.80E-04	1.89E-04	2.19E-05	1.19E-04	7.79E-05	9.72E-08	7.74E-06	23.5	1.02E-03	6.21E-04
SI48_W	0.75	59	0	1	9.95E-02	9.72E-03	4.52E-04	5.86E-04	5.32E-04	2.64E-04	3.07E-05	1.66E-04	1.09E-04	1.36E-07	1.08E-05	32.9	1.43E-03	8.70E-04
SI48_W	0.75	143	0	1	2.42E-01	2.36E-02	1.10E-03	1.42E-03	1.29E-03	6.42E-04	7.45E-05	4.04E-04	2.65E-04	3.30E-07	2.63E-05	79.8	3.46E-03	2.11E-03
SI48_W	0.75	429	0	1	7.25E-01	7.08E-02	3.29E-03	4.27E-03	3.87E-03	1.93E-03	2.24E-04	1.21E-03	7.94E-04	9.91E-07	7.90E-05	240.9	1.04E-02	6.34E-03
SI48_W	0.75	656	0	1	1.11E+00	1.23E-01	5.03E-03	6.53E-03	5.92E-03	2.96E-03	3.44E-04	1.87E-03	1.21E-03	1.52E-06	1.21E-04	377.5	1.60E-02	9.69E-03
SI48_W	0.75	530	0	1	8.96E-01	1.31E-01	4.07E-03	5.27E-03	4.78E-03	2.41E-03	2.79E-04	1.52E-03	9.81E-04	1.22E-06	9.88E-05	315.1	1.30E-02	7.83E-03
SI48_W	0.75	437	0	1	7.39E-01	1.25E-01	3.39E-03	4.35E-03	3.95E-03	2.00E-03	2.31E-04	1.26E-03	8.10E-04	1.01E-06	8.19E-05	265.6	1.08E-02	6.46E-03
SI48_W	0.75	395	0	1	6.68E-01	1.25E-01	3.12E-03	3.93E-03	3.57E-03	1.81E-03	2.10E-04	1.14E-03	7.32E-04	9.14E-07	7.43E-05	244.1	9.77E-03	5.84E-03
SI48_W	0.75	446	0	1	7.53E-01	1.67E-01	3.62E-03	4.44E-03	4.02E-03	2.05E-03	2.38E-04	1.29E-03	8.26E-04	1.03E-06	8.43E-05	283.7	1.11E-02	6.59E-03
SI48_W	0.75	471	0	1	7.96E-01	1.83E-01	3.85E-03	4.69E-03	4.25E-03	2.17E-03	2.52E-04	1.37E-03	8.72E-04	1.09E-06	8.92E-05	302.0	1.17E-02	6.96E-03
SI48_W	0.75	480	0	1	8.10E-01	1.92E-01	3.94E-03	4.77E-03	4.33E-03	2.22E-03	2.56E-04	1.40E-03	8.88E-04	1.11E-06	9.09E-05	308.8	1.20E-02	7.08E-03
SI48_W	0.75	496	0	1	8.39E-01	2.04E-01	4.10E-03	4.94E-03	4.48E-03	2.30E-03	2.66E-04	1.45E-03	9.19E-04	1.15E-06	9.42E-05	321.2	1.24E-02	7.33E-03
SI48_W	0.75	538	0	1	9.10E-01	2.19E-01	4.44E-03	5.36E-03	4.86E-03	2.49E-03	2.88E-04	1.57E-03	9.97E-04	1.24E-06	1.02E-04	347.7	1.34E-02	7.95E-03
SI48_W	0.75	665	0	1	1.12E+00	2.70E-01	5.47E-03	6.61E-03	6.00E-03	3.07E-03	3.56E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	428.8	1.66E-02	9.82E-03
SI48_W	0.75	715	0	1	1.21E+00	2.83E-01	5.85E-03	7.11E-03	6.45E-03	3.30E-03	3.82E-04	2.08E-03	1.32E-03	1.65E-06	1.35E-04	458.6	1.78E-02	1.06E-02
SI48_W	0.75	496	0	1	8.39E-01	1.91E-01	4.03E-03	4.94E-03	4.48E-03	2.29E-03	2.65E-04	1.44E-03	9.19E-04	1.15E-06	9.39E-05	316.2	1.23E-02	7.33E-03
SI48_W	0.75	328	0	1	5.54E-01	1.10E-01	2.60E-03	3.26E-03	2.96E-03	1.50E-03	1.74E-04	9.48E-04	6.07E-04	7.58E-07	6.17E-05	203.8	8.12E-03	4.85E-03
SI48_W	0.75	278	0	1	4.69E-01	8.36E-02	2.16E-03	2.76E-03	2.51E-03	1.27E-03	1.47E-04	7.99E-04	5.14E-04	6.41E-07	5.20E-05	169.5	6.84E-03	4.10E-03
SI48_W	0.75	236	0	1	3.98E-01	6.38E-02	1.81E-03	2.34E-03	2.13E-03	1.07E-03	1.24E-04	6.75E-04	4.36E-04	5.44E-07	4.40E-05	141.5	5.79E-03	3.48E-03
SI48_W	0.75	193	0	1	3.27E-01	4.71E-02	1.48E-03	1.93E-03	1.75E-03	8.79E-04	1.02E-04	5.53E-04	3.58E-04	4.47E-07	3.60E-05	114.5	4.74E-03	2.86E-03
SI48_W	0.75	143	0	1	2.42E-01	3.11E-02	1.10E-03	1.42E-03	1.29E-03	6.48E-04	7.51E-05	4.08E-04	2.65E-04	3.30E-07	2.66E-05	83.5	3.49E-03	2.11E-03
SI49_E	0.75	101	0	1	1.71E-01	1.95E-02	7.74E-04	1.00E-03	9.11E-04	4.56E-04	5.29E-05	2.87E-04	1.87E-04	2.33E-07	1.87E-05	58.2	2.46E-03	1.49E-03
SI49_E	0.75	67	0	1	1.14E-01	1.17E-02	5.16E-04	6.70E-04	6.07E-04	3.03E-04	3.52E-05	1.91E-04	1.25E-04	1.55E-07	1.24E-05	38.4	1.64E-03	9.94E-04
SI49_E	0.75	59	0	1	9.95E-02	9.72E-03	4.52E-04	5.86E-04	5.32E-04	2.65E-04	3.07E-05	1.67E-04	1.09E-04	1.36E-07	1.09E-05	33.2	1.43E-03	8.70E-04
SI49_E	0.75	42	0	1	7.11E-02	6.94E-03	3.23E-04	4.19E-04	3.80E-04	1.89E-04	2.19E-05	1.19E-04	7.79E-05	9.72E-08	7.74E-06	23.5	1.02E-03	6.21E-04
SI49_E	0.75	59	0	1	9.95E-02	9.72E-03	4.52E-04	5.86E-04	5.32E-04	2.64E-04	3.07E-05	1.66E-04	1.09E-04	1.36E-07	1.08E-05	32.9	1.43E-03	8.70E-04
SI49_E	0.75	143	0	1	2.42E-01	2.36E-02	1.10E-03	1.42E-03	1.29E-03	6.42E-04	7.45E-05	4.04E-04	2.65E-04	3.30E-07	2.63E-05	79.8	3.46E-03	2.11E-03
SI49_E	0.75	429	0	1	7.25E-01	7.08E-02	3.29E-03	4.27E-03	3.87E-03	1.93E-03	2.24E-04	1.21E-03	7.94E-04	9.91E-07	7.90E-05	240.9	1.04E-02	6.34E-03
SI49_E	0.75	656	0	1	1.11E+00	1.23E-01	5.03E-03	6.53E-03	5.92E-03	2.96E-03	3.44E-04	1.87E-03	1.21E-03	1.52E-06	1.21E-04	377.5	1.60E-02	9.69E-03
SI49_E	0.75	530	0	1	8.96E-01	1.31E-01	4.07E-03	5.27E-03	4.78E-03	2.41E-03	2.79E-04	1.52E-03	9.81E-04	1.22E-06	9.88E-05	315.1	1.30E-02	7.83E-03
SI49_E	0.75	437	0	1	7.39E-01	1.25E-01	3.39E-03	4.35E-03	3.95E-03	2.00E-03	2.31E-04	1.26E-03	8.10E-04	1.01E-06	8.19E-05	265.6	1.08E-02	6.46E-03
SI49_E	0.75	395	0	1	6.68E-01	1.25E-01	3.12E-03	3.93E-03	3.57E-03	1.81E-03	2.10E-04	1.14E-03	7.32E-04	9.14E-07	7.43E-05	244.1	9.77E-03	5.84E-03
SI49_E	0.75	446	0	1	7.53E-01	1.67E-01	3.62E-03	4.44E-03	4.02E-03	2.05E-03	2.38E-04	1.29E-03	8.26E-04	1.03E-06	8.43E-05	283.7	1.11E-02	6.59E-03
SI49_E	0.75	471	0	1	7.96E-01	1.83E-01	3.85E-03	4.69E-03	4.25E-03	2.17E-03	2.52E-04	1.37E-03	8.72E-04	1.09E-06	8.92E-05	302.0	1.17E-02	6.96E-03
SI49_E	0.75	480	0	1	8.10E-01	1.92E-01	3.94E-03	4.77E-03	4.33E-03	2.22E-03	2.56E-04	1.40E-03	8.88E-04	1.11E-06	9.09E-05	308.8	1.20E-02	7.08E-03
SI49_E	0.75	496	0	1	8.39E-01	2.04E-01	4.10E-03	4.94E-03	4.48E-03	2.30E-03	2.66E-04	1.45E-03	9.19E-04	1.15E-06	9.42E-05	321.2	1.24E-02	7.33E-03
SI49_E	0.75	538	0	1	9.10E-01	2.19E-01	4.44E-03	5.36E-03	4.86E-03	2.49E-03	2.88E-04	1.57E-03	9.97E-04	1.24E-06	1.02E-04	347.7	1.34E-02	7.95E-03
SI49_E	0.75	665	0	1	1.12E+00	2.70E-01	5.47E-03	6.61E-03	6.00E-03	3.07E-03	3.56E-04	1.94E-03	1.23E-03	1.54E-06	1.26E-04	428.8	1.66E-02	9.82E-03
SI49_E	0.75	715	0	1	1.21E+00	2.83E-01	5.85E-03	7.11E-03	6.45E-03	3.30E-03	3.82E-04	2.08E-03	1.32E-03	1.65E-06	1.35E-04	458.6	1.78E-02	1.06E-02
SI49_E	0.75	496	0	1	8.39E-01	1.91E-01	4.03E-03	4.94E-03	4.48E-03	2.29E-03	2.65E-04	1.44E-03	9.19E-04	1.15E-06	9.39E-05	316.2	1.23E-02	7.33E-03
SI49_E	0.75	328	0	1	5.54E-01	1.10E-01	2.60E-03	3.26E-03	2.96E-03	1.50E-03	1.74E-04	9.48E-04	6.07E-04	7.58E-07	6.17E-05	203.8	8.12E-03	4.85E-03
SI49_E	0.75	278	0	1	4.69E-01	8.36E-02	2.16E-03	2.76E-03	2.51E-03	1.27E-03	1.47E-04	7.99E-04	5.14E-04	6.41E-07	5.20E-05	169.5	6.84E-03	4.10E-03
SI49_E	0.75	236	0	1	3.98E-01	6.38E-02	1.81E-03	2.34E-03	2.13E-03	1.07E-03	1.24E-04	6.75E-04	4.36E-04	5.44E-07	4.40E-05	141.5	5.79E-03	3.48E-03
SI49_E	0.75	193	0	1	3.27E-01	4.71E-02	1.48E-03	1.93E-03	1.75E-03	8.79E-04	1.02E-04	5.53E-04	3.58E-04	4.47E-07	3.60E-05	114.5	4.74E-03	2.86E-03
SI49_E	0.75	143	0	1	2.42E-01	3.11E-02	1.10E-03	1.42E-03	1.29E-03	6.48E-04	7.51E-05	4.08E-04	2.65E-04	3.30E-07	2.66E-05	83.5	3.49E-03	2.11E-03
SI49_W	0.75	119	0	1	2.01E-01	2.30E-02	9.13E-04	1.18E-03	1.07E-03	5.38E-04	6.23E-05	3.39E-04	2.20E-04	2.75E-07	2.20E-05	68.6	2.90E-03	1.76E-03
SI49_W	0.75	79	0	1	1.34E-01	1.38E-02	6.09E-04	7.90E-04	7.16E-04	3.58E-04	4.15E-05	2.25E-04	1.47E-04	1.83E-07	1.47E-05	45.2	1.93E-03	1.17E-03
SI49_W	0.75	69	0	1	1.17E-01	1.15E-02	5.33E-04	6.91E-04	6.27E-04	3.12E-04	3.62E-05	1.97E-04	1.29E-04	1.60E-07	1.28E-05	39.1	1.68E-03	1.03E-03
SI49_W	0.75	50	0	1	8.38E-02	8.19E-03	3.81E-04	4.94E-04	4.48E-04	2.23E-04	2.58E-05	1.40E-04	9.18E-05	1.15E-07	9.13E-06	27.8	1.20E-03	7.33E-04
SI49_W	0.75	69	0	1	1.17E-01	1.15E-02	5.33E-04	6.91E-04	6.27E-04	3.12E-04	3.62E-05	1.96E-04	1.29E-04	1.60E-07	1.28E-05	38.8	1.68E-03	1.03E-03
SI49_W	0.75	169	0	1	2.85E-01	2.78E-02	1.29E-03	1.68E-03	1.52E-03	7.57E-04	8.78E-05	4.77E-04	3.12E-04	3.90E-07	3.10E-05	94.2	4.08E-03	2.49E-03
SI49_W	0.75	506	0	1	8.55E-01	8.35E-02	3.88E-03	5.03E-03	4.57E-03	2.27E-03	2.64E-04	1.43E-03	9.37E-04	1.17E-06	9.32E-05	284.1	1.23E-02	7.48E-03
SI49_W	0.75	774	0	1	1.31E+00	1.45E-01	5.94E-03	7.70E-03	6.99E-03	3.50E-03	4.05E-04	2.20E-03	1.43E-03	1.79E-06	1.43E-04	445.2	1.88E-02	1.14E-02
SI49_W	0.75	625	0	1	1.06E+00	1.54E-01	4.79E-03	6.22E-03	5.64E-03	2.84E-03	3.29E-04	1.79E-03	1.16E-03	1.44E-06	1.16E-04	371.6	1.53E-02	9.23E-03
SI49_W	0.75	516	0	1	8.72E-01	1.47E-01	4.00E-03	5.13E-03	4.66E-03	2.35E-03	2.73E-04	1.48E-03	9.55E-04	1.19E-06	9.66E-05	313.2	1.27E-02	7.62E-03
SI49_W	0.75	466	0	1	7.88E-01	1.47E-01	3.67E-03	4.64E-03	4.21E-03	2.14E-03	2.47E-04	1.34E-03	8.63E-04	1.08E-06	8.76E-05	287.9	1.15E-02	6.89E-03
SI49_W	0.75	526	0	1	8.89E-01	1.97E-01	4.27E-03	5.23E-03	4.75E-03	2.42E-03	2.81E-04	1.53E-03	9.74E-04	1.22E-06	9.94E-05	334.5	1.31E-02	7.77E-03
SI49_W	0.75	556	0	1	9.39E-01	2.16E-01	4.55E-03	5.53E-03	5.02E-03	2.56E-03	2.97E-04	1.62E-03	1.03E-03	1.28E-06	1.05E-04	356.2	1.38E-02	8.21E-03
SI49_W	0.75	566	0	1	9.56E-01	2.26E-01	4.65E-03	5.63E-03	5.10E-03	2.61E-03	3.02E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.2	1.41E-02	8.36E-03
SI49_W	0.75	585	0	1	9.89E-01	2.40E-01	4.83E-03	5.82E-03	5.28E-03	2.71E-03	3.13E-04	1.71E-03	1.08E-03	1.35E-06	1.11E-04	378.8	1.46E-02	8.65E-03
SI49_W	0.75	635	0	1	1.07E+00	2.58E-01	5.23E-03	6.32E-03	5.73E-03	2.93E-03	3.40E-04	1.85E-03	1.18E-03	1.47E-06	1.20E-04	410.1	1.58E-02	9.38E-03
SI49_W	0.75	784	0	1	1.32E+00	3.19E-01	6.45E-03	7.80E-03	7.07E-03	3.62E-03	4.19E-04	2.28E-03	1.45E-03	1.81E-06	1.49E-04	505.7	1.95E-02	1.16E-02

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_W	0.75	843	0	1	1.43E+00	3.34E-01	6.90E-03	8.39E-03	7.61E-03	3.89E-03	4.51E-04	2.45E-03	1.56E-03	1.95E-06	1.60E-04	540.9	2.10E-02	1.25E-02
SI49_W	0.75	585	0	1	9.89E-01	2.25E-01	4.76E-03	5.82E-03	5.28E-03	2.70E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.11E-04	372.9	1.46E-02	8.65E-03
SI49_W	0.75	387	0	1	6.54E-01	1.30E-01	3.07E-03	3.85E-03	3.49E-03	1.77E-03	2.06E-04	1.12E-03	7.16E-04	8.94E-07	7.28E-05	240.4	9.57E-03	5.72E-03
SI49_W	0.75	327	0	1	5.53E-01	9.86E-02	2.55E-03	3.26E-03	2.96E-03	1.50E-03	1.73E-04	9.42E-04	6.06E-04	7.57E-07	6.14E-05	199.9	8.07E-03	4.84E-03
SI49_W	0.75	278	0	1	4.69E-01	7.52E-02	2.13E-03	2.76E-03	2.51E-03	1.27E-03	1.47E-04	7.97E-04	5.14E-04	6.42E-07	5.19E-05	166.8	6.82E-03	4.10E-03
SI49_W	0.75	228	0	1	3.86E-01	5.55E-02	1.75E-03	2.27E-03	2.06E-03	1.04E-03	1.20E-04	6.52E-04	4.22E-04	5.27E-07	4.25E-05	135.1	5.59E-03	3.37E-03
SI49_W	0.75	169	0	1	2.85E-01	3.67E-02	1.29E-03	1.68E-03	1.52E-03	7.64E-04	8.85E-05	4.81E-04	3.12E-04	3.90E-07	3.13E-05	98.5	4.12E-03	2.49E-03
SI50_E	0.75	119	0	1	2.01E-01	2.30E-02	9.13E-04	1.18E-03	1.07E-03	5.38E-04	6.23E-05	3.39E-04	2.20E-04	2.75E-07	2.20E-05	68.6	2.90E-03	1.76E-03
SI50_E	0.75	79	0	1	1.34E-01	1.38E-02	6.09E-04	7.90E-04	7.16E-04	3.58E-04	4.15E-05	2.25E-04	1.47E-04	1.83E-07	1.47E-05	45.2	1.93E-03	1.17E-03
SI50_E	0.75	69	0	1	1.17E-01	1.15E-02	5.33E-04	6.91E-04	6.27E-04	3.12E-04	3.62E-05	1.97E-04	1.29E-04	1.60E-07	1.28E-05	39.1	1.68E-03	1.03E-03
SI50_E	0.75	50	0	1	8.38E-02	8.19E-03	3.81E-04	4.94E-04	4.48E-04	2.23E-04	2.58E-05	1.40E-04	9.18E-05	1.15E-07	9.13E-06	27.8	1.20E-03	7.33E-04
SI50_E	0.75	69	0	1	1.17E-01	1.15E-02	5.33E-04	6.91E-04	6.27E-04	3.12E-04	3.62E-05	1.96E-04	1.29E-04	1.60E-07	1.28E-05	38.8	1.68E-03	1.03E-03
SI50_E	0.75	169	0	1	2.85E-01	2.78E-02	1.29E-03	1.68E-03	1.52E-03	7.57E-04	8.78E-05	4.77E-04	3.12E-04	3.90E-07	3.10E-05	94.2	4.08E-03	2.49E-03
SI50_E	0.75	506	0	1	8.55E-01	8.35E-02	3.88E-03	5.03E-03	4.57E-03	2.27E-03	2.64E-04	1.43E-03	9.37E-04	1.17E-06	9.32E-05	284.1	1.23E-02	7.48E-03
SI50_E	0.75	774	0	1	1.31E+00	1.45E-01	5.94E-03	7.70E-03	6.99E-03	3.50E-03	4.05E-04	2.20E-03	1.43E-03	1.79E-06	1.43E-04	445.2	1.88E-02	1.14E-02
SI50_E	0.75	625	0	1	1.06E+00	1.54E-01	4.79E-03	6.22E-03	5.64E-03	2.84E-03	3.29E-04	1.79E-03	1.16E-03	1.44E-06	1.16E-04	371.6	1.53E-02	9.23E-03
SI50_E	0.75	516	0	1	8.72E-01	1.47E-01	4.00E-03	5.13E-03	4.66E-03	2.35E-03	2.73E-04	1.48E-03	9.55E-04	1.19E-06	9.66E-05	313.2	1.27E-02	7.62E-03
SI50_E	0.75	466	0	1	7.88E-01	1.47E-01	3.67E-03	4.64E-03	4.21E-03	2.14E-03	2.47E-04	1.34E-03	8.63E-04	1.08E-06	8.76E-05	287.9	1.15E-02	6.89E-03
SI50_E	0.75	526	0	1	8.89E-01	1.97E-01	4.27E-03	5.23E-03	4.75E-03	2.42E-03	2.81E-04	1.53E-03	9.74E-04	1.22E-06	9.94E-05	334.5	1.31E-02	7.77E-03
SI50_E	0.75	556	0	1	9.39E-01	2.16E-01	4.55E-03	5.53E-03	5.02E-03	2.56E-03	2.97E-04	1.62E-03	1.03E-03	1.28E-06	1.05E-04	356.2	1.38E-02	8.21E-03
SI50_E	0.75	566	0	1	9.56E-01	2.26E-01	4.65E-03	5.63E-03	5.10E-03	2.61E-03	3.02E-04	1.65E-03	1.05E-03	1.31E-06	1.07E-04	364.2	1.41E-02	8.36E-03
SI50_E	0.75	585	0	1	9.89E-01	2.40E-01	4.83E-03	5.82E-03	5.28E-03	2.71E-03	3.13E-04	1.71E-03	1.08E-03	1.35E-06	1.11E-04	378.8	1.46E-02	8.65E-03
SI50_E	0.75	635	0	1	1.07E+00	2.58E-01	5.23E-03	6.32E-03	5.73E-03	2.93E-03	3.40E-04	1.85E-03	1.18E-03	1.47E-06	1.20E-04	410.1	1.58E-02	9.38E-03
SI50_E	0.75	784	0	1	1.32E+00	3.19E-01	6.45E-03	7.80E-03	7.07E-03	3.62E-03	4.19E-04	2.28E-03	1.45E-03	1.81E-06	1.49E-04	505.7	1.95E-02	1.16E-02
SI50_E	0.75	843	0	1	1.43E+00	3.34E-01	6.90E-03	8.39E-03	7.61E-03	3.89E-03	4.51E-04	2.45E-03	1.56E-03	1.95E-06	1.60E-04	540.9	2.10E-02	1.25E-02
SI50_E	0.75	585	0	1	9.89E-01	2.25E-01	4.76E-03	5.82E-03	5.28E-03	2.70E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.11E-04	372.9	1.46E-02	8.65E-03
SI50_E	0.75	387	0	1	6.54E-01	1.30E-01	3.07E-03	3.85E-03	3.49E-03	1.77E-03	2.06E-04	1.12E-03	7.16E-04	8.94E-07	7.28E-05	240.4	9.57E-03	5.72E-03
SI50_E	0.75	327	0	1	5.53E-01	9.86E-02	2.55E-03	3.26E-03	2.96E-03	1.50E-03	1.73E-04	9.42E-04	6.06E-04	7.57E-07	6.14E-05	199.9	8.07E-03	4.84E-03
SI50_E	0.75	278	0	1	4.69E-01	7.52E-02	2.13E-03	2.76E-03	2.51E-03	1.27E-03	1.47E-04	7.97E-04	5.14E-04	6.42E-07	5.19E-05	166.8	6.82E-03	4.10E-03
SI50_E	0.75	228	0	1	3.86E-01	5.55E-02	1.75E-03	2.27E-03	2.06E-03	1.04E-03	1.20E-04	6.52E-04	4.22E-04	5.27E-07	4.25E-05	135.1	5.59E-03	3.37E-03
SI50_E	0.75	169	0	1	2.85E-01	3.67E-02	1.29E-03	1.68E-03	1.52E-03	7.64E-04	8.85E-05	4.81E-04	3.12E-04	3.90E-07	3.13E-05	98.5	4.12E-03	2.49E-03
SI50_W	0.75	112	0	1	1.89E-01	2.16E-02	8.59E-04	1.11E-03	1.01E-03	5.06E-04	5.87E-05	3.19E-04	2.07E-04	2.59E-07	2.07E-05	64.5	2.73E-03	1.66E-03
SI50_W	0.75	75	0	1	1.26E-01	1.30E-02	5.73E-04	7.43E-04	6.74E-04	3.37E-04	3.90E-05	2.12E-04	1.38E-04	1.73E-07	1.38E-05	42.6	1.82E-03	1.10E-03
SI50_W	0.75	65	0	1	1.10E-01	1.08E-02	5.01E-04	6.50E-04	5.90E-04	2.94E-04	3.41E-05	1.85E-04	1.21E-04	1.51E-07	1.20E-05	36.8	1.58E-03	9.66E-04
SI50_W	0.75	47	0	1	7.89E-02	7.70E-03	3.58E-04	4.64E-04	4.21E-04	2.10E-04	2.43E-05	1.32E-04	8.64E-05	1.08E-07	8.59E-06	26.1	1.13E-03	6.90E-04
SI50_W	0.75	65	0	1	1.10E-01	1.08E-02	5.01E-04	6.50E-04	5.90E-04	2.93E-04	3.40E-05	1.85E-04	1.21E-04	1.51E-07	1.20E-05	36.5	1.58E-03	9.66E-04
SI50_W	0.75	159	0	1	2.68E-01	2.62E-02	1.22E-03	1.58E-03	1.43E-03	7.13E-04	8.26E-05	4.48E-04	2.94E-04	3.67E-07	2.92E-05	88.6	3.84E-03	2.34E-03
SI50_W	0.75	476	0	1	8.05E-01	7.86E-02	3.65E-03	4.74E-03	4.30E-03	2.14E-03	2.48E-04	1.35E-03	8.82E-04	1.10E-06	8.77E-05	267.4	1.15E-02	7.03E-03
SI50_W	0.75	728	0	1	1.23E+00	1.37E-01	5.59E-03	7.24E-03	6.57E-03	3.29E-03	3.81E-04	2.07E-03	1.35E-03	1.68E-06	1.35E-04	418.9	1.77E-02	1.08E-02
SI50_W	0.75	588	0	1	9.94E-01	1.45E-01	4.51E-03	5.85E-03	5.31E-03	2.67E-03	3.10E-04	1.68E-03	1.09E-03	1.36E-06	1.10E-04	349.7	1.44E-02	8.69E-03
SI50_W	0.75	485	0	1	8.20E-01	1.38E-01	3.76E-03	4.83E-03	4.38E-03	2.22E-03	2.57E-04	1.40E-03	8.99E-04	1.12E-06	9.09E-05	294.7	1.19E-02	7.17E-03
SI50_W	0.75	439	0	1	7.41E-01	1.39E-01	3.46E-03	4.37E-03	3.96E-03	2.01E-03	2.33E-04	1.27E-03	8.12E-04	1.01E-06	8.24E-05	270.9	1.08E-02	6.48E-03
SI50_W	0.75	495	0	1	8.36E-01	1.85E-01	4.02E-03	4.92E-03	4.47E-03	2.28E-03	2.64E-04	1.44E-03	9.16E-04	1.14E-06	9.35E-05	314.8	1.23E-02	7.31E-03
SI50_W	0.75	523	0	1	8.83E-01	2.03E-01	4.28E-03	5.20E-03	4.72E-03	2.41E-03	2.79E-04	1.52E-03	9.68E-04	1.21E-06	9.90E-05	335.2	1.30E-02	7.72E-03
SI50_W	0.75	532	0	1	8.99E-01	2.13E-01	4.37E-03	5.29E-03	4.80E-03	2.46E-03	2.85E-04	1.55E-03	9.86E-04	1.23E-06	1.01E-04	342.7	1.33E-02	7.86E-03
SI50_W	0.75	551	0	1	9.31E-01	2.26E-01	4.55E-03	5.48E-03	4.97E-03	2.55E-03	2.95E-04	1.60E-03	1.02E-03	1.27E-06	1.05E-04	356.4	1.37E-02	8.14E-03
SI50_W	0.75	597	0	1	1.01E+00	2.43E-01	4.92E-03	5.94E-03	5.39E-03	2.76E-03	3.20E-04	1.74E-03	1.11E-03	1.38E-06	1.13E-04	385.9	1.49E-02	8.83E-03
SI50_W	0.75	738	0	1	1.25E+00	3.00E-01	6.07E-03	7.34E-03	6.66E-03	3.41E-03	3.95E-04	2.15E-03	1.37E-03	1.70E-06	1.40E-04	475.9	1.84E-02	1.09E-02
SI50_W	0.75	794	0	1	1.34E+00	3.14E-01	6.50E-03	7.90E-03	7.16E-03	3.66E-03	4.24E-04	2.31E-03	1.47E-03	1.83E-06	1.50E-04	509.0	1.98E-02	1.17E-02
SI50_W	0.75	551	0	1	9.31E-01	2.11E-01	4.48E-03	5.48E-03	4.97E-03	2.54E-03	2.94E-04	1.60E-03	1.02E-03	1.27E-06	1.04E-04	350.9	1.37E-02	8.14E-03
SI50_W	0.75	364	0	1	6.15E-01	1.22E-01	2.89E-03	3.62E-03	3.29E-03	1.67E-03	1.93E-04	1.05E-03	6.74E-04	8.41E-07	6.85E-05	226.2	9.01E-03	5.38E-03
SI50_W	0.75	308	0	1	5.21E-01	9.28E-02	2.40E-03	3.07E-03	2.78E-03	1.41E-03	1.63E-04	8.86E-04	5.70E-04	7.12E-07	5.77E-05	188.1	7.59E-03	4.55E-03
SI50_W	0.75	261	0	1	4.42E-01	7.08E-02	2.01E-03	2.60E-03	2.36E-03	1.19E-03	1.38E-04	7.50E-04	4.84E-04	6.04E-07	4.88E-05	157.0	6.42E-03	3.86E-03
SI50_W	0.75	215	0	1	3.63E-01	5.22E-02	1.65E-03	2.14E-03	1.94E-03	9.75E-04	1.13E-04	6.14E-04	3.98E-04	4.96E-07	4.00E-05	127.1	5.26E-03	3.17E-03
SI50_W	0.75	159	0	1	2.68E-01	3.46E-02	1.22E-03	1.58E-03	1.43E-03	7.19E-04	8.33E-05	4.53E-04	2.94E-04	3.67E-07	2.95E-05	92.7	3.88E-03	2.34E-03
SI51_E	0.75	112	0	1	1.89E-01	2.16E-02	8.59E-04	1.11E-03	1.01E-03	5.06E-04	5.87E-05	3.19E-04	2.07E-04	2.59E-07	2.07E-05	64.5	2.73E-03	1.66E-03
SI51_E	0.75	75	0	1	1.26E-01	1.30E-02	5.73E-04	7.43E-04	6.74E-04	3.37E-04	3.90E-05	2.12E-04	1.38E-04	1.73E-07	1.38E-05	42.6	1.82E-03	1.10E-03
SI51_E	0.75	65	0	1	1.10E-01	1.08E-02	5.01E-04	6.50E-04	5.90E-04	2.94E-04	3.41E-05	1.85E-04	1.21E-04	1.51E-07	1.20E-05	36.8	1.58E-03	9.66E-04
SI51_E	0.75	47	0	1	7.89E-02	7.70E-03	3.58E-04	4.64E-04	4.21E-04	2.10E-04	2.43E-05	1.32E-04	8.64E-05	1.08E-07	8.59E-06	26.1	1.13E-03	6.90E-04
SI51_E	0.75	65	0	1	1.10E-01	1.08E-02	5.01E-04	6.50E-04	5.90E-04	2.93E-04	3.40E-05	1.85E-04	1.21E-04	1.51E-07	1.20E-05	36.5	1.58E-03	9.66E-04
SI51_E	0.75	159	0	1	2.68E-01	2.62E-02	1.22E-03	1.58E-03	1.43E-03	7.13E-04	8.26E-05	4.48E-04	2.94E-04	3.67E-07	2.92E-05	88.6	3.84E-03	2.34E-03
SI51_E	0.75	476	0	1	8.05E-01	7.86E-02	3.65E-03	4.74E-03	4.30E-03	2.14E-03	2.48E-04	1.35E-03	8.82E-04	1.10E-06	8.77E-05	267.4	1.15E-02	7.03E-03
SI51_E	0.75	728	0	1	1.23E+00	1.37E-01	5.59E-03	7.24E-03	6.57E-03	3.29E-03	3.81E-04	2.07E-03	1.35E-03	1.68E-06	1.35E-04	418.9	1.77E-02	1.08E-02
SI51_E	0.75	588	0	1	9.94E-01	1.45E-01	4.51E-03	5.85E-03	5.31E-03	2.67E-03	3.10E-04	1.68E-03	1.09E-03	1.36E-06	1.10E-04	349.7	1.44E-02	8.69E-03
SI51_E	0.75	485	0	1	8.20E-01	1.38E-01	3.76E-03	4.83E-03	4.38E-03	2.22E-03	2.57E-04	1.40E-03	8.99E-04	1.12E-06	9.09E-05	294.7	1.19E-02	7.17E-03
SI51_E	0.75	439	0	1	7.41E-01	1.39E-01	3.46E-03	4.37E-03	3.96E-03	2.01E-03	2.33E-04	1.27E-03	8.12E-04	1.01E-06	8.24E-05	270.9	1.08E-02	6.48E-03
SI51_E	0.75	495	0	1	8.36E-01	1.85E-01	4.02E-03	4.92E-03	4.47E-03	2.28E-03	2.64E-04	1.44E-03	9.16E-04	1.14E-06	9.35E-05	314.8	1.23E-02	7.31E-03
SI51_E	0.75	523	0	1	8.83E-01	2.03E-01	4.28E-03	5.20E-03	4.72E-03	2.41E-03	2.79E-04	1.52E-03	9.68E-04	1.21E-06	9.90E-05	335.2	1.30E-02	7.72E-03
SI51_E	0.75	532	0	1	8.99E-01	2.13E-01	4.37E-03	5.29E-03	4.80E-03	2.46E-03	2.85E-04	1.55E-03	9.86E-04	1.23E-06	1.01E-04	342.7	1.33E-02	7.86E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI51_E	0.75	551	0	1	9.31E-01	2.26E-01	4.55E-03	5.48E-03	4.97E-03	2.55E-03	2.95E-04	1.60E-03	1.02E-03	1.27E-06	1.05E-04	356.4	1.37E-02	8.14E-03
SI51_E	0.75	597	0	1	1.01E+00	2.43E-01	4.92E-03	5.94E-03	5.39E-03	2.76E-03	3.20E-04	1.74E-03	1.11E-03	1.38E-06	1.13E-04	385.9	1.49E-02	8.83E-03
SI51_E	0.75	738	0	1	1.25E+00	3.00E-01	6.07E-03	7.34E-03	6.66E-03	3.41E-03	3.95E-04	2.15E-03	1.37E-03	1.70E-06	1.40E-04	475.9	1.84E-02	1.09E-02
SI51_E	0.75	794	0	1	1.34E+00	3.14E-01	6.50E-03	7.90E-03	7.16E-03	3.66E-03	4.24E-04	2.31E-03	1.47E-03	1.83E-06	1.50E-04	509.0	1.98E-02	1.17E-02
SI51_E	0.75	551	0	1	9.31E-01	2.11E-01	4.48E-03	5.48E-03	4.97E-03	2.54E-03	2.94E-04	1.60E-03	1.02E-03	1.27E-06	1.04E-04	350.9	1.37E-02	8.14E-03
SI51_E	0.75	364	0	1	6.15E-01	1.22E-01	2.89E-03	3.62E-03	3.29E-03	1.67E-03	1.93E-04	1.05E-03	6.74E-04	8.41E-07	6.85E-05	226.2	9.01E-03	5.38E-03
SI51_E	0.75	308	0	1	5.21E-01	9.28E-02	2.40E-03	3.07E-03	2.78E-03	1.41E-03	1.63E-04	8.86E-04	5.70E-04	7.12E-07	5.77E-05	188.1	7.59E-03	4.55E-03
SI51_E	0.75	261	0	1	4.42E-01	7.08E-02	2.01E-03	2.60E-03	2.36E-03	1.19E-03	1.38E-04	7.50E-04	4.84E-04	6.04E-07	4.88E-05	157.0	6.42E-03	3.86E-03
SI51_E	0.75	215	0	1	3.63E-01	5.22E-02	1.65E-03	2.14E-03	1.94E-03	9.75E-04	1.13E-04	6.14E-04	3.98E-04	4.96E-07	4.00E-05	127.1	5.26E-03	3.17E-03
SI51_E	0.75	159	0	1	2.68E-01	3.46E-02	1.22E-03	1.58E-03	1.43E-03	7.19E-04	8.33E-05	4.53E-04	2.94E-04	3.67E-07	2.95E-05	92.7	3.88E-03	2.34E-03
SI51_W	0.75	132	0	1	2.23E-01	2.55E-02	1.01E-03	1.32E-03	1.19E-03	5.97E-04	6.92E-05	3.76E-04	2.45E-04	3.06E-07	2.45E-05	76.2	3.22E-03	1.95E-03
SI51_W	0.75	88	0	1	1.49E-01	1.53E-02	6.76E-04	8.77E-04	7.96E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.04E-07	1.63E-05	50.3	2.14E-03	1.30E-03
SI51_W	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.47E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.4	1.87E-03	1.14E-03
SI51_W	0.75	55	0	1	9.31E-02	9.09E-03	4.23E-04	5.48E-04	4.97E-04	2.48E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	30.8	1.33E-03	8.14E-04
SI51_W	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.46E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.1	1.87E-03	1.14E-03
SI51_W	0.75	187	0	1	3.17E-01	3.09E-02	1.44E-03	1.86E-03	1.69E-03	8.41E-04	9.75E-05	5.29E-04	3.47E-04	4.33E-07	3.45E-05	104.6	4.53E-03	2.77E-03
SI51_W	0.75	562	0	1	9.50E-01	9.28E-02	4.31E-03	5.59E-03	5.07E-03	2.53E-03	2.93E-04	1.59E-03	1.04E-03	1.30E-06	1.04E-04	315.6	1.36E-02	8.30E-03
SI51_W	0.75	860	0	1	1.45E+00	1.61E-01	6.59E-03	8.55E-03	7.76E-03	3.88E-03	4.50E-04	2.44E-03	1.59E-03	1.99E-06	1.59E-04	494.4	2.09E-02	1.27E-02
SI51_W	0.75	694	0	1	1.17E+00	1.71E-01	5.33E-03	6.91E-03	6.27E-03	3.16E-03	3.66E-04	1.99E-03	1.29E-03	1.60E-06	1.29E-04	412.7	1.70E-02	1.03E-02
SI51_W	0.75	573	0	1	9.68E-01	1.63E-01	4.44E-03	5.70E-03	5.17E-03	2.62E-03	3.03E-04	1.65E-03	1.06E-03	1.32E-06	1.07E-04	347.9	1.41E-02	8.47E-03
SI51_W	0.75	518	0	1	8.75E-01	1.64E-01	4.08E-03	5.15E-03	4.67E-03	2.37E-03	2.75E-04	1.49E-03	9.59E-04	1.20E-06	9.73E-05	319.8	1.28E-02	7.65E-03
SI51_W	0.75	584	0	1	9.87E-01	2.19E-01	4.74E-03	5.81E-03	5.27E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	371.5	1.45E-02	8.63E-03
SI51_W	0.75	617	0	1	1.04E+00	2.40E-01	5.05E-03	6.14E-03	5.57E-03	2.85E-03	3.30E-04	1.79E-03	1.14E-03	1.43E-06	1.17E-04	395.6	1.54E-02	9.12E-03
SI51_W	0.75	628	0	1	1.06E+00	2.51E-01	5.16E-03	6.25E-03	5.67E-03	2.90E-03	3.36E-04	1.83E-03	1.16E-03	1.45E-06	1.19E-04	404.5	1.57E-02	9.28E-03
SI51_W	0.75	650	0	1	1.10E+00	2.67E-01	5.37E-03	6.47E-03	5.87E-03	3.01E-03	3.48E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	420.7	1.62E-02	9.61E-03
SI51_W	0.75	705	0	1	1.19E+00	2.87E-01	5.81E-03	7.02E-03	6.37E-03	3.26E-03	3.77E-04	2.05E-03	1.31E-03	1.63E-06	1.34E-04	455.4	1.76E-02	1.04E-02
SI51_W	0.75	871	0	1	1.47E+00	3.54E-01	7.17E-03	8.66E-03	7.86E-03	4.02E-03	4.66E-04	2.53E-03	1.61E-03	2.01E-06	1.65E-04	561.7	2.17E-02	1.29E-02
SI51_W	0.75	937	0	1	1.58E+00	3.71E-01	7.67E-03	9.32E-03	8.45E-03	4.32E-03	5.01E-04	2.72E-03	1.73E-03	2.16E-06	1.77E-04	600.8	2.33E-02	1.38E-02
SI51_W	0.75	650	0	1	1.10E+00	2.50E-01	5.28E-03	6.47E-03	5.87E-03	3.00E-03	3.47E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	414.1	1.62E-02	9.61E-03
SI51_W	0.75	430	0	1	7.26E-01	1.44E-01	3.41E-03	4.28E-03	3.88E-03	1.97E-03	2.28E-04	1.24E-03	7.96E-04	9.93E-07	8.08E-05	267.0	1.06E-02	6.35E-03
SI51_W	0.75	364	0	1	6.14E-01	1.09E-01	2.83E-03	3.62E-03	3.28E-03	1.66E-03	1.92E-04	1.05E-03	6.73E-04	8.40E-07	6.81E-05	222.0	8.96E-03	5.37E-03
SI51_W	0.75	309	0	1	5.21E-01	8.35E-02	2.37E-03	3.07E-03	2.79E-03	1.41E-03	1.63E-04	8.85E-04	5.71E-04	7.13E-07	5.76E-05	185.3	7.58E-03	4.56E-03
SI51_W	0.75	253	0	1	4.28E-01	6.16E-02	1.94E-03	2.52E-03	2.29E-03	1.15E-03	1.33E-04	7.25E-04	4.69E-04	5.86E-07	4.72E-05	150.0	6.21E-03	3.74E-03
SI51_W	0.75	187	0	1	3.17E-01	4.08E-02	1.44E-03	1.86E-03	1.69E-03	8.49E-04	9.83E-05	5.34E-04	3.47E-04	4.33E-07	3.48E-05	109.4	4.58E-03	2.77E-03
SI52_E	0.75	132	0	1	2.23E-01	2.55E-02	1.01E-03	1.32E-03	1.19E-03	5.97E-04	6.92E-05	3.76E-04	2.45E-04	3.06E-07	2.45E-05	76.2	3.22E-03	1.95E-03
SI52_E	0.75	88	0	1	1.49E-01	1.53E-02	6.76E-04	8.77E-04	7.96E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.04E-07	1.63E-05	50.3	2.14E-03	1.30E-03
SI52_E	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.47E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.4	1.87E-03	1.14E-03
SI52_E	0.75	55	0	1	9.31E-02	9.09E-03	4.23E-04	5.48E-04	4.97E-04	2.48E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	30.8	1.33E-03	8.14E-04
SI52_E	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.46E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.1	1.87E-03	1.14E-03
SI52_E	0.75	187	0	1	3.17E-01	3.09E-02	1.44E-03	1.86E-03	1.69E-03	8.41E-04	9.75E-05	5.29E-04	3.47E-04	4.33E-07	3.45E-05	104.6	4.53E-03	2.77E-03
SI52_E	0.75	562	0	1	9.50E-01	9.28E-02	4.31E-03	5.59E-03	5.07E-03	2.53E-03	2.93E-04	1.59E-03	1.04E-03	1.30E-06	1.04E-04	315.6	1.36E-02	8.30E-03
SI52_E	0.75	860	0	1	1.45E+00	1.61E-01	6.59E-03	8.55E-03	7.76E-03	3.88E-03	4.50E-04	2.44E-03	1.59E-03	1.99E-06	1.59E-04	494.4	2.09E-02	1.27E-02
SI52_E	0.75	694	0	1	1.17E+00	1.71E-01	5.33E-03	6.91E-03	6.27E-03	3.16E-03	3.66E-04	1.99E-03	1.29E-03	1.60E-06	1.29E-04	412.7	1.70E-02	1.03E-02
SI52_E	0.75	573	0	1	9.68E-01	1.63E-01	4.44E-03	5.70E-03	5.17E-03	2.62E-03	3.03E-04	1.65E-03	1.06E-03	1.32E-06	1.07E-04	347.9	1.41E-02	8.47E-03
SI52_E	0.75	518	0	1	8.75E-01	1.64E-01	4.08E-03	5.15E-03	4.67E-03	2.37E-03	2.75E-04	1.49E-03	9.59E-04	1.20E-06	9.73E-05	319.8	1.28E-02	7.65E-03
SI52_E	0.75	584	0	1	9.87E-01	2.19E-01	4.74E-03	5.81E-03	5.27E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	371.5	1.45E-02	8.63E-03
SI52_E	0.75	617	0	1	1.04E+00	2.40E-01	5.05E-03	6.14E-03	5.57E-03	2.85E-03	3.30E-04	1.79E-03	1.14E-03	1.43E-06	1.17E-04	395.6	1.54E-02	9.12E-03
SI52_E	0.75	628	0	1	1.06E+00	2.51E-01	5.16E-03	6.25E-03	5.67E-03	2.90E-03	3.36E-04	1.83E-03	1.16E-03	1.45E-06	1.19E-04	404.5	1.57E-02	9.28E-03
SI52_E	0.75	650	0	1	1.10E+00	2.67E-01	5.37E-03	6.47E-03	5.87E-03	3.01E-03	3.48E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	420.7	1.62E-02	9.61E-03
SI52_E	0.75	705	0	1	1.19E+00	2.87E-01	5.81E-03	7.02E-03	6.37E-03	3.26E-03	3.77E-04	2.05E-03	1.31E-03	1.63E-06	1.34E-04	455.4	1.76E-02	1.04E-02
SI52_E	0.75	871	0	1	1.47E+00	3.54E-01	7.17E-03	8.66E-03	7.86E-03	4.02E-03	4.66E-04	2.53E-03	1.61E-03	2.01E-06	1.65E-04	561.7	2.17E-02	1.29E-02
SI52_E	0.75	937	0	1	1.58E+00	3.71E-01	7.67E-03	9.32E-03	8.45E-03	4.32E-03	5.01E-04	2.72E-03	1.73E-03	2.16E-06	1.77E-04	600.8	2.33E-02	1.38E-02
SI52_E	0.75	650	0	1	1.10E+00	2.50E-01	5.28E-03	6.47E-03	5.87E-03	3.00E-03	3.47E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	414.1	1.62E-02	9.61E-03
SI52_E	0.75	430	0	1	7.26E-01	1.44E-01	3.41E-03	4.28E-03	3.88E-03	1.97E-03	2.28E-04	1.24E-03	7.96E-04	9.93E-07	8.08E-05	267.0	1.06E-02	6.35E-03
SI52_E	0.75	364	0	1	6.14E-01	1.09E-01	2.83E-03	3.62E-03	3.28E-03	1.66E-03	1.92E-04	1.05E-03	6.73E-04	8.40E-07	6.81E-05	222.0	8.96E-03	5.37E-03
SI52_E	0.75	309	0	1	5.21E-01	8.35E-02	2.37E-03	3.07E-03	2.79E-03	1.41E-03	1.63E-04	8.85E-04	5.71E-04	7.13E-07	5.76E-05	185.3	7.58E-03	4.56E-03
SI52_E	0.75	253	0	1	4.28E-01	6.16E-02	1.94E-03	2.52E-03	2.29E-03	1.15E-03	1.33E-04	7.25E-04	4.69E-04	5.86E-07	4.72E-05	150.0	6.21E-03	3.74E-03
SI52_E	0.75	187	0	1	3.17E-01	4.08E-02	1.44E-03	1.86E-03	1.69E-03	8.49E-04	9.83E-05	5.34E-04	3.47E-04	4.33E-07	3.48E-05	109.4	4.58E-03	2.77E-03
SI52_W	0.75	132	0	1	2.23E-01	2.55E-02	1.01E-03	1.32E-03	1.19E-03	5.97E-04	6.92E-05	3.76E-04	2.45E-04	3.06E-07	2.45E-05	76.2	3.22E-03	1.95E-03
SI52_W	0.75	88	0	1	1.49E-01	1.53E-02	6.76E-04	8.77E-04	7.96E-04	3.97E-04	4.61E-05	2.50E-04	1.63E-04	2.04E-07	1.63E-05	50.3	2.14E-03	1.30E-03
SI52_W	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.47E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.4	1.87E-03	1.14E-03
SI52_W	0.75	55	0	1	9.31E-02	9.09E-03	4.23E-04	5.48E-04	4.97E-04	2.48E-04	2.87E-05	1.56E-04	1.02E-04	1.27E-07	1.01E-05	30.8	1.33E-03	8.14E-04
SI52_W	0.75	77	0	1	1.30E-01	1.27E-02	5.92E-04	7.67E-04	6.96E-04	3.46E-04	4.02E-05	2.18E-04	1.43E-04	1.78E-07	1.42E-05	43.1	1.87E-03	1.14E-03
SI52_W	0.75	187	0	1	3.17E-01	3.09E-02	1.44E-03	1.86E-03	1.69E-03	8.41E-04	9.75E-05	5.29E-04	3.47E-04	4.33E-07	3.45E-05	104.6	4.53E-03	2.77E-03
SI52_W	0.75	562	0	1	9.50E-01	9.28E-02	4.31E-03	5.59E-03	5.07E-03	2.53E-03	2.93E-04	1.59E-03	1.04E-03	1.30E-06	1.04E-04	315.6	1.36E-02	8.30E-03
SI52_W	0.75	860	0	1	1.45E+00	1.61E-01	6.59E-03	8.55E-03	7.76E-03	3.88E-03	4.50E-04	2.44E-03	1.59E-03	1.99E-06	1.59E-04	494.4	2.09E-02	1.27E-02
SI52_W	0.75	694	0	1	1.17E+00	1.71E-01	5.33E-03	6.91E-03	6.27E-03	3.16E-03	3.66E-04	1.99E-03	1.29E-03	1.60E-06	1.29E-04	412.7	1.70E-02	1.03E-02
SI52_W	0.75	573	0	1	9.68E-01	1.63E-01	4.44E-03	5.70E-03	5.17E-03	2.62E-03	3.03E-04	1.65E-03	1.06E-03	1.32E-06	1.07E-04	347.9	1.41E-02	8.47E-03
SI52_W	0.75	518	0	1	8.75E-01	1.64E-01	4.08E-03	5.15E-03	4.67E-03	2.37E-03	2.75E-04	1.49E-03	9.59E-04	1.20E-06	9.73E-05	319.8	1.28E-02	7.65E-03

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_W	0.75	584	0	1	9.87E-01	2.19E-01	4.74E-03	5.81E-03	5.27E-03	2.69E-03	3.12E-04	1.70E-03	1.08E-03	1.35E-06	1.10E-04	371.5	1.45E-02	8.63E-03
SI52_W	0.75	617	0	1	1.04E+00	2.40E-01	5.05E-03	6.14E-03	5.57E-03	2.85E-03	3.30E-04	1.79E-03	1.14E-03	1.43E-06	1.17E-04	395.6	1.54E-02	9.12E-03
SI52_W	0.75	628	0	1	1.06E+00	2.51E-01	5.16E-03	6.25E-03	5.67E-03	2.90E-03	3.36E-04	1.83E-03	1.16E-03	1.45E-06	1.19E-04	404.5	1.57E-02	9.28E-03
SI52_W	0.75	650	0	1	1.10E+00	2.67E-01	5.37E-03	6.47E-03	5.87E-03	3.01E-03	3.48E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	420.7	1.62E-02	9.61E-03
SI52_W	0.75	705	0	1	1.19E+00	2.87E-01	5.81E-03	7.02E-03	6.37E-03	3.26E-03	3.77E-04	2.05E-03	1.31E-03	1.63E-06	1.34E-04	455.4	1.76E-02	1.04E-02
SI52_W	0.75	871	0	1	1.47E+00	3.54E-01	7.17E-03	8.66E-03	7.86E-03	4.02E-03	4.66E-04	2.53E-03	1.61E-03	2.01E-06	1.65E-04	561.7	2.17E-02	1.29E-02
SI52_W	0.75	937	0	1	1.58E+00	3.71E-01	7.67E-03	9.32E-03	8.45E-03	4.32E-03	5.01E-04	2.72E-03	1.73E-03	2.16E-06	1.77E-04	600.8	2.33E-02	1.38E-02
SI52_W	0.75	650	0	1	1.10E+00	2.50E-01	5.28E-03	6.47E-03	5.87E-03	3.00E-03	3.47E-04	1.89E-03	1.20E-03	1.50E-06	1.23E-04	414.1	1.62E-02	9.61E-03
SI52_W	0.75	430	0	1	7.26E-01	1.44E-01	3.41E-03	4.28E-03	3.88E-03	1.97E-03	2.28E-04	1.24E-03	7.96E-04	9.93E-07	8.08E-05	267.0	1.06E-02	6.35E-03
SI52_W	0.75	364	0	1	6.14E-01	1.09E-01	2.83E-03	3.62E-03	3.28E-03	1.66E-03	1.92E-04	1.05E-03	6.73E-04	8.40E-07	6.81E-05	222.0	8.96E-03	5.37E-03
SI52_W	0.75	309	0	1	5.21E-01	8.35E-02	2.37E-03	3.07E-03	2.79E-03	1.41E-03	1.63E-04	8.85E-04	5.71E-04	7.13E-07	5.76E-05	185.3	7.58E-03	4.56E-03
SI52_W	0.75	253	0	1	4.28E-01	6.16E-02	1.94E-03	2.52E-03	2.29E-03	1.15E-03	1.33E-04	7.25E-04	4.69E-04	5.86E-07	4.72E-05	150.0	6.21E-03	3.74E-03
SI52_W	0.75	187	0	1	3.17E-01	4.08E-02	1.44E-03	1.86E-03	1.69E-03	8.49E-04	9.83E-05	5.34E-04	3.47E-04	4.33E-07	3.48E-05	109.4	4.58E-03	2.77E-03

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	1.77E-03	1.35E-03	3.11E-06	1.13E-04	4.98E-05	2.21E-06	2.78E-07	8.08E-06	4.01E-06	4.40E-09	5.92E-07	0.6	8.69E-05	2.29E-06
S1	60	8	2	5	1.18E-03	9.02E-04	2.07E-06	7.52E-05	3.32E-05	1.47E-06	1.85E-07	5.38E-06	2.67E-06	2.93E-09	3.95E-07	0.4	5.79E-05	1.52E-06
S1	60	8	3	5	1.03E-03	7.89E-04	1.81E-06	6.58E-05	2.90E-05	1.29E-06	1.62E-07	4.71E-06	2.34E-06	2.57E-09	3.46E-07	0.3	5.07E-05	1.33E-06
S1	60	8	4	5	7.36E-04	5.64E-04	1.29E-06	4.70E-05	2.07E-05	9.20E-07	1.16E-07	3.37E-06	1.67E-06	1.83E-09	2.47E-07	0.2	3.62E-05	9.52E-07
S1	60	8	5	5	1.03E-03	7.89E-04	1.81E-06	6.58E-05	2.90E-05	1.29E-06	1.62E-07	4.71E-06	2.34E-06	2.57E-09	3.46E-07	0.3	5.07E-05	1.33E-06
S1	60	8	6	5	2.50E-03	1.92E-03	4.40E-06	1.60E-04	7.05E-05	3.13E-06	3.94E-07	1.14E-05	5.68E-06	6.23E-09	8.39E-07	0.8	1.23E-04	3.24E-06
S1	60	8	7	5	7.51E-03	5.75E-03	1.32E-05	4.79E-04	2.12E-04	9.38E-06	1.18E-06	3.43E-05	1.70E-05	1.87E-08	2.52E-06	2.4	3.69E-04	9.71E-06
S1	60	8	8	5	1.15E-02	8.80E-03	2.02E-05	7.33E-04	3.24E-04	1.44E-05	1.81E-06	5.25E-05	2.61E-05	2.86E-08	3.85E-06	3.7	5.65E-04	1.49E-05
S1	60	8	9	5	9.28E-03	7.10E-03	1.63E-05	5.92E-04	2.61E-04	1.16E-05	1.46E-06	4.24E-05	2.11E-05	2.31E-08	3.11E-06	3.0	4.56E-04	1.20E-05
S1	60	8	10	5	7.66E-03	5.86E-03	1.35E-05	4.89E-04	2.16E-04	9.57E-06	1.20E-06	3.50E-05	1.74E-05	1.91E-08	2.57E-06	2.5	3.76E-04	9.90E-06
S1	60	8	11	5	6.92E-03	5.30E-03	1.22E-05	4.42E-04	1.95E-04	8.66E-06	1.09E-06	3.16E-05	1.57E-05	1.72E-08	2.32E-06	2.2	3.40E-04	8.95E-06
S1	60	8	12	5	7.80E-03	5.98E-03	1.37E-05	4.98E-04	2.20E-04	9.78E-06	1.23E-06	3.57E-05	1.77E-05	1.94E-08	2.62E-06	2.5	3.84E-04	1.01E-05
S1	60	8	13	5	8.25E-03	6.31E-03	1.45E-05	5.26E-04	2.32E-04	1.03E-05	1.30E-06	3.77E-05	1.87E-05	2.05E-08	2.76E-06	2.7	4.05E-04	1.07E-05
S1	60	8	14	5	8.39E-03	6.43E-03	1.48E-05	5.36E-04	2.37E-04	1.05E-05	1.32E-06	3.84E-05	1.91E-05	2.09E-08	2.81E-06	2.7	4.13E-04	1.09E-05
S1	60	8	15	5	8.69E-03	6.65E-03	1.53E-05	5.54E-04	2.45E-04	1.09E-05	1.37E-06	3.97E-05	1.97E-05	2.16E-08	2.91E-06	2.8	4.27E-04	1.12E-05
S1	60	8	16	5	9.42E-03	7.22E-03	1.66E-05	6.01E-04	2.66E-04	1.18E-05	1.48E-06	4.31E-05	2.14E-05	2.35E-08	3.16E-06	3.0	4.63E-04	1.22E-05
S1	60	8	17	5	1.16E-02	8.91E-03	2.05E-05	7.42E-04	3.28E-04	1.46E-05	1.83E-06	5.32E-05	2.64E-05	2.90E-08	3.90E-06	3.8	5.72E-04	1.50E-05
S1	60	8	18	5	1.25E-02	9.58E-03	2.20E-05	7.99E-04	3.53E-04	1.57E-05	1.97E-06	5.72E-05	2.84E-05	3.12E-08	4.20E-06	4.0	6.15E-04	1.62E-05
S1	60	8	19	5	8.69E-03	6.65E-03	1.53E-05	5.54E-04	2.45E-04	1.09E-05	1.37E-06	3.97E-05	1.97E-05	2.16E-08	2.91E-06	2.8	4.27E-04	1.12E-05
S1	60	8	20	5	5.74E-03	4.40E-03	1.01E-05	3.66E-04	1.62E-04	7.18E-06	9.03E-07	2.63E-05	1.30E-05	1.43E-08	1.93E-06	1.9	2.82E-04	7.43E-06
S1	60	8	21	5	4.86E-03	3.72E-03	8.55E-06	3.10E-04	1.37E-04	6.07E-06	7.64E-07	2.22E-05	1.10E-05	1.21E-08	1.63E-06	1.6	2.39E-04	6.28E-06
S1	60	8	22	5	4.12E-03	3.16E-03	7.25E-06	2.63E-04	1.16E-04	5.15E-06	6.48E-07	1.88E-05	9.36E-06	1.03E-08	1.38E-06	1.3	2.03E-04	5.33E-06
S1	60	8	23	5	3.39E-03	2.59E-03	5.96E-06	2.16E-04	9.54E-05	4.23E-06	5.33E-07	1.55E-05	7.69E-06	8.43E-09	1.14E-06	1.1	1.67E-04	4.38E-06
S1	60	8	24	5	2.50E-03	1.92E-03	4.40E-06	1.60E-04	7.05E-05	3.13E-06	3.94E-07	1.14E-05	5.68E-06	6.23E-09	8.39E-07	0.8	1.23E-04	3.24E-06
S2	60	8	1	5	8.57E-04	6.56E-04	1.51E-06	5.47E-05	2.41E-05	1.07E-06	1.35E-07	3.92E-06	1.94E-06	2.13E-09	2.87E-07	0.3	4.21E-05	1.11E-06
S2	60	8	2	5	5.71E-04	4.37E-04	1.00E-06	3.64E-05	1.61E-05	7.13E-07	8.98E-08	2.61E-06	1.30E-06	1.42E-09	1.91E-07	0.2	2.81E-05	7.39E-07
S2	60	8	3	5	5.00E-04	3.83E-04	8.79E-07	3.19E-05	1.41E-05	6.24E-07	7.86E-08	2.28E-06	1.13E-06	1.24E-09	1.68E-07	0.2	2.46E-05	6.46E-07
S2	60	8	4	5	3.57E-04	2.73E-04	6.28E-07	2.28E-05	1.01E-05	4.46E-07	5.61E-08	1.63E-06	8.10E-07	8.88E-10	1.20E-07	0.1	1.75E-05	4.62E-07
S2	60	8	5	5	5.00E-04	3.83E-04	8.79E-07	3.19E-05	1.41E-05	6.24E-07	7.86E-08	2.28E-06	1.13E-06	1.24E-09	1.68E-07	0.2	2.46E-05	6.46E-07
S2	60	8	6	5	1.21E-03	9.29E-04	2.13E-06	7.74E-05	3.42E-05	1.52E-06	1.91E-07	5.55E-06	2.75E-06	3.02E-09	4.07E-07	0.4	5.97E-05	1.57E-06
S2	60	8	7	5	3.64E-03	2.79E-03	6.40E-06	2.32E-04	1.03E-04	4.55E-06	5.72E-07	1.66E-05	8.26E-06	9.06E-09	1.22E-06	1.2	1.79E-04	4.71E-06
S2	60	8	8	5	5.57E-03	4.26E-03	9.79E-06	3.55E-04	1.57E-04	6.96E-06	8.76E-07	2.55E-05	1.26E-05	1.39E-08	1.87E-06	1.8	2.74E-04	7.20E-06
S2	60	8	9	5	4.50E-03	3.44E-03	7.91E-06	2.87E-04	1.27E-04	5.62E-06	7.07E-07	2.06E-05	1.02E-05	1.12E-08	1.51E-06	1.5	2.21E-04	5.82E-06
S2	60	8	10	5	3.71E-03	2.84E-03	6.53E-06	2.37E-04	1.05E-04	4.64E-06	5.84E-07	1.70E-05	8.43E-06	9.24E-09	1.24E-06	1.2	1.83E-04	4.80E-06
S2	60	8	11	5	3.36E-03	2.57E-03	5.90E-06	2.14E-04	9.45E-05	4.20E-06	5.28E-07	1.53E-05	7.62E-06	8.35E-09	1.12E-06	1.1	1.65E-04	4.34E-06
S2	60	8	12	5	3.78E-03	2.90E-03	6.65E-06	2.41E-04	1.07E-04	4.74E-06	5.95E-07	1.73E-05	8.59E-06	9.42E-09	1.27E-06	1.2	1.86E-04	4.89E-06
S2	60	8	13	5	4.00E-03	3.06E-03	7.03E-06	2.55E-04	1.13E-04	5.01E-06	6.29E-07	1.83E-05	9.07E-06	9.95E-09	1.34E-06	1.3	1.97E-04	5.17E-06
S2	60	8	14	5	4.07E-03	3.12E-03	7.16E-06	2.60E-04	1.15E-04	5.10E-06	6.40E-07	1.86E-05	9.24E-06	1.01E-08	1.36E-06	1.3	2.00E-04	5.26E-06
S2	60	8	15	5	4.21E-03	3.23E-03	7.41E-06	2.69E-04	1.19E-04	5.28E-06	6.62E-07	1.93E-05	9.56E-06	1.05E-08	1.41E-06	1.4	2.07E-04	5.45E-06
S2	60	8	16	5	4.57E-03	3.50E-03	8.03E-06	2.92E-04	1.29E-04	5.72E-06	7.18E-07	2.09E-05	1.04E-05	1.14E-08	1.53E-06	1.5	2.25E-04	5.91E-06
S2	60	8	17	5	5.64E-03	4.32E-03	9.92E-06	3.60E-04	1.59E-04	7.06E-06	8.87E-07	2.58E-05	1.28E-05	1.40E-08	1.89E-06	1.8	2.77E-04	7.29E-06
S2	60	8	18	5	6.07E-03	4.65E-03	1.07E-05	3.87E-04	1.71E-04	7.60E-06	9.54E-07	2.77E-05	1.38E-05	1.51E-08	2.03E-06	2.0	2.98E-04	7.85E-06
S2	60	8	19	5	4.21E-03	3.23E-03	7.41E-06	2.69E-04	1.19E-04	5.27E-06	6.62E-07	1.93E-05	9.56E-06	1.05E-08	1.41E-06	1.4	2.07E-04	5.45E-06
S2	60	8	20	5	2.78E-03	2.13E-03	4.90E-06	1.78E-04	7.85E-05	3.48E-06	4.38E-07	1.27E-05	6.32E-06	6.93E-09	9.33E-07	0.9	1.37E-04	3.60E-06
S2	60	8	21	5	2.36E-03	1.80E-03	4.14E-06	1.50E-04	6.64E-05	2.94E-06	3.70E-07	1.08E-05	5.35E-06	5.86E-09	7.90E-07	0.8	1.16E-04	3.05E-06
S2	60	8	22	5	2.00E-03	1.53E-03	3.51E-06	1.28E-04	5.63E-05	2.50E-06	3.14E-07	9.14E-06	4.54E-06	4.97E-09	6.70E-07	0.6	9.83E-05	2.59E-06
S2	60	8	23	5	1.64E-03	1.26E-03	2.89E-06	1.05E-04	4.63E-05	2.05E-06	2.58E-07	7.51E-06	3.73E-06	4.09E-09	5.50E-07	0.5	8.07E-05	2.12E-06
S2	60	8	24	5	1.21E-03	9.29E-04	2.13E-06	7.74E-05	3.42E-05	1.52E-06	1.91E-07	5.55E-06	2.75E-06	3.02E-09	4.07E-07	0.4	5.97E-05	1.57E-06
S3	60	8	1	5	1.78E-03	1.36E-03	3.12E-06	1.13E-04	5.01E-05	2.22E-06	2.79E-07	8.12E-06	4.03E-06	4.42E-09	5.96E-07	0.6	8.73E-05	2.30E-06
S3	60	8	2	5	1.18E-03	9.07E-04	2.08E-06	7.56E-05	3.34E-05	1.48E-06	1.86E-07	5.41E-06	2.69E-06	2.95E-09	3.97E-07	0.4	5.82E-05	1.53E-06
S3	60	8	3	5	1.04E-03	7.93E-04	1.82E-06	6.61E-05	2.92E-05	1.29E-06	1.63E-07	4.74E-06	2.35E-06	2.58E-09	3.47E-07	0.3	5.09E-05	1.34E-06
S3	60	8	4	5	7.40E-04	5.67E-04	1.30E-06	4.72E-05	2.09E-05	9.25E-07	1.16E-07	3.38E-06	1.68E-06	1.84E-09	2.48E-07	0.2	3.64E-05	9.57E-07
S3	60	8	5	5	1.04E-03	7.93E-04	1.82E-06	6.61E-05	2.92E-05	1.29E-06	1.63E-07	4.74E-06	2.35E-06	2.58E-09	3.47E-07	0.3	5.09E-05	1.34E-06
S3	60	8	6	5	2.52E-03	1.93E-03	4.43E-06	1.61E-04	7.09E-05	3.14E-06	3.96E-07	1.15E-05	5.71E-06	6.26E-09	8.44E-07	0.8	1.24E-04	3.25E-06
S3	60	8	7	5	7.55E-03	5.78E-03	1.33E-05	4.82E-04	2.13E-04	9.43E-06	1.19E-06	3.45E-05	1.71E-05	1.88E-08	2.53E-06	2.4	3.71E-04	9.76E-06
S3	60	8	8	5	1.15E-02	8.84E-03	2.03E-05	7.37E-04	3.25E-04	1.44E-05	1.82E-06	5.28E-05	2.62E-05	2.87E-08	3.87E-06	3.7	5.68E-04	1.49E-05
S3	60	8	9	5	9.33E-03	7.14E-03	1.64E-05	5.95E-04	2.63E-04	1.17E-05	1.47E-06	4.26E-05	2.12E-05	2.32E-08	3.13E-06	3.0	4.59E-04	1.21E-05
S3	60	8	10	5	7.70E-03	5.89E-03	1.35E-05	4.91E-04	2.17E-04	9.62E-06	1.21E-06	3.52E-05	1.75E-05	1.92E-08	2.58E-06	2.5	3.78E-04	9.96E-06
S3	60	8	11	5	6.96E-03	5.33E-03	1.22E-05	4.44E-04	1.96E-04	8.71E-06	1.09E-06	3.18E-05	1.58E-05	1.73E-08	2.33E-06	2.2	3.42E-04	9.00E-06
S3	60	8	12	5	7.85E-03	6.01E-03	1.38E-05	5.01E-04	2.21E-04	9.83E-06	1.23E-06	3.59E-05	1.78E-05	1.95E-08	2.63E-06	2.5	3.86E-04	1.01E-05
S3	60	8	13	5	8.29E-03	6.35E-03	1.46E-05	5.29E-04	2.34E-04	1.04E-05	1.30E-06	3.79E-05	1.88E-05	2.06E-08	2.78E-06	2.7	4.08E-04	1.07E-05
S3	60	8	14	5	8.44E-03	6.46E-03	1.48E-05	5.38E-04	2.38E-04	1.06E-05	1.33E-06	3.86E-05	1.92E-05	2.10E-08	2.83E-06	2.7	4.15E-04	1.09E-05
S3	60	8	15	5	8.73E-03	6.69E-03	1.54E-05	5.57E-04	2.46E-04	1.10E-05	1.37E-06	3.99E-05	1.98E-05	2.17E-08	2.93E-06	2.8	4.29E-04	1.13E-05
S3	60	8	16	5	9.47E-03	7.25E-03	1.67E-05	6.04E-04	2.67E-04	1.19E-05	1.49E-06	4.33E-05	2.15E-05	2.36E-08	3.18E-06	3.1	4.66E-04	1.23E-05
S3	60	8	17	5	1.17E-02	8.95E-03	2.06E-05	7.46E-04	3.30E-04	1.46E-05	1.84E-06	5.35E-05	2.65E-05	2.91E-08	3.92E-06	3.8	5.75E-04	1.51E-05
S3	60	8	18	5	1.26E-02	9.63E-03	2.21E-05	8.03E-04	3.55E-04	1.58E-05	1.98E-06	5.75E-05	2.86E-05	3.13E-08	4.22E-06	4.1	6.19E-04	1.63E-05
S3	60	8	19	5	8.73E-03	6.69E-03	1.54E-05	5.57E-04	2.46E-04	1.09E-05	1.37E-06	3.99E-05	1.98E-05	2.17E-08	2.93E-06	2.8	4.29E-04	1.13E-05
S3	60	8	20	5	5.77E-03	4.42E-03	1.02E-05	3.68E-04	1.63E-04	7.21E-06	9.08E-07	2.64E-05	1.31E-05	1.44E-08	1.94E-06	1.9	2.84E-04	7.47E-06

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	21	5	4.88E-03	3.74E-03	8.59E-06	3.12E-04	1.38E-04	6.11E-06	7.68E-07	2.23E-05	1.11E-05	1.22E-08	1.64E-06	1.6	2.40E-04	6.32E-06
S3	60	8	22	5	4.14E-03	3.17E-03	7.29E-06	2.64E-04	1.17E-04	5.18E-06	6.52E-07	1.89E-05	9.41E-06	1.03E-08	1.39E-06	1.3	2.04E-04	5.36E-06
S3	60	8	23	5	3.40E-03	2.61E-03	5.99E-06	2.17E-04	9.59E-05	4.25E-06	5.35E-07	1.56E-05	7.73E-06	8.47E-09	1.14E-06	1.1	1.67E-04	4.40E-06
S3	60	8	24	5	2.52E-03	1.93E-03	4.43E-06	1.61E-04	7.09E-05	3.14E-06	3.96E-07	1.15E-05	5.71E-06	6.26E-09	8.44E-07	0.8	1.24E-04	3.25E-06
S4	60	8	1	5	3.06E-03	2.35E-03	5.39E-06	1.95E-04	8.63E-05	3.83E-06	4.82E-07	1.40E-05	6.95E-06	7.62E-09	1.03E-06	1.0	1.51E-04	3.96E-06
S4	60	8	2	5	2.04E-03	1.56E-03	3.59E-06	1.30E-04	5.75E-05	2.55E-06	3.21E-07	9.33E-06	4.63E-06	5.08E-09	6.85E-07	0.7	1.00E-04	2.64E-06
S4	60	8	3	5	1.79E-03	1.37E-03	3.14E-06	1.14E-04	5.03E-05	2.23E-06	2.81E-07	8.17E-06	4.06E-06	4.45E-09	5.99E-07	0.6	8.78E-05	2.31E-06
S4	60	8	4	5	1.28E-03	9.77E-04	2.24E-06	8.14E-05	3.60E-05	1.59E-06	2.01E-07	5.83E-06	2.90E-06	3.18E-09	4.28E-07	0.4	6.27E-05	1.65E-06
S4	60	8	5	5	1.79E-03	1.37E-03	3.14E-06	1.14E-04	5.03E-05	2.23E-06	2.81E-07	8.17E-06	4.06E-06	4.45E-09	5.99E-07	0.6	8.78E-05	2.31E-06
S4	60	8	6	5	4.34E-03	3.32E-03	7.63E-06	2.77E-04	1.22E-04	5.42E-06	6.82E-07	1.98E-05	9.85E-06	1.08E-08	1.45E-06	1.4	2.13E-04	5.61E-06
S4	60	8	7	5	1.30E-02	9.97E-03	2.29E-05	8.31E-04	3.67E-04	1.63E-05	2.05E-06	5.95E-05	2.95E-05	3.24E-08	4.36E-06	4.2	6.40E-04	1.68E-05
S4	60	8	8	5	1.99E-02	1.52E-02	3.50E-05	1.27E-03	5.61E-04	2.49E-05	3.13E-06	9.10E-05	4.52E-05	4.95E-08	6.67E-06	6.4	9.79E-04	2.57E-05
S4	60	8	9	5	1.61E-02	1.23E-02	2.83E-05	1.03E-03	4.53E-04	2.01E-05	2.53E-06	7.35E-05	3.65E-05	4.00E-08	5.39E-06	5.2	7.91E-04	2.08E-05
S4	60	8	10	5	1.33E-02	1.02E-02	2.33E-05	8.47E-04	3.74E-04	1.66E-05	2.09E-06	6.07E-05	3.01E-05	3.30E-08	4.45E-06	4.3	6.53E-04	1.72E-05
S4	60	8	11	5	1.20E-02	9.19E-03	2.11E-05	7.65E-04	3.38E-04	1.50E-05	1.89E-06	5.48E-05	2.72E-05	2.99E-08	4.02E-06	3.9	5.90E-04	1.55E-05
S4	60	8	12	5	1.35E-02	1.04E-02	2.38E-05	8.63E-04	3.81E-04	1.69E-05	2.13E-06	6.18E-05	3.07E-05	3.37E-08	4.54E-06	4.4	6.65E-04	1.75E-05
S4	60	8	13	5	1.43E-02	1.09E-02	2.51E-05	9.12E-04	4.03E-04	1.79E-05	2.25E-06	6.53E-05	3.24E-05	3.56E-08	4.79E-06	4.6	7.03E-04	1.85E-05
S4	60	8	14	5	1.45E-02	1.11E-02	2.56E-05	9.28E-04	4.10E-04	1.82E-05	2.29E-06	6.65E-05	3.30E-05	3.62E-08	4.88E-06	4.7	7.15E-04	1.88E-05
S4	60	8	15	5	1.51E-02	1.15E-02	2.65E-05	9.61E-04	4.24E-04	1.89E-05	2.37E-06	6.88E-05	3.42E-05	3.75E-08	5.05E-06	4.9	7.40E-04	1.95E-05
S4	60	8	16	5	1.63E-02	1.25E-02	2.87E-05	1.04E-03	4.60E-04	2.05E-05	2.57E-06	7.47E-05	3.71E-05	4.07E-08	5.48E-06	5.3	8.03E-04	2.11E-05
S4	60	8	17	5	2.02E-02	1.54E-02	3.55E-05	1.29E-03	5.68E-04	2.53E-05	3.17E-06	9.22E-05	4.58E-05	5.02E-08	6.76E-06	6.5	9.91E-04	2.61E-05
S4	60	8	18	5	2.17E-02	1.66E-02	3.82E-05	1.38E-03	6.11E-04	2.72E-05	3.41E-06	9.92E-05	4.92E-05	5.40E-08	7.27E-06	7.0	1.07E-03	2.81E-05
S4	60	8	19	5	1.51E-02	1.15E-02	2.65E-05	9.61E-04	4.24E-04	1.88E-05	2.37E-06	6.88E-05	3.42E-05	3.75E-08	5.05E-06	4.9	7.40E-04	1.95E-05
S4	60	8	20	5	9.95E-03	7.62E-03	1.75E-05	6.35E-04	2.80E-04	1.24E-05	1.57E-06	4.55E-05	2.26E-05	2.48E-08	3.34E-06	3.2	4.89E-04	1.29E-05
S4	60	8	21	5	8.42E-03	6.45E-03	1.48E-05	5.37E-04	2.37E-04	1.05E-05	1.32E-06	3.85E-05	1.91E-05	2.10E-08	2.82E-06	2.7	4.14E-04	1.09E-05
S4	60	8	22	5	7.15E-03	5.47E-03	1.26E-05	4.56E-04	2.01E-04	8.93E-06	1.12E-06	3.27E-05	1.62E-05	1.78E-08	2.40E-06	2.3	3.51E-04	9.24E-06
S4	60	8	23	5	5.87E-03	4.50E-03	1.03E-05	3.75E-04	1.65E-04	7.34E-06	9.23E-07	2.68E-05	1.33E-05	1.46E-08	1.97E-06	1.9	2.89E-04	7.59E-06
S4	60	8	24	5	4.34E-03	3.32E-03	7.63E-06	2.77E-04	1.22E-04	5.42E-06	6.82E-07	1.98E-05	9.85E-06	1.08E-08	1.45E-06	1.4	2.13E-04	5.61E-06
S5	60	8	1	5	1.16E-03	8.84E-04	2.03E-06	7.37E-05	3.25E-05	1.44E-06	1.82E-07	5.28E-06	2.62E-06	2.87E-09	3.87E-07	0.4	5.68E-05	1.49E-06
S5	60	8	2	5	7.70E-04	5.90E-04	1.35E-06	4.91E-05	2.17E-05	9.62E-07	1.21E-07	3.52E-06	1.75E-06	1.92E-09	2.58E-07	0.2	3.79E-05	9.96E-07
S5	60	8	3	5	6.74E-04	5.16E-04	1.18E-06	4.30E-05	1.90E-05	8.42E-07	1.06E-07	3.08E-06	1.53E-06	1.68E-09	2.26E-07	0.2	3.31E-05	8.71E-07
S5	60	8	4	5	4.81E-04	3.69E-04	8.46E-07	3.07E-05	1.36E-05	6.01E-07	7.57E-08	2.20E-06	1.09E-06	1.20E-09	1.61E-07	0.2	2.37E-05	6.22E-07
S5	60	8	5	5	6.74E-04	5.16E-04	1.18E-06	4.30E-05	1.90E-05	8.41E-07	1.06E-07	3.08E-06	1.53E-06	1.68E-09	2.26E-07	0.2	3.31E-05	8.71E-07
S5	60	8	6	5	1.64E-03	1.25E-03	2.88E-06	1.04E-04	4.61E-05	2.04E-06	2.57E-07	7.48E-06	3.71E-06	4.07E-09	5.49E-07	0.5	8.04E-05	2.12E-06
S5	60	8	7	5	4.91E-03	3.76E-03	8.63E-06	3.13E-04	1.38E-04	6.13E-06	7.72E-07	2.24E-05	1.11E-05	1.22E-08	1.65E-06	1.6	2.41E-04	6.35E-06
S5	60	8	8	5	7.51E-03	5.75E-03	1.32E-05	4.79E-04	2.12E-04	9.38E-06	1.18E-06	3.43E-05	1.70E-05	1.87E-08	2.52E-06	2.4	3.69E-04	9.71E-06
S5	60	8	9	5	6.06E-03	4.64E-03	1.07E-05	3.87E-04	1.71E-04	7.58E-06	9.53E-07	2.77E-05	1.38E-05	1.51E-08	2.03E-06	2.0	2.98E-04	7.84E-06
S5	60	8	10	5	5.01E-03	3.83E-03	8.80E-06	3.19E-04	1.41E-04	6.26E-06	7.87E-07	2.29E-05	1.14E-05	1.25E-08	1.68E-06	1.6	2.46E-04	6.47E-06
S5	60	8	11	5	4.52E-03	3.46E-03	7.96E-06	2.89E-04	1.27E-04	5.66E-06	7.11E-07	2.07E-05	1.03E-05	1.13E-08	1.52E-06	1.5	2.22E-04	5.85E-06
S5	60	8	12	5	5.10E-03	3.91E-03	8.97E-06	3.25E-04	1.44E-04	6.39E-06	8.02E-07	2.33E-05	1.16E-05	1.27E-08	1.71E-06	1.6	2.51E-04	6.60E-06
S5	60	8	13	5	5.39E-03	4.13E-03	9.48E-06	3.44E-04	1.52E-04	6.75E-06	8.48E-07	2.46E-05	1.22E-05	1.34E-08	1.81E-06	1.7	2.65E-04	6.97E-06
S5	60	8	14	5	5.49E-03	4.20E-03	9.65E-06	3.50E-04	1.55E-04	6.88E-06	8.63E-07	2.51E-05	1.25E-05	1.37E-08	1.84E-06	1.8	2.70E-04	7.10E-06
S5	60	8	15	5	5.68E-03	4.35E-03	9.99E-06	3.62E-04	1.60E-04	7.12E-06	8.93E-07	2.60E-05	1.29E-05	1.41E-08	1.90E-06	1.8	2.79E-04	7.34E-06
S5	60	8	16	5	6.16E-03	4.72E-03	1.08E-05	3.93E-04	1.74E-04	7.72E-06	9.69E-07	2.82E-05	1.40E-05	1.53E-08	2.07E-06	2.0	3.03E-04	7.97E-06
S5	60	8	17	5	7.60E-03	5.82E-03	1.34E-05	4.85E-04	2.14E-04	9.52E-06	1.20E-06	3.48E-05	1.73E-05	1.89E-08	2.55E-06	2.5	3.74E-04	9.83E-06
S5	60	8	18	5	8.18E-03	6.26E-03	1.44E-05	5.22E-04	2.31E-04	1.02E-05	1.29E-06	3.74E-05	1.86E-05	2.04E-08	2.74E-06	2.6	4.02E-04	1.06E-05
S5	60	8	19	5	5.68E-03	4.35E-03	9.99E-06	3.62E-04	1.60E-04	7.11E-06	8.93E-07	2.60E-05	1.29E-05	1.41E-08	1.90E-06	1.8	2.79E-04	7.34E-06
S5	60	8	20	5	3.75E-03	2.87E-03	6.60E-06	2.40E-04	1.06E-04	4.69E-06	5.90E-07	1.72E-05	8.52E-06	9.34E-09	1.26E-06	1.2	1.85E-04	4.85E-06
S5	60	8	21	5	3.18E-03	2.43E-03	5.59E-06	2.03E-04	8.95E-05	3.97E-06	4.99E-07	1.45E-05	7.21E-06	7.91E-09	1.06E-06	1.0	1.56E-04	4.11E-06
S5	60	8	22	5	2.70E-03	2.06E-03	4.74E-06	1.72E-04	7.59E-05	3.37E-06	4.24E-07	1.23E-05	6.12E-06	6.71E-09	9.04E-07	0.9	1.33E-04	3.49E-06
S5	60	8	23	5	2.21E-03	1.70E-03	3.89E-06	1.41E-04	6.24E-05	2.77E-06	3.48E-07	1.01E-05	5.03E-06	5.51E-09	7.42E-07	0.7	1.09E-04	2.86E-06
S5	60	8	24	5	1.64E-03	1.25E-03	2.88E-06	1.04E-04	4.61E-05	2.04E-06	2.57E-07	7.48E-06	3.71E-06	4.07E-09	5.49E-07	0.5	8.04E-05	2.12E-06
S6	60	8	1	5	2.12E-03	1.62E-03	3.72E-06	1.35E-04	5.96E-05	2.64E-06	3.33E-07	9.67E-06	4.80E-06	5.27E-09	7.10E-07	0.7	1.04E-04	2.74E-06
S6	60	8	2	5	1.41E-03	1.08E-03	2.48E-06	9.00E-05	3.98E-05	1.76E-06	2.22E-07	6.45E-06	3.20E-06	3.51E-09	4.73E-07	0.5	6.94E-05	1.82E-06
S6	60	8	3	5	1.23E-03	9.45E-04	2.17E-06	7.88E-05	3.48E-05	1.54E-06	1.94E-07	5.64E-06	2.80E-06	3.07E-09	4.14E-07	0.4	6.07E-05	1.60E-06
S6	60	8	4	5	8.82E-04	6.75E-04	1.55E-06	5.63E-05	2.48E-05	1.10E-06	1.39E-07	4.03E-06	2.00E-06	2.19E-09	2.96E-07	0.3	4.34E-05	1.14E-06
S6	60	8	5	5	1.23E-03	9.45E-04	2.17E-06	7.88E-05	3.48E-05	1.54E-06	1.94E-07	5.64E-06	2.80E-06	3.07E-09	4.14E-07	0.4	6.07E-05	1.60E-06
S6	60	8	6	5	3.00E-03	2.30E-03	5.27E-06	1.91E-04	8.45E-05	3.74E-06	4.71E-07	1.37E-05	6.81E-06	7.46E-09	1.01E-06	1.0	1.47E-04	3.88E-06
S6	60	8	7	5	8.99E-03	6.89E-03	1.58E-05	5.74E-04	2.53E-04	1.12E-05	1.41E-06	4.11E-05	2.04E-05	2.24E-08	3.02E-06	2.9	4.42E-04	1.16E-05
S6	60	8	8	5	1.38E-02	1.05E-02	2.42E-05	8.78E-04	3.88E-04	1.72E-05	2.16E-06	6.29E-05	3.12E-05	3.42E-08	4.61E-06	4.4	6.76E-04	1.78E-05
S6	60	8	9	5	1.11E-02	8.51E-03	1.95E-05	7.09E-04	3.13E-04	1.39E-05	1.75E-06	5.08E-05	2.52E-05	2.77E-08	3.73E-06	3.6	5.46E-04	1.44E-05
S6	60	8	10	5	9.17E-03	7.02E-03	1.61E-05	5.85E-04	2.58E-04	1.15E-05	1.44E-06	4.19E-05	2.08E-05	2.28E-08	3.07E-06	3.0	4.51E-04	1.19E-05
S6	60	8	11	5	8.29E-03	6.35E-03	1.46E-05	5.29E-04	2.34E-04	1.04E-05	1.30E-06	3.79E-05	1.88E-05	2.06E-08	2.78E-06	2.7	4.08E-04	1.07E-05
S6	60	8	12	5	9.35E-03	7.16E-03	1.64E-05	5.96E-04	2.63E-04	1.17E-05	1.47E-06	4.27E-05	2.12E-05	2.33E-08	3.13E-06	3.0	4.60E-04	1.21E-05
S6	60	8	13	5	9.88E-03	7.56E-03	1.74E-05	6.30E-04	2.78E-04	1.24E-05	1.55E-06	4.51E-05	2.24E-05	2.46E-08	3.31E-06	3.2	4.86E-04	1.28E-05
S6	60	8	14	5	1.01E-02	7.70E-03	1.77E-05	6.41E-04	2.83E-04	1.26E-05	1.58E-06	4.60E-05	2.28E-05	2.50E-08	3.37E-06	3.2	4.94E-04	1.30E-05
S6	60	8	15	5	1.04E-02	7.97E-03	1.83E-05	6.64E-04	2.93E-04	1.30E-05	1.64E-06	4.76E-05	2.36E-05	2.59E-08	3.49E-06	3.4	5.12E-04	1.35E-05
S6	60	8	16	5	1.13E-02	8.64E-03	1.98E-05	7.20E-04	3.18E-04	1.41E-05	1.77E-06	5.16E-05	2.56E-05	2.81E-08	3.78E-06	3.6	5.55E-04	1.46E-05
S6	60	8	17	5	1.39E-02	1.07E-02	2.45E-05	8.89E-04	3.93E-04	1.74E-05	2.19E-06	6.37E-05	3.16E-05	3.47E-08	4.67E-06	4.5	6.85E-04	1.80E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	18	5	1.50E-02	1.15E-02	2.64E-05	9.56E-04	4.22E-04	1.88E-05	2.36E-06	6.85E-05	3.40E-05	3.73E-08	5.03E-06	4.8	7.37E-04	1.94E-05
S6	60	8	19	5	1.04E-02	7.97E-03	1.83E-05	6.64E-04	2.93E-04	1.30E-05	1.64E-06	4.76E-05	2.36E-05	2.59E-08	3.49E-06	3.4	5.12E-04	1.35E-05
S6	60	8	20	5	6.88E-03	5.27E-03	1.21E-05	4.39E-04	1.94E-04	8.59E-06	1.08E-06	3.14E-05	1.56E-05	1.71E-08	2.31E-06	2.2	3.38E-04	8.90E-06
S6	60	8	21	5	5.82E-03	4.46E-03	1.02E-05	3.71E-04	1.64E-04	7.27E-06	9.15E-07	2.66E-05	1.32E-05	1.45E-08	1.95E-06	1.9	2.86E-04	7.53E-06
S6	60	8	22	5	4.94E-03	3.78E-03	8.68E-06	3.15E-04	1.39E-04	6.17E-06	7.76E-07	2.26E-05	1.12E-05	1.23E-08	1.66E-06	1.6	2.43E-04	6.39E-06
S6	60	8	23	5	4.06E-03	3.11E-03	7.13E-06	2.59E-04	1.14E-04	5.07E-06	6.38E-07	1.85E-05	9.21E-06	1.01E-08	1.36E-06	1.3	1.99E-04	5.25E-06
S6	60	8	24	5	3.00E-03	2.30E-03	5.27E-06	1.91E-04	8.45E-05	3.75E-06	4.71E-07	1.37E-05	6.81E-06	7.46E-09	1.01E-06	1.0	1.47E-04	3.88E-06
S7	60	8	1	5	6.07E-03	4.65E-03	1.07E-05	3.87E-04	1.71E-04	7.58E-06	9.55E-07	2.78E-05	1.38E-05	1.51E-08	2.04E-06	2.0	2.99E-04	7.85E-06
S7	60	8	2	5	4.05E-03	3.10E-03	7.12E-06	2.58E-04	1.14E-04	5.06E-06	6.37E-07	1.85E-05	9.19E-06	1.01E-08	1.36E-06	1.3	1.99E-04	5.24E-06
S7	60	8	3	5	3.54E-03	2.71E-03	6.23E-06	2.26E-04	9.98E-05	4.42E-06	5.57E-07	1.62E-05	8.04E-06	8.82E-09	1.19E-06	1.1	1.74E-04	4.58E-06
S7	60	8	4	5	2.53E-03	1.94E-03	4.45E-06	1.61E-04	7.13E-05	3.16E-06	3.98E-07	1.16E-05	5.74E-06	6.30E-09	8.48E-07	0.8	1.24E-04	3.27E-06
S7	60	8	5	5	3.54E-03	2.71E-03	6.23E-06	2.26E-04	9.98E-05	4.42E-06	5.57E-07	1.62E-05	8.04E-06	8.82E-09	1.19E-06	1.1	1.74E-04	4.58E-06
S7	60	8	6	5	8.60E-03	6.59E-03	1.51E-05	5.49E-04	2.42E-04	1.07E-05	1.35E-06	3.93E-05	1.95E-05	2.14E-08	2.88E-06	2.8	4.23E-04	1.11E-05
S7	60	8	7	5	2.58E-02	1.98E-02	4.54E-05	1.65E-03	7.27E-04	3.22E-05	4.06E-06	1.18E-04	5.86E-05	6.42E-08	8.65E-06	8.3	1.27E-03	3.34E-05
S7	60	8	8	5	3.95E-02	3.02E-02	6.94E-05	2.52E-03	1.11E-03	4.93E-05	6.21E-06	1.80E-04	8.96E-05	9.82E-08	1.32E-05	12.7	1.94E-03	5.10E-05
S7	60	8	9	5	3.19E-02	2.44E-02	5.61E-05	2.03E-03	8.98E-04	3.98E-05	5.01E-06	1.46E-04	7.24E-05	7.93E-08	1.07E-05	10.3	1.57E-03	4.12E-05
S7	60	8	10	5	2.63E-02	2.01E-02	4.63E-05	1.68E-03	7.41E-04	3.29E-05	4.14E-06	1.20E-04	5.97E-05	6.55E-08	8.82E-06	8.5	1.29E-03	3.40E-05
S7	60	8	11	5	2.38E-02	1.82E-02	4.18E-05	1.52E-03	6.70E-04	2.98E-05	3.74E-06	1.09E-04	5.40E-05	5.92E-08	7.97E-06	7.7	1.17E-03	3.08E-05
S7	60	8	12	5	2.68E-02	2.05E-02	4.72E-05	1.71E-03	7.56E-04	3.36E-05	4.22E-06	1.23E-04	6.09E-05	6.67E-08	8.99E-06	8.7	1.32E-03	3.47E-05
S7	60	8	13	5	2.83E-02	2.17E-02	4.98E-05	1.81E-03	7.98E-04	3.55E-05	4.46E-06	1.30E-04	6.43E-05	7.05E-08	9.50E-06	9.1	1.39E-03	3.66E-05
S7	60	8	14	5	2.88E-02	2.21E-02	5.07E-05	1.84E-03	8.13E-04	3.62E-05	4.54E-06	1.32E-04	6.55E-05	7.18E-08	9.67E-06	9.3	1.42E-03	3.73E-05
S7	60	8	15	5	2.99E-02	2.29E-02	5.25E-05	1.90E-03	8.41E-04	3.74E-05	4.69E-06	1.36E-04	6.78E-05	7.43E-08	1.00E-05	9.6	1.47E-03	3.86E-05
S7	60	8	16	5	3.24E-02	2.48E-02	5.69E-05	2.07E-03	9.13E-04	4.06E-05	5.09E-06	1.48E-04	7.35E-05	8.06E-08	1.09E-05	10.5	1.59E-03	4.19E-05
S7	60	8	17	5	4.00E-02	3.06E-02	7.03E-05	2.55E-03	1.13E-03	5.01E-05	6.29E-06	1.83E-04	9.07E-05	9.95E-08	1.34E-05	12.9	1.97E-03	5.17E-05
S7	60	8	18	5	4.30E-02	3.29E-02	7.56E-05	2.74E-03	1.21E-03	5.39E-05	6.76E-06	1.97E-04	9.76E-05	1.07E-07	1.44E-05	13.9	2.11E-03	5.56E-05
S7	60	8	19	5	2.99E-02	2.29E-02	5.25E-05	1.90E-03	8.41E-04	3.74E-05	4.69E-06	1.36E-04	6.78E-05	7.43E-08	1.00E-05	9.6	1.47E-03	3.86E-05
S7	60	8	20	5	1.97E-02	1.51E-02	3.47E-05	1.26E-03	5.56E-04	2.47E-05	3.10E-06	9.02E-05	4.48E-05	4.91E-08	6.62E-06	6.4	9.70E-04	2.55E-05
S7	60	8	21	5	1.67E-02	1.28E-02	2.94E-05	1.07E-03	4.71E-04	2.09E-05	2.63E-06	7.63E-05	3.79E-05	4.16E-08	5.60E-06	5.4	8.21E-04	2.16E-05
S7	60	8	22	5	1.42E-02	1.08E-02	2.49E-05	9.04E-04	3.99E-04	1.77E-05	2.23E-06	6.48E-05	3.22E-05	3.53E-08	4.75E-06	4.6	6.97E-04	1.83E-05
S7	60	8	23	5	1.16E-02	8.91E-03	2.05E-05	7.43E-04	3.28E-04	1.45E-05	1.83E-06	5.32E-05	2.64E-05	2.90E-08	3.90E-06	3.8	5.72E-04	1.51E-05
S7	60	8	24	5	8.60E-03	6.59E-03	1.51E-05	5.49E-04	2.42E-04	1.07E-05	1.35E-06	3.93E-05	1.95E-05	2.14E-08	2.88E-06	2.8	4.23E-04	1.11E-05
S8	60	8	1	5	3.67E-03	2.81E-03	6.45E-06	2.34E-04	1.03E-04	4.58E-06	5.77E-07	1.68E-05	8.32E-06	9.13E-09	1.23E-06	1.2	1.80E-04	4.74E-06
S8	60	8	2	5	2.44E-03	1.87E-03	4.30E-06	1.56E-04	6.89E-05	3.05E-06	3.84E-07	1.12E-05	5.55E-06	6.08E-09	8.20E-07	0.8	1.20E-04	3.16E-06
S8	60	8	3	5	2.14E-03	1.64E-03	3.76E-06	1.36E-04	6.03E-05	2.67E-06	3.36E-07	9.78E-06	4.86E-06	5.32E-09	7.17E-07	0.7	1.05E-04	2.77E-06
S8	60	8	4	5	1.53E-03	1.17E-03	2.69E-06	9.75E-05	4.31E-05	1.91E-06	2.40E-07	6.98E-06	3.47E-06	3.80E-09	5.12E-07	0.5	7.51E-05	1.98E-06
S8	60	8	5	5	2.14E-03	1.64E-03	3.76E-06	1.36E-04	6.03E-05	2.67E-06	3.36E-07	9.78E-06	4.86E-06	5.32E-09	7.17E-07	0.7	1.05E-04	2.77E-06
S8	60	8	6	5	5.20E-03	3.98E-03	9.14E-06	3.31E-04	1.46E-04	6.49E-06	8.17E-07	2.37E-05	1.18E-05	1.29E-08	1.74E-06	1.7	2.55E-04	6.72E-06
S8	60	8	7	5	1.56E-02	1.19E-02	2.74E-05	9.94E-04	4.39E-04	1.95E-05	2.45E-06	7.12E-05	3.54E-05	3.88E-08	5.23E-06	5.0	7.66E-04	2.02E-05
S8	60	8	8	5	2.38E-02	1.83E-02	4.19E-05	1.52E-03	6.72E-04	2.98E-05	3.75E-06	1.09E-04	5.41E-05	5.93E-08	7.99E-06	7.7	1.17E-03	3.08E-05
S8	60	8	9	5	1.93E-02	1.47E-02	3.39E-05	1.23E-03	5.43E-04	2.41E-05	3.03E-06	8.80E-05	4.37E-05	4.79E-08	6.45E-06	6.2	9.47E-04	2.49E-05
S8	60	8	10	5	1.59E-02	1.22E-02	2.79E-05	1.01E-03	4.48E-04	1.99E-05	2.50E-06	7.26E-05	3.61E-05	3.96E-08	5.33E-06	5.1	7.81E-04	2.06E-05
S8	60	8	11	5	1.44E-02	1.10E-02	2.53E-05	9.16E-04	4.05E-04	1.80E-05	2.26E-06	6.57E-05	3.26E-05	3.57E-08	4.82E-06	4.6	7.06E-04	1.86E-05
S8	60	8	12	5	1.62E-02	1.24E-02	2.85E-05	1.03E-03	4.56E-04	2.03E-05	2.55E-06	7.40E-05	3.68E-05	4.03E-08	5.43E-06	5.2	7.96E-04	2.09E-05
S8	60	8	13	5	1.71E-02	1.31E-02	3.01E-05	1.09E-03	4.82E-04	2.14E-05	2.69E-06	7.82E-05	3.88E-05	4.26E-08	5.74E-06	5.5	8.41E-04	2.21E-05
S8	60	8	14	5	1.74E-02	1.33E-02	3.06E-05	1.11E-03	4.91E-04	2.18E-05	2.74E-06	7.96E-05	3.95E-05	4.34E-08	5.84E-06	5.6	8.56E-04	2.25E-05
S8	60	8	15	5	1.80E-02	1.38E-02	3.17E-05	1.15E-03	5.08E-04	2.26E-05	2.84E-06	8.24E-05	4.09E-05	4.49E-08	6.05E-06	5.8	8.86E-04	2.33E-05
S8	60	8	16	5	1.96E-02	1.50E-02	3.44E-05	1.25E-03	5.51E-04	2.45E-05	3.08E-06	8.94E-05	4.44E-05	4.87E-08	6.56E-06	6.3	9.62E-04	2.53E-05
S8	60	8	17	5	2.41E-02	1.85E-02	4.25E-05	1.54E-03	6.80E-04	3.02E-05	3.80E-06	1.10E-04	5.48E-05	6.01E-08	8.09E-06	7.8	1.19E-03	3.12E-05
S8	60	8	18	5	2.60E-02	1.99E-02	4.57E-05	1.66E-03	7.32E-04	3.25E-05	4.08E-06	1.19E-04	5.90E-05	6.47E-08	8.71E-06	8.4	1.28E-03	3.36E-05
S8	60	8	19	5	1.80E-02	1.38E-02	3.17E-05	1.15E-03	5.08E-04	2.26E-05	2.84E-06	8.24E-05	4.09E-05	4.49E-08	6.05E-06	5.8	8.86E-04	2.33E-05
S8	60	8	20	5	1.19E-02	9.13E-03	2.10E-05	7.60E-04	3.36E-04	1.49E-05	1.87E-06	5.45E-05	2.71E-05	2.97E-08	4.00E-06	3.8	5.86E-04	1.54E-05
S8	60	8	21	5	1.01E-02	7.72E-03	1.77E-05	6.43E-04	2.84E-04	1.26E-05	1.59E-06	4.61E-05	2.29E-05	2.51E-08	3.38E-06	3.3	4.96E-04	1.30E-05
S8	60	8	22	5	8.56E-03	6.55E-03	1.50E-05	5.46E-04	2.41E-04	1.07E-05	1.35E-06	3.91E-05	1.94E-05	2.13E-08	2.87E-06	2.8	4.21E-04	1.11E-05
S8	60	8	23	5	7.03E-03	5.38E-03	1.24E-05	4.48E-04	1.98E-04	8.78E-06	1.11E-06	3.21E-05	1.60E-05	1.75E-08	2.36E-06	2.3	3.46E-04	9.09E-06
S8	60	8	24	5	5.20E-03	3.98E-03	9.14E-06	3.31E-04	1.46E-04	6.49E-06	8.17E-07	2.37E-05	1.18E-05	1.29E-08	1.74E-06	1.7	2.55E-04	6.72E-06
S9	60	8	1	5	2.62E-03	2.00E-03	4.60E-06	1.67E-04	7.37E-05	3.27E-06	4.11E-07	1.20E-05	5.94E-06	6.51E-09	8.77E-07	0.8	1.29E-04	3.38E-06
S9	60	8	2	5	1.74E-03	1.34E-03	3.07E-06	1.11E-04	4.92E-05	2.18E-06	2.74E-07	7.97E-06	3.96E-06	4.34E-09	5.85E-07	0.6	8.58E-05	2.26E-06
S9	60	8	3	5	1.53E-03	1.17E-03	2.68E-06	9.74E-05	4.30E-05	1.91E-06	2.40E-07	6.98E-06	3.46E-06	3.80E-09	5.12E-07	0.5	7.50E-05	1.97E-06
S9	60	8	4	5	1.09E-03	8.35E-04	1.92E-06	6.96E-05	3.07E-05	1.36E-06	1.71E-07	4.98E-06	2.47E-06	2.71E-09	3.66E-07	0.4	5.36E-05	1.41E-06
S9	60	8	5	5	1.53E-03	1.17E-03	2.68E-06	9.74E-05	4.30E-05	1.91E-06	2.40E-07	6.98E-06	3.46E-06	3.80E-09	5.12E-07	0.5	7.50E-05	1.97E-06
S9	60	8	6	5	3.71E-03	2.84E-03	6.52E-06	2.37E-04	1.04E-04	4.63E-06	5.83E-07	1.69E-05	8.41E-06	9.23E-09	1.24E-06	1.2	1.82E-04	4.79E-06
S9	60	8	7	5	1.11E-02	8.52E-03	1.96E-05	7.10E-04	3.13E-04	1.39E-05	1.75E-06	5.08E-05	2.52E-05	2.77E-08	3.73E-06	3.6	5.47E-04	1.44E-05
S9	60	8	8	5	1.70E-02	1.30E-02	2.99E-05	1.09E-03	4.79E-04	2.13E-05	2.67E-06	7.77E-05	3.86E-05	4.23E-08	5.70E-06	5.5	8.36E-04	2.20E-05
S9	60	8	9	5	1.37E-02	1.05E-02	2.42E-05	8.77E-04	3.87E-04	1.72E-05	2.16E-06	6.28E-05	3.12E-05	3.42E-08	4.61E-06	4.4	6.75E-04	1.78E-05
S9	60	8	10	5	1.13E-02	8.68E-03	1.99E-05	7.23E-04	3.20E-04	1.42E-05	1.78E-06	5.18E-05	2.57E-05	2.82E-08	3.80E-06	3.7	5.57E-04	1.47E-05
S9	60	8	11	5	1.02E-02	7.85E-03	1.80E-05	6.54E-04	2.89E-04	1.28E-05	1.61E-06	4.68E-05	2.33E-05	2.55E-08	3.44E-06	3.3	5.04E-04	1.33E-05
S9	60	8	12	5	1.16E-02	8.85E-03	2.03E-05	7.37E-04	3.26E-04	1.45E-05	1.82E-06	5.28E-05	2.62E-05	2.88E-08	3.87E-06	3.7	5.68E-04	1.49E-05
S9	60	8	13	5	1.22E-02	9.35E-03	2.15E-05	7.79E-04	3.44E-04	1.53E-05	1.92E-06	5.58E-05	2.77E-05	3.04E-08	4.09E-06	3.9	6.00E-04	1.58E-05
S9	60	8	14	5	1.24E-02	9.52E-03	2.19E-05	7.93E-04	3.50E-04	1.56E-05	1.95E-06	5.68E-05	2.82E-05	3.09E-08	4.17E-06	4.0	6.11E-04	1.61E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	15	5	1.29E-02	9.85E-03	2.26E-05	8.21E-04	3.63E-04	1.61E-05	2.02E-06	5.88E-05	2.92E-05	3.20E-08	4.31E-06	4.2	6.33E-04	1.66E-05
S9	60	8	16	5	1.40E-02	1.07E-02	2.45E-05	8.90E-04	3.93E-04	1.75E-05	2.19E-06	6.38E-05	3.17E-05	3.47E-08	4.68E-06	4.5	6.86E-04	1.80E-05
S9	60	8	17	5	1.72E-02	1.32E-02	3.03E-05	1.10E-03	4.85E-04	2.16E-05	2.71E-06	7.87E-05	3.91E-05	4.29E-08	5.78E-06	5.6	8.47E-04	2.23E-05
S9	60	8	18	5	1.85E-02	1.42E-02	3.26E-05	1.18E-03	5.22E-04	2.32E-05	2.91E-06	8.47E-05	4.21E-05	4.61E-08	6.21E-06	6.0	9.11E-04	2.40E-05
S9	60	8	19	5	1.29E-02	9.85E-03	2.26E-05	8.21E-04	3.63E-04	1.61E-05	2.02E-06	5.88E-05	2.92E-05	3.20E-08	4.31E-06	4.2	6.33E-04	1.66E-05
S9	60	8	20	5	8.50E-03	6.51E-03	1.50E-05	5.43E-04	2.40E-04	1.06E-05	1.34E-06	3.89E-05	1.93E-05	2.12E-08	2.85E-06	2.7	4.18E-04	1.10E-05
S9	60	8	21	5	7.20E-03	5.51E-03	1.27E-05	4.59E-04	2.03E-04	8.99E-06	1.13E-06	3.29E-05	1.63E-05	1.79E-08	2.41E-06	2.3	3.54E-04	9.31E-06
S9	60	8	22	5	6.11E-03	4.68E-03	1.07E-05	3.90E-04	1.72E-04	7.63E-06	9.60E-07	2.79E-05	1.39E-05	1.52E-08	2.05E-06	2.0	3.00E-04	7.90E-06
S9	60	8	23	5	5.02E-03	3.84E-03	8.82E-06	3.20E-04	1.41E-04	6.27E-06	7.89E-07	2.29E-05	1.14E-05	1.25E-08	1.68E-06	1.6	2.47E-04	6.49E-06
S9	60	8	24	5	3.71E-03	2.84E-03	6.52E-06	2.37E-04	1.04E-04	4.63E-06	5.83E-07	1.69E-05	8.41E-06	9.23E-09	1.24E-06	1.2	1.82E-04	4.79E-06
S10	60	8	1	5	4.50E-03	3.45E-03	7.91E-06	2.87E-04	1.27E-04	5.62E-06	7.08E-07	2.06E-05	1.02E-05	1.12E-08	1.51E-06	1.5	2.21E-04	5.82E-06
S10	60	8	2	5	3.00E-03	2.30E-03	5.28E-06	1.91E-04	8.45E-05	3.75E-06	4.72E-07	1.37E-05	6.81E-06	7.47E-09	1.01E-06	1.0	1.48E-04	3.88E-06
S10	60	8	3	5	2.63E-03	2.01E-03	4.62E-06	1.67E-04	7.40E-05	3.28E-06	4.13E-07	1.20E-05	5.96E-06	6.53E-09	8.80E-07	0.8	1.29E-04	3.40E-06
S10	60	8	4	5	1.88E-03	1.44E-03	3.30E-06	1.20E-04	5.28E-05	2.34E-06	2.95E-07	8.57E-06	4.26E-06	4.67E-09	6.29E-07	0.6	9.22E-05	2.43E-06
S10	60	8	5	5	2.63E-03	2.01E-03	4.62E-06	1.67E-04	7.40E-05	3.28E-06	4.13E-07	1.20E-05	5.96E-06	6.53E-09	8.80E-07	0.8	1.29E-04	3.40E-06
S10	60	8	6	5	6.38E-03	4.88E-03	1.12E-05	4.07E-04	1.80E-04	7.96E-06	1.00E-06	2.91E-05	1.45E-05	1.59E-08	2.14E-06	2.1	3.13E-04	8.25E-06
S10	60	8	7	5	1.91E-02	1.46E-02	3.36E-05	1.22E-03	5.39E-04	2.39E-05	3.01E-06	8.74E-05	4.34E-05	4.76E-08	6.41E-06	6.2	9.40E-04	2.47E-05
S10	60	8	8	5	2.93E-02	2.24E-02	5.14E-05	1.87E-03	8.24E-04	3.65E-05	4.60E-06	1.34E-04	6.64E-05	7.28E-08	9.81E-06	9.4	1.44E-03	3.78E-05
S10	60	8	9	5	2.36E-02	1.81E-02	4.15E-05	1.51E-03	6.66E-04	2.95E-05	3.71E-06	1.08E-04	5.36E-05	5.88E-08	7.92E-06	7.6	1.16E-03	3.06E-05
S10	60	8	10	5	1.95E-02	1.49E-02	3.43E-05	1.24E-03	5.50E-04	2.44E-05	3.07E-06	8.91E-05	4.43E-05	4.85E-08	6.54E-06	6.3	9.59E-04	2.52E-05
S10	60	8	11	5	1.76E-02	1.35E-02	3.10E-05	1.12E-03	4.97E-04	2.21E-05	2.77E-06	8.06E-05	4.00E-05	4.39E-08	5.91E-06	5.7	8.67E-04	2.28E-05
S10	60	8	12	5	1.99E-02	1.52E-02	3.50E-05	1.27E-03	5.60E-04	2.49E-05	3.13E-06	9.09E-05	4.51E-05	4.95E-08	6.66E-06	6.4	9.77E-04	2.57E-05
S10	60	8	13	5	2.10E-02	1.61E-02	3.69E-05	1.34E-03	5.92E-04	2.63E-05	3.30E-06	9.60E-05	4.77E-05	5.23E-08	7.04E-06	6.8	1.03E-03	2.72E-05
S10	60	8	14	5	2.14E-02	1.64E-02	3.76E-05	1.36E-03	6.02E-04	2.68E-05	3.36E-06	9.77E-05	4.85E-05	5.32E-08	7.17E-06	6.9	1.05E-03	2.76E-05
S10	60	8	15	5	2.21E-02	1.69E-02	3.89E-05	1.41E-03	6.23E-04	2.77E-05	3.48E-06	1.01E-04	5.02E-05	5.51E-08	7.42E-06	7.1	1.09E-03	2.86E-05
S10	60	8	16	5	2.40E-02	1.84E-02	4.22E-05	1.53E-03	6.76E-04	3.01E-05	3.77E-06	1.10E-04	5.45E-05	5.97E-08	8.05E-06	7.7	1.18E-03	3.10E-05
S10	60	8	17	5	2.96E-02	2.27E-02	5.21E-05	1.89E-03	8.35E-04	3.71E-05	4.66E-06	1.35E-04	6.72E-05	7.37E-08	9.93E-06	9.6	1.46E-03	3.83E-05
S10	60	8	18	5	3.19E-02	2.44E-02	5.61E-05	2.03E-03	8.98E-04	3.99E-05	5.01E-06	1.46E-04	7.24E-05	7.93E-08	1.07E-05	10.3	1.57E-03	4.12E-05
S10	60	8	19	5	2.21E-02	1.69E-02	3.89E-05	1.41E-03	6.23E-04	2.77E-05	3.48E-06	1.01E-04	5.02E-05	5.51E-08	7.42E-06	7.1	1.09E-03	2.86E-05
S10	60	8	20	5	1.46E-02	1.12E-02	2.57E-05	9.33E-04	4.12E-04	1.83E-05	2.30E-06	6.69E-05	3.32E-05	3.64E-08	4.90E-06	4.7	7.19E-04	1.89E-05
S10	60	8	21	5	1.24E-02	9.48E-03	2.18E-05	7.90E-04	3.49E-04	1.55E-05	1.95E-06	5.66E-05	2.81E-05	3.08E-08	4.15E-06	4.0	6.08E-04	1.60E-05
S10	60	8	22	5	1.05E-02	8.04E-03	1.85E-05	6.70E-04	2.96E-04	1.31E-05	1.65E-06	4.80E-05	2.38E-05	2.61E-08	3.52E-06	3.4	5.16E-04	1.36E-05
S10	60	8	23	5	8.63E-03	6.60E-03	1.52E-05	5.50E-04	2.43E-04	1.08E-05	1.36E-06	3.94E-05	1.96E-05	2.15E-08	2.89E-06	2.8	4.24E-04	1.12E-05
S10	60	8	24	5	6.38E-03	4.88E-03	1.12E-05	4.07E-04	1.80E-04	7.96E-06	1.00E-06	2.91E-05	1.45E-05	1.59E-08	2.14E-06	2.1	3.13E-04	8.25E-06
S11	60	8	1	5	1.50E-03	1.15E-03	2.64E-06	9.59E-05	4.24E-05	1.88E-06	2.36E-07	6.87E-06	3.41E-06	3.74E-09	5.04E-07	0.5	7.39E-05	1.94E-06
S11	60	8	2	5	1.00E-03	7.67E-04	1.76E-06	6.39E-05	2.82E-05	1.25E-06	1.58E-07	4.58E-06	2.28E-06	2.49E-09	3.36E-07	0.3	4.93E-05	1.30E-06
S11	60	8	3	5	8.77E-04	6.72E-04	1.54E-06	5.60E-05	2.47E-05	1.10E-06	1.38E-07	4.01E-06	1.99E-06	2.18E-09	2.94E-07	0.3	4.31E-05	1.13E-06
S11	60	8	4	5	6.26E-04	4.80E-04	1.10E-06	4.00E-05	1.77E-05	7.82E-07	9.85E-08	2.86E-06	1.42E-06	1.56E-09	2.10E-07	0.2	3.08E-05	8.10E-07
S11	60	8	5	5	8.77E-04	6.72E-04	1.54E-06	5.60E-05	2.47E-05	1.10E-06	1.38E-07	4.01E-06	1.99E-06	2.18E-09	2.94E-07	0.3	4.31E-05	1.13E-06
S11	60	8	6	5	2.13E-03	1.63E-03	3.75E-06	1.36E-04	6.00E-05	2.66E-06	3.35E-07	9.74E-06	4.83E-06	5.30E-09	7.14E-07	0.7	1.05E-04	2.75E-06
S11	60	8	7	5	6.39E-03	4.89E-03	1.12E-05	4.08E-04	1.80E-04	7.98E-06	1.00E-06	2.92E-05	1.45E-05	1.59E-08	2.14E-06	2.1	3.14E-04	8.26E-06
S11	60	8	8	5	9.77E-03	7.48E-03	1.72E-05	6.23E-04	2.75E-04	1.22E-05	1.54E-06	4.47E-05	2.22E-05	2.43E-08	3.28E-06	3.2	4.80E-04	1.26E-05
S11	60	8	9	5	7.89E-03	6.04E-03	1.39E-05	5.04E-04	2.22E-04	9.86E-06	1.24E-06	3.61E-05	1.79E-05	1.96E-08	2.65E-06	2.5	3.88E-04	1.02E-05
S11	60	8	10	5	6.51E-03	4.99E-03	1.15E-05	4.16E-04	1.84E-04	8.14E-06	1.02E-06	2.98E-05	1.48E-05	1.62E-08	2.18E-06	2.1	3.20E-04	8.43E-06
S11	60	8	11	5	5.89E-03	4.51E-03	1.04E-05	3.76E-04	1.66E-04	7.37E-06	9.26E-07	2.69E-05	1.34E-05	1.47E-08	1.97E-06	1.9	2.89E-04	7.62E-06
S11	60	8	12	5	6.64E-03	5.08E-03	1.17E-05	4.24E-04	1.87E-04	8.32E-06	1.04E-06	3.04E-05	1.51E-05	1.65E-08	2.23E-06	2.1	3.26E-04	8.59E-06
S11	60	8	13	5	7.02E-03	5.37E-03	1.23E-05	4.48E-04	1.98E-04	8.79E-06	1.10E-06	3.21E-05	1.59E-05	1.75E-08	2.35E-06	2.3	3.45E-04	9.07E-06
S11	60	8	14	5	7.14E-03	5.47E-03	1.26E-05	4.56E-04	2.01E-04	8.96E-06	1.12E-06	3.26E-05	1.62E-05	1.78E-08	2.39E-06	2.3	3.51E-04	9.24E-06
S11	60	8	15	5	7.39E-03	5.66E-03	1.30E-05	4.72E-04	2.08E-04	9.27E-06	1.16E-06	3.38E-05	1.68E-05	1.84E-08	2.48E-06	2.4	3.63E-04	9.56E-06
S11	60	8	16	5	8.02E-03	6.14E-03	1.41E-05	5.12E-04	2.26E-04	1.00E-05	1.26E-06	3.67E-05	1.82E-05	2.00E-08	2.69E-06	2.6	3.94E-04	1.04E-05
S11	60	8	17	5	9.90E-03	7.58E-03	1.74E-05	6.31E-04	2.79E-04	1.24E-05	1.56E-06	4.52E-05	2.25E-05	2.46E-08	3.32E-06	3.2	4.87E-04	1.28E-05
S11	60	8	18	5	1.06E-02	8.15E-03	1.87E-05	6.79E-04	3.00E-04	1.33E-05	1.67E-06	4.87E-05	2.42E-05	2.65E-08	3.57E-06	3.4	5.24E-04	1.38E-05
S11	60	8	19	5	7.39E-03	5.66E-03	1.30E-05	4.72E-04	2.08E-04	9.25E-06	1.16E-06	3.38E-05	1.68E-05	1.84E-08	2.48E-06	2.4	3.63E-04	9.56E-06
S11	60	8	20	5	4.89E-03	3.74E-03	8.59E-06	3.12E-04	1.38E-04	6.10E-06	7.68E-07	2.23E-05	1.11E-05	1.22E-08	1.64E-06	1.6	2.40E-04	6.32E-06
S11	60	8	21	5	4.13E-03	3.17E-03	7.27E-06	2.64E-04	1.16E-04	5.17E-06	6.50E-07	1.89E-05	9.38E-06	1.03E-08	1.39E-06	1.3	2.03E-04	5.35E-06
S11	60	8	22	5	3.51E-03	2.69E-03	6.17E-06	2.24E-04	9.88E-05	4.38E-06	5.52E-07	1.60E-05	7.96E-06	8.73E-09	1.18E-06	1.1	1.72E-04	4.54E-06
S11	60	8	23	5	2.88E-03	2.21E-03	5.07E-06	1.84E-04	8.12E-05	3.60E-06	4.53E-07	1.32E-05	6.54E-06	7.17E-09	9.66E-07	0.9	1.42E-04	3.73E-06
S11	60	8	24	5	2.13E-03	1.63E-03	3.75E-06	1.36E-04	6.00E-05	2.66E-06	3.35E-07	9.74E-06	4.83E-06	5.30E-09	7.14E-07	0.7	1.05E-04	2.75E-06
S12	60	8	1	5	2.75E-03	2.10E-03	4.83E-06	1.75E-04	7.74E-05	3.43E-06	4.32E-07	1.26E-05	6.24E-06	6.84E-09	9.21E-07	0.9	1.35E-04	3.55E-06
S12	60	8	2	5	1.83E-03	1.40E-03	3.22E-06	1.17E-04	5.16E-05	2.29E-06	2.88E-07	8.37E-06	4.16E-06	4.56E-09	6.14E-07	0.6	9.01E-05	2.37E-06
S12	60	8	3	5	1.60E-03	1.23E-03	2.82E-06	1.02E-04	4.52E-05	2.00E-06	2.52E-07	7.33E-06	3.64E-06	3.99E-09	5.37E-07	0.5	7.88E-05	2.07E-06
S12	60	8	4	5	1.14E-03	8.77E-04	2.01E-06	7.30E-05	3.23E-05	1.43E-06	1.80E-07	5.23E-06	2.60E-06	2.85E-09	3.84E-07	0.4	5.63E-05	1.48E-06
S12	60	8	5	5	1.60E-03	1.23E-03	2.82E-06	1.02E-04	4.52E-05	2.00E-06	2.52E-07	7.33E-06	3.64E-06	3.99E-09	5.37E-07	0.5	7.88E-05	2.07E-06
S12	60	8	6	5	3.89E-03	2.98E-03	6.84E-06	2.48E-04	1.10E-04	4.86E-06	6.12E-07	1.78E-05	8.84E-06	9.69E-09	1.31E-06	1.3	1.91E-04	5.03E-06
S12	60	8	7	5	1.17E-02	8.94E-03	2.05E-05	7.45E-04	3.29E-04	1.46E-05	1.84E-06	5.34E-05	2.65E-05	2.91E-08	3.92E-06	3.8	5.74E-04	1.51E-05
S12	60	8	8	5	1.79E-02	1.37E-02	3.14E-05	1.14E-03	5.03E-04	2.23E-05	2.81E-06	8.16E-05	4.05E-05	4.45E-08	5.99E-06	5.8	8.78E-04	2.31E-05
S12	60	8	9	5	1.44E-02	1.10E-02	2.54E-05	9.20E-04	4.06E-04	1.80E-05	2.27E-06	6.59E-05	3.27E-05	3.59E-08	4.84E-06	4.7	7.09E-04	1.87E-05
S12	60	8	10	5	1.19E-02	9.12E-03	2.09E-05	7.60E-04	3.36E-04	1.49E-05	1.87E-06	5.44E-05	2.70E-05	2.96E-08	3.99E-06	3.8	5.85E-04	1.54E-05
S12	60	8	11	5	1.08E-02	8.24E-03	1.89E-05	6.87E-04	3.03E-04	1.35E-05	1.69E-06	4.92E-05	2.44E-05	2.68E-08	3.61E-06	3.5	5.29E-04	1.39E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	12	5	1.21E-02	9.29E-03	2.13E-05	7.74E-04	3.42E-04	1.52E-05	1.91E-06	5.55E-05	2.75E-05	3.02E-08	4.07E-06	3.9	5.97E-04	1.57E-05
S12	60	8	13	5	1.28E-02	9.82E-03	2.25E-05	8.18E-04	3.61E-04	1.61E-05	2.02E-06	5.86E-05	2.91E-05	3.19E-08	4.30E-06	4.1	6.30E-04	1.66E-05
S12	60	8	14	5	1.31E-02	9.99E-03	2.30E-05	8.33E-04	3.68E-04	1.64E-05	2.05E-06	5.97E-05	2.96E-05	3.25E-08	4.38E-06	4.2	6.42E-04	1.69E-05
S12	60	8	15	5	1.35E-02	1.03E-02	2.38E-05	8.62E-04	3.81E-04	1.69E-05	2.12E-06	6.17E-05	3.07E-05	3.36E-08	4.53E-06	4.4	6.64E-04	1.75E-05
S12	60	8	16	5	1.47E-02	1.12E-02	2.58E-05	9.35E-04	4.13E-04	1.84E-05	2.30E-06	6.70E-05	3.33E-05	3.65E-08	4.91E-06	4.7	7.20E-04	1.90E-05
S12	60	8	17	5	1.81E-02	1.39E-02	3.18E-05	1.15E-03	5.10E-04	2.27E-05	2.84E-06	8.27E-05	4.11E-05	4.50E-08	6.06E-06	5.8	8.89E-04	2.34E-05
S12	60	8	18	5	1.95E-02	1.49E-02	3.42E-05	1.24E-03	5.48E-04	2.44E-05	3.06E-06	8.90E-05	4.42E-05	4.84E-08	6.53E-06	6.3	9.57E-04	2.52E-05
S12	60	8	19	5	1.35E-02	1.03E-02	2.38E-05	8.62E-04	3.81E-04	1.69E-05	2.12E-06	6.17E-05	3.07E-05	3.36E-08	4.53E-06	4.4	6.64E-04	1.75E-05
S12	60	8	20	5	8.93E-03	6.84E-03	1.57E-05	5.70E-04	2.52E-04	1.12E-05	1.40E-06	4.08E-05	2.03E-05	2.22E-08	2.99E-06	2.9	4.39E-04	1.15E-05
S12	60	8	21	5	7.56E-03	5.79E-03	1.33E-05	4.82E-04	2.13E-04	9.44E-06	1.19E-06	3.45E-05	1.72E-05	1.88E-08	2.53E-06	2.4	3.71E-04	9.77E-06
S12	60	8	22	5	6.41E-03	4.91E-03	1.13E-05	4.09E-04	1.81E-04	8.01E-06	1.01E-06	2.93E-05	1.46E-05	1.60E-08	2.15E-06	2.1	3.15E-04	8.29E-06
S12	60	8	23	5	5.27E-03	4.03E-03	9.26E-06	3.36E-04	1.48E-04	6.58E-06	8.28E-07	2.41E-05	1.20E-05	1.31E-08	1.77E-06	1.7	2.59E-04	6.81E-06
S12	60	8	24	5	3.89E-03	2.98E-03	6.84E-06	2.48E-04	1.10E-04	4.86E-06	6.12E-07	1.78E-05	8.84E-06	9.69E-09	1.31E-06	1.3	1.91E-04	5.03E-06
S13	60	8	1	5	3.64E-03	2.79E-03	6.40E-06	2.32E-04	1.03E-04	4.54E-06	5.72E-07	1.66E-05	8.26E-06	9.05E-09	1.22E-06	1.2	1.79E-04	4.71E-06
S13	60	8	2	5	2.43E-03	1.86E-03	4.26E-06	1.55E-04	6.83E-05	3.03E-06	3.81E-07	1.11E-05	5.51E-06	6.04E-09	8.13E-07	0.8	1.19E-04	3.14E-06
S13	60	8	3	5	2.12E-03	1.62E-03	3.73E-06	1.35E-04	5.98E-05	2.65E-06	3.34E-07	9.70E-06	4.82E-06	5.28E-09	7.11E-07	0.7	1.04E-04	2.74E-06
S13	60	8	4	5	1.52E-03	1.16E-03	2.67E-06	9.67E-05	4.27E-05	1.89E-06	2.38E-07	6.93E-06	3.44E-06	3.77E-09	5.08E-07	0.5	7.45E-05	1.96E-06
S13	60	8	5	5	2.12E-03	1.62E-03	3.73E-06	1.35E-04	5.98E-05	2.65E-06	3.34E-07	9.70E-06	4.82E-06	5.28E-09	7.11E-07	0.7	1.04E-04	2.74E-06
S13	60	8	6	5	5.15E-03	3.95E-03	9.06E-06	3.29E-04	1.45E-04	6.44E-06	8.10E-07	2.36E-05	1.17E-05	1.28E-08	1.73E-06	1.7	2.53E-04	6.67E-06
S13	60	8	7	5	1.55E-02	1.18E-02	2.72E-05	9.86E-04	4.36E-04	1.93E-05	2.43E-06	7.07E-05	3.51E-05	3.85E-08	5.18E-06	5.0	7.60E-04	2.00E-05
S13	60	8	8	5	2.36E-02	1.81E-02	4.16E-05	1.51E-03	6.66E-04	2.95E-05	3.72E-06	1.08E-04	5.37E-05	5.89E-08	7.93E-06	7.6	1.16E-03	3.06E-05
S13	60	8	9	5	1.91E-02	1.46E-02	3.36E-05	1.22E-03	5.38E-04	2.39E-05	3.00E-06	8.73E-05	4.34E-05	4.75E-08	6.40E-06	6.2	9.39E-04	2.47E-05
S13	60	8	10	5	1.58E-02	1.21E-02	2.77E-05	1.01E-03	4.44E-04	1.97E-05	2.48E-06	7.21E-05	3.58E-05	3.92E-08	5.29E-06	5.1	7.75E-04	2.04E-05
S13	60	8	11	5	1.42E-02	1.09E-02	2.51E-05	9.09E-04	4.02E-04	1.78E-05	2.24E-06	6.51E-05	3.23E-05	3.55E-08	4.78E-06	4.6	7.01E-04	1.84E-05
S13	60	8	12	5	1.61E-02	1.23E-02	2.83E-05	1.03E-03	4.53E-04	2.01E-05	2.53E-06	7.34E-05	3.65E-05	4.00E-08	5.39E-06	5.2	7.90E-04	2.08E-05
S13	60	8	13	5	1.70E-02	1.30E-02	2.99E-05	1.08E-03	4.78E-04	2.13E-05	2.67E-06	7.76E-05	3.85E-05	4.23E-08	5.69E-06	5.5	8.35E-04	2.20E-05
S13	60	8	14	5	1.73E-02	1.32E-02	3.04E-05	1.10E-03	4.87E-04	2.17E-05	2.72E-06	7.90E-05	3.92E-05	4.30E-08	5.79E-06	5.6	8.50E-04	2.23E-05
S13	60	8	15	5	1.79E-02	1.37E-02	3.15E-05	1.14E-03	5.04E-04	2.24E-05	2.81E-06	8.18E-05	4.06E-05	4.45E-08	6.00E-06	5.8	8.79E-04	2.31E-05
S13	60	8	16	5	1.94E-02	1.49E-02	3.41E-05	1.24E-03	5.47E-04	2.43E-05	3.05E-06	8.87E-05	4.40E-05	4.83E-08	6.51E-06	6.3	9.54E-04	2.51E-05
S13	60	8	17	5	2.39E-02	1.83E-02	4.21E-05	1.53E-03	6.75E-04	3.00E-05	3.77E-06	1.09E-04	5.44E-05	5.96E-08	8.03E-06	7.7	1.18E-03	3.10E-05
S13	60	8	18	5	2.58E-02	1.97E-02	4.53E-05	1.64E-03	7.26E-04	3.23E-05	4.05E-06	1.18E-04	5.85E-05	6.41E-08	8.64E-06	8.3	1.27E-03	3.33E-05
S13	60	8	19	5	1.79E-02	1.37E-02	3.15E-05	1.14E-03	5.04E-04	2.24E-05	2.81E-06	8.18E-05	4.06E-05	4.45E-08	6.00E-06	5.8	8.79E-04	2.31E-05
S13	60	8	20	5	1.18E-02	9.05E-03	2.08E-05	7.54E-04	3.33E-04	1.48E-05	1.86E-06	5.40E-05	2.68E-05	2.94E-08	3.96E-06	3.8	5.81E-04	1.53E-05
S13	60	8	21	5	1.00E-02	7.66E-03	1.76E-05	6.38E-04	2.82E-04	1.25E-05	1.57E-06	4.57E-05	2.27E-05	2.49E-08	3.35E-06	3.2	4.92E-04	1.29E-05
S13	60	8	22	5	8.49E-03	6.50E-03	1.49E-05	5.42E-04	2.39E-04	1.06E-05	1.33E-06	3.88E-05	1.93E-05	2.11E-08	2.85E-06	2.7	4.17E-04	1.10E-05
S13	60	8	23	5	6.97E-03	5.34E-03	1.23E-05	4.45E-04	1.96E-04	8.71E-06	1.10E-06	3.19E-05	1.58E-05	1.74E-08	2.34E-06	2.3	3.43E-04	9.02E-06
S13	60	8	24	5	5.15E-03	3.95E-03	9.06E-06	3.29E-04	1.45E-04	6.44E-06	8.10E-07	2.36E-05	1.17E-05	1.28E-08	1.73E-06	1.7	2.53E-04	6.67E-06
S14	60	8	1	5	1.78E-03	1.36E-03	3.12E-06	1.13E-04	5.00E-05	2.22E-06	2.79E-07	8.12E-06	4.03E-06	4.42E-09	5.95E-07	0.6	8.73E-05	2.30E-06
S14	60	8	2	5	1.18E-03	9.06E-04	2.08E-06	7.55E-05	3.34E-05	1.48E-06	1.86E-07	5.41E-06	2.69E-06	2.95E-09	3.97E-07	0.4	5.82E-05	1.53E-06
S14	60	8	3	5	1.04E-03	7.93E-04	1.82E-06	6.61E-05	2.92E-05	1.29E-06	1.63E-07	4.73E-06	2.35E-06	2.58E-09	3.47E-07	0.3	5.09E-05	1.34E-06
S14	60	8	4	5	7.40E-04	5.66E-04	1.30E-06	4.72E-05	2.08E-05	9.24E-07	1.16E-07	3.38E-06	1.68E-06	1.84E-09	2.48E-07	0.2	3.64E-05	9.57E-07
S14	60	8	5	5	1.04E-03	7.93E-04	1.82E-06	6.61E-05	2.92E-05	1.29E-06	1.63E-07	4.73E-06	2.35E-06	2.58E-09	3.47E-07	0.3	5.09E-05	1.34E-06
S14	60	8	6	5	2.52E-03	1.93E-03	4.42E-06	1.60E-04	7.09E-05	3.14E-06	3.95E-07	1.15E-05	5.71E-06	6.26E-09	8.43E-07	0.8	1.24E-04	3.25E-06
S14	60	8	7	5	7.55E-03	5.78E-03	1.33E-05	4.81E-04	2.13E-04	9.42E-06	1.19E-06	3.45E-05	1.71E-05	1.88E-08	2.53E-06	2.4	3.71E-04	9.76E-06
S14	60	8	8	5	1.15E-02	8.84E-03	2.03E-05	7.36E-04	3.25E-04	1.44E-05	1.81E-06	5.27E-05	2.62E-05	2.87E-08	3.87E-06	3.7	5.67E-04	1.49E-05
S14	60	8	9	5	9.32E-03	7.14E-03	1.64E-05	5.95E-04	2.63E-04	1.16E-05	1.47E-06	4.26E-05	2.12E-05	2.32E-08	3.12E-06	3.0	4.58E-04	1.21E-05
S14	60	8	10	5	7.69E-03	5.89E-03	1.35E-05	4.91E-04	2.17E-04	9.62E-06	1.21E-06	3.52E-05	1.75E-05	1.91E-08	2.58E-06	2.5	3.78E-04	9.95E-06
S14	60	8	11	5	6.95E-03	5.32E-03	1.22E-05	4.44E-04	1.96E-04	8.70E-06	1.09E-06	3.18E-05	1.58E-05	1.73E-08	2.33E-06	2.2	3.42E-04	8.99E-06
S14	60	8	12	5	7.84E-03	6.00E-03	1.38E-05	5.00E-04	2.21E-04	9.82E-06	1.23E-06	3.58E-05	1.78E-05	1.95E-08	2.63E-06	2.5	3.86E-04	1.01E-05
S14	60	8	13	5	8.28E-03	6.34E-03	1.46E-05	5.29E-04	2.33E-04	1.04E-05	1.30E-06	3.79E-05	1.88E-05	2.06E-08	2.78E-06	2.7	4.07E-04	1.07E-05
S14	60	8	14	5	8.43E-03	6.46E-03	1.48E-05	5.38E-04	2.38E-04	1.06E-05	1.33E-06	3.85E-05	1.91E-05	2.10E-08	2.83E-06	2.7	4.15E-04	1.09E-05
S14	60	8	15	5	8.73E-03	6.68E-03	1.53E-05	5.57E-04	2.46E-04	1.09E-05	1.37E-06	3.99E-05	1.98E-05	2.17E-08	2.93E-06	2.8	4.29E-04	1.13E-05
S14	60	8	16	5	9.47E-03	7.25E-03	1.66E-05	6.04E-04	2.67E-04	1.19E-05	1.49E-06	4.33E-05	2.15E-05	2.36E-08	3.17E-06	3.1	4.66E-04	1.22E-05
S14	60	8	17	5	1.17E-02	8.95E-03	2.06E-05	7.46E-04	3.29E-04	1.46E-05	1.84E-06	5.34E-05	2.65E-05	2.91E-08	3.92E-06	3.8	5.75E-04	1.51E-05
S14	60	8	18	5	1.26E-02	9.63E-03	2.21E-05	8.02E-04	3.54E-04	1.58E-05	1.98E-06	5.75E-05	2.85E-05	3.13E-08	4.22E-06	4.1	6.18E-04	1.63E-05
S14	60	8	19	5	8.73E-03	6.68E-03	1.53E-05	5.57E-04	2.46E-04	1.09E-05	1.37E-06	3.99E-05	1.98E-05	2.17E-08	2.93E-06	2.8	4.29E-04	1.13E-05
S14	60	8	20	5	5.77E-03	4.42E-03	1.01E-05	3.68E-04	1.63E-04	7.21E-06	9.07E-07	2.64E-05	1.31E-05	1.44E-08	1.93E-06	1.9	2.84E-04	7.46E-06
S14	60	8	21	5	4.88E-03	3.74E-03	8.59E-06	3.11E-04	1.38E-04	6.10E-06	7.68E-07	2.23E-05	1.11E-05	1.22E-08	1.64E-06	1.6	2.40E-04	6.31E-06
S14	60	8	22	5	4.14E-03	3.17E-03	7.28E-06	2.64E-04	1.17E-04	5.18E-06	6.51E-07	1.89E-05	9.40E-06	1.03E-08	1.39E-06	1.3	2.04E-04	5.36E-06
S14	60	8	23	5	3.40E-03	2.61E-03	5.98E-06	2.17E-04	9.59E-05	4.25E-06	5.35E-07	1.56E-05	7.72E-06	8.47E-09	1.14E-06	1.1	1.67E-04	4.40E-06
S14	60	8	24	5	2.52E-03	1.93E-03	4.42E-06	1.60E-04	7.09E-05	3.14E-06	3.95E-07	1.15E-05	5.71E-06	6.26E-09	8.43E-07	0.8	1.24E-04	3.25E-06
S15	60	8	1	5	1.73E-03	1.33E-03	3.05E-06	1.11E-04	4.88E-05	2.16E-06	2.72E-07	7.92E-06	3.93E-06	4.31E-09	5.81E-07	0.6	8.52E-05	2.24E-06
S15	60	8	2	5	1.15E-03	8.84E-04	2.03E-06	7.37E-05	3.25E-05	1.44E-06	1.82E-07	5.28E-06	2.62E-06	2.87E-09	3.87E-07	0.4	5.68E-05	1.49E-06
S15	60	8	3	5	1.01E-03	7.74E-04	1.78E-06	6.45E-05	2.85E-05	1.26E-06	1.59E-07	4.62E-06	2.29E-06	2.52E-09	3.39E-07	0.3	4.97E-05	1.31E-06
S15	60	8	4	5	7.22E-04	5.53E-04	1.27E-06	4.61E-05	2.03E-05	9.02E-07	1.13E-07	3.30E-06	1.64E-06	1.80E-09	2.42E-07	0.2	3.55E-05	9.34E-07
S15	60	8	5	5	1.01E-03	7.74E-04	1.78E-06	6.45E-05	2.85E-05	1.26E-06	1.59E-07	4.62E-06	2.29E-06	2.52E-09	3.39E-07	0.3	4.97E-05	1.31E-06
S15	60	8	6	5	2.45E-03	1.88E-03	4.32E-06	1.57E-04	6.92E-05	3.06E-06	3.86E-07	1.12E-05	5.57E-06	6.11E-09	8.23E-07	0.8	1.21E-04	3.17E-06
S15	60	8	7	5	7.36E-03	5.64E-03	1.29E-05	4.70E-04	2.07E-04	9.20E-06	1.16E-06	3.37E-05	1.67E-05	1.83E-08	2.47E-06	2.4	3.62E-04	9.52E-06
S15	60	8	8	5	1.13E-02	8.62E-03	1.98E-05	7.18E-04	3.17E-04	1.41E-05	1.77E-06	5.15E-05	2.56E-05	2.80E-08	3.78E-06	3.6	5.54E-04	1.46E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	9	5	9.09E-03	6.96E-03	1.60E-05	5.80E-04	2.56E-04	1.14E-05	1.43E-06	4.16E-05	2.06E-05	2.26E-08	3.05E-06	2.9	4.47E-04	1.18E-05
S15	60	8	10	5	7.51E-03	5.75E-03	1.32E-05	4.79E-04	2.12E-04	9.38E-06	1.18E-06	3.43E-05	1.70E-05	1.87E-08	2.52E-06	2.4	3.69E-04	9.71E-06
S15	60	8	11	5	6.79E-03	5.20E-03	1.19E-05	4.33E-04	1.91E-04	8.49E-06	1.07E-06	3.10E-05	1.54E-05	1.69E-08	2.27E-06	2.2	3.34E-04	8.78E-06
S15	60	8	12	5	7.65E-03	5.86E-03	1.35E-05	4.88E-04	2.16E-04	9.58E-06	1.20E-06	3.50E-05	1.74E-05	1.90E-08	2.57E-06	2.5	3.76E-04	9.90E-06
S15	60	8	13	5	8.08E-03	6.19E-03	1.42E-05	5.16E-04	2.28E-04	1.01E-05	1.27E-06	3.70E-05	1.84E-05	2.01E-08	2.71E-06	2.6	3.97E-04	1.05E-05
S15	60	8	14	5	8.23E-03	6.30E-03	1.45E-05	5.25E-04	2.32E-04	1.03E-05	1.29E-06	3.76E-05	1.87E-05	2.05E-08	2.76E-06	2.7	4.05E-04	1.06E-05
S15	60	8	15	5	8.52E-03	6.52E-03	1.50E-05	5.43E-04	2.40E-04	1.07E-05	1.34E-06	3.89E-05	1.93E-05	2.12E-08	2.86E-06	2.7	4.19E-04	1.10E-05
S15	60	8	16	5	9.24E-03	7.07E-03	1.62E-05	5.89E-04	2.60E-04	1.16E-05	1.45E-06	4.22E-05	2.10E-05	2.30E-08	3.10E-06	3.0	4.54E-04	1.19E-05
S15	60	8	17	5	1.14E-02	8.73E-03	2.01E-05	7.28E-04	3.21E-04	1.43E-05	1.79E-06	5.21E-05	2.59E-05	2.84E-08	3.82E-06	3.7	5.61E-04	1.47E-05
S15	60	8	18	5	1.23E-02	9.40E-03	2.16E-05	7.83E-04	3.46E-04	1.54E-05	1.93E-06	5.61E-05	2.79E-05	3.05E-08	4.11E-06	4.0	6.03E-04	1.59E-05
S15	60	8	19	5	8.52E-03	6.52E-03	1.50E-05	5.43E-04	2.40E-04	1.07E-05	1.34E-06	3.89E-05	1.93E-05	2.12E-08	2.86E-06	2.7	4.19E-04	1.10E-05
S15	60	8	20	5	5.63E-03	4.31E-03	9.90E-06	3.59E-04	1.59E-04	7.03E-06	8.85E-07	2.57E-05	1.28E-05	1.40E-08	1.89E-06	1.8	2.77E-04	7.28E-06
S15	60	8	21	5	4.76E-03	3.65E-03	8.38E-06	3.04E-04	1.34E-04	5.95E-06	7.49E-07	2.18E-05	1.08E-05	1.19E-08	1.60E-06	1.5	2.34E-04	6.16E-06
S15	60	8	22	5	4.04E-03	3.10E-03	7.11E-06	2.58E-04	1.14E-04	5.05E-06	6.36E-07	1.85E-05	9.18E-06	1.01E-08	1.36E-06	1.3	1.99E-04	5.23E-06
S15	60	8	23	5	3.32E-03	2.54E-03	5.84E-06	2.12E-04	9.36E-05	4.15E-06	5.22E-07	1.52E-05	7.54E-06	8.26E-09	1.11E-06	1.1	1.63E-04	4.29E-06
S15	60	8	24	5	2.45E-03	1.88E-03	4.32E-06	1.57E-04	6.92E-05	3.07E-06	3.86E-07	1.12E-05	5.57E-06	6.11E-09	8.23E-07	0.8	1.21E-04	3.17E-06
S16	60	8	1	5	1.15E-03	8.80E-04	2.02E-06	7.33E-05	3.24E-05	1.44E-06	1.81E-07	5.25E-06	2.61E-06	2.86E-09	3.85E-07	0.4	5.65E-05	1.49E-06
S16	60	8	2	5	7.66E-04	5.87E-04	1.35E-06	4.89E-05	2.16E-05	9.57E-07	1.20E-07	3.50E-06	1.74E-06	1.91E-09	2.57E-07	0.2	3.77E-05	9.91E-07
S16	60	8	3	5	6.70E-04	5.13E-04	1.18E-06	4.28E-05	1.89E-05	8.37E-07	1.05E-07	3.06E-06	1.52E-06	1.67E-09	2.25E-07	0.2	3.30E-05	8.67E-07
S16	60	8	4	5	4.79E-04	3.67E-04	8.42E-07	3.06E-05	1.35E-05	5.98E-07	7.53E-08	2.19E-06	1.09E-06	1.19E-09	1.61E-07	0.2	2.35E-05	6.19E-07
S16	60	8	5	5	6.70E-04	5.13E-04	1.18E-06	4.28E-05	1.89E-05	8.37E-07	1.05E-07	3.06E-06	1.52E-06	1.67E-09	2.25E-07	0.2	3.30E-05	8.67E-07
S16	60	8	6	5	1.63E-03	1.25E-03	2.86E-06	1.04E-04	4.59E-05	2.03E-06	2.56E-07	7.44E-06	3.70E-06	4.05E-09	5.46E-07	0.5	8.01E-05	2.11E-06
S16	60	8	7	5	4.88E-03	3.74E-03	8.59E-06	3.12E-04	1.38E-04	6.10E-06	7.68E-07	2.23E-05	1.11E-05	1.22E-08	1.64E-06	1.6	2.40E-04	6.32E-06
S16	60	8	8	5	7.47E-03	5.72E-03	1.31E-05	4.77E-04	2.11E-04	9.33E-06	1.17E-06	3.41E-05	1.70E-05	1.86E-08	2.50E-06	2.4	3.67E-04	9.66E-06
S16	60	8	9	5	6.03E-03	4.62E-03	1.06E-05	3.85E-04	1.70E-04	7.54E-06	9.49E-07	2.76E-05	1.37E-05	1.50E-08	2.02E-06	1.9	2.97E-04	7.80E-06
S16	60	8	10	5	4.98E-03	3.81E-03	8.76E-06	3.18E-04	1.40E-04	6.23E-06	7.83E-07	2.28E-05	1.13E-05	1.24E-08	1.67E-06	1.6	2.45E-04	6.44E-06
S16	60	8	11	5	4.50E-03	3.45E-03	7.92E-06	2.87E-04	1.27E-04	5.63E-06	7.08E-07	2.06E-05	1.02E-05	1.12E-08	1.51E-06	1.5	2.21E-04	5.82E-06
S16	60	8	12	5	5.08E-03	3.89E-03	8.93E-06	3.24E-04	1.43E-04	6.36E-06	7.98E-07	2.32E-05	1.15E-05	1.26E-08	1.70E-06	1.6	2.50E-04	6.57E-06
S16	60	8	13	5	5.36E-03	4.11E-03	9.43E-06	3.42E-04	1.51E-04	6.72E-06	8.43E-07	2.45E-05	1.22E-05	1.33E-08	1.80E-06	1.7	2.64E-04	6.94E-06
S16	60	8	14	5	5.46E-03	4.18E-03	9.60E-06	3.48E-04	1.54E-04	6.85E-06	8.58E-07	2.50E-05	1.24E-05	1.36E-08	1.83E-06	1.8	2.68E-04	7.06E-06
S16	60	8	15	5	5.65E-03	4.33E-03	9.94E-06	3.61E-04	1.59E-04	7.09E-06	8.89E-07	2.58E-05	1.28E-05	1.41E-08	1.89E-06	1.8	2.78E-04	7.31E-06
S16	60	8	16	5	6.13E-03	4.69E-03	1.08E-05	3.91E-04	1.73E-04	7.68E-06	9.64E-07	2.80E-05	1.39E-05	1.53E-08	2.06E-06	2.0	3.01E-04	7.93E-06
S16	60	8	17	5	7.57E-03	5.79E-03	1.33E-05	4.83E-04	2.13E-04	9.48E-06	1.19E-06	3.46E-05	1.72E-05	1.88E-08	2.54E-06	2.4	3.72E-04	9.79E-06
S16	60	8	18	5	8.14E-03	6.23E-03	1.43E-05	5.19E-04	2.29E-04	1.02E-05	1.28E-06	3.72E-05	1.85E-05	2.03E-08	2.73E-06	2.6	4.00E-04	1.05E-05
S16	60	8	19	5	5.65E-03	4.33E-03	9.94E-06	3.61E-04	1.59E-04	7.07E-06	8.89E-07	2.58E-05	1.28E-05	1.41E-08	1.89E-06	1.8	2.78E-04	7.31E-06
S16	60	8	20	5	3.74E-03	2.86E-03	6.57E-06	2.38E-04	1.05E-04	4.67E-06	5.87E-07	1.71E-05	8.48E-06	9.30E-09	1.25E-06	1.2	1.84E-04	4.83E-06
S16	60	8	21	5	3.16E-03	2.42E-03	5.56E-06	2.02E-04	8.91E-05	3.95E-06	4.97E-07	1.44E-05	7.17E-06	7.87E-09	1.06E-06	1.0	1.55E-04	4.09E-06
S16	60	8	22	5	2.68E-03	2.05E-03	4.72E-06	1.71E-04	7.56E-05	3.35E-06	4.22E-07	1.23E-05	6.09E-06	6.67E-09	8.99E-07	0.9	1.32E-04	3.47E-06
S16	60	8	23	5	2.20E-03	1.69E-03	3.87E-06	1.41E-04	6.21E-05	2.75E-06	3.46E-07	1.01E-05	5.00E-06	5.48E-09	7.39E-07	0.7	1.08E-04	2.85E-06
S16	60	8	24	5	1.63E-03	1.25E-03	2.86E-06	1.04E-04	4.59E-05	2.03E-06	2.56E-07	7.44E-06	3.70E-06	4.05E-09	5.46E-07	0.5	8.01E-05	2.11E-06
S17	60	8	1	5	2.40E-03	1.84E-03	4.22E-06	1.53E-04	6.76E-05	3.00E-06	3.77E-07	1.10E-05	5.45E-06	5.97E-09	8.04E-07	0.8	1.18E-04	3.10E-06
S17	60	8	2	5	1.60E-03	1.22E-03	2.81E-06	1.02E-04	4.51E-05	2.00E-06	2.52E-07	7.31E-06	3.63E-06	3.98E-09	5.36E-07	0.5	7.86E-05	2.07E-06
S17	60	8	3	5	1.40E-03	1.07E-03	2.46E-06	8.93E-05	3.94E-05	1.75E-06	2.20E-07	6.40E-06	3.18E-06	3.48E-09	4.69E-07	0.5	6.88E-05	1.81E-06
S17	60	8	4	5	1.00E-03	7.66E-04	1.76E-06	6.38E-05	2.82E-05	1.25E-06	1.57E-07	4.57E-06	2.27E-06	2.49E-09	3.35E-07	0.3	4.92E-05	1.29E-06
S17	60	8	5	5	1.40E-03	1.07E-03	2.46E-06	8.93E-05	3.94E-05	1.75E-06	2.20E-07	6.40E-06	3.18E-06	3.48E-09	4.69E-07	0.5	6.88E-05	1.81E-06
S17	60	8	6	5	3.40E-03	2.60E-03	5.98E-06	2.17E-04	9.58E-05	4.24E-06	5.34E-07	1.55E-05	7.72E-06	8.46E-09	1.14E-06	1.1	1.67E-04	4.40E-06
S17	60	8	7	5	1.02E-02	7.81E-03	1.79E-05	6.51E-04	2.87E-04	1.27E-05	1.60E-06	4.66E-05	2.31E-05	2.54E-08	3.42E-06	3.3	5.01E-04	1.32E-05
S17	60	8	8	5	1.56E-02	1.19E-02	2.74E-05	9.95E-04	4.39E-04	1.95E-05	2.45E-06	7.13E-05	3.54E-05	3.88E-08	5.23E-06	5.0	7.67E-04	2.02E-05
S17	60	8	9	5	1.26E-02	9.65E-03	2.22E-05	8.04E-04	3.55E-04	1.57E-05	1.98E-06	5.76E-05	2.86E-05	3.14E-08	4.22E-06	4.1	6.19E-04	1.63E-05
S17	60	8	10	5	1.04E-02	7.96E-03	1.83E-05	6.63E-04	2.93E-04	1.30E-05	1.63E-06	4.75E-05	2.36E-05	2.59E-08	3.49E-06	3.4	5.11E-04	1.34E-05
S17	60	8	11	5	9.40E-03	7.20E-03	1.65E-05	6.00E-04	2.65E-04	1.18E-05	1.48E-06	4.30E-05	2.13E-05	2.34E-08	3.15E-06	3.0	4.62E-04	1.22E-05
S17	60	8	12	5	1.06E-02	8.11E-03	1.86E-05	6.76E-04	2.99E-04	1.33E-05	1.67E-06	4.84E-05	2.41E-05	2.64E-08	3.55E-06	3.4	5.21E-04	1.37E-05
S17	60	8	13	5	1.12E-02	8.57E-03	1.97E-05	7.14E-04	3.16E-04	1.40E-05	1.76E-06	5.12E-05	2.54E-05	2.79E-08	3.75E-06	3.6	5.50E-04	1.45E-05
S17	60	8	14	5	1.14E-02	8.73E-03	2.00E-05	7.27E-04	3.21E-04	1.43E-05	1.79E-06	5.21E-05	2.59E-05	2.84E-08	3.82E-06	3.7	5.60E-04	1.47E-05
S17	60	8	15	5	1.18E-02	9.03E-03	2.07E-05	7.53E-04	3.32E-04	1.48E-05	1.85E-06	5.39E-05	2.68E-05	2.94E-08	3.96E-06	3.8	5.80E-04	1.53E-05
S17	60	8	16	5	1.28E-02	9.80E-03	2.25E-05	8.16E-04	3.61E-04	1.60E-05	2.01E-06	5.85E-05	2.90E-05	3.18E-08	4.29E-06	4.1	6.29E-04	1.66E-05
S17	60	8	17	5	1.58E-02	1.21E-02	2.78E-05	1.01E-03	4.45E-04	1.98E-05	2.48E-06	7.22E-05	3.59E-05	3.93E-08	5.30E-06	5.1	7.77E-04	2.04E-05
S17	60	8	18	5	1.70E-02	1.30E-02	2.99E-05	1.08E-03	4.79E-04	2.13E-05	2.67E-06	7.77E-05	3.86E-05	4.23E-08	5.70E-06	5.5	8.36E-04	2.20E-05
S17	60	8	19	5	1.18E-02	9.03E-03	2.07E-05	7.53E-04	3.32E-04	1.48E-05	1.85E-06	5.39E-05	2.68E-05	2.94E-08	3.96E-06	3.8	5.80E-04	1.53E-05
S17	60	8	20	5	7.80E-03	5.97E-03	1.37E-05	4.98E-04	2.20E-04	9.74E-06	1.23E-06	3.56E-05	1.77E-05	1.94E-08	2.61E-06	2.5	3.83E-04	1.01E-05
S17	60	8	21	5	6.60E-03	5.05E-03	1.16E-05	4.21E-04	1.86E-04	8.25E-06	1.04E-06	3.02E-05	1.50E-05	1.64E-08	2.21E-06	2.1	3.24E-04	8.53E-06
S17	60	8	22	5	5.60E-03	4.29E-03	9.84E-06	3.57E-04	1.58E-04	7.00E-06	8.80E-07	2.56E-05	1.27E-05	1.39E-08	1.88E-06	1.8	2.75E-04	7.24E-06
S17	60	8	23	5	4.60E-03	3.52E-03	8.09E-06	2.93E-04	1.30E-04	5.75E-06	7.23E-07	2.10E-05	1.04E-05	1.14E-08	1.54E-06	1.5	2.26E-04	5.95E-06
S17	60	8	24	5	3.40E-03	2.60E-03	5.98E-06	2.17E-04	9.58E-05	4.25E-06	5.34E-07	1.55E-05	7.72E-06	8.46E-09	1.14E-06	1.1	1.67E-04	4.40E-06
S18	65	9	1	5	4.37E-03	3.18E-03	7.81E-06	2.38E-04	1.14E-04	4.87E-06	6.47E-07	1.89E-05	9.31E-06	1.04E-08	1.39E-06	1.4	1.92E-04	5.20E-06
S18	65	9	2	5	2.91E-03	2.12E-03	5.21E-06	1.59E-04	7.62E-05	3.25E-06	4.31E-07	1.26E-05	6.21E-06	6.92E-09	9.29E-07	1.0	1.28E-04	3.46E-06
S18	65	9	3	5	2.55E-03	1.85E-03	4.56E-06	1.39E-04	6.67E-05	2.84E-06	3.77E-07	1.10E-05	5.43E-06	6.05E-09	8.13E-07	0.8	1.12E-04	3.03E-06
S18	65	9	4	5	1.82E-03	1.32E-03	3.26E-06	9.91E-05	4.76E-05	2.03E-06	2.69E-07	7.88E-06	3.88E-06	4.32E-09	5.81E-07	0.6	7.98E-05	2.17E-06
S18	65	9	5	5	2.55E-03	1.85E-03	4.56E-06	1.39E-04	6.67E-05	2.84E-06	3.77E-07	1.10E-05	5.43E-06	6.05E-09	8.13E-07	0.8	1.12E-04	3.03E-06

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	6	5	6.19E-03	4.50E-03	1.11E-05	3.37E-04	1.62E-04	6.90E-06	9.16E-07	2.68E-05	1.32E-05	1.47E-08	1.97E-06	2.0	2.71E-04	7.36E-06
S18	65	9	7	5	1.86E-02	1.35E-02	3.32E-05	1.01E-03	4.86E-04	2.07E-05	2.75E-06	8.04E-05	3.96E-05	4.41E-08	5.92E-06	6.1	8.14E-04	2.21E-05
S18	65	9	8	5	2.84E-02	2.07E-02	5.08E-05	1.55E-03	7.43E-04	3.17E-05	4.20E-06	1.23E-04	6.05E-05	6.75E-08	9.06E-06	9.3	1.25E-03	3.38E-05
S18	65	9	9	5	2.29E-02	1.67E-02	4.10E-05	1.25E-03	6.00E-04	2.56E-05	3.40E-06	9.93E-05	4.89E-05	5.45E-08	7.32E-06	7.5	1.01E-03	2.73E-05
S18	65	9	10	5	1.89E-02	1.38E-02	3.39E-05	1.03E-03	4.95E-04	2.11E-05	2.80E-06	8.20E-05	4.03E-05	4.50E-08	6.04E-06	6.2	8.30E-04	2.25E-05
S18	65	9	11	5	1.71E-02	1.24E-02	3.06E-05	9.32E-04	4.48E-04	1.91E-05	2.53E-06	7.41E-05	3.65E-05	4.06E-08	5.46E-06	5.6	7.50E-04	2.04E-05
S18	65	9	12	5	1.93E-02	1.40E-02	3.45E-05	1.05E-03	5.05E-04	2.16E-05	2.86E-06	8.35E-05	4.11E-05	4.58E-08	6.16E-06	6.3	8.46E-04	2.30E-05
S18	65	9	13	5	2.04E-02	1.48E-02	3.65E-05	1.11E-03	5.34E-04	2.28E-05	3.02E-06	8.83E-05	4.34E-05	4.84E-08	6.50E-06	6.7	8.94E-04	2.43E-05
S18	65	9	14	5	2.07E-02	1.51E-02	3.71E-05	1.13E-03	5.43E-04	2.32E-05	3.07E-06	8.98E-05	4.42E-05	4.93E-08	6.62E-06	6.8	9.10E-04	2.47E-05
S18	65	9	15	5	2.15E-02	1.56E-02	3.84E-05	1.17E-03	5.62E-04	2.41E-05	3.18E-06	9.30E-05	4.58E-05	5.10E-08	6.85E-06	7.0	9.42E-04	2.56E-05
S18	65	9	16	5	2.33E-02	1.69E-02	4.17E-05	1.27E-03	6.10E-04	2.61E-05	3.45E-06	1.01E-04	4.97E-05	5.53E-08	7.43E-06	7.6	1.02E-03	2.77E-05
S18	65	9	17	5	2.87E-02	2.09E-02	5.14E-05	1.57E-03	7.53E-04	3.22E-05	4.26E-06	1.25E-04	6.13E-05	6.83E-08	9.18E-06	9.4	1.26E-03	3.42E-05
S18	65	9	18	5	3.09E-02	2.25E-02	5.54E-05	1.68E-03	8.10E-04	3.46E-05	4.58E-06	1.34E-04	6.59E-05	7.35E-08	9.87E-06	10.1	1.36E-03	3.68E-05
S18	65	9	19	5	2.15E-02	1.56E-02	3.84E-05	1.17E-03	5.62E-04	2.40E-05	3.18E-06	9.30E-05	4.58E-05	5.10E-08	6.85E-06	7.0	9.42E-04	2.56E-05
S18	65	9	20	5	1.42E-02	1.03E-02	2.54E-05	7.73E-04	3.72E-04	1.58E-05	2.10E-06	6.15E-05	3.03E-05	3.37E-08	4.53E-06	4.6	6.23E-04	1.69E-05
S18	65	9	21	5	1.20E-02	8.74E-03	2.15E-05	6.54E-04	3.14E-04	1.34E-05	1.78E-06	5.20E-05	2.56E-05	2.85E-08	3.83E-06	3.9	5.27E-04	1.43E-05
S18	65	9	22	5	1.02E-02	7.41E-03	1.82E-05	5.55E-04	2.67E-04	1.14E-05	1.51E-06	4.41E-05	2.17E-05	2.42E-08	3.25E-06	3.3	4.47E-04	1.21E-05
S18	65	9	23	5	8.37E-03	6.09E-03	1.50E-05	4.56E-04	2.19E-04	9.34E-06	1.24E-06	3.62E-05	1.78E-05	1.99E-08	2.67E-06	2.7	3.67E-04	9.96E-06
S18	65	9	24	5	6.19E-03	4.50E-03	1.11E-05	3.37E-04	1.62E-04	6.90E-06	9.16E-07	2.68E-05	1.32E-05	1.47E-08	1.97E-06	2.0	2.71E-04	7.36E-06
S19	65	9	1	5	4.49E-03	3.27E-03	8.03E-06	2.44E-04	1.18E-04	5.01E-06	6.65E-07	1.94E-05	9.57E-06	1.07E-08	1.43E-06	1.5	1.97E-04	5.34E-06
S19	65	9	2	5	2.99E-03	2.18E-03	5.35E-06	1.63E-04	7.83E-05	3.34E-06	4.43E-07	1.30E-05	6.38E-06	7.11E-09	9.55E-07	1.0	1.31E-04	3.56E-06
S19	65	9	3	5	2.62E-03	1.90E-03	4.68E-06	1.43E-04	6.85E-05	2.92E-06	3.88E-07	1.13E-05	5.58E-06	6.22E-09	8.36E-07	0.9	1.15E-04	3.12E-06
S19	65	9	4	5	1.87E-03	1.36E-03	3.35E-06	1.02E-04	4.90E-05	2.09E-06	2.77E-07	8.10E-06	3.99E-06	4.44E-09	5.97E-07	0.6	8.20E-05	2.23E-06
S19	65	9	5	5	2.62E-03	1.90E-03	4.68E-06	1.43E-04	6.85E-05	2.92E-06	3.88E-07	1.13E-05	5.58E-06	6.22E-09	8.36E-07	0.9	1.15E-04	3.12E-06
S19	65	9	6	5	6.36E-03	4.63E-03	1.14E-05	3.46E-04	1.66E-04	7.09E-06	9.42E-07	2.75E-05	1.36E-05	1.51E-08	2.03E-06	2.1	2.79E-04	7.57E-06
S19	65	9	7	5	1.91E-02	1.39E-02	3.41E-05	1.04E-03	4.99E-04	2.13E-05	2.82E-06	8.26E-05	4.07E-05	4.53E-08	6.09E-06	6.2	8.37E-04	2.27E-05
S19	65	9	8	5	2.92E-02	2.12E-02	5.22E-05	1.59E-03	7.64E-04	3.26E-05	4.32E-06	1.26E-04	6.22E-05	6.93E-08	9.31E-06	9.5	1.28E-03	3.47E-05
S19	65	9	9	5	2.36E-02	1.71E-02	4.22E-05	1.28E-03	6.17E-04	2.63E-05	3.49E-06	1.02E-04	5.02E-05	5.60E-08	7.52E-06	7.7	1.03E-03	2.80E-05
S19	65	9	10	5	1.94E-02	1.42E-02	3.48E-05	1.06E-03	5.09E-04	2.17E-05	2.88E-06	8.42E-05	4.15E-05	4.62E-08	6.21E-06	6.4	8.53E-04	2.31E-05
S19	65	9	11	5	1.76E-02	1.28E-02	3.15E-05	9.57E-04	4.60E-04	1.97E-05	2.60E-06	7.61E-05	3.75E-05	4.18E-08	5.61E-06	5.8	7.71E-04	2.09E-05
S19	65	9	12	5	1.98E-02	1.44E-02	3.55E-05	1.08E-03	5.19E-04	2.22E-05	2.94E-06	8.58E-05	4.23E-05	4.71E-08	6.33E-06	6.5	8.70E-04	2.36E-05
S19	65	9	13	5	2.09E-02	1.52E-02	3.75E-05	1.14E-03	5.48E-04	2.34E-05	3.10E-06	9.07E-05	4.47E-05	4.98E-08	6.69E-06	6.9	9.19E-04	2.49E-05
S19	65	9	14	5	2.13E-02	1.55E-02	3.81E-05	1.16E-03	5.58E-04	2.39E-05	3.16E-06	9.23E-05	4.55E-05	5.07E-08	6.80E-06	7.0	9.35E-04	2.54E-05
S19	65	9	15	5	2.21E-02	1.61E-02	3.95E-05	1.20E-03	5.78E-04	2.47E-05	3.27E-06	9.56E-05	4.70E-05	5.24E-08	7.04E-06	7.2	9.68E-04	2.63E-05
S19	65	9	16	5	2.39E-02	1.74E-02	4.28E-05	1.30E-03	6.27E-04	2.68E-05	3.55E-06	1.04E-04	5.10E-05	5.69E-08	7.64E-06	7.8	1.05E-03	2.85E-05
S19	65	9	17	5	2.95E-02	2.15E-02	5.29E-05	1.61E-03	7.74E-04	3.31E-05	4.38E-06	1.28E-04	6.30E-05	7.02E-08	9.43E-06	9.7	1.30E-03	3.52E-05
S19	65	9	18	5	3.18E-02	2.31E-02	5.69E-05	1.73E-03	8.32E-04	3.56E-05	4.71E-06	1.38E-04	6.78E-05	7.56E-08	1.01E-05	10.4	1.39E-03	3.78E-05
S19	65	9	19	5	2.21E-02	1.61E-02	3.95E-05	1.20E-03	5.78E-04	2.47E-05	3.27E-06	9.56E-05	4.70E-05	5.24E-08	7.04E-06	7.2	9.68E-04	2.63E-05
S19	65	9	20	5	1.46E-02	1.06E-02	2.61E-05	7.94E-04	3.82E-04	1.63E-05	2.16E-06	6.32E-05	3.11E-05	3.47E-08	4.66E-06	4.8	6.40E-04	1.74E-05
S19	65	9	21	5	1.23E-02	8.98E-03	2.21E-05	6.72E-04	3.23E-04	1.38E-05	1.83E-06	5.35E-05	2.63E-05	2.93E-08	3.94E-06	4.0	5.41E-04	1.47E-05
S19	65	9	22	5	1.05E-02	7.62E-03	1.87E-05	5.70E-04	2.74E-04	1.17E-05	1.55E-06	4.54E-05	2.23E-05	2.49E-08	3.34E-06	3.4	4.59E-04	1.25E-05
S19	65	9	23	5	8.60E-03	6.26E-03	1.54E-05	4.69E-04	2.25E-04	9.60E-06	1.27E-06	3.73E-05	1.83E-05	2.04E-08	2.75E-06	2.8	3.77E-04	1.02E-05
S19	65	9	24	5	6.36E-03	4.63E-03	1.14E-05	3.46E-04	1.66E-04	7.10E-06	9.42E-07	2.75E-05	1.36E-05	1.51E-08	2.03E-06	2.1	2.79E-04	7.57E-06
S20	60	8	1	5	3.98E-03	3.05E-03	7.00E-06	2.54E-04	1.12E-04	4.98E-06	6.26E-07	1.82E-05	9.04E-06	9.91E-09	1.34E-06	1.3	1.96E-04	5.15E-06
S20	60	8	2	5	2.66E-03	2.03E-03	4.67E-06	1.69E-04	7.48E-05	3.32E-06	4.18E-07	1.21E-05	6.03E-06	6.61E-09	8.90E-07	0.9	1.31E-04	3.43E-06
S20	60	8	3	5	2.32E-03	1.78E-03	4.09E-06	1.48E-04	6.55E-05	2.90E-06	3.65E-07	1.06E-05	5.27E-06	5.78E-09	7.79E-07	0.8	1.14E-04	3.01E-06
S20	60	8	4	5	1.66E-03	1.27E-03	2.92E-06	1.06E-04	4.68E-05	2.07E-06	2.61E-07	7.59E-06	3.77E-06	4.13E-09	5.56E-07	0.5	8.16E-05	2.15E-06
S20	60	8	5	5	2.32E-03	1.78E-03	4.09E-06	1.48E-04	6.55E-05	2.90E-06	3.65E-07	1.06E-05	5.27E-06	5.78E-09	7.79E-07	0.8	1.14E-04	3.01E-06
S20	60	8	6	5	5.64E-03	4.32E-03	9.92E-06	3.60E-04	1.59E-04	7.05E-06	8.87E-07	2.58E-05	1.28E-05	1.40E-08	1.89E-06	1.8	2.77E-04	7.30E-06
S20	60	8	7	5	1.69E-02	1.30E-02	2.98E-05	1.08E-03	4.77E-04	2.11E-05	2.66E-06	7.74E-05	3.84E-05	4.21E-08	5.68E-06	5.5	8.32E-04	2.19E-05
S20	60	8	8	5	2.59E-02	1.98E-02	4.55E-05	1.65E-03	7.30E-04	3.24E-05	4.07E-06	1.18E-04	5.88E-05	6.44E-08	8.68E-06	8.4	1.27E-03	3.35E-05
S20	60	8	9	5	2.09E-02	1.60E-02	3.68E-05	1.33E-03	5.89E-04	2.61E-05	3.29E-06	9.56E-05	4.75E-05	5.21E-08	7.01E-06	6.8	1.03E-03	2.70E-05
S20	60	8	10	5	1.73E-02	1.32E-02	3.04E-05	1.10E-03	4.86E-04	2.16E-05	2.71E-06	7.89E-05	3.92E-05	4.30E-08	5.79E-06	5.6	8.49E-04	2.23E-05
S20	60	8	11	5	1.56E-02	1.19E-02	2.74E-05	9.95E-04	4.40E-04	1.95E-05	2.45E-06	7.13E-05	3.54E-05	3.88E-08	5.23E-06	5.0	7.67E-04	2.02E-05
S20	60	8	12	5	1.76E-02	1.35E-02	3.09E-05	1.12E-03	4.96E-04	2.20E-05	2.77E-06	8.04E-05	3.99E-05	4.38E-08	5.90E-06	5.7	8.65E-04	2.28E-05
S20	60	8	13	5	1.86E-02	1.42E-02	3.27E-05	1.19E-03	5.24E-04	2.33E-05	2.92E-06	8.50E-05	4.22E-05	4.63E-08	6.23E-06	6.0	9.14E-04	2.40E-05
S20	60	8	14	5	1.89E-02	1.45E-02	3.33E-05	1.21E-03	5.33E-04	2.37E-05	2.98E-06	8.65E-05	4.30E-05	4.71E-08	6.34E-06	6.1	9.30E-04	2.45E-05
S20	60	8	15	5	1.96E-02	1.50E-02	3.44E-05	1.25E-03	5.52E-04	2.46E-05	3.08E-06	8.95E-05	4.45E-05	4.87E-08	6.57E-06	6.3	9.63E-04	2.53E-05
S20	60	8	16	5	2.12E-02	1.63E-02	3.74E-05	1.36E-03	5.99E-04	2.66E-05	3.34E-06	9.71E-05	4.82E-05	5.29E-08	7.12E-06	6.9	1.04E-03	2.75E-05
S20	60	8	17	5	2.62E-02	2.01E-02	4.61E-05	1.67E-03	7.39E-04	3.28E-05	4.12E-06	1.20E-04	5.95E-05	6.53E-08	8.79E-06	8.5	1.29E-03	3.39E-05
S20	60	8	18	5	2.82E-02	2.16E-02	4.96E-05	1.80E-03	7.95E-04	3.53E-05	4.44E-06	1.29E-04	6.40E-05	7.02E-08	9.46E-06	9.1	1.39E-03	3.65E-05
S20	60	8	19	5	1.96E-02	1.50E-02	3.44E-05	1.25E-03	5.52E-04	2.45E-05	3.08E-06	8.95E-05	4.45E-05	4.87E-08	6.57E-06	6.3	9.63E-04	2.53E-05
S20	60	8	20	5	1.29E-02	9.91E-03	2.28E-05	8.26E-04	3.65E-04	1.62E-05	2.04E-06	5.92E-05	2.94E-05	3.22E-08	4.34E-06	4.2	6.37E-04	1.67E-05
S20	60	8	21	5	1.10E-02	8.39E-03	1.93E-05	6.99E-04	3.09E-04	1.37E-05	1.72E-06	5.01E-05	2.49E-05	2.73E-08	3.67E-06	3.5	5.39E-04	1.42E-05
S20	60	8	22	5	9.29E-03	7.12E-03	1.63E-05	5.93E-04	2.62E-04	1.16E-05	1.46E-06	4.25E-05	2.11E-05	2.31E-08	3.12E-06	3.0	4.57E-04	1.20E-05
S20	60	8	23	5	7.64E-03	5.85E-03	1.34E-05	4.87E-04	2.15E-04	9.54E-06	1.20E-06	3.49E-05	1.73E-05	1.90E-08	2.56E-06	2.5	3.75E-04	9.87E-06
S20	60	8	24	5	5.64E-03	4.32E-03	9.92E-06	3.60E-04	1.59E-04	7.05E-06	8.87E-07	2.58E-05	1.28E-05	1.40E-08	1.89E-06	1.8	2.77E-04	7.30E-06
S21	60	8	1	5	1.04E-02	7.93E-03	1.82E-05	6.61E-04	2.92E-04	1.29E-05	1.63E-06	4.73E-05	2.35E-05	2.58E-08	3.47E-06	3.3	5.09E-04	1.34E-05
S21	60	8	2	5	6.90E-03	5.29E-03	1.21E-05	4.40E-04	1.95E-04	8.62E-06	1.09E-06	3.16E-05	1.57E-05	1.72E-08	2.31E-06	2.2	3.39E-04	8.93E-06

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	3	5	6.04E-03	4.63E-03	1.06E-05	3.85E-04	1.70E-04	7.54E-06	9.50E-07	2.76E-05	1.37E-05	1.50E-08	2.03E-06	1.9	2.97E-04	7.81E-06
S21	60	8	4	5	4.31E-03	3.30E-03	7.59E-06	2.75E-04	1.22E-04	5.39E-06	6.78E-07	1.97E-05	9.79E-06	1.07E-08	1.45E-06	1.4	2.12E-04	5.58E-06
S21	60	8	5	5	6.04E-03	4.63E-03	1.06E-05	3.85E-04	1.70E-04	7.54E-06	9.50E-07	2.76E-05	1.37E-05	1.50E-08	2.03E-06	1.9	2.97E-04	7.81E-06
S21	60	8	6	5	1.47E-02	1.12E-02	2.58E-05	9.36E-04	4.13E-04	1.83E-05	2.31E-06	6.71E-05	3.33E-05	3.65E-08	4.92E-06	4.7	7.21E-04	1.90E-05
S21	60	8	7	5	4.40E-02	3.37E-02	7.74E-05	2.81E-03	1.24E-03	5.50E-05	6.92E-06	2.01E-04	9.99E-05	1.10E-07	1.48E-05	14.2	2.16E-03	5.69E-05
S21	60	8	8	5	6.73E-02	5.15E-02	1.18E-04	4.29E-03	1.90E-03	8.41E-05	1.06E-05	3.08E-04	1.53E-04	1.68E-07	2.26E-05	21.7	3.31E-03	8.70E-05
S21	60	8	9	5	5.44E-02	4.16E-02	9.56E-05	3.47E-03	1.53E-03	6.79E-05	8.55E-06	2.48E-04	1.23E-04	1.35E-07	1.82E-05	17.5	2.67E-03	7.03E-05
S21	60	8	10	5	4.49E-02	3.44E-02	7.89E-05	2.86E-03	1.26E-03	5.61E-05	7.06E-06	2.05E-04	1.02E-04	1.12E-07	1.50E-05	14.5	2.21E-03	5.80E-05
S21	60	8	11	5	4.06E-02	3.11E-02	7.13E-05	2.59E-03	1.14E-03	5.08E-05	6.38E-06	1.85E-04	9.21E-05	1.01E-07	1.36E-05	13.1	1.99E-03	5.25E-05
S21	60	8	12	5	4.57E-02	3.50E-02	8.04E-05	2.92E-03	1.29E-03	5.73E-05	7.19E-06	2.09E-04	1.04E-04	1.14E-07	1.53E-05	14.8	2.25E-03	5.91E-05
S21	60	8	13	5	4.83E-02	3.70E-02	8.50E-05	3.08E-03	1.36E-03	6.05E-05	7.60E-06	2.21E-04	1.10E-04	1.20E-07	1.62E-05	15.6	2.38E-03	6.25E-05
S21	60	8	14	5	4.92E-02	3.77E-02	8.65E-05	3.14E-03	1.39E-03	6.17E-05	7.73E-06	2.25E-04	1.12E-04	1.22E-07	1.65E-05	15.9	2.42E-03	6.36E-05
S21	60	8	15	5	5.09E-02	3.90E-02	8.95E-05	3.25E-03	1.43E-03	6.38E-05	8.00E-06	2.33E-04	1.16E-04	1.27E-07	1.71E-05	16.4	2.50E-03	6.58E-05
S21	60	8	16	5	5.52E-02	4.23E-02	9.71E-05	3.52E-03	1.56E-03	6.92E-05	8.68E-06	2.52E-04	1.25E-04	1.37E-07	1.85E-05	17.8	2.72E-03	7.14E-05
S21	60	8	17	5	6.82E-02	5.22E-02	1.20E-04	4.35E-03	1.92E-03	8.54E-05	1.07E-05	3.12E-04	1.55E-04	1.70E-07	2.29E-05	22.0	3.35E-03	8.82E-05
S21	60	8	18	5	7.33E-02	5.62E-02	1.29E-04	4.68E-03	2.07E-03	9.19E-05	1.15E-05	3.35E-04	1.66E-04	1.83E-07	2.46E-05	23.7	3.61E-03	9.49E-05
S21	60	8	19	5	5.09E-02	3.90E-02	8.95E-05	3.25E-03	1.43E-03	6.37E-05	8.00E-06	2.33E-04	1.16E-04	1.27E-07	1.71E-05	16.4	2.50E-03	6.58E-05
S21	60	8	20	5	3.37E-02	2.58E-02	5.92E-05	2.15E-03	9.48E-04	4.20E-05	5.29E-06	1.54E-04	7.64E-05	8.38E-08	1.13E-05	10.9	1.65E-03	4.35E-05
S21	60	8	21	5	2.85E-02	2.18E-02	5.01E-05	1.82E-03	8.02E-04	3.56E-05	4.48E-06	1.30E-04	6.46E-05	7.09E-08	9.55E-06	9.2	1.40E-03	3.68E-05
S21	60	8	22	5	2.42E-02	1.85E-02	4.25E-05	1.54E-03	6.81E-04	3.02E-05	3.80E-06	1.10E-04	5.48E-05	6.01E-08	8.10E-06	7.8	1.19E-03	3.12E-05
S21	60	8	23	5	1.98E-02	1.52E-02	3.49E-05	1.27E-03	5.59E-04	2.48E-05	3.12E-06	9.07E-05	4.50E-05	4.94E-08	6.65E-06	6.4	9.76E-04	2.57E-05
S21	60	8	24	5	1.47E-02	1.12E-02	2.58E-05	9.36E-04	4.13E-04	1.83E-05	2.31E-06	6.71E-05	3.33E-05	3.65E-08	4.92E-06	4.7	7.21E-04	1.90E-05
S22	60	8	1	5	5.92E-03	4.53E-03	1.04E-05	3.78E-04	1.67E-04	7.39E-06	9.30E-07	2.70E-05	1.34E-05	1.47E-08	1.98E-06	1.9	2.91E-04	7.65E-06
S22	60	8	2	5	3.94E-03	3.02E-03	6.94E-06	2.52E-04	1.11E-04	4.93E-06	6.20E-07	1.80E-05	8.95E-06	9.82E-09	1.32E-06	1.3	1.94E-04	5.10E-06
S22	60	8	3	5	3.45E-03	2.64E-03	6.07E-06	2.20E-04	9.73E-05	4.31E-06	5.43E-07	1.58E-05	7.84E-06	8.59E-09	1.16E-06	1.1	1.70E-04	4.46E-06
S22	60	8	4	5	2.47E-03	1.89E-03	4.34E-06	1.57E-04	6.95E-05	3.08E-06	3.88E-07	1.13E-05	5.60E-06	6.14E-09	8.27E-07	0.8	1.21E-04	3.19E-06
S22	60	8	5	5	3.45E-03	2.64E-03	6.07E-06	2.20E-04	9.73E-05	4.31E-06	5.43E-07	1.58E-05	7.84E-06	8.59E-09	1.16E-06	1.1	1.70E-04	4.46E-06
S22	60	8	6	5	8.38E-03	6.42E-03	1.47E-05	5.35E-04	2.36E-04	1.05E-05	1.32E-06	3.83E-05	1.90E-05	2.09E-08	2.81E-06	2.7	4.12E-04	1.08E-05
S22	60	8	7	5	2.51E-02	1.93E-02	4.42E-05	1.60E-03	7.09E-04	3.14E-05	3.95E-06	1.15E-04	5.71E-05	6.26E-08	8.43E-06	8.1	1.24E-03	3.25E-05
S22	60	8	8	5	3.85E-02	2.95E-02	6.76E-05	2.45E-03	1.08E-03	4.81E-05	6.05E-06	1.76E-04	8.73E-05	9.57E-08	1.29E-05	12.4	1.89E-03	4.97E-05
S22	60	8	9	5	3.11E-02	2.38E-02	5.46E-05	1.98E-03	8.75E-04	3.88E-05	4.88E-06	1.42E-04	7.05E-05	7.73E-08	1.04E-05	10.0	1.53E-03	4.02E-05
S22	60	8	10	5	2.56E-02	1.96E-02	4.51E-05	1.64E-03	7.23E-04	3.21E-05	4.03E-06	1.17E-04	5.82E-05	6.38E-08	8.60E-06	8.3	1.26E-03	3.32E-05
S22	60	8	11	5	2.32E-02	1.77E-02	4.08E-05	1.48E-03	6.53E-04	2.90E-05	3.64E-06	1.06E-04	5.26E-05	5.77E-08	7.77E-06	7.5	1.14E-03	3.00E-05
S22	60	8	12	5	2.61E-02	2.00E-02	4.60E-05	1.67E-03	7.36E-04	3.27E-05	4.11E-06	1.19E-04	5.93E-05	6.50E-08	8.76E-06	8.4	1.28E-03	3.38E-05
S22	60	8	13	5	2.76E-02	2.11E-02	4.86E-05	1.76E-03	7.78E-04	3.46E-05	4.34E-06	1.26E-04	6.27E-05	6.87E-08	9.26E-06	8.9	1.36E-03	3.57E-05
S22	60	8	14	5	2.81E-02	2.15E-02	4.94E-05	1.79E-03	7.92E-04	3.52E-05	4.42E-06	1.28E-04	6.38E-05	7.00E-08	9.42E-06	9.1	1.38E-03	3.64E-05
S22	60	8	15	5	2.91E-02	2.23E-02	5.12E-05	1.86E-03	8.20E-04	3.65E-05	4.57E-06	1.33E-04	6.60E-05	7.24E-08	9.75E-06	9.4	1.43E-03	3.76E-05
S22	60	8	16	5	3.16E-02	2.42E-02	5.55E-05	2.01E-03	8.89E-04	3.95E-05	4.96E-06	1.44E-04	7.16E-05	7.85E-08	1.06E-05	10.2	1.55E-03	4.08E-05
S22	60	8	17	5	3.90E-02	2.98E-02	6.85E-05	2.49E-03	1.10E-03	4.88E-05	6.13E-06	1.78E-04	8.84E-05	9.70E-08	1.31E-05	12.6	1.92E-03	5.04E-05
S22	60	8	18	5	4.19E-02	3.21E-02	7.37E-05	2.67E-03	1.18E-03	5.25E-05	6.59E-06	1.92E-04	9.51E-05	1.04E-07	1.41E-05	13.5	2.06E-03	5.42E-05
S22	60	8	19	5	2.91E-02	2.23E-02	5.12E-05	1.86E-03	8.20E-04	3.64E-05	4.57E-06	1.33E-04	6.60E-05	7.24E-08	9.75E-06	9.4	1.43E-03	3.76E-05
S22	60	8	20	5	1.92E-02	1.47E-02	3.38E-05	1.23E-03	5.42E-04	2.40E-05	3.02E-06	8.79E-05	4.37E-05	4.79E-08	6.45E-06	6.2	9.46E-04	2.49E-05
S22	60	8	21	5	1.63E-02	1.25E-02	2.86E-05	1.04E-03	4.59E-04	2.03E-05	2.56E-06	7.44E-05	3.69E-05	4.05E-08	5.46E-06	5.3	8.00E-04	2.10E-05
S22	60	8	22	5	1.38E-02	1.06E-02	2.43E-05	8.81E-04	3.89E-04	1.73E-05	2.17E-06	6.31E-05	3.13E-05	3.44E-08	4.63E-06	4.5	6.79E-04	1.79E-05
S22	60	8	23	5	1.13E-02	8.68E-03	1.99E-05	7.24E-04	3.20E-04	1.42E-05	1.78E-06	5.18E-05	2.57E-05	2.82E-08	3.80E-06	3.7	5.58E-04	1.47E-05
S22	60	8	24	5	8.38E-03	6.42E-03	1.47E-05	5.35E-04	2.36E-04	1.05E-05	1.32E-06	3.83E-05	1.90E-05	2.09E-08	2.81E-06	2.7	4.12E-04	1.08E-05
S23	60	8	1	5	3.11E-03	2.38E-03	5.48E-06	1.99E-04	8.77E-05	3.89E-06	4.90E-07	1.42E-05	7.07E-06	7.75E-09	1.04E-06	1.0	1.53E-04	4.03E-06
S23	60	8	2	5	2.08E-03	1.59E-03	3.65E-06	1.32E-04	5.85E-05	2.59E-06	3.26E-07	9.49E-06	4.71E-06	5.17E-09	6.96E-07	0.7	1.02E-04	2.68E-06
S23	60	8	3	5	1.82E-03	1.39E-03	3.19E-06	1.16E-04	5.12E-05	2.27E-06	2.86E-07	8.30E-06	4.12E-06	4.52E-09	6.09E-07	0.6	8.93E-05	2.35E-06
S23	60	8	4	5	1.30E-03	9.93E-04	2.28E-06	8.28E-05	3.66E-05	1.62E-06	2.04E-07	5.93E-06	2.94E-06	3.23E-09	4.35E-07	0.4	6.38E-05	1.68E-06
S23	60	8	5	5	1.82E-03	1.39E-03	3.19E-06	1.16E-04	5.12E-05	2.27E-06	2.86E-07	8.30E-06	4.12E-06	4.52E-09	6.09E-07	0.6	8.93E-05	2.35E-06
S23	60	8	6	5	4.41E-03	3.38E-03	7.76E-06	2.81E-04	1.24E-04	5.51E-06	6.94E-07	2.02E-05	1.00E-05	1.10E-08	1.48E-06	1.4	2.17E-04	5.70E-06
S23	60	8	7	5	1.32E-02	1.01E-02	2.33E-05	8.44E-04	3.73E-04	1.65E-05	2.08E-06	6.05E-05	3.00E-05	3.29E-08	4.44E-06	4.3	6.51E-04	1.71E-05
S23	60	8	8	5	2.02E-02	1.55E-02	3.56E-05	1.29E-03	5.70E-04	2.53E-05	3.18E-06	9.25E-05	4.59E-05	5.04E-08	6.79E-06	6.5	9.95E-04	2.62E-05
S23	60	8	9	5	1.63E-02	1.25E-02	2.87E-05	1.04E-03	4.61E-04	2.04E-05	2.57E-06	7.47E-05	3.71E-05	4.07E-08	5.48E-06	5.3	8.04E-04	2.11E-05
S23	60	8	10	5	1.35E-02	1.03E-02	2.37E-05	8.61E-04	3.80E-04	1.69E-05	2.12E-06	6.17E-05	3.06E-05	3.36E-08	4.52E-06	4.4	6.63E-04	1.74E-05
S23	60	8	11	5	1.22E-02	9.34E-03	2.14E-05	7.78E-04	3.44E-04	1.53E-05	1.92E-06	5.57E-05	2.77E-05	3.04E-08	4.09E-06	3.9	6.00E-04	1.58E-05
S23	60	8	12	5	1.38E-02	1.05E-02	2.42E-05	8.77E-04	3.88E-04	1.72E-05	2.16E-06	6.29E-05	3.12E-05	3.42E-08	4.61E-06	4.4	6.76E-04	1.78E-05
S23	60	8	13	5	1.45E-02	1.11E-02	2.56E-05	9.27E-04	4.09E-04	1.82E-05	2.28E-06	6.64E-05	3.30E-05	3.62E-08	4.87E-06	4.7	7.14E-04	1.88E-05
S23	60	8	14	5	1.48E-02	1.13E-02	2.60E-05	9.44E-04	4.17E-04	1.85E-05	2.33E-06	6.76E-05	3.36E-05	3.68E-08	4.96E-06	4.8	7.27E-04	1.91E-05
S23	60	8	15	5	1.53E-02	1.17E-02	2.69E-05	9.77E-04	4.31E-04	1.92E-05	2.41E-06	7.00E-05	3.47E-05	3.81E-08	5.13E-06	4.9	7.53E-04	1.98E-05
S23	60	8	16	5	1.66E-02	1.27E-02	2.92E-05	1.06E-03	4.68E-04	2.08E-05	2.61E-06	7.59E-05	3.77E-05	4.13E-08	5.57E-06	5.4	8.16E-04	2.15E-05
S23	60	8	17	5	2.05E-02	1.57E-02	3.60E-05	1.31E-03	5.78E-04	2.57E-05	3.22E-06	9.37E-05	4.65E-05	5.10E-08	6.87E-06	6.6	1.01E-03	2.65E-05
S23	60	8	18	5	2.21E-02	1.69E-02	3.88E-05	1.41E-03	6.21E-04	2.76E-05	3.47E-06	1.01E-04	5.01E-05	5.49E-08	7.39E-06	7.1	1.08E-03	2.85E-05
S23	60	8	19	5	1.53E-02	1.17E-02	2.69E-05	9.77E-04	4.31E-04	1.92E-05	2.41E-06	7.00E-05	3.47E-05	3.81E-08	5.13E-06	4.9	7.53E-04	1.98E-05
S23	60	8	20	5	1.01E-02	7.75E-03	1.78E-05	6.46E-04	2.85E-04	1.26E-05	1.59E-06	4.63E-05	2.30E-05	2.52E-08	3.39E-06	3.3	4.98E-04	1.31E-05
S23	60	8	21	5	8.56E-03	6.56E-03	1.51E-05	5.46E-04	2.41E-04	1.07E-05	1.35E-06	3.91E-05	1.94E-05	2.13E-08	2.87E-06	2.8	4.21E-04	1.11E-05
S23	60	8	22	5	7.26E-03	5.56E-03	1.28E-05	4.64E-04	2.05E-04	9.08E-06	1.14E-06	3.32E-05	1.65E-05	1.81E-08	2.44E-06	2.3	3.57E-04	9.40E-06
S23	60	8	23	5	5.97E-03	4.57E-03	1.05E-05	3.81E-04	1.68E-04	7.46E-06	9.38E-07	2.73E-05	1.35E-05	1.49E-08	2.00E-06	1.9	2.93E-04	7.72E-06

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	24	5	4.41E-03	3.38E-03	7.76E-06	2.81E-04	1.24E-04	5.51E-06	6.94E-07	2.02E-05	1.00E-05	1.10E-08	1.48E-06	1.4	2.17E-04	5.70E-06
S24	60	8	1	5	1.26E-03	9.64E-04	2.21E-06	8.03E-05	3.55E-05	1.57E-06	1.98E-07	5.75E-06	2.86E-06	3.13E-09	4.22E-07	0.4	6.19E-05	1.63E-06
S24	60	8	2	5	8.39E-04	6.43E-04	1.48E-06	5.35E-05	2.36E-05	1.05E-06	1.32E-07	3.84E-06	1.90E-06	2.09E-09	2.81E-07	0.3	4.13E-05	1.09E-06
S24	60	8	3	5	7.34E-04	5.62E-04	1.29E-06	4.69E-05	2.07E-05	9.17E-07	1.15E-07	3.36E-06	1.67E-06	1.83E-09	2.46E-07	0.2	3.61E-05	9.50E-07
S24	60	8	4	5	5.24E-04	4.02E-04	9.22E-07	3.35E-05	1.48E-05	6.55E-07	8.25E-08	2.40E-06	1.19E-06	1.31E-09	1.76E-07	0.2	2.58E-05	6.78E-07
S24	60	8	5	5	7.34E-04	5.62E-04	1.29E-06	4.69E-05	2.07E-05	9.17E-07	1.15E-07	3.36E-06	1.67E-06	1.83E-09	2.46E-07	0.2	3.61E-05	9.50E-07
S24	60	8	6	5	1.78E-03	1.37E-03	3.14E-06	1.14E-04	5.03E-05	2.23E-06	2.80E-07	8.15E-06	4.05E-06	4.44E-09	5.98E-07	0.6	8.77E-05	2.31E-06
S24	60	8	7	5	5.35E-03	4.10E-03	9.41E-06	3.41E-04	1.51E-04	6.68E-06	8.41E-07	2.45E-05	1.21E-05	1.33E-08	1.79E-06	1.7	2.63E-04	6.92E-06
S24	60	8	8	5	8.18E-03	6.27E-03	1.44E-05	5.22E-04	2.31E-04	1.02E-05	1.29E-06	3.74E-05	1.86E-05	2.04E-08	2.74E-06	2.6	4.02E-04	1.06E-05
S24	60	8	9	5	6.61E-03	5.06E-03	1.16E-05	4.22E-04	1.86E-04	8.26E-06	1.04E-06	3.02E-05	1.50E-05	1.64E-08	2.22E-06	2.1	3.25E-04	8.55E-06
S24	60	8	10	5	5.45E-03	4.18E-03	9.59E-06	3.48E-04	1.54E-04	6.82E-06	8.58E-07	2.49E-05	1.24E-05	1.36E-08	1.83E-06	1.8	2.68E-04	7.05E-06
S24	60	8	11	5	4.93E-03	3.78E-03	8.67E-06	3.15E-04	1.39E-04	6.17E-06	7.75E-07	2.25E-05	1.12E-05	1.23E-08	1.65E-06	1.6	2.42E-04	6.38E-06
S24	60	8	12	5	5.56E-03	4.26E-03	9.78E-06	3.55E-04	1.57E-04	6.96E-06	8.74E-07	2.54E-05	1.26E-05	1.38E-08	1.86E-06	1.8	2.73E-04	7.19E-06
S24	60	8	13	5	5.87E-03	4.50E-03	1.03E-05	3.75E-04	1.66E-04	7.36E-06	9.24E-07	2.69E-05	1.33E-05	1.46E-08	1.97E-06	1.9	2.89E-04	7.60E-06
S24	60	8	14	5	5.98E-03	4.58E-03	1.05E-05	3.82E-04	1.68E-04	7.50E-06	9.40E-07	2.73E-05	1.36E-05	1.49E-08	2.00E-06	1.9	2.94E-04	7.73E-06
S24	60	8	15	5	6.19E-03	4.74E-03	1.09E-05	3.95E-04	1.74E-04	7.76E-06	9.73E-07	2.83E-05	1.40E-05	1.54E-08	2.08E-06	2.0	3.04E-04	8.00E-06
S24	60	8	16	5	6.71E-03	5.14E-03	1.18E-05	4.28E-04	1.89E-04	8.41E-06	1.06E-06	3.07E-05	1.52E-05	1.67E-08	2.25E-06	2.2	3.30E-04	8.68E-06
S24	60	8	17	5	8.29E-03	6.35E-03	1.46E-05	5.29E-04	2.34E-04	1.04E-05	1.30E-06	3.79E-05	1.88E-05	2.06E-08	2.78E-06	2.7	4.07E-04	1.07E-05
S24	60	8	18	5	8.92E-03	6.83E-03	1.57E-05	5.69E-04	2.51E-04	1.12E-05	1.40E-06	4.08E-05	2.02E-05	2.22E-08	2.99E-06	2.9	4.38E-04	1.15E-05
S24	60	8	19	5	6.19E-03	4.74E-03	1.09E-05	3.95E-04	1.74E-04	7.75E-06	9.73E-07	2.83E-05	1.40E-05	1.54E-08	2.08E-06	2.0	3.04E-04	8.00E-06
S24	60	8	20	5	4.09E-03	3.13E-03	7.19E-06	2.61E-04	1.15E-04	5.11E-06	6.43E-07	1.87E-05	9.29E-06	1.02E-08	1.37E-06	1.3	2.01E-04	5.29E-06
S24	60	8	21	5	3.46E-03	2.65E-03	6.09E-06	2.21E-04	9.75E-05	4.33E-06	5.44E-07	1.58E-05	7.86E-06	8.62E-09	1.16E-06	1.1	1.70E-04	4.48E-06
S24	60	8	22	5	2.94E-03	2.25E-03	5.17E-06	1.87E-04	8.28E-05	3.67E-06	4.62E-07	1.34E-05	6.67E-06	7.31E-09	9.85E-07	0.9	1.44E-04	3.80E-06
S24	60	8	23	5	2.41E-03	1.85E-03	4.24E-06	1.54E-04	6.80E-05	3.01E-06	3.79E-07	1.10E-05	5.48E-06	6.01E-09	8.09E-07	0.8	1.19E-04	3.12E-06
S24	60	8	24	5	1.78E-03	1.37E-03	3.14E-06	1.14E-04	5.03E-05	2.23E-06	2.80E-07	8.15E-06	4.05E-06	4.44E-09	5.98E-07	0.6	8.77E-05	2.31E-06
S25	60	8	1	5	1.73E-03	1.33E-03	3.05E-06	1.11E-04	4.89E-05	2.17E-06	2.73E-07	7.93E-06	3.94E-06	4.32E-09	5.82E-07	0.6	8.53E-05	2.24E-06
S25	60	8	2	5	1.16E-03	8.85E-04	2.03E-06	7.38E-05	3.26E-05	1.44E-06	1.82E-07	5.29E-06	2.62E-06	2.88E-09	3.88E-07	0.4	5.69E-05	1.50E-06
S25	60	8	3	5	1.01E-03	7.75E-04	1.78E-06	6.46E-05	2.85E-05	1.26E-06	1.59E-07	4.63E-06	2.30E-06	2.52E-09	3.39E-07	0.3	4.97E-05	1.31E-06
S25	60	8	4	5	7.23E-04	5.53E-04	1.27E-06	4.61E-05	2.04E-05	9.03E-07	1.14E-07	3.30E-06	1.64E-06	1.80E-09	2.42E-07	0.2	3.55E-05	9.35E-07
S25	60	8	5	5	1.01E-03	7.75E-04	1.78E-06	6.46E-05	2.85E-05	1.26E-06	1.59E-07	4.63E-06	2.30E-06	2.52E-09	3.39E-07	0.3	4.97E-05	1.31E-06
S25	60	8	6	5	2.46E-03	1.88E-03	4.32E-06	1.57E-04	6.92E-05	3.07E-06	3.86E-07	1.12E-05	5.58E-06	6.12E-09	8.24E-07	0.8	1.21E-04	3.18E-06
S25	60	8	7	5	7.37E-03	5.64E-03	1.30E-05	4.70E-04	2.08E-04	9.21E-06	1.16E-06	3.37E-05	1.67E-05	1.83E-08	2.47E-06	2.4	3.62E-04	9.53E-06
S25	60	8	8	5	1.13E-02	8.63E-03	1.98E-05	7.19E-04	3.18E-04	1.41E-05	1.77E-06	5.15E-05	2.56E-05	2.81E-08	3.78E-06	3.6	5.54E-04	1.46E-05
S25	60	8	9	5	9.11E-03	6.97E-03	1.60E-05	5.81E-04	2.57E-04	1.14E-05	1.43E-06	4.16E-05	2.07E-05	2.27E-08	3.05E-06	2.9	4.48E-04	1.18E-05
S25	60	8	10	5	7.52E-03	5.76E-03	1.32E-05	4.80E-04	2.12E-04	9.40E-06	1.18E-06	3.44E-05	1.71E-05	1.87E-08	2.52E-06	2.4	3.70E-04	9.72E-06
S25	60	8	11	5	6.79E-03	5.20E-03	1.19E-05	4.33E-04	1.91E-04	8.50E-06	1.07E-06	3.11E-05	1.54E-05	1.69E-08	2.28E-06	2.2	3.34E-04	8.79E-06
S25	60	8	12	5	7.66E-03	5.87E-03	1.35E-05	4.89E-04	2.16E-04	9.60E-06	1.20E-06	3.50E-05	1.74E-05	1.91E-08	2.57E-06	2.5	3.77E-04	9.91E-06
S25	60	8	13	5	8.09E-03	6.20E-03	1.42E-05	5.16E-04	2.28E-04	1.01E-05	1.27E-06	3.70E-05	1.84E-05	2.01E-08	2.71E-06	2.6	3.98E-04	1.05E-05
S25	60	8	14	5	8.24E-03	6.31E-03	1.45E-05	5.26E-04	2.32E-04	1.03E-05	1.30E-06	3.77E-05	1.87E-05	2.05E-08	2.76E-06	2.7	4.05E-04	1.07E-05
S25	60	8	15	5	8.53E-03	6.53E-03	1.50E-05	5.44E-04	2.40E-04	1.07E-05	1.34E-06	3.90E-05	1.94E-05	2.12E-08	2.86E-06	2.8	4.19E-04	1.10E-05
S25	60	8	16	5	9.25E-03	7.08E-03	1.63E-05	5.90E-04	2.61E-04	1.16E-05	1.45E-06	4.23E-05	2.10E-05	2.30E-08	3.10E-06	3.0	4.55E-04	1.20E-05
S25	60	8	17	5	1.14E-02	8.74E-03	2.01E-05	7.29E-04	3.22E-04	1.43E-05	1.80E-06	5.22E-05	2.59E-05	2.84E-08	3.83E-06	3.7	5.61E-04	1.48E-05
S25	60	8	18	5	1.23E-02	9.41E-03	2.16E-05	7.84E-04	3.46E-04	1.54E-05	1.93E-06	5.62E-05	2.79E-05	3.06E-08	4.12E-06	4.0	6.04E-04	1.59E-05
S25	60	8	19	5	8.53E-03	6.53E-03	1.50E-05	5.44E-04	2.40E-04	1.07E-05	1.34E-06	3.90E-05	1.94E-05	2.12E-08	2.86E-06	2.8	4.19E-04	1.10E-05
S25	60	8	20	5	5.64E-03	4.32E-03	9.91E-06	3.60E-04	1.59E-04	7.04E-06	8.86E-07	2.58E-05	1.28E-05	1.40E-08	1.89E-06	1.8	2.77E-04	7.29E-06
S25	60	8	21	5	4.77E-03	3.65E-03	8.39E-06	3.04E-04	1.34E-04	5.96E-06	7.50E-07	2.18E-05	1.08E-05	1.19E-08	1.60E-06	1.5	2.35E-04	6.17E-06
S25	60	8	22	5	4.05E-03	3.10E-03	7.12E-06	2.58E-04	1.14E-04	5.06E-06	6.36E-07	1.85E-05	9.19E-06	1.01E-08	1.36E-06	1.3	1.99E-04	5.23E-06
S25	60	8	23	5	3.32E-03	2.55E-03	5.85E-06	2.12E-04	9.37E-05	4.15E-06	5.23E-07	1.52E-05	7.55E-06	8.27E-09	1.11E-06	1.1	1.63E-04	4.30E-06
S25	60	8	24	5	2.46E-03	1.88E-03	4.32E-06	1.57E-04	6.92E-05	3.07E-06	3.86E-07	1.12E-05	5.58E-06	6.12E-09	8.24E-07	0.8	1.21E-04	3.18E-06
S26	60	8	1	5	5.46E-03	4.18E-03	9.61E-06	3.49E-04	1.54E-04	6.82E-06	8.59E-07	2.50E-05	1.24E-05	1.36E-08	1.83E-06	1.8	2.69E-04	7.07E-06
S26	60	8	2	5	3.64E-03	2.79E-03	6.40E-06	2.32E-04	1.03E-04	4.55E-06	5.73E-07	1.66E-05	8.27E-06	9.06E-09	1.22E-06	1.2	1.79E-04	4.71E-06
S26	60	8	3	5	3.19E-03	2.44E-03	5.60E-06	2.03E-04	8.98E-05	3.98E-06	5.01E-07	1.46E-05	7.23E-06	7.93E-09	1.07E-06	1.0	1.57E-04	4.12E-06
S26	60	8	4	5	2.28E-03	1.74E-03	4.00E-06	1.45E-04	6.41E-05	2.84E-06	3.58E-07	1.04E-05	5.17E-06	5.67E-09	7.63E-07	0.7	1.12E-04	2.94E-06
S26	60	8	5	5	3.19E-03	2.44E-03	5.60E-06	2.03E-04	8.98E-05	3.98E-06	5.01E-07	1.46E-05	7.23E-06	7.93E-09	1.07E-06	1.0	1.57E-04	4.12E-06
S26	60	8	6	5	7.74E-03	5.93E-03	1.36E-05	4.94E-04	2.18E-04	9.67E-06	1.22E-06	3.54E-05	1.76E-05	1.93E-08	2.59E-06	2.5	3.81E-04	1.00E-05
S26	60	8	7	5	2.32E-02	1.78E-02	4.08E-05	1.48E-03	6.54E-04	2.90E-05	3.65E-06	1.06E-04	5.27E-05	5.78E-08	7.78E-06	7.5	1.14E-03	3.00E-05
S26	60	8	8	5	3.55E-02	2.72E-02	6.24E-05	2.27E-03	1.00E-03	4.44E-05	5.58E-06	1.62E-04	8.06E-05	8.84E-08	1.19E-05	11.5	1.75E-03	4.59E-05
S26	60	8	9	5	2.87E-02	2.20E-02	5.04E-05	1.83E-03	8.08E-04	3.58E-05	4.51E-06	1.31E-04	6.51E-05	7.14E-08	9.62E-06	9.3	1.41E-03	3.71E-05
S26	60	8	10	5	2.37E-02	1.81E-02	4.16E-05	1.51E-03	6.67E-04	2.96E-05	3.72E-06	1.08E-04	5.37E-05	5.89E-08	7.94E-06	7.6	1.16E-03	3.06E-05
S26	60	8	11	5	2.14E-02	1.64E-02	3.76E-05	1.37E-03	6.03E-04	2.68E-05	3.36E-06	9.78E-05	4.86E-05	5.33E-08	7.17E-06	6.9	1.05E-03	2.77E-05
S26	60	8	12	5	2.41E-02	1.85E-02	4.24E-05	1.54E-03	6.80E-04	3.02E-05	3.79E-06	1.10E-04	5.48E-05	6.01E-08	8.09E-06	7.8	1.19E-03	3.12E-05
S26	60	8	13	5	2.55E-02	1.95E-02	4.48E-05	1.63E-03	7.18E-04	3.19E-05	4.01E-06	1.17E-04	5.79E-05	6.35E-08	8.55E-06	8.2	1.25E-03	3.30E-05
S26	60	8	14	5	2.59E-02	1.99E-02	4.56E-05	1.66E-03	7.31E-04	3.25E-05	4.08E-06	1.19E-04	5.89E-05	6.46E-08	8.70E-06	8.4	1.28E-03	3.36E-05
S26	60	8	15	5	2.69E-02	2.06E-02	4.72E-05	1.71E-03	7.57E-04	3.37E-05	4.22E-06	1.23E-04	6.10E-05	6.69E-08	9.01E-06	8.7	1.32E-03	3.47E-05
S26	60	8	16	5	2.91E-02	2.23E-02	5.12E-05	1.86E-03	8.21E-04	3.65E-05	4.58E-06	1.33E-04	6.61E-05	7.25E-08	9.77E-06	9.4	1.43E-03	3.77E-05
S26	60	8	17	5	3.60E-02	2.75E-02	6.32E-05	2.29E-03	1.01E-03	4.50E-05	5.66E-06	1.64E-04	8.16E-05	8.95E-08	1.21E-05	11.6	1.77E-03	4.65E-05
S26	60	8	18	5	3.87E-02	2.96E-02	6.80E-05	2.47E-03	1.09E-03	4.85E-05	6.08E-06	1.77E-04	8.78E-05	9.63E-08	1.30E-05	12.5	1.90E-03	5.00E-05
S26	60	8	19	5	2.69E-02	2.06E-02	4.72E-05	1.71E-03	7.57E-04	3.36E-05	4.22E-06	1.23E-04	6.10E-05	6.69E-08	9.01E-06	8.7	1.32E-03	3.47E-05
S26	60	8	20	5	1.78E-02	1.36E-02	3.12E-05	1.13E-03	5.00E-04	2.22E-05	2.79E-06	8.12E-05	4.03E-05	4.42E-08	5.95E-06	5.7	8.73E-04	2.30E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	21	5	1.50E-02	1.15E-02	2.64E-05	9.59E-04	4.23E-04	1.88E-05	2.36E-06	6.87E-05	3.41E-05	3.74E-08	5.04E-06	4.8	7.39E-04	1.94E-05
S26	60	8	22	5	1.27E-02	9.76E-03	2.24E-05	8.13E-04	3.59E-04	1.59E-05	2.00E-06	5.83E-05	2.89E-05	3.17E-08	4.27E-06	4.1	6.27E-04	1.65E-05
S26	60	8	23	5	1.05E-02	8.02E-03	1.84E-05	6.68E-04	2.95E-04	1.31E-05	1.65E-06	4.79E-05	2.38E-05	2.61E-08	3.51E-06	3.4	5.15E-04	1.35E-05
S26	60	8	24	5	7.74E-03	5.93E-03	1.36E-05	4.94E-04	2.18E-04	9.67E-06	1.22E-06	3.54E-05	1.76E-05	1.93E-08	2.59E-06	2.5	3.81E-04	1.00E-05
S27	50	7	1	5	3.38E-03	2.71E-03	5.90E-06	2.39E-04	1.03E-04	4.50E-06	5.31E-07	1.52E-05	7.62E-06	9.41E-09	1.11E-06	1.1	1.65E-04	4.50E-06
S27	50	7	2	5	2.25E-03	1.81E-03	3.93E-06	1.59E-04	6.85E-05	3.00E-06	3.54E-07	1.01E-05	5.08E-06	6.28E-09	7.42E-07	0.7	1.10E-04	3.00E-06
S27	50	7	3	5	1.97E-03	1.58E-03	3.44E-06	1.39E-04	6.00E-05	2.62E-06	3.10E-07	8.85E-06	4.45E-06	5.49E-09	6.49E-07	0.6	9.65E-05	2.63E-06
S27	50	7	4	5	1.41E-03	1.13E-03	2.46E-06	9.95E-05	4.28E-05	1.87E-06	2.21E-07	6.32E-06	3.18E-06	3.92E-09	4.63E-07	0.5	6.89E-05	1.88E-06
S27	50	7	5	5	1.97E-03	1.58E-03	3.44E-06	1.39E-04	6.00E-05	2.62E-06	3.10E-07	8.85E-06	4.45E-06	5.49E-09	6.49E-07	0.6	9.65E-05	2.63E-06
S27	50	7	6	5	4.78E-03	3.84E-03	8.36E-06	3.38E-04	1.46E-04	6.37E-06	7.52E-07	2.15E-05	1.08E-05	1.33E-08	1.58E-06	1.6	2.34E-04	6.38E-06
S27	50	7	7	5	1.43E-02	1.15E-02	2.51E-05	1.01E-03	4.37E-04	1.91E-05	2.26E-06	6.44E-05	3.24E-05	4.00E-08	4.73E-06	4.7	7.03E-04	1.91E-05
S27	50	7	8	5	2.19E-02	1.76E-02	3.83E-05	1.55E-03	6.68E-04	2.92E-05	3.45E-06	9.86E-05	4.96E-05	6.12E-08	7.23E-06	7.1	1.08E-03	2.93E-05
S27	50	7	9	5	1.77E-02	1.42E-02	3.10E-05	1.25E-03	5.40E-04	2.36E-05	2.79E-06	7.96E-05	4.00E-05	4.94E-08	5.84E-06	5.8	8.69E-04	2.36E-05
S27	50	7	10	5	1.46E-02	1.18E-02	2.56E-05	1.03E-03	4.45E-04	1.95E-05	2.30E-06	6.57E-05	3.30E-05	4.08E-08	4.82E-06	4.8	7.17E-04	1.95E-05
S27	50	7	11	5	1.32E-02	1.06E-02	2.31E-05	9.35E-04	4.03E-04	1.76E-05	2.08E-06	5.94E-05	2.99E-05	3.69E-08	4.36E-06	4.3	6.48E-04	1.76E-05
S27	50	7	12	5	1.49E-02	1.20E-02	2.61E-05	1.05E-03	4.54E-04	1.99E-05	2.34E-06	6.70E-05	3.37E-05	4.16E-08	4.91E-06	4.9	7.31E-04	1.99E-05
S27	50	7	13	5	1.58E-02	1.27E-02	2.75E-05	1.11E-03	4.80E-04	2.10E-05	2.48E-06	7.08E-05	3.56E-05	4.39E-08	5.19E-06	5.1	7.72E-04	2.10E-05
S27	50	7	14	5	1.60E-02	1.29E-02	2.80E-05	1.13E-03	4.88E-04	2.14E-05	2.52E-06	7.20E-05	3.62E-05	4.47E-08	5.28E-06	5.2	7.86E-04	2.14E-05
S27	50	7	15	5	1.66E-02	1.33E-02	2.90E-05	1.17E-03	5.05E-04	2.22E-05	2.61E-06	7.46E-05	3.75E-05	4.63E-08	5.47E-06	5.4	8.13E-04	2.21E-05
S27	50	7	16	5	1.80E-02	1.45E-02	3.15E-05	1.27E-03	5.48E-04	2.41E-05	2.83E-06	8.09E-05	4.07E-05	5.02E-08	5.93E-06	5.9	8.82E-04	2.40E-05
S27	50	7	17	5	2.22E-02	1.79E-02	3.88E-05	1.57E-03	6.77E-04	2.97E-05	3.49E-06	9.98E-05	5.02E-05	6.20E-08	7.32E-06	7.2	1.09E-03	2.97E-05
S27	50	7	18	5	2.39E-02	1.92E-02	4.18E-05	1.69E-03	7.28E-04	3.19E-05	3.76E-06	1.07E-04	5.40E-05	6.67E-08	7.88E-06	7.8	1.17E-03	3.19E-05
S27	50	7	19	5	1.66E-02	1.33E-02	2.90E-05	1.17E-03	5.05E-04	2.21E-05	2.61E-06	7.46E-05	3.75E-05	4.63E-08	5.47E-06	5.4	8.13E-04	2.21E-05
S27	50	7	20	5	1.10E-02	8.82E-03	1.92E-05	7.76E-04	3.34E-04	1.46E-05	1.72E-06	4.93E-05	2.48E-05	3.06E-08	3.61E-06	3.6	5.38E-04	1.46E-05
S27	50	7	21	5	9.28E-03	7.46E-03	1.62E-05	6.57E-04	2.83E-04	1.24E-05	1.46E-06	4.17E-05	2.10E-05	2.59E-08	3.06E-06	3.0	4.55E-04	1.24E-05
S27	50	7	22	5	7.88E-03	6.33E-03	1.38E-05	5.57E-04	2.40E-04	1.05E-05	1.24E-06	3.54E-05	1.78E-05	2.20E-08	2.60E-06	2.6	3.86E-04	1.05E-05
S27	50	7	23	5	6.47E-03	5.20E-03	1.13E-05	4.58E-04	1.97E-04	8.62E-06	1.02E-06	2.91E-05	1.46E-05	1.80E-08	2.13E-06	2.1	3.17E-04	8.63E-06
S27	50	7	24	5	4.78E-03	3.84E-03	8.36E-06	3.38E-04	1.46E-04	6.37E-06	7.52E-07	2.15E-05	1.08E-05	1.33E-08	1.58E-06	1.6	2.34E-04	6.38E-06
S28	50	7	1	5	2.07E-03	1.67E-03	3.62E-06	1.47E-04	6.31E-05	2.76E-06	3.26E-07	9.31E-06	4.68E-06	5.78E-09	6.83E-07	0.7	1.02E-04	2.77E-06
S28	50	7	2	5	1.38E-03	1.11E-03	2.42E-06	9.78E-05	4.21E-05	1.84E-06	2.17E-07	6.21E-06	3.12E-06	3.85E-09	4.55E-07	0.4	6.77E-05	1.84E-06
S28	50	7	3	5	1.21E-03	9.72E-04	2.11E-06	8.56E-05	3.68E-05	1.61E-06	1.90E-07	5.43E-06	2.73E-06	3.37E-09	3.99E-07	0.4	5.93E-05	1.61E-06
S28	50	7	4	5	8.64E-04	6.94E-04	1.51E-06	6.11E-05	2.63E-05	1.15E-06	1.36E-07	3.88E-06	1.95E-06	2.41E-09	2.85E-07	0.3	4.23E-05	1.15E-06
S28	50	7	5	5	1.21E-03	9.72E-04	2.11E-06	8.56E-05	3.68E-05	1.61E-06	1.90E-07	5.43E-06	2.73E-06	3.37E-09	3.99E-07	0.4	5.93E-05	1.61E-06
S28	50	7	6	5	2.94E-03	2.36E-03	5.13E-06	2.08E-04	8.94E-05	3.91E-06	4.62E-07	1.32E-05	6.63E-06	8.19E-09	9.68E-07	1.0	1.44E-04	3.92E-06
S28	50	7	7	5	8.81E-03	7.08E-03	1.54E-05	6.23E-04	2.68E-04	1.17E-05	1.39E-06	3.96E-05	1.99E-05	2.46E-08	2.90E-06	2.9	4.32E-04	1.18E-05
S28	50	7	8	5	1.35E-02	1.08E-02	2.36E-05	9.53E-04	4.10E-04	1.80E-05	2.12E-06	6.05E-05	3.04E-05	3.76E-08	4.44E-06	4.4	6.61E-04	1.80E-05
S28	50	7	9	5	1.09E-02	8.75E-03	1.90E-05	7.70E-04	3.31E-04	1.45E-05	1.71E-06	4.89E-05	2.46E-05	3.04E-08	3.59E-06	3.5	5.33E-04	1.45E-05
S28	50	7	10	5	8.98E-03	7.22E-03	1.57E-05	6.36E-04	2.74E-04	1.20E-05	1.41E-06	4.04E-05	2.03E-05	2.51E-08	2.96E-06	2.9	4.40E-04	1.20E-05
S28	50	7	11	5	8.12E-03	6.53E-03	1.42E-05	5.74E-04	2.47E-04	1.08E-05	1.28E-06	3.65E-05	1.83E-05	2.26E-08	2.68E-06	2.6	3.98E-04	1.08E-05
S28	50	7	12	5	9.16E-03	7.36E-03	1.60E-05	6.48E-04	2.79E-04	1.22E-05	1.44E-06	4.11E-05	2.07E-05	2.55E-08	3.02E-06	3.0	4.49E-04	1.22E-05
S28	50	7	13	5	9.68E-03	7.78E-03	1.69E-05	6.84E-04	2.95E-04	1.29E-05	1.52E-06	4.35E-05	2.19E-05	2.70E-08	3.19E-06	3.1	4.74E-04	1.29E-05
S28	50	7	14	5	9.85E-03	7.92E-03	1.72E-05	6.97E-04	3.00E-04	1.32E-05	1.55E-06	4.42E-05	2.22E-05	2.75E-08	3.25E-06	3.2	4.83E-04	1.31E-05
S28	50	7	15	5	1.02E-02	8.19E-03	1.78E-05	7.21E-04	3.10E-04	1.36E-05	1.60E-06	4.58E-05	2.30E-05	2.84E-08	3.36E-06	3.3	5.00E-04	1.36E-05
S28	50	7	16	5	1.11E-02	8.89E-03	1.93E-05	7.82E-04	3.37E-04	1.48E-05	1.74E-06	4.97E-05	2.50E-05	3.08E-08	3.64E-06	3.6	5.42E-04	1.48E-05
S28	50	7	17	5	1.36E-02	1.10E-02	2.39E-05	9.66E-04	4.16E-04	1.82E-05	2.15E-06	6.13E-05	3.08E-05	3.81E-08	4.50E-06	4.4	6.69E-04	1.82E-05
S28	50	7	18	5	1.47E-02	1.18E-02	2.57E-05	1.04E-03	4.47E-04	1.96E-05	2.31E-06	6.60E-05	3.32E-05	4.10E-08	4.84E-06	4.8	7.20E-04	1.96E-05
S28	50	7	19	5	1.02E-02	8.19E-03	1.78E-05	7.21E-04	3.10E-04	1.36E-05	1.60E-06	4.58E-05	2.30E-05	2.84E-08	3.36E-06	3.3	5.00E-04	1.36E-05
S28	50	7	20	5	6.74E-03	5.42E-03	1.18E-05	4.77E-04	2.05E-04	8.98E-06	1.06E-06	3.03E-05	1.52E-05	1.88E-08	2.22E-06	2.2	3.30E-04	8.99E-06
S28	50	7	21	5	5.70E-03	4.58E-03	9.97E-06	4.03E-04	1.74E-04	7.60E-06	8.96E-07	2.56E-05	1.29E-05	1.59E-08	1.88E-06	1.9	2.79E-04	7.61E-06
S28	50	7	22	5	4.84E-03	3.89E-03	8.46E-06	3.42E-04	1.47E-04	6.45E-06	7.61E-07	2.17E-05	1.09E-05	1.35E-08	1.59E-06	1.6	2.37E-04	6.46E-06
S28	50	7	23	5	3.97E-03	3.19E-03	6.95E-06	2.81E-04	1.21E-04	5.29E-06	6.25E-07	1.79E-05	8.98E-06	1.11E-08	1.31E-06	1.3	1.95E-04	5.30E-06
S28	50	7	24	5	2.94E-03	2.36E-03	5.13E-06	2.08E-04	8.94E-05	3.91E-06	4.62E-07	1.32E-05	6.63E-06	8.19E-09	9.68E-07	1.0	1.44E-04	3.92E-06
S29	60	8	1	5	3.03E-03	2.32E-03	5.32E-06	1.93E-04	8.53E-05	3.78E-06	4.76E-07	1.38E-05	6.87E-06	7.53E-09	1.01E-06	1.0	1.49E-04	3.91E-06
S29	60	8	2	5	2.02E-03	1.54E-03	3.55E-06	1.29E-04	5.68E-05	2.52E-06	3.17E-07	9.22E-06	4.58E-06	5.02E-09	6.76E-07	0.7	9.92E-05	2.61E-06
S29	60	8	3	5	1.76E-03	1.35E-03	3.10E-06	1.13E-04	4.97E-05	2.20E-06	2.78E-07	8.07E-06	4.01E-06	4.39E-09	5.92E-07	0.6	8.68E-05	2.28E-06
S29	60	8	4	5	1.26E-03	9.65E-04	2.22E-06	8.04E-05	3.55E-05	1.57E-06	1.98E-07	5.76E-06	2.86E-06	3.14E-09	4.23E-07	0.4	6.20E-05	1.63E-06
S29	60	8	5	5	1.76E-03	1.35E-03	3.10E-06	1.13E-04	4.97E-05	2.20E-06	2.78E-07	8.07E-06	4.01E-06	4.39E-09	5.92E-07	0.6	8.68E-05	2.28E-06
S29	60	8	6	5	4.29E-03	3.28E-03	7.54E-06	2.73E-04	1.21E-04	5.35E-06	6.74E-07	1.96E-05	9.73E-06	1.07E-08	1.44E-06	1.4	2.11E-04	5.54E-06
S29	60	8	7	5	1.29E-02	9.85E-03	2.26E-05	8.20E-04	3.62E-04	1.61E-05	2.02E-06	5.88E-05	2.92E-05	3.20E-08	4.31E-06	4.2	6.32E-04	1.66E-05
S29	60	8	8	5	1.97E-02	1.51E-02	3.46E-05	1.25E-03	5.54E-04	2.46E-05	3.09E-06	8.99E-05	4.46E-05	4.89E-08	6.59E-06	6.3	9.67E-04	2.54E-05
S29	60	8	9	5	1.59E-02	1.22E-02	2.79E-05	1.01E-03	4.48E-04	1.98E-05	2.50E-06	7.26E-05	3.61E-05	3.95E-08	5.33E-06	5.1	7.81E-04	2.05E-05
S29	60	8	10	5	1.31E-02	1.00E-02	2.31E-05	8.37E-04	3.69E-04	1.64E-05	2.06E-06	5.99E-05	2.98E-05	3.26E-08	4.40E-06	4.2	6.45E-04	1.70E-05
S29	60	8	11	5	1.18E-02	9.07E-03	2.08E-05	7.56E-04	3.34E-04	1.48E-05	1.86E-06	5.42E-05	2.69E-05	2.95E-08	3.97E-06	3.8	5.83E-04	1.53E-05
S29	60	8	12	5	1.34E-02	1.02E-02	2.35E-05	8.53E-04	3.77E-04	1.67E-05	2.10E-06	6.11E-05	3.03E-05	3.33E-08	4.48E-06	4.3	6.57E-04	1.73E-05
S29	60	8	13	5	1.41E-02	1.08E-02	2.48E-05	9.01E-04	3.98E-04	1.77E-05	2.22E-06	6.45E-05	3.20E-05	3.51E-08	4.73E-06	4.6	6.94E-04	1.83E-05
S29	60	8	14	5	1.44E-02	1.10E-02	2.53E-05	9.17E-04	4.05E-04	1.80E-05	2.26E-06	6.57E-05	3.26E-05	3.58E-08	4.82E-06	4.6	7.07E-04	1.86E-05
S29	60	8	15	5	1.49E-02	1.14E-02	2.62E-05	9.49E-04	4.19E-04	1.87E-05	2.34E-06	6.80E-05	3.38E-05	3.70E-08	4.99E-06	4.8	7.31E-04	1.92E-05
S29	60	8	16	5	1.61E-02	1.24E-02	2.84E-05	1.03E-03	4.55E-04	2.02E-05	2.54E-06	7.38E-05	3.66E-05	4.02E-08	5.41E-06	5.2	7.93E-04	2.09E-05
S29	60	8	17	5	1.99E-02	1.53E-02	3.50E-05	1.27E-03	5.61E-04	2.49E-05	3.13E-06	9.10E-05	4.52E-05	4.96E-08	6.68E-06	6.4	9.79E-04	2.58E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	18	5	2.14E-02	1.64E-02	3.77E-05	1.37E-03	6.04E-04	2.68E-05	3.37E-06	9.80E-05	4.86E-05	5.33E-08	7.19E-06	6.9	1.05E-03	2.77E-05
S29	60	8	19	5	1.49E-02	1.14E-02	2.62E-05	9.49E-04	4.19E-04	1.86E-05	2.34E-06	6.80E-05	3.38E-05	3.70E-08	4.99E-06	4.8	7.31E-04	1.92E-05
S29	60	8	20	5	9.83E-03	7.53E-03	1.73E-05	6.27E-04	2.77E-04	1.23E-05	1.55E-06	4.49E-05	2.23E-05	2.45E-08	3.30E-06	3.2	4.83E-04	1.27E-05
S29	60	8	21	5	8.32E-03	6.37E-03	1.46E-05	5.31E-04	2.34E-04	1.04E-05	1.31E-06	3.80E-05	1.89E-05	2.07E-08	2.79E-06	2.7	4.09E-04	1.08E-05
S29	60	8	22	5	7.06E-03	5.41E-03	1.24E-05	4.50E-04	1.99E-04	8.82E-06	1.11E-06	3.23E-05	1.60E-05	1.76E-08	2.37E-06	2.3	3.47E-04	9.13E-06
S29	60	8	23	5	5.80E-03	4.44E-03	1.02E-05	3.70E-04	1.63E-04	7.25E-06	9.12E-07	2.65E-05	1.32E-05	1.44E-08	1.94E-06	1.9	2.85E-04	7.50E-06
S29	60	8	24	5	4.29E-03	3.28E-03	7.54E-06	2.73E-04	1.21E-04	5.35E-06	6.74E-07	1.96E-05	9.73E-06	1.07E-08	1.44E-06	1.4	2.11E-04	5.54E-06
S30	60	8	1	5	2.58E-03	1.98E-03	4.54E-06	1.65E-04	7.27E-05	3.22E-06	4.06E-07	1.18E-05	5.86E-06	6.42E-09	8.65E-07	0.8	1.27E-04	3.34E-06
S30	60	8	2	5	1.72E-03	1.32E-03	3.02E-06	1.10E-04	4.85E-05	2.15E-06	2.70E-07	7.86E-06	3.90E-06	4.28E-09	5.77E-07	0.6	8.46E-05	2.22E-06
S30	60	8	3	5	1.50E-03	1.15E-03	2.65E-06	9.60E-05	4.24E-05	1.88E-06	2.37E-07	6.88E-06	3.42E-06	3.75E-09	5.05E-07	0.5	7.40E-05	1.95E-06
S30	60	8	4	5	1.07E-03	8.23E-04	1.89E-06	6.86E-05	3.03E-05	1.34E-06	1.69E-07	4.91E-06	2.44E-06	2.68E-09	3.60E-07	0.3	5.28E-05	1.39E-06
S30	60	8	5	5	1.50E-03	1.15E-03	2.65E-06	9.60E-05	4.24E-05	1.88E-06	2.37E-07	6.88E-06	3.42E-06	3.75E-09	5.05E-07	0.5	7.40E-05	1.95E-06
S30	60	8	6	5	3.65E-03	2.80E-03	6.43E-06	2.33E-04	1.03E-04	4.56E-06	5.75E-07	1.67E-05	8.30E-06	9.10E-09	1.23E-06	1.2	1.80E-04	4.73E-06
S30	60	8	7	5	1.10E-02	8.40E-03	1.93E-05	7.00E-04	3.09E-04	1.37E-05	1.72E-06	5.01E-05	2.49E-05	2.73E-08	3.68E-06	3.5	5.39E-04	1.42E-05
S30	60	8	8	5	1.68E-02	1.28E-02	2.95E-05	1.07E-03	4.73E-04	2.10E-05	2.64E-06	7.67E-05	3.81E-05	4.17E-08	5.62E-06	5.4	8.24E-04	2.17E-05
S30	60	8	9	5	1.35E-02	1.04E-02	2.38E-05	8.64E-04	3.82E-04	1.69E-05	2.13E-06	6.19E-05	3.07E-05	3.37E-08	4.54E-06	4.4	6.66E-04	1.75E-05
S30	60	8	10	5	1.12E-02	8.56E-03	1.97E-05	7.13E-04	3.15E-04	1.40E-05	1.76E-06	5.11E-05	2.54E-05	2.78E-08	3.75E-06	3.6	5.50E-04	1.45E-05
S30	60	8	11	5	1.01E-02	7.74E-03	1.78E-05	6.45E-04	2.85E-04	1.26E-05	1.59E-06	4.62E-05	2.29E-05	2.51E-08	3.39E-06	3.3	4.97E-04	1.31E-05
S30	60	8	12	5	1.14E-02	8.72E-03	2.00E-05	7.27E-04	3.21E-04	1.43E-05	1.79E-06	5.21E-05	2.59E-05	2.84E-08	3.82E-06	3.7	5.60E-04	1.47E-05
S30	60	8	13	5	1.20E-02	9.22E-03	2.12E-05	7.68E-04	3.39E-04	1.51E-05	1.89E-06	5.50E-05	2.73E-05	3.00E-08	4.04E-06	3.9	5.92E-04	1.56E-05
S30	60	8	14	5	1.23E-02	9.38E-03	2.15E-05	7.82E-04	3.45E-04	1.54E-05	1.93E-06	5.60E-05	2.78E-05	3.05E-08	4.11E-06	4.0	6.02E-04	1.58E-05
S30	60	8	15	5	1.27E-02	9.71E-03	2.23E-05	8.09E-04	3.57E-04	1.59E-05	1.99E-06	5.80E-05	2.88E-05	3.16E-08	4.25E-06	4.1	6.24E-04	1.64E-05
S30	60	8	16	5	1.38E-02	1.05E-02	2.42E-05	8.78E-04	3.88E-04	1.72E-05	2.16E-06	6.29E-05	3.12E-05	3.42E-08	4.61E-06	4.4	6.76E-04	1.78E-05
S30	60	8	17	5	1.70E-02	1.30E-02	2.99E-05	1.08E-03	4.79E-04	2.13E-05	2.67E-06	7.76E-05	3.86E-05	4.23E-08	5.69E-06	5.5	8.35E-04	2.20E-05
S30	60	8	18	5	1.83E-02	1.40E-02	3.21E-05	1.17E-03	5.15E-04	2.29E-05	2.87E-06	8.35E-05	4.15E-05	4.55E-08	6.13E-06	5.9	8.98E-04	2.36E-05
S30	60	8	19	5	1.27E-02	9.71E-03	2.23E-05	8.09E-04	3.57E-04	1.59E-05	1.99E-06	5.80E-05	2.88E-05	3.16E-08	4.25E-06	4.1	6.24E-04	1.64E-05
S30	60	8	20	5	8.38E-03	6.42E-03	1.47E-05	5.35E-04	2.36E-04	1.05E-05	1.32E-06	3.83E-05	1.90E-05	2.09E-08	2.81E-06	2.7	4.12E-04	1.08E-05
S30	60	8	21	5	7.09E-03	5.43E-03	1.25E-05	4.53E-04	2.00E-04	8.87E-06	1.12E-06	3.24E-05	1.61E-05	1.77E-08	2.38E-06	2.3	3.49E-04	9.18E-06
S30	60	8	22	5	6.02E-03	4.61E-03	1.06E-05	3.84E-04	1.70E-04	7.52E-06	9.46E-07	2.75E-05	1.37E-05	1.50E-08	2.02E-06	1.9	2.96E-04	7.79E-06
S30	60	8	23	5	4.94E-03	3.79E-03	8.70E-06	3.15E-04	1.39E-04	6.18E-06	7.77E-07	2.26E-05	1.12E-05	1.23E-08	1.66E-06	1.6	2.43E-04	6.40E-06
S30	60	8	24	5	3.65E-03	2.80E-03	6.43E-06	2.33E-04	1.03E-04	4.57E-06	5.75E-07	1.67E-05	8.30E-06	9.10E-09	1.23E-06	1.2	1.80E-04	4.73E-06
S31	60	8	1	5	5.52E-03	4.23E-03	9.71E-06	3.52E-04	1.56E-04	6.90E-06	8.69E-07	2.53E-05	1.25E-05	1.37E-08	1.85E-06	1.8	2.72E-04	7.14E-06
S31	60	8	2	5	3.68E-03	2.82E-03	6.48E-06	2.35E-04	1.04E-04	4.60E-06	5.79E-07	1.68E-05	8.36E-06	9.17E-09	1.23E-06	1.2	1.81E-04	4.76E-06
S31	60	8	3	5	3.22E-03	2.47E-03	5.67E-06	2.06E-04	9.08E-05	4.03E-06	5.07E-07	1.47E-05	7.31E-06	8.02E-09	1.08E-06	1.0	1.58E-04	4.17E-06
S31	60	8	4	5	2.30E-03	1.76E-03	4.05E-06	1.47E-04	6.49E-05	2.88E-06	3.62E-07	1.05E-05	5.22E-06	5.73E-09	7.72E-07	0.7	1.13E-04	2.98E-06
S31	60	8	5	5	3.22E-03	2.47E-03	5.67E-06	2.06E-04	9.08E-05	4.02E-06	5.07E-07	1.47E-05	7.31E-06	8.02E-09	1.08E-06	1.0	1.58E-04	4.17E-06
S31	60	8	6	5	7.83E-03	5.99E-03	1.38E-05	4.99E-04	2.21E-04	9.77E-06	1.23E-06	3.58E-05	1.78E-05	1.95E-08	2.62E-06	2.5	3.85E-04	1.01E-05
S31	60	8	7	5	2.35E-02	1.80E-02	4.13E-05	1.50E-03	6.62E-04	2.93E-05	3.69E-06	1.07E-04	5.33E-05	5.84E-08	7.87E-06	7.6	1.15E-03	3.04E-05
S31	60	8	8	5	3.59E-02	2.75E-02	6.31E-05	2.29E-03	1.01E-03	4.49E-05	5.65E-06	1.64E-04	8.15E-05	8.94E-08	1.20E-05	11.6	1.77E-03	4.64E-05
S31	60	8	9	5	2.90E-02	2.22E-02	5.10E-05	1.85E-03	8.17E-04	3.62E-05	4.56E-06	1.33E-04	6.58E-05	7.22E-08	9.72E-06	9.4	1.43E-03	3.75E-05
S31	60	8	10	5	2.39E-02	1.83E-02	4.21E-05	1.53E-03	6.75E-04	2.99E-05	3.76E-06	1.09E-04	5.43E-05	5.96E-08	8.03E-06	7.7	1.18E-03	3.10E-05
S31	60	8	11	5	2.16E-02	1.66E-02	3.80E-05	1.38E-03	6.10E-04	2.71E-05	3.40E-06	9.89E-05	4.91E-05	5.39E-08	7.25E-06	7.0	1.06E-03	2.80E-05
S31	60	8	12	5	2.44E-02	1.87E-02	4.29E-05	1.56E-03	6.88E-04	3.06E-05	3.84E-06	1.12E-04	5.54E-05	6.07E-08	8.18E-06	7.9	1.20E-03	3.16E-05
S31	60	8	13	5	2.58E-02	1.97E-02	4.53E-05	1.64E-03	7.26E-04	3.23E-05	4.05E-06	1.18E-04	5.85E-05	6.42E-08	8.64E-06	8.3	1.27E-03	3.33E-05
S31	60	8	14	5	2.62E-02	2.01E-02	4.61E-05	1.67E-03	7.39E-04	3.29E-05	4.13E-06	1.20E-04	5.96E-05	6.53E-08	8.80E-06	8.5	1.29E-03	3.39E-05
S31	60	8	15	5	2.72E-02	2.08E-02	4.78E-05	1.73E-03	7.65E-04	3.41E-05	4.27E-06	1.24E-04	6.17E-05	6.76E-08	9.11E-06	8.8	1.34E-03	3.51E-05
S31	60	8	16	5	2.95E-02	2.26E-02	5.18E-05	1.88E-03	8.30E-04	3.69E-05	4.63E-06	1.35E-04	6.69E-05	7.33E-08	9.88E-06	9.5	1.45E-03	3.81E-05
S31	60	8	17	5	3.64E-02	2.78E-02	6.40E-05	2.32E-03	1.02E-03	4.55E-05	5.72E-06	1.66E-04	8.26E-05	9.05E-08	1.22E-05	11.7	1.79E-03	4.70E-05
S31	60	8	18	5	3.91E-02	3.00E-02	6.88E-05	2.50E-03	1.10E-03	4.90E-05	6.15E-06	1.79E-04	8.88E-05	9.74E-08	1.31E-05	12.6	1.92E-03	5.06E-05
S31	60	8	19	5	2.72E-02	2.08E-02	4.78E-05	1.73E-03	7.65E-04	3.40E-05	4.27E-06	1.24E-04	6.17E-05	6.76E-08	9.11E-06	8.8	1.34E-03	3.51E-05
S31	60	8	20	5	1.80E-02	1.37E-02	3.16E-05	1.15E-03	5.06E-04	2.24E-05	2.82E-06	8.21E-05	4.08E-05	4.47E-08	6.02E-06	5.8	8.83E-04	2.32E-05
S31	60	8	21	5	1.52E-02	1.16E-02	2.67E-05	9.69E-04	4.28E-04	1.90E-05	2.39E-06	6.94E-05	3.45E-05	3.78E-08	5.09E-06	4.9	7.47E-04	1.96E-05
S31	60	8	22	5	1.29E-02	9.87E-03	2.27E-05	8.22E-04	3.63E-04	1.61E-05	2.03E-06	5.89E-05	2.93E-05	3.21E-08	4.32E-06	4.2	6.34E-04	1.67E-05
S31	60	8	23	5	1.06E-02	8.11E-03	1.86E-05	6.76E-04	2.98E-04	1.32E-05	1.66E-06	4.84E-05	2.40E-05	2.64E-08	3.55E-06	3.4	5.21E-04	1.37E-05
S31	60	8	24	5	7.83E-03	5.99E-03	1.38E-05	4.99E-04	2.21E-04	9.78E-06	1.23E-06	3.58E-05	1.78E-05	1.95E-08	2.62E-06	2.5	3.85E-04	1.01E-05
S32	60	8	1	5	2.38E-03	1.82E-03	4.18E-06	1.52E-04	6.70E-05	2.97E-06	3.74E-07	1.09E-05	5.40E-06	5.92E-09	7.97E-07	0.8	1.17E-04	3.08E-06
S32	60	8	2	5	1.59E-03	1.21E-03	2.79E-06	1.01E-04	4.47E-05	1.98E-06	2.49E-07	7.25E-06	3.60E-06	3.95E-09	5.31E-07	0.5	7.79E-05	2.05E-06
S32	60	8	3	5	1.39E-03	1.06E-03	2.44E-06	8.85E-05	3.91E-05	1.73E-06	2.18E-07	6.34E-06	3.15E-06	3.45E-09	4.65E-07	0.4	6.82E-05	1.79E-06
S32	60	8	4	5	9.91E-04	7.59E-04	1.74E-06	6.32E-05	2.79E-05	1.24E-06	1.56E-07	4.53E-06	2.25E-06	2.47E-09	3.32E-07	0.3	4.87E-05	1.28E-06
S32	60	8	5	5	1.39E-03	1.06E-03	2.44E-06	8.85E-05	3.91E-05	1.73E-06	2.18E-07	6.34E-06	3.15E-06	3.45E-09	4.65E-07	0.4	6.82E-05	1.79E-06
S32	60	8	6	5	3.37E-03	2.58E-03	5.92E-06	2.15E-04	9.49E-05	4.21E-06	5.30E-07	1.54E-05	7.65E-06	8.38E-09	1.13E-06	1.1	1.66E-04	4.36E-06
S32	60	8	7	5	1.01E-02	7.74E-03	1.78E-05	6.45E-04	2.85E-04	1.26E-05	1.59E-06	4.62E-05	2.29E-05	2.52E-08	3.39E-06	3.3	4.97E-04	1.31E-05
S32	60	8	8	5	1.55E-02	1.18E-02	2.72E-05	9.86E-04	4.36E-04	1.93E-05	2.43E-06	7.07E-05	3.51E-05	3.85E-08	5.18E-06	5.0	7.60E-04	2.00E-05
S32	60	8	9	5	1.25E-02	9.56E-03	2.20E-05	7.97E-04	3.52E-04	1.56E-05	1.96E-06	5.71E-05	2.83E-05	3.11E-08	4.19E-06	4.0	6.14E-04	1.61E-05
S32	60	8	10	5	1.03E-02	7.89E-03	1.81E-05	6.57E-04	2.90E-04	1.29E-05	1.62E-06	4.71E-05	2.34E-05	2.56E-08	3.45E-06	3.3	5.07E-04	1.33E-05
S32	60	8	11	5	9.31E-03	7.13E-03	1.64E-05	5.94E-04	2.62E-04	1.17E-05	1.46E-06	4.26E-05	2.11E-05	2.32E-08	3.12E-06	3.0	4.58E-04	1.20E-05
S32	60	8	12	5	1.05E-02	8.04E-03	1.85E-05	6.70E-04	2.96E-04	1.32E-05	1.65E-06	4.80E-05	2.38E-05	2.61E-08	3.52E-06	3.4	5.16E-04	1.36E-05
S32	60	8	13	5	1.11E-02	8.50E-03	1.95E-05	7.08E-04	3.13E-04	1.39E-05	1.74E-06	5.07E-05	2.52E-05	2.76E-08	3.72E-06	3.6	5.46E-04	1.44E-05
S32	60	8	14	5	1.13E-02	8.65E-03	1.99E-05	7.21E-04	3.18E-04	1.42E-05	1.78E-06	5.16E-05	2.56E-05	2.81E-08	3.79E-06	3.6	5.55E-04	1.46E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	60	8	15	5	1.17E-02	8.95E-03	2.06E-05	7.46E-04	3.29E-04	1.47E-05	1.84E-06	5.34E-05	2.65E-05	2.91E-08	3.92E-06	3.8	5.75E-04	1.51E-05
S32	60	8	16	5	1.27E-02	9.71E-03	2.23E-05	8.09E-04	3.57E-04	1.59E-05	1.99E-06	5.80E-05	2.88E-05	3.16E-08	4.25E-06	4.1	6.24E-04	1.64E-05
S32	60	8	17	5	1.57E-02	1.20E-02	2.75E-05	9.99E-04	4.41E-04	1.96E-05	2.46E-06	7.16E-05	3.55E-05	3.90E-08	5.25E-06	5.1	7.70E-04	2.02E-05
S32	60	8	18	5	1.68E-02	1.29E-02	2.96E-05	1.07E-03	4.75E-04	2.11E-05	2.65E-06	7.70E-05	3.82E-05	4.19E-08	5.65E-06	5.4	8.28E-04	2.18E-05
S32	60	8	19	5	1.17E-02	8.95E-03	2.06E-05	7.46E-04	3.29E-04	1.46E-05	1.84E-06	5.34E-05	2.65E-05	2.91E-08	3.92E-06	3.8	5.75E-04	1.51E-05
S32	60	8	20	5	7.73E-03	5.92E-03	1.36E-05	4.93E-04	2.18E-04	9.66E-06	1.22E-06	3.53E-05	1.75E-05	1.92E-08	2.59E-06	2.5	3.80E-04	9.99E-06
S32	60	8	21	5	6.54E-03	5.01E-03	1.15E-05	4.17E-04	1.84E-04	8.17E-06	1.03E-06	2.99E-05	1.48E-05	1.63E-08	2.19E-06	2.1	3.21E-04	8.46E-06
S32	60	8	22	5	5.55E-03	4.25E-03	9.76E-06	3.54E-04	1.56E-04	6.93E-06	8.72E-07	2.54E-05	1.26E-05	1.38E-08	1.86E-06	1.8	2.73E-04	7.18E-06
S32	60	8	23	5	4.56E-03	3.49E-03	8.01E-06	2.91E-04	1.28E-04	5.70E-06	7.17E-07	2.08E-05	1.03E-05	1.13E-08	1.53E-06	1.5	2.24E-04	5.89E-06
S32	60	8	24	5	3.37E-03	2.58E-03	5.92E-06	2.15E-04	9.49E-05	4.21E-06	5.30E-07	1.54E-05	7.65E-06	8.38E-09	1.13E-06	1.1	1.66E-04	4.36E-06
S33	60	8	1	5	2.23E-03	1.71E-03	3.93E-06	1.42E-04	6.29E-05	2.79E-06	3.51E-07	1.02E-05	5.07E-06	5.56E-09	7.49E-07	0.7	1.10E-04	2.89E-06
S33	60	8	2	5	1.49E-03	1.14E-03	2.62E-06	9.50E-05	4.20E-05	1.86E-06	2.34E-07	6.81E-06	3.38E-06	3.71E-09	4.99E-07	0.5	7.32E-05	1.93E-06
S33	60	8	3	5	1.30E-03	9.98E-04	2.29E-06	8.31E-05	3.67E-05	1.63E-06	2.05E-07	5.95E-06	2.96E-06	3.24E-09	4.37E-07	0.4	6.40E-05	1.68E-06
S33	60	8	4	5	9.31E-04	7.13E-04	1.64E-06	5.94E-05	2.62E-05	1.16E-06	1.46E-07	4.25E-06	2.11E-06	2.32E-09	3.12E-07	0.3	4.57E-05	1.20E-06
S33	60	8	5	5	1.30E-03	9.98E-04	2.29E-06	8.31E-05	3.67E-05	1.63E-06	2.05E-07	5.95E-06	2.96E-06	3.24E-09	4.37E-07	0.4	6.40E-05	1.68E-06
S33	60	8	6	5	3.16E-03	2.42E-03	5.56E-06	2.02E-04	8.92E-05	3.95E-06	4.97E-07	1.45E-05	7.18E-06	7.87E-09	1.06E-06	1.0	1.56E-04	4.09E-06
S33	60	8	7	5	9.49E-03	7.27E-03	1.67E-05	6.06E-04	2.67E-04	1.19E-05	1.49E-06	4.34E-05	2.15E-05	2.36E-08	3.18E-06	3.1	4.67E-04	1.23E-05
S33	60	8	8	5	1.45E-02	1.11E-02	2.55E-05	9.26E-04	4.09E-04	1.81E-05	2.28E-06	6.64E-05	3.30E-05	3.61E-08	4.87E-06	4.7	7.14E-04	1.88E-05
S33	60	8	9	5	1.17E-02	8.98E-03	2.06E-05	7.48E-04	3.30E-04	1.46E-05	1.84E-06	5.36E-05	2.66E-05	2.92E-08	3.93E-06	3.8	5.76E-04	1.52E-05
S33	60	8	10	5	9.68E-03	7.41E-03	1.70E-05	6.17E-04	2.73E-04	1.21E-05	1.52E-06	4.42E-05	2.20E-05	2.41E-08	3.24E-06	3.1	4.76E-04	1.25E-05
S33	60	8	11	5	8.75E-03	6.70E-03	1.54E-05	5.58E-04	2.46E-04	1.09E-05	1.38E-06	4.00E-05	1.99E-05	2.18E-08	2.93E-06	2.8	4.30E-04	1.13E-05
S33	60	8	12	5	9.86E-03	7.55E-03	1.73E-05	6.29E-04	2.78E-04	1.24E-05	1.55E-06	4.51E-05	2.24E-05	2.45E-08	3.31E-06	3.2	4.85E-04	1.28E-05
S33	60	8	13	5	1.04E-02	7.98E-03	1.83E-05	6.65E-04	2.94E-04	1.31E-05	1.64E-06	4.76E-05	2.37E-05	2.59E-08	3.49E-06	3.4	5.12E-04	1.35E-05
S33	60	8	14	5	1.06E-02	8.12E-03	1.87E-05	6.77E-04	2.99E-04	1.33E-05	1.67E-06	4.85E-05	2.41E-05	2.64E-08	3.56E-06	3.4	5.22E-04	1.37E-05
S33	60	8	15	5	1.10E-02	8.41E-03	1.93E-05	7.01E-04	3.09E-04	1.38E-05	1.73E-06	5.02E-05	2.49E-05	2.73E-08	3.68E-06	3.5	5.40E-04	1.42E-05
S33	60	8	16	5	1.19E-02	9.12E-03	2.09E-05	7.60E-04	3.36E-04	1.49E-05	1.87E-06	5.44E-05	2.70E-05	2.96E-08	3.99E-06	3.8	5.86E-04	1.54E-05
S33	60	8	17	5	1.47E-02	1.13E-02	2.59E-05	9.38E-04	4.14E-04	1.84E-05	2.31E-06	6.72E-05	3.34E-05	3.66E-08	4.93E-06	4.7	7.23E-04	1.90E-05
S33	60	8	18	5	1.58E-02	1.21E-02	2.78E-05	1.01E-03	4.46E-04	1.98E-05	2.49E-06	7.23E-05	3.59E-05	3.94E-08	5.30E-06	5.1	7.78E-04	2.05E-05
S33	60	8	19	5	1.10E-02	8.41E-03	1.93E-05	7.01E-04	3.09E-04	1.37E-05	1.73E-06	5.02E-05	2.49E-05	2.73E-08	3.68E-06	3.5	5.40E-04	1.42E-05
S33	60	8	20	5	7.26E-03	5.56E-03	1.28E-05	4.63E-04	2.05E-04	9.07E-06	1.14E-06	3.32E-05	1.65E-05	1.81E-08	2.43E-06	2.3	3.57E-04	9.39E-06
S33	60	8	21	5	6.14E-03	4.70E-03	1.08E-05	3.92E-04	1.73E-04	7.68E-06	9.66E-07	2.81E-05	1.39E-05	1.53E-08	2.06E-06	2.0	3.02E-04	7.94E-06
S33	60	8	22	5	5.21E-03	3.99E-03	9.16E-06	3.32E-04	1.47E-04	6.51E-06	8.19E-07	2.38E-05	1.18E-05	1.30E-08	1.75E-06	1.7	2.56E-04	6.74E-06
S33	60	8	23	5	4.28E-03	3.28E-03	7.53E-06	2.73E-04	1.21E-04	5.35E-06	6.73E-07	1.96E-05	9.72E-06	1.07E-08	1.44E-06	1.4	2.10E-04	5.54E-06
S33	60	8	24	5	3.16E-03	2.42E-03	5.56E-06	2.02E-04	8.92E-05	3.95E-06	4.97E-07	1.45E-05	7.18E-06	7.87E-09	1.06E-06	1.0	1.56E-04	4.09E-06
S34	60	8	1	5	1.41E-03	1.08E-03	2.48E-06	8.99E-05	3.97E-05	1.76E-06	2.22E-07	6.44E-06	3.20E-06	3.51E-09	4.73E-07	0.5	6.93E-05	1.82E-06
S34	60	8	2	5	9.40E-04	7.20E-04	1.65E-06	6.00E-05	2.65E-05	1.17E-06	1.48E-07	4.30E-06	2.13E-06	2.34E-09	3.15E-07	0.3	4.62E-05	1.22E-06
S34	60	8	3	5	8.22E-04	6.30E-04	1.45E-06	5.25E-05	2.32E-05	1.03E-06	1.29E-07	3.76E-06	1.87E-06	2.05E-09	2.76E-07	0.3	4.04E-05	1.06E-06
S34	60	8	4	5	5.87E-04	4.50E-04	1.03E-06	3.75E-05	1.65E-05	7.34E-07	9.23E-08	2.68E-06	1.33E-06	1.46E-09	1.97E-07	0.2	2.89E-05	7.60E-07
S34	60	8	5	5	8.22E-04	6.30E-04	1.45E-06	5.25E-05	2.32E-05	1.03E-06	1.29E-07	3.76E-06	1.87E-06	2.05E-09	2.76E-07	0.3	4.04E-05	1.06E-06
S34	60	8	6	5	2.00E-03	1.53E-03	3.51E-06	1.27E-04	5.63E-05	2.49E-06	3.14E-07	9.13E-06	4.53E-06	4.97E-09	6.69E-07	0.6	9.82E-05	2.58E-06
S34	60	8	7	5	5.99E-03	4.59E-03	1.05E-05	3.82E-04	1.69E-04	7.48E-06	9.42E-07	2.74E-05	1.36E-05	1.49E-08	2.01E-06	1.9	2.95E-04	7.75E-06
S34	60	8	8	5	9.16E-03	7.02E-03	1.61E-05	5.85E-04	2.58E-04	1.14E-05	1.44E-06	4.19E-05	2.08E-05	2.28E-08	3.07E-06	3.0	4.50E-04	1.18E-05
S34	60	8	9	5	7.40E-03	5.67E-03	1.30E-05	4.72E-04	2.09E-04	9.25E-06	1.16E-06	3.38E-05	1.68E-05	1.84E-08	2.48E-06	2.4	3.64E-04	9.57E-06
S34	60	8	10	5	6.11E-03	4.68E-03	1.07E-05	3.90E-04	1.72E-04	7.64E-06	9.60E-07	2.79E-05	1.39E-05	1.52E-08	2.05E-06	2.0	3.00E-04	7.90E-06
S34	60	8	11	5	5.52E-03	4.23E-03	9.71E-06	3.52E-04	1.56E-04	6.91E-06	8.68E-07	2.52E-05	1.25E-05	1.37E-08	1.85E-06	1.8	2.71E-04	7.14E-06
S34	60	8	12	5	6.23E-03	4.77E-03	1.09E-05	3.97E-04	1.75E-04	7.80E-06	9.79E-07	2.85E-05	1.41E-05	1.55E-08	2.09E-06	2.0	3.06E-04	8.05E-06
S34	60	8	13	5	6.58E-03	5.04E-03	1.16E-05	4.20E-04	1.85E-04	8.24E-06	1.03E-06	3.01E-05	1.49E-05	1.64E-08	2.21E-06	2.1	3.23E-04	8.51E-06
S34	60	8	14	5	6.70E-03	5.13E-03	1.18E-05	4.27E-04	1.89E-04	8.40E-06	1.05E-06	3.06E-05	1.52E-05	1.67E-08	2.24E-06	2.2	3.29E-04	8.66E-06
S34	60	8	15	5	6.93E-03	5.31E-03	1.22E-05	4.42E-04	1.95E-04	8.69E-06	1.09E-06	3.17E-05	1.57E-05	1.72E-08	2.32E-06	2.2	3.41E-04	8.96E-06
S34	60	8	16	5	7.52E-03	5.76E-03	1.32E-05	4.80E-04	2.12E-04	9.42E-06	1.18E-06	3.44E-05	1.71E-05	1.87E-08	2.52E-06	2.4	3.70E-04	9.72E-06
S34	60	8	17	5	9.28E-03	7.11E-03	1.63E-05	5.92E-04	2.61E-04	1.16E-05	1.46E-06	4.24E-05	2.11E-05	2.31E-08	3.11E-06	3.0	4.56E-04	1.20E-05
S34	60	8	18	5	9.98E-03	7.65E-03	1.76E-05	6.37E-04	2.81E-04	1.25E-05	1.57E-06	4.56E-05	2.27E-05	2.48E-08	3.35E-06	3.2	4.91E-04	1.29E-05
S34	60	8	19	5	6.93E-03	5.31E-03	1.22E-05	4.42E-04	1.95E-04	8.67E-06	1.09E-06	3.17E-05	1.57E-05	1.72E-08	2.32E-06	2.2	3.41E-04	8.96E-06
S34	60	8	20	5	4.58E-03	3.51E-03	8.06E-06	2.92E-04	1.29E-04	5.72E-06	7.20E-07	2.09E-05	1.04E-05	1.14E-08	1.54E-06	1.5	2.25E-04	5.92E-06
S34	60	8	21	5	3.88E-03	2.97E-03	6.82E-06	2.47E-04	1.09E-04	4.84E-06	6.09E-07	1.77E-05	8.80E-06	9.65E-09	1.30E-06	1.3	1.91E-04	5.01E-06
S34	60	8	22	5	3.29E-03	2.52E-03	5.78E-06	2.10E-04	9.27E-05	4.11E-06	5.17E-07	1.50E-05	7.47E-06	8.19E-09	1.10E-06	1.1	1.62E-04	4.25E-06
S34	60	8	23	5	2.70E-03	2.07E-03	4.75E-06	1.72E-04	7.61E-05	3.38E-06	4.25E-07	1.23E-05	6.13E-06	6.72E-09	9.06E-07	0.9	1.33E-04	3.49E-06
S34	60	8	24	5	2.00E-03	1.53E-03	3.51E-06	1.27E-04	5.63E-05	2.49E-06	3.14E-07	9.13E-06	4.53E-06	4.97E-09	6.69E-07	0.6	9.82E-05	2.58E-06
S35	60	8	1	5	1.32E-03	1.01E-03	2.32E-06	8.42E-05	3.72E-05	1.65E-06	2.08E-07	6.04E-06	3.00E-06	3.29E-09	4.43E-07	0.4	6.49E-05	1.71E-06
S35	60	8	2	5	8.80E-04	6.74E-04	1.55E-06	5.62E-05	2.48E-05	1.10E-06	1.38E-07	4.02E-06	2.00E-06	2.19E-09	2.95E-07	0.3	4.33E-05	1.14E-06
S35	60	8	3	5	7.70E-04	5.90E-04	1.35E-06	4.91E-05	2.17E-05	9.62E-07	1.21E-07	3.52E-06	1.75E-06	1.92E-09	2.58E-07	0.2	3.79E-05	9.96E-07
S35	60	8	4	5	5.50E-04	4.21E-04	9.67E-07	3.51E-05	1.55E-05	6.87E-07	8.65E-08	2.51E-06	1.25E-06	1.37E-09	1.84E-07	0.2	2.70E-05	7.12E-07
S35	60	8	5	5	7.70E-04	5.90E-04	1.35E-06	4.91E-05	2.17E-05	9.62E-07	1.21E-07	3.52E-06	1.75E-06	1.92E-09	2.58E-07	0.2	3.79E-05	9.96E-07
S35	60	8	6	5	1.87E-03	1.43E-03	3.29E-06	1.19E-04	5.27E-05	2.34E-06	2.94E-07	8.55E-06	4.25E-06	4.66E-09	6.27E-07	0.6	9.20E-05	2.42E-06
S35	60	8	7	5	5.61E-03	4.30E-03	9.87E-06	3.58E-04	1.58E-04	7.01E-06	8.82E-07	2.56E-05	1.27E-05	1.40E-08	1.88E-06	1.8	2.76E-04	7.26E-06
S35	60	8	8	5	8.58E-03	6.57E-03	1.51E-05	5.48E-04	2.42E-04	1.07E-05	1.35E-06	3.92E-05	1.95E-05	2.14E-08	2.88E-06	2.8	4.22E-04	1.11E-05
S35	60	8	9	5	6.93E-03	5.31E-03	1.22E-05	4.42E-04	1.95E-04	8.66E-06	1.09E-06	3.17E-05	1.57E-05	1.73E-08	2.32E-06	2.2	3.41E-04	8.96E-06
S35	60	8	10	5	5.72E-03	4.38E-03	1.01E-05	3.65E-04	1.61E-04	7.15E-06	9.00E-07	2.62E-05	1.30E-05	1.42E-08	1.92E-06	1.8	2.81E-04	7.40E-06
S35	60	8	11	5	5.17E-03	3.96E-03	9.09E-06	3.30E-04	1.46E-04	6.47E-06	8.13E-07	2.36E-05	1.17E-05	1.29E-08	1.73E-06	1.7	2.54E-04	6.69E-06

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	12	5	5.83E-03	4.47E-03	1.03E-05	3.72E-04	1.64E-04	7.30E-06	9.17E-07	2.67E-05	1.32E-05	1.45E-08	1.96E-06	1.9	2.87E-04	7.54E-06
S35	60	8	13	5	6.16E-03	4.72E-03	1.08E-05	3.93E-04	1.74E-04	7.72E-06	9.69E-07	2.82E-05	1.40E-05	1.53E-08	2.07E-06	2.0	3.03E-04	7.97E-06
S35	60	8	14	5	6.27E-03	4.80E-03	1.10E-05	4.00E-04	1.77E-04	7.87E-06	9.86E-07	2.87E-05	1.42E-05	1.56E-08	2.10E-06	2.0	3.08E-04	8.11E-06
S35	60	8	15	5	6.49E-03	4.97E-03	1.14E-05	4.14E-04	1.83E-04	8.14E-06	1.02E-06	2.97E-05	1.47E-05	1.62E-08	2.18E-06	2.1	3.19E-04	8.40E-06
S35	60	8	16	5	7.04E-03	5.39E-03	1.24E-05	4.49E-04	1.98E-04	8.82E-06	1.11E-06	3.22E-05	1.60E-05	1.75E-08	2.36E-06	2.3	3.46E-04	9.11E-06
S35	60	8	17	5	8.69E-03	6.66E-03	1.53E-05	5.55E-04	2.45E-04	1.09E-05	1.37E-06	3.97E-05	1.97E-05	2.16E-08	2.91E-06	2.8	4.27E-04	1.12E-05
S35	60	8	18	5	9.35E-03	7.16E-03	1.64E-05	5.97E-04	2.64E-04	1.17E-05	1.47E-06	4.27E-05	2.12E-05	2.33E-08	3.14E-06	3.0	4.60E-04	1.21E-05
S35	60	8	19	5	6.49E-03	4.97E-03	1.14E-05	4.14E-04	1.83E-04	8.12E-06	1.02E-06	2.97E-05	1.47E-05	1.62E-08	2.18E-06	2.1	3.19E-04	8.40E-06
S35	60	8	20	5	4.29E-03	3.29E-03	7.55E-06	2.74E-04	1.21E-04	5.36E-06	6.75E-07	1.96E-05	9.74E-06	1.07E-08	1.44E-06	1.4	2.11E-04	5.55E-06
S35	60	8	21	5	3.63E-03	2.78E-03	6.38E-06	2.32E-04	1.02E-04	4.54E-06	5.71E-07	1.66E-05	8.24E-06	9.04E-09	1.22E-06	1.2	1.79E-04	4.70E-06
S35	60	8	22	5	3.08E-03	2.36E-03	5.42E-06	1.97E-04	8.68E-05	3.85E-06	4.84E-07	1.41E-05	6.99E-06	7.67E-09	1.03E-06	1.0	1.51E-04	3.98E-06
S35	60	8	23	5	2.53E-03	1.94E-03	4.45E-06	1.61E-04	7.13E-05	3.16E-06	3.98E-07	1.16E-05	5.74E-06	6.30E-09	8.48E-07	0.8	1.24E-04	3.27E-06
S35	60	8	24	5	1.87E-03	1.43E-03	3.29E-06	1.19E-04	5.27E-05	2.34E-06	2.94E-07	8.55E-06	4.25E-06	4.66E-09	6.27E-07	0.6	9.20E-05	2.42E-06
S36	60	8	1	5	2.04E-03	1.56E-03	3.59E-06	1.30E-04	5.76E-05	2.55E-06	3.21E-07	9.34E-06	4.64E-06	5.09E-09	6.85E-07	0.7	1.00E-04	2.64E-06
S36	60	8	2	5	1.36E-03	1.04E-03	2.40E-06	8.69E-05	3.84E-05	1.70E-06	2.14E-07	6.23E-06	3.09E-06	3.39E-09	4.57E-07	0.4	6.70E-05	1.76E-06
S36	60	8	3	5	1.19E-03	9.13E-04	2.10E-06	7.61E-05	3.36E-05	1.49E-06	1.87E-07	5.45E-06	2.71E-06	2.97E-09	4.00E-07	0.4	5.86E-05	1.54E-06
S36	60	8	4	5	8.51E-04	6.52E-04	1.50E-06	5.43E-05	2.40E-05	1.06E-06	1.34E-07	3.89E-06	1.93E-06	2.12E-09	2.85E-07	0.3	4.19E-05	1.10E-06
S36	60	8	5	5	1.19E-03	9.13E-04	2.10E-06	7.61E-05	3.36E-05	1.49E-06	1.87E-07	5.45E-06	2.71E-06	2.97E-09	4.00E-07	0.4	5.86E-05	1.54E-06
S36	60	8	6	5	2.89E-03	2.22E-03	5.09E-06	1.85E-04	8.16E-05	3.62E-06	4.55E-07	1.32E-05	6.57E-06	7.21E-09	9.71E-07	0.9	1.42E-04	3.74E-06
S36	60	8	7	5	8.68E-03	6.65E-03	1.53E-05	5.54E-04	2.45E-04	1.08E-05	1.37E-06	3.97E-05	1.97E-05	2.16E-08	2.91E-06	2.8	4.27E-04	1.12E-05
S36	60	8	8	5	1.33E-02	1.02E-02	2.34E-05	8.47E-04	3.74E-04	1.66E-05	2.09E-06	6.07E-05	3.02E-05	3.31E-08	4.45E-06	4.3	6.53E-04	1.72E-05
S36	60	8	9	5	1.07E-02	8.22E-03	1.89E-05	6.85E-04	3.02E-04	1.34E-05	1.69E-06	4.90E-05	2.44E-05	2.67E-08	3.60E-06	3.5	5.27E-04	1.39E-05
S36	60	8	10	5	8.86E-03	6.78E-03	1.56E-05	5.65E-04	2.50E-04	1.11E-05	1.39E-06	4.05E-05	2.01E-05	2.20E-08	2.97E-06	2.9	4.35E-04	1.15E-05
S36	60	8	11	5	8.00E-03	6.13E-03	1.41E-05	5.11E-04	2.26E-04	1.00E-05	1.26E-06	3.66E-05	1.82E-05	1.99E-08	2.68E-06	2.6	3.94E-04	1.04E-05
S36	60	8	12	5	9.03E-03	6.91E-03	1.59E-05	5.76E-04	2.54E-04	1.13E-05	1.42E-06	4.13E-05	2.05E-05	2.25E-08	3.03E-06	2.9	4.44E-04	1.17E-05
S36	60	8	13	5	9.54E-03	7.30E-03	1.68E-05	6.08E-04	2.69E-04	1.19E-05	1.50E-06	4.36E-05	2.16E-05	2.37E-08	3.20E-06	3.1	4.69E-04	1.23E-05
S36	60	8	14	5	9.71E-03	7.43E-03	1.71E-05	6.19E-04	2.74E-04	1.22E-05	1.53E-06	4.44E-05	2.20E-05	2.42E-08	3.25E-06	3.1	4.77E-04	1.26E-05
S36	60	8	15	5	1.00E-02	7.69E-03	1.77E-05	6.41E-04	2.83E-04	1.26E-05	1.58E-06	4.59E-05	2.28E-05	2.50E-08	3.37E-06	3.2	4.94E-04	1.30E-05
S36	60	8	16	5	1.09E-02	8.35E-03	1.92E-05	6.95E-04	3.07E-04	1.37E-05	1.71E-06	4.98E-05	2.47E-05	2.71E-08	3.65E-06	3.5	5.36E-04	1.41E-05
S36	60	8	17	5	1.35E-02	1.03E-02	2.37E-05	8.58E-04	3.79E-04	1.68E-05	2.12E-06	6.15E-05	3.05E-05	3.35E-08	4.51E-06	4.3	6.61E-04	1.74E-05
S36	60	8	18	5	1.45E-02	1.11E-02	2.55E-05	9.24E-04	4.08E-04	1.81E-05	2.28E-06	6.62E-05	3.29E-05	3.60E-08	4.85E-06	4.7	7.12E-04	1.87E-05
S36	60	8	19	5	1.00E-02	7.69E-03	1.77E-05	6.41E-04	2.83E-04	1.26E-05	1.58E-06	4.59E-05	2.28E-05	2.50E-08	3.37E-06	3.2	4.94E-04	1.30E-05
S36	60	8	20	5	6.64E-03	5.09E-03	1.17E-05	4.24E-04	1.87E-04	8.30E-06	1.04E-06	3.04E-05	1.51E-05	1.65E-08	2.23E-06	2.1	3.27E-04	8.59E-06
S36	60	8	21	5	5.62E-03	4.30E-03	9.88E-06	3.59E-04	1.58E-04	7.02E-06	8.84E-07	2.57E-05	1.28E-05	1.40E-08	1.88E-06	1.8	2.76E-04	7.27E-06
S36	60	8	22	5	4.77E-03	3.65E-03	8.38E-06	3.04E-04	1.34E-04	5.96E-06	7.50E-07	2.18E-05	1.08E-05	1.19E-08	1.60E-06	1.5	2.34E-04	6.17E-06
S36	60	8	23	5	3.92E-03	3.00E-03	6.89E-06	2.50E-04	1.10E-04	4.89E-06	6.16E-07	1.79E-05	8.89E-06	9.75E-09	1.31E-06	1.3	1.93E-04	5.07E-06
S36	60	8	24	5	2.89E-03	2.22E-03	5.09E-06	1.85E-04	8.16E-05	3.62E-06	4.55E-07	1.32E-05	6.57E-06	7.21E-09	9.71E-07	0.9	1.42E-04	3.74E-06
S37	60	8	1	5	1.01E-03	7.71E-04	1.77E-06	6.42E-05	2.84E-05	1.26E-06	1.58E-07	4.60E-06	2.29E-06	2.51E-09	3.38E-07	0.3	4.95E-05	1.30E-06
S37	60	8	2	5	6.71E-04	5.14E-04	1.18E-06	4.28E-05	1.89E-05	8.38E-07	1.06E-07	3.07E-06	1.52E-06	1.67E-09	2.25E-07	0.2	3.30E-05	8.68E-07
S37	60	8	3	5	5.87E-04	4.50E-04	1.03E-06	3.75E-05	1.66E-05	7.34E-07	9.24E-08	2.68E-06	1.33E-06	1.46E-09	1.97E-07	0.2	2.89E-05	7.60E-07
S37	60	8	4	5	4.20E-04	3.21E-04	7.38E-07	2.68E-05	1.18E-05	5.24E-07	6.60E-08	1.92E-06	9.52E-07	1.04E-09	1.41E-07	0.1	2.06E-05	5.43E-07
S37	60	8	5	5	5.87E-04	4.50E-04	1.03E-06	3.75E-05	1.66E-05	7.34E-07	9.24E-08	2.68E-06	1.33E-06	1.46E-09	1.97E-07	0.2	2.89E-05	7.60E-07
S37	60	8	6	5	1.43E-03	1.09E-03	2.51E-06	9.10E-05	4.02E-05	1.78E-06	2.24E-07	6.52E-06	3.24E-06	3.55E-09	4.78E-07	0.5	7.01E-05	1.84E-06
S37	60	8	7	5	4.28E-03	3.28E-03	7.52E-06	2.73E-04	1.21E-04	5.34E-06	6.73E-07	1.96E-05	9.71E-06	1.07E-08	1.43E-06	1.4	2.10E-04	5.53E-06
S37	60	8	8	5	6.54E-03	5.01E-03	1.15E-05	4.18E-04	1.84E-04	8.18E-06	1.03E-06	2.99E-05	1.49E-05	1.63E-08	2.19E-06	2.1	3.22E-04	8.46E-06
S37	60	8	9	5	5.29E-03	4.05E-03	9.30E-06	3.37E-04	1.49E-04	6.60E-06	8.31E-07	2.42E-05	1.20E-05	1.32E-08	1.77E-06	1.7	2.60E-04	6.84E-06
S37	60	8	10	5	4.36E-03	3.34E-03	7.67E-06	2.78E-04	1.23E-04	5.45E-06	6.86E-07	1.99E-05	9.90E-06	1.09E-08	1.46E-06	1.4	2.15E-04	5.64E-06
S37	60	8	11	5	3.94E-03	3.02E-03	6.93E-06	2.52E-04	1.11E-04	4.94E-06	6.20E-07	1.80E-05	8.95E-06	9.82E-09	1.32E-06	1.3	1.94E-04	5.10E-06
S37	60	8	12	5	4.45E-03	3.41E-03	7.82E-06	2.84E-04	1.25E-04	5.57E-06	6.99E-07	2.03E-05	1.01E-05	1.11E-08	1.49E-06	1.4	2.19E-04	5.75E-06
S37	60	8	13	5	4.70E-03	3.60E-03	8.26E-06	3.00E-04	1.32E-04	5.89E-06	7.39E-07	2.15E-05	1.07E-05	1.17E-08	1.58E-06	1.5	2.31E-04	6.08E-06
S37	60	8	14	5	4.78E-03	3.66E-03	8.41E-06	3.05E-04	1.35E-04	6.00E-06	7.52E-07	2.19E-05	1.09E-05	1.19E-08	1.60E-06	1.5	2.35E-04	6.19E-06
S37	60	8	15	5	4.95E-03	3.79E-03	8.71E-06	3.16E-04	1.39E-04	6.21E-06	7.78E-07	2.26E-05	1.12E-05	1.23E-08	1.66E-06	1.6	2.43E-04	6.40E-06
S37	60	8	16	5	5.37E-03	4.11E-03	9.44E-06	3.43E-04	1.51E-04	6.73E-06	8.44E-07	2.45E-05	1.22E-05	1.34E-08	1.80E-06	1.7	2.64E-04	6.95E-06
S37	60	8	17	5	6.63E-03	5.08E-03	1.17E-05	4.23E-04	1.87E-04	8.30E-06	1.04E-06	3.03E-05	1.50E-05	1.65E-08	2.22E-06	2.1	3.26E-04	8.57E-06
S37	60	8	18	5	7.13E-03	5.46E-03	1.25E-05	4.55E-04	2.01E-04	8.93E-06	1.12E-06	3.26E-05	1.62E-05	1.78E-08	2.39E-06	2.3	3.51E-04	9.22E-06
S37	60	8	19	5	4.95E-03	3.79E-03	8.71E-06	3.16E-04	1.39E-04	6.20E-06	7.78E-07	2.26E-05	1.12E-05	1.23E-08	1.66E-06	1.6	2.43E-04	6.40E-06
S37	60	8	20	5	3.27E-03	2.51E-03	5.75E-06	2.09E-04	9.22E-05	4.09E-06	5.15E-07	1.50E-05	7.43E-06	8.14E-09	1.10E-06	1.1	1.61E-04	4.23E-06
S37	60	8	21	5	2.77E-03	2.12E-03	4.87E-06	1.77E-04	7.80E-05	3.46E-06	4.35E-07	1.27E-05	6.29E-06	6.89E-09	9.28E-07	0.9	1.36E-04	3.58E-06
S37	60	8	22	5	2.35E-03	1.80E-03	4.13E-06	1.50E-04	6.62E-05	2.94E-06	3.69E-07	1.07E-05	5.33E-06	5.85E-09	7.88E-07	0.8	1.16E-04	3.04E-06
S37	60	8	23	5	1.93E-03	1.48E-03	3.39E-06	1.23E-04	5.44E-05	2.41E-06	3.03E-07	8.82E-06	4.38E-06	4.80E-09	6.47E-07	0.6	9.49E-05	2.50E-06
S37	60	8	24	5	1.43E-03	1.09E-03	2.51E-06	9.10E-05	4.02E-05	1.78E-06	2.24E-07	6.52E-06	3.24E-06	3.55E-09	4.78E-07	0.5	7.01E-05	1.84E-06
S38	60	8	1	5	1.67E-03	1.28E-03	2.93E-06	1.06E-04	4.69E-05	2.08E-06	2.62E-07	7.61E-06	3.78E-06	4.14E-09	5.58E-07	0.5	8.19E-05	2.15E-06
S38	60	8	2	5	1.11E-03	8.50E-04	1.95E-06	7.08E-05	3.13E-05	1.39E-06	1.75E-07	5.07E-06	2.52E-06	2.76E-09	3.72E-07	0.4	5.46E-05	1.44E-06
S38	60	8	3	5	9.71E-04	7.44E-04	1.71E-06	6.20E-05	2.74E-05	1.21E-06	1.53E-07	4.44E-06	2.20E-06	2.42E-09	3.26E-07	0.3	4.78E-05	1.26E-06
S38	60	8	4	5	6.94E-04	5.31E-04	1.22E-06	4.43E-05	1.96E-05	8.67E-07	1.09E-07	3.17E-06	1.57E-06	1.73E-09	2.33E-07	0.2	3.41E-05	8.97E-07
S38	60	8	5	5	9.71E-04	7.44E-04	1.71E-06	6.20E-05	2.74E-05	1.21E-06	1.53E-07	4.44E-06	2.20E-06	2.42E-09	3.26E-07	0.3	4.78E-05	1.26E-06
S38	60	8	6	5	2.36E-03	1.81E-03	4.15E-06	1.51E-04	6.65E-05	2.95E-06	3.71E-07	1.08E-05	5.35E-06	5.87E-09	7.91E-07	0.8	1.16E-04	3.05E-06
S38	60	8	7	5	7.08E-03	5.42E-03	1.24E-05	4.52E-04	1.99E-04	8.84E-06	1.11E-06	3.23E-05	1.61E-05	1.76E-08	2.37E-06	2.3	3.48E-04	9.15E-06
S38	60	8	8	5	1.08E-02	8.29E-03	1.90E-05	6.91E-04	3.05E-04	1.35E-05	1.70E-06	4.95E-05	2.46E-05	2.69E-08	3.63E-06	3.5	5.32E-04	1.40E-05

Table F-9: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	9	5	8.74E-03	6.69E-03	1.54E-05	5.58E-04	2.46E-04	1.09E-05	1.37E-06	4.00E-05	1.98E-05	2.18E-08	2.93E-06	2.8	4.30E-04	1.13E-05
S38	60	8	10	5	7.22E-03	5.53E-03	1.27E-05	4.60E-04	2.03E-04	9.02E-06	1.13E-06	3.30E-05	1.64E-05	1.80E-08	2.42E-06	2.3	3.55E-04	9.33E-06
S38	60	8	11	5	6.52E-03	4.99E-03	1.15E-05	4.16E-04	1.84E-04	8.16E-06	1.03E-06	2.98E-05	1.48E-05	1.62E-08	2.19E-06	2.1	3.21E-04	8.43E-06
S38	60	8	12	5	7.35E-03	5.63E-03	1.29E-05	4.69E-04	2.07E-04	9.21E-06	1.16E-06	3.36E-05	1.67E-05	1.83E-08	2.47E-06	2.4	3.62E-04	9.51E-06
S38	60	8	13	5	7.77E-03	5.95E-03	1.37E-05	4.96E-04	2.19E-04	9.73E-06	1.22E-06	3.55E-05	1.76E-05	1.93E-08	2.61E-06	2.5	3.82E-04	1.00E-05
S38	60	8	14	5	7.91E-03	6.06E-03	1.39E-05	5.05E-04	2.23E-04	9.92E-06	1.24E-06	3.62E-05	1.80E-05	1.97E-08	2.65E-06	2.6	3.89E-04	1.02E-05
S38	60	8	15	5	8.19E-03	6.27E-03	1.44E-05	5.22E-04	2.31E-04	1.03E-05	1.29E-06	3.74E-05	1.86E-05	2.04E-08	2.74E-06	2.6	4.03E-04	1.06E-05
S38	60	8	16	5	8.88E-03	6.80E-03	1.56E-05	5.67E-04	2.50E-04	1.11E-05	1.40E-06	4.06E-05	2.02E-05	2.21E-08	2.98E-06	2.9	4.37E-04	1.15E-05
S38	60	8	17	5	1.10E-02	8.39E-03	1.93E-05	6.99E-04	3.09E-04	1.37E-05	1.72E-06	5.01E-05	2.49E-05	2.73E-08	3.68E-06	3.5	5.39E-04	1.42E-05
S38	60	8	18	5	1.18E-02	9.03E-03	2.07E-05	7.53E-04	3.32E-04	1.48E-05	1.85E-06	5.39E-05	2.68E-05	2.94E-08	3.95E-06	3.8	5.80E-04	1.53E-05
S38	60	8	19	5	8.19E-03	6.27E-03	1.44E-05	5.22E-04	2.31E-04	1.02E-05	1.29E-06	3.74E-05	1.86E-05	2.04E-08	2.74E-06	2.6	4.03E-04	1.06E-05
S38	60	8	20	5	5.41E-03	4.14E-03	9.52E-06	3.45E-04	1.52E-04	6.76E-06	8.51E-07	2.47E-05	1.23E-05	1.35E-08	1.81E-06	1.7	2.66E-04	7.00E-06
S38	60	8	21	5	4.58E-03	3.51E-03	8.05E-06	2.92E-04	1.29E-04	5.72E-06	7.20E-07	2.09E-05	1.04E-05	1.14E-08	1.54E-06	1.5	2.25E-04	5.92E-06
S38	60	8	22	5	3.89E-03	2.98E-03	6.83E-06	2.48E-04	1.09E-04	4.86E-06	6.11E-07	1.78E-05	8.82E-06	9.67E-09	1.30E-06	1.3	1.91E-04	5.02E-06
S38	60	8	23	5	3.19E-03	2.44E-03	5.61E-06	2.04E-04	8.99E-05	3.99E-06	5.02E-07	1.46E-05	7.24E-06	7.94E-09	1.07E-06	1.0	1.57E-04	4.13E-06
S38	60	8	24	5	2.36E-03	1.81E-03	4.15E-06	1.51E-04	6.65E-05	2.95E-06	3.71E-07	1.08E-05	5.35E-06	5.87E-09	7.91E-07	0.8	1.16E-04	3.05E-06
S39	60	8	1	5	6.98E-03	5.34E-03	1.23E-05	4.45E-04	1.97E-04	8.72E-06	1.10E-06	3.19E-05	1.58E-05	1.74E-08	2.34E-06	2.3	3.43E-04	9.03E-06
S39	60	8	2	5	4.65E-03	3.56E-03	8.18E-06	2.97E-04	1.31E-04	5.81E-06	7.31E-07	2.13E-05	1.06E-05	1.16E-08	1.56E-06	1.5	2.29E-04	6.02E-06
S39	60	8	3	5	4.07E-03	3.12E-03	7.16E-06	2.60E-04	1.15E-04	5.08E-06	6.40E-07	1.86E-05	9.24E-06	1.01E-08	1.36E-06	1.3	2.00E-04	5.26E-06
S39	60	8	4	5	2.91E-03	2.23E-03	5.11E-06	1.86E-04	8.19E-05	3.63E-06	4.57E-07	1.33E-05	6.60E-06	7.24E-09	9.75E-07	0.9	1.43E-04	3.76E-06
S39	60	8	5	5	4.07E-03	3.12E-03	7.16E-06	2.60E-04	1.15E-04	5.08E-06	6.40E-07	1.86E-05	9.24E-06	1.01E-08	1.36E-06	1.3	2.00E-04	5.26E-06
S39	60	8	6	5	9.89E-03	7.57E-03	1.74E-05	6.31E-04	2.79E-04	1.23E-05	1.55E-06	4.52E-05	2.24E-05	2.46E-08	3.31E-06	3.2	4.86E-04	1.28E-05
S39	60	8	7	5	2.97E-02	2.27E-02	5.22E-05	1.89E-03	8.36E-04	3.70E-05	4.66E-06	1.36E-04	6.73E-05	7.38E-08	9.94E-06	9.6	1.46E-03	3.84E-05
S39	60	8	8	5	4.54E-02	3.47E-02	7.98E-05	2.89E-03	1.28E-03	5.67E-05	7.13E-06	2.07E-04	1.03E-04	1.13E-07	1.52E-05	14.6	2.23E-03	5.87E-05
S39	60	8	9	5	3.66E-02	2.81E-02	6.44E-05	2.34E-03	1.03E-03	4.58E-05	5.76E-06	1.67E-04	8.32E-05	9.12E-08	1.23E-05	11.8	1.80E-03	4.74E-05
S39	60	8	10	5	3.02E-02	2.32E-02	5.32E-05	1.93E-03	8.52E-04	3.78E-05	4.75E-06	1.38E-04	6.86E-05	7.53E-08	1.01E-05	9.8	1.49E-03	3.91E-05
S39	60	8	11	5	2.73E-02	2.09E-02	4.81E-05	1.74E-03	7.70E-04	3.42E-05	4.30E-06	1.25E-04	6.20E-05	6.80E-08	9.16E-06	8.8	1.34E-03	3.53E-05
S39	60	8	12	5	3.08E-02	2.36E-02	5.42E-05	1.97E-03	8.68E-04	3.86E-05	4.85E-06	1.41E-04	7.00E-05	7.67E-08	1.03E-05	9.9	1.52E-03	3.99E-05
S39	60	8	13	5	3.26E-02	2.49E-02	5.73E-05	2.08E-03	9.18E-04	4.08E-05	5.12E-06	1.49E-04	7.39E-05	8.11E-08	1.09E-05	10.5	1.60E-03	4.21E-05
S39	60	8	14	5	3.31E-02	2.54E-02	5.83E-05	2.11E-03	9.34E-04	4.16E-05	5.21E-06	1.52E-04	7.52E-05	8.25E-08	1.11E-05	10.7	1.63E-03	4.29E-05
S39	60	8	15	5	3.43E-02	2.63E-02	6.03E-05	2.19E-03	9.67E-04	4.30E-05	5.39E-06	1.57E-04	7.79E-05	8.54E-08	1.15E-05	11.1	1.69E-03	4.44E-05
S39	60	8	16	5	3.72E-02	2.85E-02	6.54E-05	2.37E-03	1.05E-03	4.66E-05	5.85E-06	1.70E-04	8.45E-05	9.26E-08	1.25E-05	12.0	1.83E-03	4.81E-05
S39	60	8	17	5	4.59E-02	3.52E-02	8.08E-05	2.93E-03	1.29E-03	5.75E-05	7.22E-06	2.10E-04	1.04E-04	1.14E-07	1.54E-05	14.8	2.26E-03	5.94E-05
S39	60	8	18	5	4.94E-02	3.78E-02	8.69E-05	3.15E-03	1.39E-03	6.19E-05	7.77E-06	2.26E-04	1.12E-04	1.23E-07	1.66E-05	16.0	2.43E-03	6.39E-05
S39	60	8	19	5	3.43E-02	2.63E-02	6.03E-05	2.19E-03	9.67E-04	4.29E-05	5.39E-06	1.57E-04	7.79E-05	8.54E-08	1.15E-05	11.1	1.69E-03	4.44E-05
S39	60	8	20	5	2.27E-02	1.74E-02	3.99E-05	1.45E-03	6.39E-04	2.83E-05	3.57E-06	1.04E-04	5.15E-05	5.64E-08	7.60E-06	7.3	1.12E-03	2.93E-05
S39	60	8	21	5	1.92E-02	1.47E-02	3.37E-05	1.22E-03	5.41E-04	2.40E-05	3.02E-06	8.77E-05	4.36E-05	4.78E-08	6.43E-06	6.2	9.43E-04	2.48E-05
S39	60	8	22	5	1.63E-02	1.25E-02	2.86E-05	1.04E-03	4.59E-04	2.03E-05	2.56E-06	7.44E-05	3.70E-05	4.05E-08	5.46E-06	5.3	8.01E-04	2.11E-05
S39	60	8	23	5	1.34E-02	1.02E-02	2.35E-05	8.53E-04	3.77E-04	1.67E-05	2.10E-06	6.11E-05	3.04E-05	3.33E-08	4.48E-06	4.3	6.58E-04	1.73E-05
S39	60	8	24	5	9.89E-03	7.57E-03	1.74E-05	6.31E-04	2.79E-04	1.23E-05	1.55E-06	4.52E-05	2.24E-05	2.46E-08	3.31E-06	3.2	4.86E-04	1.28E-05
S40	80	11	1	5	3.38E-03	2.26E-03	6.29E-06	1.37E-04	7.88E-05	3.03E-06	4.51E-07	1.33E-05	6.45E-06	7.50E-09	9.92E-07	1.1	1.19E-04	3.47E-06
S40	80	11	2	5	2.25E-03	1.51E-03	4.19E-06	9.14E-05	5.25E-05	2.02E-06	3.01E-07	8.89E-06	4.30E-06	5.00E-09	6.61E-07	0.8	7.90E-05	2.31E-06
S40	80	11	3	5	1.97E-03	1.32E-03	3.67E-06	8.00E-05	4.60E-05	1.77E-06	2.63E-07	7.78E-06	3.76E-06	4.37E-09	5.79E-07	0.7	6.91E-05	2.03E-06
S40	80	11	4	5	1.41E-03	9.43E-04	2.62E-06	5.71E-05	3.28E-05	1.26E-06	1.88E-07	5.56E-06	2.69E-06	3.12E-09	4.13E-07	0.5	4.94E-05	1.45E-06
S40	80	11	5	5	1.97E-03	1.32E-03	3.67E-06	8.00E-05	4.60E-05	1.77E-06	2.63E-07	7.78E-06	3.76E-06	4.37E-09	5.79E-07	0.7	6.91E-05	2.03E-06
S40	80	11	6	5	4.79E-03	3.21E-03	8.91E-06	1.94E-04	1.12E-04	4.29E-06	6.39E-07	1.89E-05	9.14E-06	1.06E-08	1.41E-06	1.6	1.68E-04	4.92E-06
S40	80	11	7	5	1.44E-02	9.62E-03	2.67E-05	5.83E-04	3.35E-04	1.29E-05	1.92E-06	5.67E-05	2.74E-05	3.19E-08	4.22E-06	4.8	5.04E-04	1.48E-05
S40	80	11	8	5	2.20E-02	1.47E-02	4.09E-05	8.91E-04	5.12E-04	1.97E-05	2.93E-06	8.67E-05	4.19E-05	4.87E-08	6.45E-06	7.4	7.70E-04	2.26E-05
S40	80	11	9	5	1.78E-02	1.19E-02	3.30E-05	7.20E-04	4.14E-04	1.59E-05	2.37E-06	7.00E-05	3.39E-05	3.94E-08	5.21E-06	6.0	6.22E-04	1.82E-05
S40	80	11	10	5	1.47E-02	9.81E-03	2.73E-05	5.94E-04	3.41E-04	1.31E-05	1.96E-06	5.78E-05	2.80E-05	3.25E-08	4.30E-06	4.9	5.14E-04	1.50E-05
S40	80	11	11	5	1.32E-02	8.87E-03	2.46E-05	5.37E-04	3.09E-04	1.19E-05	1.77E-06	5.22E-05	2.53E-05	2.94E-08	3.89E-06	4.5	4.64E-04	1.36E-05
S40	80	11	12	5	1.49E-02	1.00E-02	2.78E-05	6.06E-04	3.48E-04	1.34E-05	1.99E-06	5.89E-05	2.85E-05	3.31E-08	4.38E-06	5.0	5.23E-04	1.53E-05
S40	80	11	13	5	1.58E-02	1.06E-02	2.94E-05	6.40E-04	3.68E-04	1.42E-05	2.11E-06	6.22E-05	3.01E-05	3.50E-08	4.63E-06	5.3	5.53E-04	1.62E-05
S40	80	11	14	5	1.61E-02	1.08E-02	2.99E-05	6.51E-04	3.74E-04	1.45E-05	2.14E-06	6.33E-05	3.06E-05	3.56E-08	4.71E-06	5.4	5.63E-04	1.65E-05
S40	80	11	15	5	1.66E-02	1.11E-02	3.09E-05	6.74E-04	3.87E-04	1.50E-05	2.22E-06	6.56E-05	3.17E-05	3.69E-08	4.88E-06	5.6	5.83E-04	1.71E-05
S40	80	11	16	5	1.80E-02	1.21E-02	3.35E-05	7.31E-04	4.20E-04	1.62E-05	2.41E-06	7.11E-05	3.44E-05	4.00E-08	5.29E-06	6.1	6.32E-04	1.85E-05
S40	80	11	17	5	2.23E-02	1.49E-02	4.14E-05	9.03E-04	5.19E-04	2.00E-05	2.97E-06	8.78E-05	4.25E-05	4.94E-08	6.53E-06	7.5	7.80E-04	2.29E-05
S40	80	11	18	5	2.40E-02	1.60E-02	4.46E-05	9.71E-04	5.58E-04	2.15E-05	3.20E-06	9.45E-05	4.57E-05	5.31E-08	7.03E-06	8.1	8.40E-04	2.46E-05
S40	80	11	19	5	1.66E-02	1.11E-02	3.09E-05	6.74E-04	3.87E-04	1.49E-05	2.22E-06	6.56E-05	3.17E-05	3.69E-08	4.88E-06	5.6	5.83E-04	1.71E-05
S40	80	11	20	5	1.10E-02	7.36E-03	2.04E-05	4.46E-04	2.56E-04	9.85E-06	1.47E-06	4.33E-05	2.10E-05	2.44E-08	3.22E-06	3.7	3.85E-04	1.13E-05
S40	80	11	21	5	9.30E-03	6.22E-03	1.73E-05	3.77E-04	2.17E-04	8.34E-06	1.24E-06	3.67E-05	1.77E-05	2.06E-08	2.73E-06	3.1	3.26E-04	9.55E-06
S40	80	11	22	5	7.89E-03	5.28E-03	1.47E-05	3.20E-04	1.84E-04	7.07E-06	1.05E-06	3.11E-05	1.51E-05	1.75E-08	2.32E-06	2.7	2.77E-04	8.10E-06
S40	80	11	23	5	6.48E-03	4.34E-03	1.21E-05	2.63E-04	1.51E-04	5.81E-06	8.65E-07	2.56E-05	1.24E-05	1.44E-08	1.90E-06	2.2	2.27E-04	6.65E-06
S40	80	11	24	5	4.79E-03	3.21E-03	8.91E-06	1.94E-04	1.12E-04	4.29E-06	6.39E-07	1.89E-05	9.14E-06	1.06E-08	1.41E-06	1.6	1.68E-04	4.92E-06

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	6	0	1	1.94E-02	2.44E-02	3.68E-05	1.23E-03	1.13E-03	3.92E-05	7.32E-06	2.23E-04	1.12E-04	1.98E-07	1.68E-05	6.3	2.36E-03	1.39E-04
SI1_E	0.59	4	0	1	1.30E-02	1.63E-02	2.45E-05	8.21E-04	7.55E-04	2.61E-05	4.88E-06	1.49E-04	7.48E-05	1.32E-07	1.12E-05	4.2	1.57E-03	9.30E-05
SI1_E	0.59	3	0	1	1.13E-02	1.42E-02	2.15E-05	7.19E-04	6.61E-04	2.28E-05	4.27E-06	1.30E-04	6.55E-05	1.16E-07	9.78E-06	3.6	1.38E-03	8.14E-05
SI1_E	0.59	2	0	1	8.10E-03	1.02E-02	1.53E-05	5.13E-04	4.72E-04	1.63E-05	3.05E-06	9.29E-05	4.68E-05	8.25E-08	6.99E-06	2.6	9.83E-04	5.81E-05
SI1_E	0.59	3	0	1	1.13E-02	1.42E-02	2.15E-05	7.19E-04	6.61E-04	2.28E-05	4.27E-06	1.30E-04	6.55E-05	1.16E-07	9.78E-06	3.6	1.38E-03	8.14E-05
SI1_E	0.59	8	0	1	2.75E-02	3.45E-02	5.21E-05	1.75E-03	1.60E-03	5.55E-05	1.04E-05	3.16E-04	1.59E-04	2.81E-07	2.38E-05	8.9	3.34E-03	1.98E-04
SI1_E	0.59	25	0	1	8.26E-02	1.04E-01	1.56E-04	5.24E-03	4.81E-03	1.66E-04	3.11E-05	9.48E-04	4.77E-04	8.42E-07	7.13E-05	26.6	1.00E-02	5.93E-04
SI1_E	0.59	38	0	1	1.26E-01	1.58E-01	2.39E-04	8.01E-03	7.36E-03	2.55E-04	4.76E-05	1.45E-03	7.30E-04	1.29E-06	1.09E-04	40.6	1.53E-02	9.07E-04
SI1_E	0.59	30	0	1	1.02E-01	1.28E-01	1.93E-04	6.47E-03	5.95E-03	2.06E-04	3.84E-05	1.17E-03	5.89E-04	1.04E-06	8.80E-05	32.8	1.24E-02	7.32E-04
SI1_E	0.59	25	0	1	8.42E-02	1.06E-01	1.59E-04	5.34E-03	4.91E-03	1.70E-04	3.17E-05	9.66E-04	4.87E-04	8.59E-07	7.27E-05	27.1	1.02E-02	6.04E-04
SI1_E	0.59	23	0	1	7.61E-02	9.55E-02	1.44E-04	4.82E-03	4.44E-03	1.53E-04	2.87E-05	8.74E-04	4.40E-04	7.76E-07	6.57E-05	24.5	9.24E-03	5.46E-04
SI1_E	0.59	26	0	1	8.59E-02	1.08E-01	1.62E-04	5.44E-03	5.00E-03	1.73E-04	3.23E-05	9.85E-04	4.96E-04	8.75E-07	7.40E-05	27.6	1.04E-02	6.16E-04
SI1_E	0.59	27	0	1	9.07E-02	1.14E-01	1.72E-04	5.75E-03	5.29E-03	1.83E-04	3.41E-05	1.04E-03	5.24E-04	9.25E-07	7.82E-05	29.2	1.10E-02	6.51E-04
SI1_E	0.59	27	0	1	9.23E-02	1.16E-01	1.75E-04	5.85E-03	5.38E-03	1.86E-04	3.47E-05	1.06E-03	5.33E-04	9.41E-07	7.96E-05	29.7	1.12E-02	6.63E-04
SI1_E	0.59	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.93E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI1_E	0.59	31	0	1	1.04E-01	1.30E-01	1.96E-04	6.57E-03	6.04E-03	2.09E-04	3.90E-05	1.19E-03	5.99E-04	1.06E-06	8.94E-05	33.4	1.26E-02	7.44E-04
SI1_E	0.59	38	0	1	1.28E-01	1.61E-01	2.42E-04	8.11E-03	7.46E-03	2.58E-04	4.82E-05	1.47E-03	7.39E-04	1.30E-06	1.10E-04	41.2	1.55E-02	9.18E-04
SI1_E	0.59	41	0	1	1.38E-01	1.73E-01	2.60E-04	8.73E-03	8.02E-03	2.77E-04	5.18E-05	1.58E-03	7.95E-04	1.40E-06	1.19E-04	44.3	1.67E-02	9.88E-04
SI1_E	0.59	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.93E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI1_E	0.59	19	0	1	6.32E-02	7.92E-02	1.20E-04	4.00E-03	3.68E-03	1.27E-04	2.38E-05	7.25E-04	3.65E-04	6.44E-07	5.45E-05	20.3	7.67E-03	4.53E-04
SI1_E	0.59	16	0	1	5.35E-02	6.70E-02	1.01E-04	3.39E-03	3.12E-03	1.08E-04	2.01E-05	6.13E-04	3.09E-04	5.45E-07	4.61E-05	17.2	6.49E-03	3.84E-04
SI1_E	0.59	13	0	1	4.54E-02	5.69E-02	8.58E-05	2.87E-03	2.64E-03	9.14E-05	1.71E-05	5.20E-04	2.62E-04	4.62E-07	3.91E-05	14.6	5.51E-03	3.25E-04
SI1_E	0.59	11	0	1	3.73E-02	4.67E-02	7.05E-05	2.36E-03	2.17E-03	7.51E-05	1.40E-05	4.27E-04	2.15E-04	3.80E-07	3.21E-05	12.0	4.52E-03	2.67E-04
SI1_E	0.59	8	0	1	2.75E-02	3.45E-02	5.21E-05	1.75E-03	1.60E-03	5.55E-05	1.04E-05	3.16E-04	1.59E-04	2.81E-07	2.38E-05	8.9	3.34E-03	1.98E-04
SI1_W	0.59	6	0	1	1.86E-02	2.34E-02	3.53E-05	1.18E-03	1.09E-03	3.76E-05	7.02E-06	2.14E-04	1.08E-04	1.90E-07	1.61E-05	6.0	2.26E-03	1.34E-04
SI1_W	0.59	4	0	1	1.24E-02	1.56E-02	2.35E-05	7.88E-04	7.24E-04	2.50E-05	4.68E-06	1.43E-04	7.18E-05	1.27E-07	1.07E-05	4.0	1.51E-03	8.92E-05
SI1_W	0.59	3	0	1	1.09E-02	1.36E-02	2.06E-05	6.89E-04	6.34E-04	2.19E-05	4.09E-06	1.25E-04	6.28E-05	1.11E-07	9.38E-06	3.5	1.32E-03	7.81E-05
SI1_W	0.59	2	0	1	7.77E-03	9.74E-03	1.47E-05	4.92E-04	4.53E-04	1.56E-05	2.92E-06	8.91E-05	4.49E-05	7.92E-08	6.70E-06	2.5	9.43E-04	5.58E-05
SI1_W	0.59	3	0	1	1.09E-02	1.36E-02	2.06E-05	6.89E-04	6.34E-04	2.19E-05	4.09E-06	1.25E-04	6.28E-05	1.11E-07	9.38E-06	3.5	1.32E-03	7.81E-05
SI1_W	0.59	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI1_W	0.59	24	0	1	7.92E-02	9.94E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.09E-04	4.58E-04	8.08E-07	6.83E-05	25.5	9.62E-03	5.69E-04
SI1_W	0.59	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.68E-03	7.06E-03	2.44E-04	4.56E-05	1.39E-03	7.00E-04	1.24E-06	1.05E-04	39.0	1.47E-02	8.70E-04
SI1_W	0.59	29	0	1	9.79E-02	1.23E-01	1.85E-04	6.20E-03	5.71E-03	1.97E-04	3.68E-05	1.12E-03	5.65E-04	9.98E-07	8.44E-05	31.5	1.19E-02	7.02E-04
SI1_W	0.59	24	0	1	8.08E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.27E-04	4.67E-04	8.24E-07	6.97E-05	26.0	9.81E-03	5.80E-04
SI1_W	0.59	22	0	1	7.30E-02	9.16E-02	1.38E-04	4.63E-03	4.26E-03	1.47E-04	2.75E-05	8.38E-04	4.22E-04	7.44E-07	6.30E-05	23.5	8.87E-03	5.24E-04
SI1_W	0.59	24	0	1	8.24E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI1_W	0.59	26	0	1	8.70E-02	1.09E-01	1.65E-04	5.51E-03	5.07E-03	1.75E-04	3.27E-05	9.98E-04	5.03E-04	8.87E-07	7.50E-05	28.0	1.06E-02	6.24E-04
SI1_W	0.59	26	0	1	8.86E-02	1.11E-01	1.68E-04	5.61E-03	5.16E-03	1.78E-04	3.33E-05	1.02E-03	5.12E-04	9.03E-07	7.64E-05	28.5	1.08E-02	6.36E-04
SI1_W	0.59	27	0	1	9.17E-02	1.15E-01	1.73E-04	5.81E-03	5.34E-03	1.85E-04	3.45E-05	1.05E-03	5.29E-04	9.34E-07	7.91E-05	29.5	1.11E-02	6.58E-04
SI1_W	0.59	30	0	1	9.94E-02	1.25E-01	1.88E-04	6.30E-03	5.80E-03	2.00E-04	3.74E-05	1.14E-03	5.74E-04	1.01E-06	8.58E-05	32.0	1.21E-02	7.14E-04
SI1_W	0.59	37	0	1	1.23E-01	1.54E-01	2.32E-04	7.78E-03	7.15E-03	2.47E-04	4.62E-05	1.41E-03	7.09E-04	1.25E-06	1.06E-04	39.5	1.49E-02	8.81E-04
SI1_W	0.59	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.37E-03	7.70E-03	2.66E-04	4.97E-05	1.52E-03	7.63E-04	1.35E-06	1.14E-04	42.5	1.60E-02	9.48E-04
SI1_W	0.59	27	0	1	9.17E-02	1.15E-01	1.73E-04	5.81E-03	5.34E-03	1.85E-04	3.45E-05	1.05E-03	5.29E-04	9.34E-07	7.91E-05	29.5	1.11E-02	6.58E-04
SI1_W	0.59	18	0	1	6.06E-02	7.60E-02	1.15E-04	3.84E-03	3.53E-03	1.22E-04	2.28E-05	6.95E-04	3.50E-04	6.18E-07	5.23E-05	19.5	7.36E-03	4.35E-04
SI1_W	0.59	15	0	1	5.13E-02	6.43E-02	9.70E-05	3.25E-03	2.99E-03	1.03E-04	1.93E-05	5.88E-04	2.96E-04	5.23E-07	4.42E-05	16.5	6.22E-03	3.68E-04
SI1_W	0.59	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.76E-05	1.64E-05	4.99E-04	2.51E-04	4.43E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI1_W	0.59	11	0	1	3.57E-02	4.48E-02	6.76E-05	2.26E-03	2.08E-03	7.20E-05	1.34E-05	4.10E-04	2.06E-04	3.64E-07	3.08E-05	11.5	4.34E-03	2.56E-04
SI1_W	0.59	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI2_E	0.51	6	0	1	2.13E-02	2.67E-02	4.03E-05	1.35E-03	1.24E-03	4.30E-05	8.03E-06	2.45E-04	1.23E-04	2.17E-07	1.84E-05	6.9	2.59E-03	1.53E-04
SI2_E	0.51	4	0	1	1.42E-02	1.78E-02	2.69E-05	9.01E-04	8.29E-04	2.86E-05	5.35E-06	1.63E-04	8.21E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI2_E	0.51	4	0	1	1.24E-02	1.56E-02	2.35E-05	7.88E-04	7.25E-04	2.51E-05	4.68E-06	1.43E-04	7.19E-05	1.27E-07	1.07E-05	4.0	1.51E-03	8.93E-05
SI2_E	0.51	3	0	1	8.89E-03	1.11E-02	1.68E-05	5.63E-04	5.18E-04	1.79E-05	3.34E-06	1.02E-04	5.13E-05	9.06E-08	7.66E-06	2.9	1.08E-03	6.38E-05
SI2_E	0.51	4	0	1	1.24E-02	1.56E-02	2.35E-05	7.88E-04	7.25E-04	2.51E-05	4.68E-06	1.43E-04	7.19E-05	1.27E-07	1.07E-05	4.0	1.51E-03	8.93E-05
SI2_E	0.51	9	0	1	3.02E-02	3.79E-02	5.72E-05	1.91E-03	1.76E-03	6.09E-05	1.14E-05	3.47E-04	1.75E-04	3.08E-07	2.61E-05	9.7	3.67E-03	2.17E-04
SI2_E	0.51	27	0	1	9.06E-02	1.14E-01	1.71E-04	5.74E-03	5.28E-03	1.83E-04	3.41E-05	1.04E-03	5.24E-04	9.24E-07	7.82E-05	29.2	1.10E-02	6.50E-04
SI2_E	0.51	41	0	1	1.39E-01	1.74E-01	2.62E-04	8.78E-03	8.08E-03	2.79E-04	5.22E-05	1.59E-03	8.01E-04	1.41E-06	1.20E-04	44.6	1.68E-02	9.95E-04
SI2_E	0.51	33	0	1	1.12E-01	1.40E-01	2.12E-04	7.10E-03	6.53E-03	2.26E-04	4.21E-05	1.28E-03	6.47E-04	1.14E-06	9.66E-05	36.0	1.36E-02	8.04E-04
SI2_E	0.51	27	0	1	9.24E-02	1.16E-01	1.75E-04	5.86E-03	5.39E-03	1.86E-04	3.48E-05	1.06E-03	5.34E-04	9.42E-07	7.97E-05	29.7	1.12E-02	6.63E-04
SI2_E	0.51	25	0	1	8.35E-02	1.05E-01	1.58E-04	5.29E-03	4.87E-03	1.68E-04	3.14E-05	9.58E-04	4.82E-04	8.51E-07	7.20E-05	26.9	1.01E-02	5.99E-04
SI2_E	0.51	28	0	1	9.42E-02	1.18E-01	1.78E-04	5.97E-03	5.49E-03	1.90E-04	3.54E-05	1.08E-03	5.44E-04	9.60E-07	8.12E-05	30.3	1.14E-02	6.76E-04
SI2_E	0.51	30	0	1	9.95E-02	1.25E-01	1.88E-04	6.31E-03	5.80E-03	2.00E-04	3.75E-05	1.14E-03	5.75E-04	1.01E-06	8.58E-05	32.0	1.21E-02	7.14E-04
SI2_E	0.51	30	0	1	1.01E-01	1.27E-01	1.92E-04	6.42E-03	5.90E-03	2.04E-04	3.81E-05	1.16E-03	5.85E-04	1.03E-06	8.74E-05	32.6	1.23E-02	7.27E-04
SI2_E	0.51	31	0	1	1.05E-01	1.32E-01	1.98E-04	6.65E-03	6.11E-03	2.11E-04	3.95E-05	1.20E-03	6.06E-04	1.07E-06	9.04E-05	33.7	1.27E-02	7.52E-04
SI2_E	0.51	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.21E-03	6.63E-03	2.29E-04	4.28E-05	1.31E-03	6.57E-04	1.16E-06	9.81E-05	36.6	1.38E-02	8.16E-04
SI2_E	0.51	42	0	1	1.40E-01	1.76E-01	2.66E-04	8.90E-03	8.18E-03	2.83E-04	5.28E-05	1.61E-03	8.11E-04	1.43E-06	1.21E-04	45.2	1.70E-02	1.01E-03
SI2_E	0.51	45	0	1	1.51E-01	1.89E-01	2.86E-04	9.57E-03	8.80E-03	3.04E-04	5.69E-05	1.73E-03	8.73E-04	1.54E-06	1.30E-04	48.6	1.83E-02	1.08E-03
SI2_E	0.51	31	0	1	1.05E-01	1.32E-01	1.98E-04	6.65E-03	6.11E-03	2.11E-04	3.95E-05	1.20E-03	6.06E-04	1.07E-06	9.04E-05	33.7	1.27E-02	7.52E-04
SI2_E	0.51	21	0	1	6.93E-02	8.69E-02	1.31E-04	4.39E-03	4.04E-03	1.40E-04	2.61E-05	7.95E-04	4.00E-04	7.06E-07	5.98E-05	22.3	8.41E-03	4.97E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	17	0	1	5.87E-02	7.36E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.73E-04	3.39E-04	5.98E-07	5.06E-05	18.9	7.12E-03	4.21E-04
SI2_E	0.51	15	0	1	4.98E-02	6.24E-02	9.41E-05	3.15E-03	2.90E-03	1.00E-04	1.87E-05	5.71E-04	2.87E-04	5.07E-07	4.29E-05	16.0	6.04E-03	3.57E-04
SI2_E	0.51	12	0	1	4.09E-02	5.13E-02	7.73E-05	2.59E-03	2.38E-03	8.23E-05	1.54E-05	4.69E-04	2.36E-04	4.17E-07	3.53E-05	13.2	4.96E-03	2.93E-04
SI2_E	0.51	9	0	1	3.02E-02	3.79E-02	5.72E-05	1.91E-03	1.76E-03	6.09E-05	1.14E-05	3.47E-04	1.75E-04	3.08E-07	2.61E-05	9.7	3.67E-03	2.17E-04
SI2_W	0.42	5	0	1	1.55E-02	1.95E-02	2.94E-05	9.84E-04	9.05E-04	3.13E-05	5.85E-06	1.78E-04	8.97E-05	1.58E-07	1.34E-05	5.0	1.89E-03	1.11E-04
SI2_W	0.42	3	0	1	1.04E-02	1.30E-02	1.96E-05	6.56E-04	6.04E-04	2.09E-05	3.90E-06	1.19E-04	5.98E-05	1.06E-07	8.93E-06	3.3	1.26E-03	7.43E-05
SI2_W	0.42	3	0	1	9.06E-03	1.14E-02	1.71E-05	5.74E-04	5.28E-04	1.83E-05	3.41E-06	1.04E-04	5.23E-05	9.24E-08	7.82E-06	2.9	1.10E-03	6.50E-05
SI2_W	0.42	2	0	1	6.47E-03	8.12E-03	1.22E-05	4.10E-04	3.77E-04	1.30E-05	2.44E-06	7.43E-05	3.74E-05	6.60E-08	5.58E-06	2.1	7.86E-04	4.65E-05
SI2_W	0.42	3	0	1	9.06E-03	1.14E-02	1.71E-05	5.74E-04	5.28E-04	1.83E-05	3.41E-06	1.04E-04	5.23E-05	9.24E-08	7.82E-06	2.9	1.10E-03	6.50E-05
SI2_W	0.42	7	0	1	2.20E-02	2.76E-02	4.16E-05	1.39E-03	1.28E-03	4.43E-05	8.28E-06	2.53E-04	1.27E-04	2.24E-07	1.90E-05	7.1	2.67E-03	1.58E-04
SI2_W	0.42	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.58E-04	3.81E-04	6.73E-07	5.69E-05	21.2	8.02E-03	4.74E-04
SI2_W	0.42	30	0	1	1.01E-01	1.27E-01	1.91E-04	6.40E-03	5.89E-03	2.03E-04	3.80E-05	1.16E-03	5.83E-04	1.03E-06	8.71E-05	32.5	1.23E-02	7.25E-04
SI2_W	0.42	24	0	1	8.16E-02	1.02E-01	1.54E-04	5.17E-03	4.75E-03	1.64E-04	3.07E-05	9.36E-04	4.71E-04	8.31E-07	7.03E-05	26.2	9.90E-03	5.85E-04
SI2_W	0.42	20	0	1	6.73E-02	8.44E-02	1.27E-04	4.27E-03	3.92E-03	1.36E-04	2.53E-05	7.72E-04	3.89E-04	6.86E-07	5.81E-05	21.7	8.17E-03	4.83E-04
SI2_W	0.42	18	0	1	6.08E-02	7.63E-02	1.15E-04	3.86E-03	3.55E-03	1.23E-04	2.29E-05	6.98E-04	3.51E-04	6.20E-07	5.25E-05	19.6	7.39E-03	4.37E-04
SI2_W	0.42	20	0	1	6.86E-02	8.61E-02	1.30E-04	4.35E-03	4.00E-03	1.38E-04	2.58E-05	7.87E-04	3.96E-04	6.99E-07	5.92E-05	22.1	8.33E-03	4.92E-04
SI2_W	0.42	22	0	1	7.25E-02	9.09E-02	1.37E-04	4.59E-03	4.23E-03	1.46E-04	2.73E-05	8.32E-04	4.19E-04	7.39E-07	6.25E-05	23.3	8.80E-03	5.20E-04
SI2_W	0.42	22	0	1	7.38E-02	9.26E-02	1.40E-04	4.68E-03	4.30E-03	1.49E-04	2.78E-05	8.47E-04	4.26E-04	7.52E-07	6.36E-05	23.7	8.96E-03	5.30E-04
SI2_W	0.42	23	0	1	7.64E-02	9.58E-02	1.45E-04	4.84E-03	4.45E-03	1.54E-04	2.87E-05	8.76E-04	4.41E-04	7.78E-07	6.59E-05	24.6	9.27E-03	5.48E-04
SI2_W	0.42	25	0	1	8.29E-02	1.04E-01	1.57E-04	5.25E-03	4.83E-03	1.67E-04	3.12E-05	9.51E-04	4.79E-04	8.44E-07	7.15E-05	26.7	1.01E-02	5.95E-04
SI2_W	0.42	30	0	1	1.02E-01	1.28E-01	1.93E-04	6.48E-03	5.96E-03	2.06E-04	3.85E-05	1.17E-03	5.91E-04	1.04E-06	8.82E-05	32.9	1.24E-02	7.34E-04
SI2_W	0.42	33	0	1	1.10E-01	1.38E-01	2.08E-04	6.97E-03	6.41E-03	2.22E-04	4.14E-05	1.26E-03	6.36E-04	1.12E-06	9.49E-05	35.4	1.34E-02	7.90E-04
SI2_W	0.42	23	0	1	7.64E-02	9.58E-02	1.45E-04	4.84E-03	4.45E-03	1.54E-04	2.87E-05	8.76E-04	4.41E-04	7.78E-07	6.59E-05	24.6	9.27E-03	5.48E-04
SI2_W	0.42	15	0	1	5.05E-02	6.33E-02	9.55E-05	3.20E-03	2.94E-03	1.02E-04	1.90E-05	5.79E-04	2.92E-04	5.15E-07	4.35E-05	16.2	6.13E-03	3.62E-04
SI2_W	0.42	13	0	1	4.27E-02	5.36E-02	8.08E-05	2.71E-03	2.49E-03	8.61E-05	1.61E-05	4.90E-04	2.47E-04	4.35E-07	3.68E-05	13.7	5.19E-03	3.07E-04
SI2_W	0.42	11	0	1	3.62E-02	4.55E-02	6.86E-05	2.30E-03	2.11E-03	7.30E-05	1.36E-05	4.16E-04	2.09E-04	3.69E-07	3.13E-05	11.7	4.40E-03	2.60E-04
SI2_W	0.42	9	0	1	2.98E-02	3.73E-02	5.63E-05	1.89E-03	1.74E-03	6.00E-05	1.12E-05	3.42E-04	1.72E-04	3.03E-07	2.57E-05	9.6	3.61E-03	2.14E-04
SI2_W	0.42	7	0	1	2.20E-02	2.76E-02	4.16E-05	1.39E-03	1.28E-03	4.43E-05	8.28E-06	2.53E-04	1.27E-04	2.24E-07	1.90E-05	7.1	2.67E-03	1.58E-04
SI3_E	0.50	6	0	1	1.86E-02	2.34E-02	3.53E-05	1.18E-03	1.09E-03	3.76E-05	7.02E-06	2.14E-04	1.08E-04	1.90E-07	1.61E-05	6.0	2.26E-03	1.34E-04
SI3_E	0.50	4	0	1	1.24E-02	1.56E-02	2.35E-05	7.88E-04	7.24E-04	2.50E-05	4.68E-06	1.43E-04	7.18E-05	1.27E-07	1.07E-05	4.0	1.51E-03	8.92E-05
SI3_E	0.50	3	0	1	1.09E-02	1.36E-02	2.06E-05	6.89E-04	6.34E-04	2.19E-05	4.09E-06	1.25E-04	6.28E-05	1.11E-07	9.38E-06	3.5	1.32E-03	7.80E-05
SI3_E	0.50	2	0	1	7.77E-03	9.74E-03	1.47E-05	4.92E-04	4.53E-04	1.56E-05	2.92E-06	8.91E-05	4.49E-05	7.92E-08	6.70E-06	2.5	9.43E-04	5.57E-05
SI3_E	0.50	3	0	1	1.09E-02	1.36E-02	2.06E-05	6.89E-04	6.34E-04	2.19E-05	4.09E-06	1.25E-04	6.28E-05	1.11E-07	9.38E-06	3.5	1.32E-03	7.80E-05
SI3_E	0.50	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI3_E	0.50	24	0	1	7.92E-02	9.94E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.09E-04	4.58E-04	8.07E-07	6.83E-05	25.5	9.62E-03	5.69E-04
SI3_E	0.50	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.68E-03	7.06E-03	2.44E-04	4.56E-05	1.39E-03	7.00E-04	1.23E-06	1.05E-04	39.0	1.47E-02	8.70E-04
SI3_E	0.50	29	0	1	9.79E-02	1.23E-01	1.85E-04	6.20E-03	5.70E-03	1.97E-04	3.68E-05	1.12E-03	5.65E-04	9.97E-07	8.44E-05	31.5	1.19E-02	7.02E-04
SI3_E	0.50	24	0	1	8.08E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.27E-04	4.67E-04	8.23E-07	6.97E-05	26.0	9.81E-03	5.80E-04
SI3_E	0.50	22	0	1	7.30E-02	9.16E-02	1.38E-04	4.63E-03	4.26E-03	1.47E-04	2.75E-05	8.38E-04	4.22E-04	7.44E-07	6.30E-05	23.5	8.86E-03	5.24E-04
SI3_E	0.50	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI3_E	0.50	26	0	1	8.70E-02	1.09E-01	1.65E-04	5.51E-03	5.07E-03	1.75E-04	3.27E-05	9.98E-04	5.02E-04	8.87E-07	7.50E-05	28.0	1.06E-02	6.24E-04
SI3_E	0.50	26	0	1	8.86E-02	1.11E-01	1.68E-04	5.61E-03	5.16E-03	1.78E-04	3.33E-05	1.02E-03	5.11E-04	9.02E-07	7.64E-05	28.5	1.07E-02	6.35E-04
SI3_E	0.50	27	0	1	9.17E-02	1.15E-01	1.73E-04	5.81E-03	5.34E-03	1.85E-04	3.45E-05	1.05E-03	5.29E-04	9.34E-07	7.91E-05	29.5	1.11E-02	6.58E-04
SI3_E	0.50	30	0	1	9.94E-02	1.25E-01	1.88E-04	6.30E-03	5.79E-03	2.00E-04	3.74E-05	1.14E-03	5.74E-04	1.01E-06	8.58E-05	32.0	1.21E-02	7.13E-04
SI3_E	0.50	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.78E-03	7.15E-03	2.47E-04	4.62E-05	1.41E-03	7.09E-04	1.25E-06	1.06E-04	39.5	1.49E-02	8.81E-04
SI3_E	0.50	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.37E-03	7.70E-03	2.66E-04	4.97E-05	1.52E-03	7.63E-04	1.35E-06	1.14E-04	42.5	1.60E-02	9.48E-04
SI3_E	0.50	27	0	1	9.17E-02	1.15E-01	1.73E-04	5.81E-03	5.34E-03	1.85E-04	3.45E-05	1.05E-03	5.29E-04	9.34E-07	7.91E-05	29.5	1.11E-02	6.58E-04
SI3_E	0.50	18	0	1	6.06E-02	7.60E-02	1.15E-04	3.84E-03	3.53E-03	1.22E-04	2.28E-05	6.95E-04	3.50E-04	6.17E-07	5.23E-05	19.5	7.36E-03	4.35E-04
SI3_E	0.50	15	0	1	5.13E-02	6.43E-02	9.70E-05	3.25E-03	2.99E-03	1.03E-04	1.93E-05	5.88E-04	2.96E-04	5.22E-07	4.42E-05	16.5	6.22E-03	3.68E-04
SI3_E	0.50	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.76E-05	1.64E-05	4.99E-04	2.51E-04	4.43E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI3_E	0.50	11	0	1	3.57E-02	4.48E-02	6.76E-05	2.26E-03	2.08E-03	7.20E-05	1.34E-05	4.10E-04	2.06E-04	3.64E-07	3.08E-05	11.5	4.34E-03	2.56E-04
SI3_E	0.50	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI3_W	0.38	5	0	1	1.54E-02	1.94E-02	2.92E-05	9.78E-04	8.99E-04	3.11E-05	5.81E-06	1.77E-04	8.91E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI3_W	0.38	3	0	1	1.03E-02	1.29E-02	1.95E-05	6.52E-04	6.00E-04	2.07E-05	3.87E-06	1.18E-04	5.94E-05	1.05E-07	8.87E-06	3.3	1.25E-03	7.38E-05
SI3_W	0.38	3	0	1	9.00E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.76E-06	2.9	1.09E-03	6.46E-05
SI3_W	0.38	2	0	1	6.43E-03	8.07E-03	1.22E-05	4.08E-04	3.75E-04	1.30E-05	2.42E-06	7.38E-05	3.71E-05	6.55E-08	5.55E-06	2.1	7.81E-04	4.61E-05
SI3_W	0.38	3	0	1	9.00E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.76E-06	2.9	1.09E-03	6.46E-05
SI3_W	0.38	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.40E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.65E-03	1.57E-04
SI3_W	0.38	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.68E-07	5.66E-05	21.1	7.96E-03	4.71E-04
SI3_W	0.38	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.36E-03	5.85E-03	2.02E-04	3.78E-05	1.15E-03	5.79E-04	1.02E-06	8.65E-05	32.3	1.22E-02	7.20E-04
SI3_W	0.38	24	0	1	8.10E-02	1.02E-01	1.53E-04	5.13E-03	4.72E-03	1.63E-04	3.05E-05	9.30E-04	4.68E-04	8.26E-07	6.99E-05	26.1	9.84E-03	5.81E-04
SI3_W	0.38	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.67E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI3_W	0.38	18	0	1	6.04E-02	7.58E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.27E-05	6.94E-04	3.49E-04	6.16E-07	5.21E-05	19.4	7.34E-03	4.34E-04
SI3_W	0.38	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.27E-03	4.89E-04
SI3_W	0.38	21	0	1	7.20E-02	9.03E-02	1.36E-04	4.56E-03	4.20E-03	1.45E-04	2.71E-05	8.26E-04	4.16E-04	7.34E-07	6.21E-05	23.2	8.74E-03	5.17E-04
SI3_W	0.38	22	0	1	7.33E-02	9.19E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.23E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI3_W	0.38	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.73E-07	6.54E-05	24.4	9.21E-03	5.45E-04
SI3_W	0.38	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.44E-04	4.75E-04	8.39E-07	7.10E-05	26.5	9.99E-03	5.91E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.82E-05	1.17E-03	5.87E-04	1.04E-06	8.76E-05	32.7	1.23E-02	7.29E-04
SI3_W	0.38	33	0	1	1.09E-01	1.37E-01	2.07E-04	6.93E-03	6.37E-03	2.20E-04	4.11E-05	1.25E-03	6.31E-04	1.11E-06	9.43E-05	35.2	1.33E-02	7.84E-04
SI3_W	0.38	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.73E-07	6.54E-05	24.4	9.21E-03	5.45E-04
SI3_W	0.38	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.75E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI3_W	0.38	13	0	1	4.24E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI3_W	0.38	11	0	1	3.60E-02	4.52E-02	6.81E-05	2.28E-03	2.10E-03	7.25E-05	1.36E-05	4.13E-04	2.08E-04	3.67E-07	3.11E-05	11.6	4.37E-03	2.58E-04
SI3_W	0.38	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.87E-03	1.72E-03	5.96E-05	1.11E-05	3.39E-04	1.71E-04	3.01E-07	2.55E-05	9.5	3.59E-03	2.12E-04
SI3_W	0.38	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.40E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.65E-03	1.57E-04
SI4_E	0.32	4	0	1	1.30E-02	1.63E-02	2.47E-05	8.26E-04	7.60E-04	2.63E-05	4.90E-06	1.50E-04	7.53E-05	1.33E-07	1.12E-05	4.2	1.58E-03	9.35E-05
SI4_E	0.32	3	0	1	8.69E-03	1.09E-02	1.64E-05	5.51E-04	5.06E-04	1.75E-05	3.27E-06	9.97E-05	5.02E-05	8.85E-08	7.49E-06	2.8	1.05E-03	6.23E-05
SI4_E	0.32	2	0	1	7.60E-03	9.53E-03	1.44E-05	4.82E-04	4.43E-04	1.53E-05	2.86E-06	8.72E-05	4.39E-05	7.75E-08	6.56E-06	2.4	9.23E-04	5.46E-05
SI4_E	0.32	2	0	1	5.43E-03	6.81E-03	1.03E-05	3.44E-04	3.16E-04	1.09E-05	2.04E-06	6.23E-05	3.14E-05	5.53E-08	4.68E-06	1.7	6.59E-04	3.90E-05
SI4_E	0.32	2	0	1	7.60E-03	9.53E-03	1.44E-05	4.82E-04	4.43E-04	1.53E-05	2.86E-06	8.72E-05	4.39E-05	7.75E-08	6.56E-06	2.4	9.23E-04	5.46E-05
SI4_E	0.32	5	0	1	1.85E-02	2.32E-02	3.49E-05	1.17E-03	1.08E-03	3.72E-05	6.95E-06	2.12E-04	1.07E-04	1.88E-07	1.59E-05	5.9	2.24E-03	1.32E-04
SI4_E	0.32	16	0	1	5.54E-02	6.95E-02	1.05E-04	3.51E-03	3.23E-03	1.12E-04	2.08E-05	6.35E-04	3.20E-04	5.64E-07	4.78E-05	17.8	6.72E-03	3.97E-04
SI4_E	0.32	25	0	1	8.47E-02	1.06E-01	1.60E-04	5.37E-03	4.94E-03	1.71E-04	3.19E-05	9.72E-04	4.89E-04	8.63E-07	7.31E-05	27.3	1.03E-02	6.08E-04
SI4_E	0.32	20	0	1	6.84E-02	8.58E-02	1.29E-04	4.34E-03	3.99E-03	1.38E-04	2.57E-05	7.85E-04	3.95E-04	6.97E-07	5.90E-05	22.0	8.31E-03	4.91E-04
SI4_E	0.32	17	0	1	5.65E-02	7.08E-02	1.07E-04	3.58E-03	3.29E-03	1.14E-04	2.13E-05	6.48E-04	3.26E-04	5.76E-07	4.87E-05	18.2	6.86E-03	4.05E-04
SI4_E	0.32	15	0	1	5.10E-02	6.40E-02	9.66E-05	3.23E-03	2.97E-03	1.03E-04	1.92E-05	5.86E-04	2.95E-04	5.20E-07	4.40E-05	16.4	6.20E-03	3.66E-04
SI4_E	0.32	17	0	1	5.76E-02	7.22E-02	1.09E-04	3.65E-03	3.35E-03	1.16E-04	2.17E-05	6.60E-04	3.32E-04	5.87E-07	4.96E-05	18.5	6.99E-03	4.13E-04
SI4_E	0.32	18	0	1	6.08E-02	7.63E-02	1.15E-04	3.85E-03	3.54E-03	1.23E-04	2.29E-05	6.98E-04	3.51E-04	6.20E-07	5.25E-05	19.6	7.38E-03	4.36E-04
SI4_E	0.32	18	0	1	6.19E-02	7.76E-02	1.17E-04	3.92E-03	3.61E-03	1.25E-04	2.33E-05	7.10E-04	3.58E-04	6.31E-07	5.34E-05	19.9	7.51E-03	4.44E-04
SI4_E	0.32	19	0	1	6.41E-02	8.04E-02	1.21E-04	4.06E-03	3.73E-03	1.29E-04	2.41E-05	7.35E-04	3.70E-04	6.53E-07	5.53E-05	20.6	7.78E-03	4.60E-04
SI4_E	0.32	21	0	1	6.95E-02	8.72E-02	1.31E-04	4.40E-03	4.05E-03	1.40E-04	2.62E-05	7.97E-04	4.01E-04	7.08E-07	5.99E-05	22.4	8.44E-03	4.99E-04
SI4_E	0.32	26	0	1	8.58E-02	1.08E-01	1.62E-04	5.44E-03	5.00E-03	1.73E-04	3.23E-05	9.84E-04	4.96E-04	8.74E-07	7.40E-05	27.6	1.04E-02	6.16E-04
SI4_E	0.32	27	0	1	9.23E-02	1.16E-01	1.75E-04	5.85E-03	5.38E-03	1.86E-04	3.47E-05	1.06E-03	5.33E-04	9.41E-07	7.96E-05	29.7	1.12E-02	6.62E-04
SI4_E	0.32	19	0	1	6.41E-02	8.04E-02	1.21E-04	4.06E-03	3.73E-03	1.29E-04	2.41E-05	7.35E-04	3.70E-04	6.53E-07	5.53E-05	20.6	7.78E-03	4.60E-04
SI4_E	0.32	13	0	1	4.24E-02	5.31E-02	8.01E-05	2.68E-03	2.47E-03	8.53E-05	1.59E-05	4.86E-04	2.45E-04	4.32E-07	3.65E-05	13.6	5.14E-03	3.04E-04
SI4_E	0.32	11	0	1	3.58E-02	4.49E-02	6.78E-05	2.27E-03	2.09E-03	7.22E-05	1.35E-05	4.11E-04	2.07E-04	3.65E-07	3.09E-05	11.5	4.35E-03	2.57E-04
SI4_E	0.32	9	0	1	3.04E-02	3.81E-02	5.75E-05	1.93E-03	1.77E-03	6.13E-05	1.14E-05	3.49E-04	1.76E-04	3.10E-07	2.62E-05	9.8	3.69E-03	2.18E-04
SI4_E	0.32	7	0	1	2.50E-02	3.13E-02	4.73E-05	1.58E-03	1.46E-03	5.03E-05	9.40E-06	2.87E-04	1.44E-04	2.55E-07	2.15E-05	8.0	3.03E-03	1.79E-04
SI4_E	0.32	5	0	1	1.85E-02	2.32E-02	3.49E-05	1.17E-03	1.08E-03	3.72E-05	6.95E-06	2.12E-04	1.07E-04	1.88E-07	1.59E-05	5.9	2.24E-03	1.32E-04
SI4_W	0.32	6	0	1	2.09E-02	2.62E-02	3.95E-05	1.32E-03	1.22E-03	4.21E-05	7.87E-06	2.40E-04	1.21E-04	2.13E-07	1.80E-05	6.7	2.54E-03	1.50E-04
SI4_W	0.32	4	0	1	1.39E-02	1.75E-02	2.64E-05	8.83E-04	8.12E-04	2.81E-05	5.24E-06	1.60E-04	8.05E-05	1.42E-07	1.20E-05	4.5	1.69E-03	1.00E-04
SI4_W	0.32	4	0	1	1.22E-02	1.53E-02	2.31E-05	7.73E-04	7.11E-04	2.46E-05	4.59E-06	1.40E-04	7.04E-05	1.24E-07	1.05E-05	3.9	1.48E-03	8.75E-05
SI4_W	0.32	3	0	1	8.71E-03	1.09E-02	1.65E-05	5.52E-04	5.08E-04	1.75E-05	3.28E-06	9.99E-05	5.03E-05	8.88E-08	7.51E-06	2.8	1.06E-03	6.25E-05
SI4_W	0.32	4	0	1	1.22E-02	1.53E-02	2.31E-05	7.73E-04	7.11E-04	2.46E-05	4.59E-06	1.40E-04	7.04E-05	1.24E-07	1.05E-05	3.9	1.48E-03	8.75E-05
SI4_W	0.32	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.73E-03	5.96E-05	1.11E-05	3.40E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.13E-04
SI4_W	0.32	26	0	1	8.88E-02	1.11E-01	1.68E-04	5.63E-03	5.18E-03	1.79E-04	3.34E-05	1.02E-03	5.13E-04	9.05E-07	7.66E-05	28.6	1.08E-02	6.38E-04
SI4_W	0.32	40	0	1	1.36E-01	1.70E-01	2.57E-04	8.61E-03	7.92E-03	2.74E-04	5.11E-05	1.56E-03	7.85E-04	1.38E-06	1.17E-04	43.7	1.65E-02	9.75E-04
SI4_W	0.32	33	0	1	1.10E-01	1.38E-01	2.08E-04	6.95E-03	6.40E-03	2.21E-04	4.13E-05	1.26E-03	6.34E-04	1.12E-06	9.46E-05	35.3	1.33E-02	7.88E-04
SI4_W	0.32	27	0	1	9.06E-02	1.14E-01	1.71E-04	5.74E-03	5.28E-03	1.82E-04	3.41E-05	1.04E-03	5.23E-04	9.23E-07	7.81E-05	29.1	1.10E-02	6.50E-04
SI4_W	0.32	24	0	1	8.19E-02	1.03E-01	1.55E-04	5.19E-03	4.77E-03	1.65E-04	3.08E-05	9.39E-04	4.73E-04	8.34E-07	7.06E-05	26.3	9.94E-03	5.88E-04
SI4_W	0.32	27	0	1	9.23E-02	1.16E-01	1.75E-04	5.85E-03	5.38E-03	1.86E-04	3.47E-05	1.06E-03	5.33E-04	9.41E-07	7.96E-05	29.7	1.12E-02	6.63E-04
SI4_W	0.32	29	0	1	9.75E-02	1.22E-01	1.85E-04	6.18E-03	5.69E-03	1.96E-04	3.67E-05	1.12E-03	5.63E-04	9.94E-07	8.41E-05	31.4	1.18E-02	7.00E-04
SI4_W	0.32	30	0	1	9.93E-02	1.25E-01	1.88E-04	6.29E-03	5.79E-03	2.00E-04	3.74E-05	1.14E-03	5.73E-04	1.01E-06	8.56E-05	31.9	1.21E-02	7.13E-04
SI4_W	0.32	31	0	1	1.03E-01	1.29E-01	1.94E-04	6.51E-03	5.99E-03	2.07E-04	3.87E-05	1.18E-03	5.94E-04	1.05E-06	8.86E-05	33.1	1.25E-02	7.38E-04
SI4_W	0.32	33	0	1	1.11E-01	1.40E-01	2.11E-04	7.06E-03	6.50E-03	2.25E-04	4.20E-05	1.28E-03	6.44E-04	1.14E-06	9.61E-05	35.9	1.35E-02	8.00E-04
SI4_W	0.32	41	0	1	1.38E-01	1.73E-01	2.60E-04	8.72E-03	8.02E-03	2.77E-04	5.18E-05	1.58E-03	7.95E-04	1.40E-06	1.19E-04	44.3	1.67E-02	9.88E-04
SI4_W	0.32	44	0	1	1.48E-01	1.86E-01	2.80E-04	9.38E-03	8.63E-03	2.98E-04	5.57E-05	1.70E-03	8.55E-04	1.51E-06	1.28E-04	47.6	1.80E-02	1.06E-03
SI4_W	0.32	31	0	1	1.03E-01	1.29E-01	1.94E-04	6.51E-03	5.99E-03	2.07E-04	3.87E-05	1.18E-03	5.94E-04	1.05E-06	8.86E-05	33.1	1.25E-02	7.38E-04
SI4_W	0.32	20	0	1	6.79E-02	8.52E-02	1.29E-04	4.31E-03	3.96E-03	1.37E-04	2.56E-05	7.79E-04	3.92E-04	6.92E-07	5.86E-05	21.9	8.25E-03	4.88E-04
SI4_W	0.32	17	0	1	5.75E-02	7.21E-02	1.09E-04	3.64E-03	3.35E-03	1.16E-04	2.16E-05	6.60E-04	3.32E-04	5.86E-07	4.96E-05	18.5	6.98E-03	4.13E-04
SI4_W	0.32	15	0	1	4.88E-02	6.12E-02	9.23E-05	3.09E-03	2.84E-03	9.82E-05	1.84E-05	5.60E-04	2.82E-04	4.97E-07	4.21E-05	15.7	5.92E-03	3.50E-04
SI4_W	0.32	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.88E-04
SI4_W	0.32	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.73E-03	5.96E-05	1.11E-05	3.40E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.13E-04
SI5_E	0.58	11	0	1	3.85E-02	4.83E-02	7.28E-05	2.44E-03	2.24E-03	7.76E-05	1.45E-05	4.42E-04	2.22E-04	3.92E-07	3.32E-05	12.4	4.67E-03	2.76E-04
SI5_E	0.58	8	0	1	2.57E-02	3.22E-02	4.86E-05	1.63E-03	1.50E-03	5.17E-05	9.66E-06	2.95E-04	1.48E-04	2.62E-07	2.21E-05	8.3	3.12E-03	1.84E-04
SI5_E	0.58	7	0	1	2.25E-02	2.82E-02	4.25E-05	1.42E-03	1.31E-03	4.52E-05	8.45E-06	2.58E-04	1.30E-04	2.29E-07	1.94E-05	7.2	2.73E-03	1.61E-04
SI5_E	0.58	5	0	1	1.60E-02	2.01E-02	3.04E-05	1.02E-03	9.35E-04	3.23E-05	6.04E-06	1.84E-04	9.27E-05	1.64E-07	1.38E-05	5.2	1.95E-03	1.15E-04
SI5_E	0.58	7	0	1	2.25E-02	2.82E-02	4.25E-05	1.42E-03	1.31E-03	4.52E-05	8.45E-06	2.58E-04	1.30E-04	2.29E-07	1.94E-05	7.2	2.73E-03	1.61E-04
SI5_E	0.58	16	0	1	5.45E-02	6.84E-02	1.03E-04	3.46E-03	3.18E-03	1.10E-04	2.05E-05	6.26E-04	3.15E-04	5.56E-07	4.70E-05	17.5	6.62E-03	3.91E-04
SI5_E	0.58	49	0	1	1.64E-01	2.05E-01	3.10E-04	1.04E-02	9.54E-03	3.30E-04	6.16E-05	1.88E-03	9.45E-04	1.67E-06	1.41E-04	52.6	1.99E-02	1.17E-03
SI5_E	0.58	74	0	1	2.50E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.04E-04	9.42E-05	2.87E-03	1.45E-03	2.55E-06	2.16E-04	80.5	3.04E-02	1.80E-03
SI5_E	0.58	60	0	1	2.02E-01	2.54E-01	3.82E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.0	2.45E-02	1.45E-03
SI5_E	0.58	50	0	1	1.67E-01	2.09E-01	3.16E-04	1.06E-02	9.72E-03	3.36E-04	6.28E-05	1.91E-03	9.64E-04	1.70E-06	1.44E-04	53.7	2.03E-02	1.20E-03
SI5_E	0.58	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI5_E	0.58	51	0	1	1.70E-01	2.13E-01	3.22E-04	1.08E-02	9.91E-03	3.43E-04	6.40E-05	1.95E-03	9.82E-04	1.73E-06	1.47E-04	54.7	2.06E-02	1.22E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	53	0	1	1.80E-01	2.25E-01	3.40E-04	1.14E-02	1.05E-02	3.62E-04	6.76E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.8	2.18E-02	1.29E-03
SI5_E	0.58	54	0	1	1.83E-01	2.29E-01	3.46E-04	1.16E-02	1.07E-02	3.68E-04	6.88E-05	2.10E-03	1.06E-03	1.86E-06	1.58E-04	58.8	2.22E-02	1.31E-03
SI5_E	0.58	56	0	1	1.89E-01	2.37E-01	3.58E-04	1.20E-02	1.10E-02	3.81E-04	7.12E-05	2.17E-03	1.09E-03	1.93E-06	1.63E-04	60.9	2.30E-02	1.36E-03
SI5_E	0.58	61	0	1	2.05E-01	2.58E-01	3.89E-04	1.30E-02	1.20E-02	4.14E-04	7.73E-05	2.36E-03	1.19E-03	2.09E-06	1.77E-04	66.1	2.49E-02	1.47E-03
SI5_E	0.58	75	0	1	2.53E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.54E-05	2.91E-03	1.46E-03	2.58E-06	2.19E-04	81.5	3.08E-02	1.82E-03
SI5_E	0.58	81	0	1	2.73E-01	3.42E-01	5.16E-04	1.73E-02	1.59E-02	5.49E-04	1.03E-04	3.13E-03	1.58E-03	2.78E-06	2.35E-04	87.7	3.31E-02	1.96E-03
SI5_E	0.58	56	0	1	1.89E-01	2.37E-01	3.58E-04	1.20E-02	1.10E-02	3.81E-04	7.12E-05	2.17E-03	1.09E-03	1.93E-06	1.63E-04	60.9	2.30E-02	1.36E-03
SI5_E	0.58	37	0	1	1.25E-01	1.57E-01	2.37E-04	7.93E-03	7.29E-03	2.52E-04	4.71E-05	1.44E-03	7.23E-04	1.28E-06	1.08E-04	40.3	1.52E-02	8.98E-04
SI5_E	0.58	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.71E-03	6.17E-03	2.13E-04	3.98E-05	1.21E-03	6.12E-04	1.08E-06	9.13E-05	34.1	1.29E-02	7.60E-04
SI5_E	0.58	27	0	1	8.98E-02	1.13E-01	1.70E-04	5.69E-03	5.24E-03	1.81E-04	3.38E-05	1.03E-03	5.19E-04	9.16E-07	7.75E-05	28.9	1.09E-02	6.45E-04
SI5_E	0.58	22	0	1	7.38E-02	9.26E-02	1.40E-04	4.68E-03	4.30E-03	1.49E-04	2.78E-05	8.47E-04	4.26E-04	7.52E-07	6.37E-05	23.7	8.96E-03	5.30E-04
SI5_E	0.58	16	0	1	5.45E-02	6.84E-02	1.03E-04	3.46E-03	3.18E-03	1.10E-04	2.05E-05	6.26E-04	3.15E-04	5.56E-07	4.70E-05	17.5	6.62E-03	3.91E-04
SI5_W	0.59	18	0	1	5.93E-02	7.43E-02	1.12E-04	3.76E-03	3.45E-03	1.19E-04	2.23E-05	6.80E-04	3.42E-04	6.04E-07	5.11E-05	19.1	7.20E-03	4.25E-04
SI5_W	0.59	12	0	1	3.95E-02	4.96E-02	7.48E-05	2.50E-03	2.30E-03	7.96E-05	1.49E-05	4.53E-04	2.28E-04	4.03E-07	3.41E-05	12.7	4.80E-03	2.84E-04
SI5_W	0.59	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.02E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI5_W	0.59	7	0	1	2.47E-02	3.10E-02	4.67E-05	1.57E-03	1.44E-03	4.97E-05	9.29E-06	2.83E-04	1.43E-04	2.52E-07	2.13E-05	7.9	3.00E-03	1.77E-04
SI5_W	0.59	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.02E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI5_W	0.59	25	0	1	8.40E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.56E-07	7.24E-05	27.0	1.02E-02	6.03E-04
SI5_W	0.59	75	0	1	2.52E-01	3.16E-01	4.77E-04	1.60E-02	1.47E-02	5.07E-04	9.48E-05	2.89E-03	1.45E-03	2.57E-06	2.17E-04	81.0	3.06E-02	1.81E-03
SI5_W	0.59	115	0	1	3.85E-01	4.83E-01	7.29E-04	2.44E-02	2.25E-02	7.76E-04	1.45E-04	4.42E-03	2.23E-03	3.93E-06	3.32E-04	123.9	4.68E-02	2.76E-03
SI5_W	0.59	93	0	1	3.11E-01	3.90E-01	5.89E-04	1.97E-02	1.81E-02	6.27E-04	1.17E-04	3.57E-03	1.80E-03	3.17E-06	2.68E-04	100.1	3.78E-02	2.23E-03
SI5_W	0.59	76	0	1	2.57E-01	3.22E-01	4.86E-04	1.63E-02	1.50E-02	5.17E-04	9.67E-05	2.95E-03	1.48E-03	2.62E-06	2.22E-04	82.6	3.12E-02	1.84E-03
SI5_W	0.59	69	0	1	2.32E-01	2.91E-01	4.39E-04	1.47E-02	1.35E-02	4.68E-04	8.74E-05	2.66E-03	1.34E-03	2.37E-06	2.00E-04	74.7	2.82E-02	1.67E-03
SI5_W	0.59	78	0	1	2.62E-01	3.28E-01	4.95E-04	1.66E-02	1.53E-02	5.27E-04	9.85E-05	3.00E-03	1.51E-03	2.67E-06	2.26E-04	84.2	3.18E-02	1.88E-03
SI5_W	0.59	82	0	1	2.77E-01	3.47E-01	5.23E-04	1.75E-02	1.61E-02	5.57E-04	1.04E-04	3.17E-03	1.60E-03	2.82E-06	2.39E-04	89.0	3.36E-02	1.99E-03
SI5_W	0.59	84	0	1	2.82E-01	3.53E-01	5.33E-04	1.78E-02	1.64E-02	5.67E-04	1.06E-04	3.23E-03	1.63E-03	2.87E-06	2.43E-04	90.6	3.42E-02	2.02E-03
SI5_W	0.59	87	0	1	2.91E-01	3.66E-01	5.51E-04	1.85E-02	1.70E-02	5.87E-04	1.10E-04	3.34E-03	1.68E-03	2.97E-06	2.51E-04	93.8	3.54E-02	2.09E-03
SI5_W	0.59	94	0	1	3.16E-01	3.96E-01	5.98E-04	2.00E-02	1.84E-02	6.37E-04	1.19E-04	3.63E-03	1.83E-03	3.22E-06	2.73E-04	101.7	3.84E-02	2.27E-03
SI5_W	0.59	116	0	1	3.90E-01	4.89E-01	7.38E-04	2.47E-02	2.27E-02	7.86E-04	1.47E-04	4.48E-03	2.25E-03	3.98E-06	3.37E-04	125.5	4.74E-02	2.80E-03
SI5_W	0.59	125	0	1	4.20E-01	5.27E-01	7.94E-04	2.66E-02	2.45E-02	8.46E-04	1.58E-04	4.82E-03	2.42E-03	4.28E-06	3.62E-04	135.1	5.10E-02	3.01E-03
SI5_W	0.59	87	0	1	2.91E-01	3.66E-01	5.51E-04	1.85E-02	1.70E-02	5.87E-04	1.10E-04	3.34E-03	1.68E-03	2.97E-06	2.51E-04	93.8	3.54E-02	2.09E-03
SI5_W	0.59	57	0	1	1.93E-01	2.42E-01	3.64E-04	1.22E-02	1.12E-02	3.88E-04	7.25E-05	2.21E-03	1.11E-03	1.96E-06	1.66E-04	62.0	2.34E-02	1.38E-03
SI5_W	0.59	48	0	1	1.63E-01	2.04E-01	3.08E-04	1.03E-02	9.50E-03	3.28E-04	6.13E-05	1.87E-03	9.41E-04	1.66E-06	1.41E-04	52.4	1.98E-02	1.17E-03
SI5_W	0.59	41	0	1	1.38E-01	1.73E-01	2.62E-04	8.76E-03	8.06E-03	2.79E-04	5.20E-05	1.59E-03	7.99E-04	1.41E-06	1.19E-04	44.5	1.68E-02	9.93E-04
SI5_W	0.59	34	0	1	1.14E-01	1.42E-01	2.15E-04	7.20E-03	6.62E-03	2.29E-04	4.28E-05	1.30E-03	6.56E-04	1.16E-06	9.80E-05	36.5	1.38E-02	8.15E-04
SI5_W	0.59	25	0	1	8.40E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.56E-07	7.24E-05	27.0	1.02E-02	6.03E-04
SI6_E	0.43	13	0	1	4.34E-02	5.44E-02	8.21E-05	2.75E-03	2.53E-03	8.74E-05	1.63E-05	4.98E-04	2.51E-04	4.42E-07	3.74E-05	14.0	5.27E-03	3.12E-04
SI6_E	0.43	9	0	1	2.89E-02	3.63E-02	5.48E-05	1.83E-03	1.69E-03	5.83E-05	1.09E-05	3.32E-04	1.67E-04	2.95E-07	2.50E-05	9.3	3.51E-03	2.08E-04
SI6_E	0.43	8	0	1	2.53E-02	3.18E-02	4.79E-05	1.60E-03	1.48E-03	5.10E-05	9.53E-06	2.91E-04	1.46E-04	2.58E-07	2.18E-05	8.1	3.07E-03	1.82E-04
SI6_E	0.43	5	0	1	1.81E-02	2.27E-02	3.42E-05	1.15E-03	1.05E-03	3.64E-05	6.81E-06	2.08E-04	1.04E-04	1.84E-07	1.56E-05	5.8	2.20E-03	1.30E-04
SI6_E	0.43	8	0	1	2.53E-02	3.18E-02	4.79E-05	1.60E-03	1.48E-03	5.10E-05	9.53E-06	2.91E-04	1.46E-04	2.58E-07	2.18E-05	8.1	3.07E-03	1.82E-04
SI6_E	0.43	18	0	1	6.15E-02	7.71E-02	1.16E-04	3.90E-03	3.58E-03	1.24E-04	2.31E-05	7.06E-04	3.55E-04	6.27E-07	5.30E-05	19.8	7.47E-03	4.41E-04
SI6_E	0.43	55	0	1	1.85E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.4	2.24E-02	1.32E-03
SI6_E	0.43	84	0	1	2.82E-01	3.54E-01	5.34E-04	1.79E-02	1.64E-02	5.68E-04	1.06E-04	3.24E-03	1.63E-03	2.88E-06	2.43E-04	90.8	3.43E-02	2.02E-03
SI6_E	0.43	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.44E-02	1.33E-02	4.59E-04	8.58E-05	2.61E-03	1.32E-03	2.32E-06	1.97E-04	73.3	2.77E-02	1.64E-03
SI6_E	0.43	56	0	1	1.88E-01	2.36E-01	3.56E-04	1.19E-02	1.10E-02	3.79E-04	7.08E-05	2.16E-03	1.09E-03	1.92E-06	1.62E-04	60.5	2.28E-02	1.35E-03
SI6_E	0.43	51	0	1	1.70E-01	2.13E-01	3.22E-04	1.08E-02	9.91E-03	3.43E-04	6.40E-05	1.95E-03	9.82E-04	1.73E-06	1.47E-04	54.7	2.06E-02	1.22E-03
SI6_E	0.43	57	0	1	1.92E-01	2.40E-01	3.63E-04	1.22E-02	1.12E-02	3.86E-04	7.22E-05	2.20E-03	1.11E-03	1.95E-06	1.65E-04	61.7	2.33E-02	1.38E-03
SI6_E	0.43	60	0	1	2.03E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.08E-04	7.62E-05	2.32E-03	1.17E-03	2.06E-06	1.75E-04	65.2	2.46E-02	1.45E-03
SI6_E	0.43	61	0	1	2.06E-01	2.59E-01	3.90E-04	1.31E-02	1.20E-02	4.15E-04	7.76E-05	2.37E-03	1.19E-03	2.10E-06	1.78E-04	66.3	2.50E-02	1.48E-03
SI6_E	0.43	63	0	1	2.13E-01	2.68E-01	4.04E-04	1.35E-02	1.24E-02	4.30E-04	8.03E-05	2.45E-03	1.23E-03	2.18E-06	1.84E-04	68.7	2.59E-02	1.53E-03
SI6_E	0.43	69	0	1	2.32E-01	2.90E-01	4.38E-04	1.47E-02	1.35E-02	4.66E-04	8.71E-05	2.66E-03	1.34E-03	2.36E-06	2.00E-04	74.5	2.81E-02	1.66E-03
SI6_E	0.43	85	0	1	2.86E-01	3.58E-01	5.41E-04	1.81E-02	1.67E-02	5.76E-04	1.08E-04	3.28E-03	1.65E-03	2.91E-06	2.46E-04	91.9	3.47E-02	2.05E-03
SI6_E	0.43	91	0	1	3.08E-01	3.86E-01	5.82E-04	1.95E-02	1.79E-02	6.19E-04	1.16E-04	3.53E-03	1.78E-03	3.13E-06	2.65E-04	98.9	3.73E-02	2.21E-03
SI6_E	0.43	63	0	1	2.13E-01	2.68E-01	4.04E-04	1.35E-02	1.24E-02	4.30E-04	8.03E-05	2.45E-03	1.23E-03	2.18E-06	1.84E-04	68.7	2.59E-02	1.53E-03
SI6_E	0.43	42	0	1	1.41E-01	1.77E-01	2.67E-04	8.94E-03	8.22E-03	2.84E-04	5.31E-05	1.62E-03	8.15E-04	1.44E-06	1.22E-04	45.4	1.71E-02	1.01E-03
SI6_E	0.43	35	0	1	1.19E-01	1.50E-01	2.26E-04	7.57E-03	6.96E-03	2.40E-04	4.49E-05	1.37E-03	6.90E-04	1.22E-06	1.03E-04	38.4	1.45E-02	8.57E-04
SI6_E	0.43	30	0	1	1.01E-01	1.27E-01	1.92E-04	6.42E-03	5.90E-03	2.04E-04	3.81E-05	1.16E-03	5.85E-04	1.03E-06	8.74E-05	32.6	1.23E-02	7.27E-04
SI6_E	0.43	25	0	1	8.32E-02	1.04E-01	1.57E-04	5.27E-03	4.85E-03	1.68E-04	3.13E-05	9.55E-04	4.81E-04	8.48E-07	7.18E-05	26.8	1.01E-02	5.97E-04
SI6_E	0.43	18	0	1	6.15E-02	7.71E-02	1.16E-04	3.90E-03	3.58E-03	1.24E-04	2.31E-05	7.06E-04	3.55E-04	6.27E-07	5.30E-05	19.8	7.47E-03	4.41E-04
SI6_W	0.43	10	0	1	3.48E-02	4.36E-02	6.58E-05	2.20E-03	2.03E-03	7.00E-05	1.31E-05	3.99E-04	2.01E-04	3.54E-07	3.00E-05	11.2	4.22E-03	2.49E-04
SI6_W	0.43	7	0	1	2.32E-02	2.91E-02	4.39E-05	1.47E-03	1.35E-03	4.67E-05	8.72E-06	2.66E-04	1.34E-04	2.36E-07	2.00E-05	7.5	2.81E-03	1.66E-04
SI6_W	0.43	6	0	1	2.03E-02	2.54E-02	3.84E-05	1.29E-03	1.18E-03	4.09E-05	7.63E-06	2.33E-04	1.17E-04	2.07E-07	1.75E-05	6.5	2.46E-03	1.46E-04
SI6_W	0.43	4	0	1	1.45E-02	1.82E-02	2.74E-05	9.18E-04	8.44E-04	2.92E-05	5.45E-06	1.66E-04	8.37E-05	1.48E-07	1.25E-05	4.7	1.76E-03	1.04E-04
SI6_W	0.43	6	0	1	2.03E-02	2.54E-02	3.84E-05	1.29E-03	1.18E-03	4.09E-05	7.63E-06	2.33E-04	1.17E-04	2.07E-07	1.75E-05	6.5	2.46E-03	1.46E-04
SI6_W	0.43	15	0	1	4.93E-02	6.18E-02	9.32E-05	3.12E-03	2.87E-03	9.92E-05	1.85E-05	5.65E-04	2.84E-04	5.02E-07	4.25E-05	15.8	5.98E-03	3.53E-04
SI6_W	0.43	44	0	1	1.48E-01	1.85E-01	2.80E-04	9.36E-03	8.61E-03	2.98E-04	5.56E-05	1.70E-03	8.53E-04	1.51E-06	1.27E-04	47.5	1.79E-02	1.06E-03
SI6_W	0.43	67	0	1	2.26E-01	2.83E-01	4.28E-04	1.43E-02	1.32E-02	4.55E-04	8.50E-05	2.59E-03	1.31E-03	2.30E-06	1.95E-04	72.7	2.74E-02	1.62E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	54	0	1	1.83E-01	2.29E-01	3.45E-04	1.16E-02	1.06E-02	3.68E-04	6.87E-05	2.09E-03	1.05E-03	1.86E-06	1.57E-04	58.7	2.22E-02	1.31E-03
SI6_W	0.43	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.55E-03	8.78E-03	3.03E-04	5.67E-05	1.73E-03	8.70E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI6_W	0.43	40	0	1	1.36E-01	1.71E-01	2.58E-04	8.63E-03	7.94E-03	2.74E-04	5.12E-05	1.56E-03	7.86E-04	1.39E-06	1.17E-04	43.8	1.65E-02	9.77E-04
SI6_W	0.43	46	0	1	1.54E-01	1.93E-01	2.91E-04	9.73E-03	8.95E-03	3.09E-04	5.78E-05	1.76E-03	8.87E-04	1.57E-06	1.32E-04	49.4	1.86E-02	1.10E-03
SI6_W	0.43	48	0	1	1.62E-01	2.03E-01	3.07E-04	1.03E-02	9.46E-03	3.27E-04	6.11E-05	1.86E-03	9.37E-04	1.65E-06	1.40E-04	52.2	1.97E-02	1.16E-03
SI6_W	0.43	49	0	1	1.65E-01	2.07E-01	3.12E-04	1.05E-02	9.62E-03	3.33E-04	6.22E-05	1.89E-03	9.54E-04	1.68E-06	1.42E-04	53.1	2.00E-02	1.19E-03
SI6_W	0.43	51	0	1	1.71E-01	2.14E-01	3.23E-04	1.08E-02	9.96E-03	3.44E-04	6.43E-05	1.96E-03	9.87E-04	1.74E-06	1.47E-04	55.0	2.08E-02	1.23E-03
SI6_W	0.43	55	0	1	1.85E-01	2.33E-01	3.51E-04	1.18E-02	1.08E-02	3.74E-04	6.98E-05	2.13E-03	1.07E-03	1.89E-06	1.60E-04	59.7	2.25E-02	1.33E-03
SI6_W	0.43	68	0	1	2.29E-01	2.87E-01	4.33E-04	1.45E-02	1.33E-02	4.61E-04	8.61E-05	2.63E-03	1.32E-03	2.33E-06	1.97E-04	73.6	2.78E-02	1.64E-03
SI6_W	0.43	73	0	1	2.46E-01	3.09E-01	4.66E-04	1.56E-02	1.44E-02	4.96E-04	9.27E-05	2.83E-03	1.42E-03	2.51E-06	2.12E-04	79.2	2.99E-02	1.77E-03
SI6_W	0.43	51	0	1	1.71E-01	2.14E-01	3.23E-04	1.08E-02	9.96E-03	3.44E-04	6.43E-05	1.96E-03	9.87E-04	1.74E-06	1.47E-04	55.0	2.08E-02	1.23E-03
SI6_W	0.43	34	0	1	1.13E-01	1.42E-01	2.14E-04	7.16E-03	6.59E-03	2.28E-04	4.25E-05	1.30E-03	6.53E-04	1.15E-06	9.75E-05	36.4	1.37E-02	8.11E-04
SI6_W	0.43	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.93E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.25E-05	30.8	1.16E-02	6.86E-04
SI6_W	0.43	24	0	1	8.11E-02	1.02E-01	1.53E-04	5.14E-03	4.73E-03	1.63E-04	3.05E-05	9.31E-04	4.69E-04	8.27E-07	7.00E-05	26.1	9.85E-03	5.82E-04
SI6_W	0.43	20	0	1	6.66E-02	8.36E-02	1.26E-04	4.22E-03	3.88E-03	1.34E-04	2.51E-05	7.65E-04	3.85E-04	6.79E-07	5.75E-05	21.4	8.09E-03	4.78E-04
SI6_W	0.43	15	0	1	4.93E-02	6.18E-02	9.32E-05	3.12E-03	2.87E-03	9.92E-05	1.85E-05	5.65E-04	2.84E-04	5.02E-07	4.25E-05	15.8	5.98E-03	3.53E-04
SI7_E	0.47	11	0	1	3.74E-02	4.70E-02	7.08E-05	2.37E-03	2.18E-03	7.54E-05	1.41E-05	4.30E-04	2.16E-04	3.82E-07	3.23E-05	12.0	4.55E-03	2.69E-04
SI7_E	0.47	7	0	1	2.50E-02	3.13E-02	4.72E-05	1.58E-03	1.45E-03	5.03E-05	9.39E-06	2.86E-04	1.44E-04	2.54E-07	2.15E-05	8.0	3.03E-03	1.79E-04
SI7_E	0.47	6	0	1	2.18E-02	2.74E-02	4.13E-05	1.38E-03	1.27E-03	4.40E-05	8.22E-06	2.51E-04	1.26E-04	2.23E-07	1.88E-05	7.0	2.65E-03	1.57E-04
SI7_E	0.47	5	0	1	1.56E-02	1.96E-02	2.95E-05	9.89E-04	9.09E-04	3.14E-05	5.87E-06	1.79E-04	9.01E-05	1.59E-07	1.35E-05	5.0	1.89E-03	1.12E-04
SI7_E	0.47	6	0	1	2.18E-02	2.74E-02	4.13E-05	1.38E-03	1.27E-03	4.40E-05	8.22E-06	2.51E-04	1.26E-04	2.23E-07	1.88E-05	7.0	2.65E-03	1.57E-04
SI7_E	0.47	16	0	1	5.30E-02	6.65E-02	1.00E-04	3.36E-03	3.09E-03	1.07E-04	2.00E-05	6.09E-04	3.06E-04	5.41E-07	4.57E-05	17.1	6.44E-03	3.81E-04
SI7_E	0.47	47	0	1	1.59E-01	2.00E-01	3.01E-04	1.01E-02	9.27E-03	3.21E-04	5.99E-05	1.83E-03	9.19E-04	1.62E-06	1.37E-04	51.2	1.93E-02	1.14E-03
SI7_E	0.47	72	0	1	2.43E-01	3.05E-01	4.60E-04	1.54E-02	1.42E-02	4.90E-04	9.16E-05	2.79E-03	1.41E-03	2.48E-06	2.10E-04	78.3	2.95E-02	1.75E-03
SI7_E	0.47	58	0	1	1.97E-01	2.47E-01	3.72E-04	1.25E-02	1.15E-02	3.96E-04	7.40E-05	2.26E-03	1.14E-03	2.00E-06	1.70E-04	63.2	2.39E-02	1.41E-03
SI7_E	0.47	48	0	1	1.62E-01	2.03E-01	3.07E-04	1.03E-02	9.46E-03	3.27E-04	6.11E-05	1.86E-03	9.37E-04	1.65E-06	1.40E-04	52.2	1.97E-02	1.16E-03
SI7_E	0.47	44	0	1	1.47E-01	1.84E-01	2.77E-04	9.29E-03	8.55E-03	2.95E-04	5.52E-05	1.68E-03	8.47E-04	1.49E-06	1.26E-04	47.2	1.78E-02	1.05E-03
SI7_E	0.47	49	0	1	1.65E-01	2.07E-01	3.13E-04	1.05E-02	9.64E-03	3.33E-04	6.22E-05	1.90E-03	9.55E-04	1.69E-06	1.43E-04	53.2	2.01E-02	1.19E-03
SI7_E	0.47	52	0	1	1.75E-01	2.19E-01	3.31E-04	1.11E-02	1.02E-02	3.52E-04	6.58E-05	2.00E-03	1.01E-03	1.78E-06	1.51E-04	56.2	2.12E-02	1.25E-03
SI7_E	0.47	53	0	1	1.78E-01	2.23E-01	3.36E-04	1.13E-02	1.04E-02	3.58E-04	6.69E-05	2.04E-03	1.03E-03	1.81E-06	1.53E-04	57.2	2.16E-02	1.28E-03
SI7_E	0.47	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.17E-02	1.07E-02	3.71E-04	6.93E-05	2.11E-03	1.06E-03	1.88E-06	1.59E-04	59.2	2.23E-02	1.32E-03
SI7_E	0.47	59	0	1	2.00E-01	2.50E-01	3.78E-04	1.27E-02	1.16E-02	4.02E-04	7.52E-05	2.29E-03	1.15E-03	2.04E-06	1.72E-04	64.2	2.42E-02	1.43E-03
SI7_E	0.47	73	0	1	2.47E-01	3.09E-01	4.66E-04	1.56E-02	1.44E-02	4.97E-04	9.28E-05	2.83E-03	1.42E-03	2.51E-06	2.13E-04	79.3	2.99E-02	1.77E-03
SI7_E	0.47	79	0	1	2.65E-01	3.33E-01	5.02E-04	1.68E-02	1.55E-02	5.34E-04	9.98E-05	3.04E-03	1.53E-03	2.70E-06	2.29E-04	85.3	3.22E-02	1.90E-03
SI7_E	0.47	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.17E-02	1.07E-02	3.71E-04	6.93E-05	2.11E-03	1.06E-03	1.88E-06	1.59E-04	59.2	2.23E-02	1.32E-03
SI7_E	0.47	36	0	1	1.22E-01	1.53E-01	2.30E-04	7.71E-03	7.09E-03	2.45E-04	4.58E-05	1.40E-03	7.03E-04	1.24E-06	1.05E-04	39.1	1.48E-02	8.73E-04
SI7_E	0.47	31	0	1	1.03E-01	1.29E-01	1.95E-04	6.53E-03	6.00E-03	2.07E-04	3.87E-05	1.18E-03	5.95E-04	1.05E-06	8.88E-05	33.1	1.25E-02	7.39E-04
SI7_E	0.47	26	0	1	8.74E-02	1.10E-01	1.65E-04	5.54E-03	5.09E-03	1.76E-04	3.29E-05	1.00E-03	5.05E-04	8.90E-07	7.54E-05	28.1	1.06E-02	6.27E-04
SI7_E	0.47	21	0	1	7.18E-02	9.00E-02	1.36E-04	4.55E-03	4.18E-03	1.45E-04	2.70E-05	8.23E-04	4.14E-04	7.31E-07	6.19E-05	23.1	8.71E-03	5.15E-04
SI7_E	0.47	16	0	1	5.30E-02	6.65E-02	1.00E-04	3.36E-03	3.09E-03	1.07E-04	2.00E-05	6.09E-04	3.06E-04	5.41E-07	4.57E-05	17.1	6.44E-03	3.81E-04
SI7_W	0.47	10	0	1	3.51E-02	4.40E-02	6.64E-05	2.22E-03	2.05E-03	7.07E-05	1.32E-05	4.03E-04	2.03E-04	3.58E-07	3.03E-05	11.3	4.26E-03	2.52E-04
SI7_W	0.47	7	0	1	2.34E-02	2.93E-02	4.43E-05	1.48E-03	1.36E-03	4.71E-05	8.80E-06	2.68E-04	1.35E-04	2.38E-07	2.02E-05	7.5	2.84E-03	1.68E-04
SI7_W	0.47	6	0	1	2.05E-02	2.57E-02	3.87E-05	1.30E-03	1.19E-03	4.12E-05	7.70E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.48E-03	1.47E-04
SI7_W	0.47	4	0	1	1.46E-02	1.83E-02	2.77E-05	9.27E-04	8.52E-04	2.95E-05	5.50E-06	1.68E-04	8.44E-05	1.49E-07	1.26E-05	4.7	1.77E-03	1.05E-04
SI7_W	0.47	6	0	1	2.05E-02	2.57E-02	3.87E-05	1.30E-03	1.19E-03	4.12E-05	7.70E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.48E-03	1.47E-04
SI7_W	0.47	15	0	1	4.97E-02	6.23E-02	9.40E-05	3.15E-03	2.90E-03	1.00E-04	1.87E-05	5.70E-04	2.87E-04	5.07E-07	4.29E-05	16.0	6.03E-03	3.57E-04
SI7_W	0.47	44	0	1	1.49E-01	1.87E-01	2.82E-04	9.45E-03	8.69E-03	3.00E-04	5.61E-05	1.71E-03	8.61E-04	1.52E-06	1.29E-04	48.0	1.81E-02	1.07E-03
SI7_W	0.47	68	0	1	2.28E-01	2.86E-01	4.32E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI7_W	0.47	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.07E-02	3.71E-04	6.93E-05	2.11E-03	1.06E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI7_W	0.47	45	0	1	1.52E-01	1.91E-01	2.88E-04	9.64E-03	8.86E-03	3.06E-04	5.72E-05	1.74E-03	8.78E-04	1.55E-06	1.31E-04	48.9	1.85E-02	1.09E-03
SI7_W	0.47	41	0	1	1.37E-01	1.72E-01	2.60E-04	8.71E-03	8.01E-03	2.77E-04	5.17E-05	1.58E-03	7.94E-04	1.40E-06	1.19E-04	44.2	1.67E-02	9.86E-04
SI7_W	0.47	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.82E-03	9.03E-03	3.12E-04	5.83E-05	1.78E-03	8.95E-04	1.58E-06	1.34E-04	49.9	1.88E-02	1.11E-03
SI7_W	0.47	49	0	1	1.64E-01	2.05E-01	3.10E-04	1.04E-02	9.54E-03	3.30E-04	6.16E-05	1.88E-03	9.46E-04	1.67E-06	1.41E-04	52.7	1.99E-02	1.18E-03
SI7_W	0.47	50	0	1	1.67E-01	2.09E-01	3.15E-04	1.06E-02	9.71E-03	3.36E-04	6.27E-05	1.91E-03	9.63E-04	1.70E-06	1.44E-04	53.6	2.02E-02	1.20E-03
SI7_W	0.47	51	0	1	1.73E-01	2.16E-01	3.26E-04	1.09E-02	1.01E-02	3.48E-04	6.49E-05	1.98E-03	9.96E-04	1.76E-06	1.49E-04	55.5	2.09E-02	1.24E-03
SI7_W	0.47	56	0	1	1.87E-01	2.35E-01	3.54E-04	1.19E-02	1.09E-02	3.77E-04	7.04E-05	2.15E-03	1.08E-03	1.91E-06	1.61E-04	60.2	2.27E-02	1.34E-03
SI7_W	0.47	69	0	1	2.31E-01	2.90E-01	4.37E-04	1.46E-02	1.35E-02	4.65E-04	8.69E-05	2.65E-03	1.33E-03	2.35E-06	1.99E-04	74.3	2.80E-02	1.66E-03
SI7_W	0.47	74	0	1	2.49E-01	3.12E-01	4.70E-04	1.58E-02	1.45E-02	5.01E-04	9.35E-05	2.85E-03	1.44E-03	2.53E-06	2.14E-04	80.0	3.02E-02	1.78E-03
SI7_W	0.47	51	0	1	1.73E-01	2.16E-01	3.26E-04	1.09E-02	1.01E-02	3.48E-04	6.49E-05	1.98E-03	9.96E-04	1.76E-06	1.49E-04	55.5	2.09E-02	1.24E-03
SI7_W	0.47	34	0	1	1.14E-01	1.43E-01	2.16E-04	7.23E-03	6.65E-03	2.30E-04	4.29E-05	1.31E-03	6.59E-04	1.16E-06	9.84E-05	36.7	1.38E-02	8.18E-04
SI7_W	0.47	29	0	1	9.65E-02	1.21E-01	1.83E-04	6.12E-03	5.62E-03	1.94E-04	3.63E-05	1.11E-03	5.57E-04	9.83E-07	8.32E-05	31.0	1.17E-02	6.92E-04
SI7_W	0.47	24	0	1	8.19E-02	1.03E-01	1.55E-04	5.19E-03	4.77E-03	1.65E-04	3.08E-05	9.39E-04	4.73E-04	8.34E-07	7.06E-05	26.3	9.94E-03	5.88E-04
SI7_W	0.47	20	0	1	6.73E-02	8.44E-02	1.27E-04	4.26E-03	3.92E-03	1.35E-04	2.53E-05	7.72E-04	3.88E-04	6.85E-07	5.80E-05	21.6	8.16E-03	4.83E-04
SI7_W	0.47	15	0	1	4.97E-02	6.23E-02	9.40E-05	3.15E-03	2.90E-03	1.00E-04	1.87E-05	5.70E-04	2.87E-04	5.07E-07	4.29E-05	16.0	6.03E-03	3.57E-04
SI8_E	0.55	12	0	1	4.14E-02	5.19E-02	7.82E-05	2.62E-03	2.41E-03	8.33E-05	1.56E-05	4.74E-04	2.39E-04	4.21E-07	3.57E-05	13.3	5.02E-03	2.97E-04
SI8_E	0.55	8	0	1	2.76E-02	3.46E-02	5.22E-05	1.75E-03	1.61E-03	5.55E-05	1.04E-05	3.16E-04	1.59E-04	2.81E-07	2.38E-05	8.9	3.35E-03	1.98E-04
SI8_E	0.55	7	0	1	2.41E-02	3.03E-02	4.56E-05	1.53E-03	1.41E-03	4.86E-05	9.08E-06	2.77E-04	1.39E-04	2.46E-07	2.08E-05	7.8	2.93E-03	1.73E-04
SI8_E	0.55	5	0	1	1.72E-02	2.16E-02	3.26E-05	1.09E-03	1.00E-03	3.47E-05	6.48E-06	1.98E-04	9.95E-05	1.76E-07	1.49E-05	5.5	2.09E-03	1.24E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	7	0	1	2.41E-02	3.03E-02	4.56E-05	1.53E-03	1.41E-03	4.86E-05	9.08E-06	2.77E-04	1.39E-04	2.46E-07	2.08E-05	7.8	2.93E-03	1.73E-04
SI8_E	0.55	17	0	1	5.86E-02	7.35E-02	1.11E-04	3.71E-03	3.41E-03	1.18E-04	2.20E-05	6.72E-04	3.38E-04	5.97E-07	5.05E-05	18.8	7.11E-03	4.20E-04
SI8_E	0.55	52	0	1	1.76E-01	2.20E-01	3.33E-04	1.11E-02	1.02E-02	3.54E-04	6.61E-05	2.02E-03	1.02E-03	1.79E-06	1.52E-04	56.5	2.13E-02	1.26E-03
SI8_E	0.55	80	0	1	2.69E-01	3.37E-01	5.09E-04	1.70E-02	1.57E-02	5.41E-04	1.01E-04	3.08E-03	1.55E-03	2.74E-06	2.32E-04	86.5	3.26E-02	1.93E-03
SI8_E	0.55	65	0	1	2.17E-01	2.72E-01	4.11E-04	1.38E-02	1.27E-02	4.37E-04	8.17E-05	2.49E-03	1.25E-03	2.21E-06	1.87E-04	69.8	2.64E-02	1.56E-03
SI8_E	0.55	53	0	1	1.79E-01	2.25E-01	3.39E-04	1.14E-02	1.04E-02	3.61E-04	6.74E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.7	2.18E-02	1.29E-03
SI8_E	0.55	48	0	1	1.62E-01	2.03E-01	3.06E-04	1.03E-02	9.44E-03	3.26E-04	6.10E-05	1.86E-03	9.36E-04	1.65E-06	1.40E-04	52.1	1.97E-02	1.16E-03
SI8_E	0.55	54	0	1	1.83E-01	2.29E-01	3.46E-04	1.16E-02	1.06E-02	3.68E-04	6.87E-05	2.10E-03	1.05E-03	1.86E-06	1.58E-04	58.8	2.22E-02	1.31E-03
SI8_E	0.55	57	0	1	1.93E-01	2.42E-01	3.65E-04	1.22E-02	1.12E-02	3.89E-04	7.26E-05	2.21E-03	1.11E-03	1.97E-06	1.66E-04	62.1	2.34E-02	1.38E-03
SI8_E	0.55	58	0	1	1.96E-01	2.46E-01	3.72E-04	1.24E-02	1.14E-02	3.96E-04	7.39E-05	2.25E-03	1.13E-03	2.00E-06	1.69E-04	63.2	2.38E-02	1.41E-03
SI8_E	0.55	60	0	1	2.03E-01	2.55E-01	3.85E-04	1.29E-02	1.19E-02	4.10E-04	7.65E-05	2.33E-03	1.17E-03	2.07E-06	1.75E-04	65.4	2.47E-02	1.46E-03
SI8_E	0.55	66	0	1	2.21E-01	2.77E-01	4.17E-04	1.40E-02	1.29E-02	4.44E-04	8.30E-05	2.53E-03	1.27E-03	2.25E-06	1.90E-04	71.0	2.68E-02	1.58E-03
SI8_E	0.55	81	0	1	2.72E-01	3.41E-01	5.15E-04	1.73E-02	1.59E-02	5.48E-04	1.02E-04	3.12E-03	1.57E-03	2.77E-06	2.35E-04	87.6	3.31E-02	1.95E-03
SI8_E	0.55	87	0	1	2.93E-01	3.67E-01	5.54E-04	1.86E-02	1.71E-02	5.90E-04	1.10E-04	3.36E-03	1.69E-03	2.99E-06	2.53E-04	94.2	3.56E-02	2.10E-03
SI8_E	0.55	60	0	1	2.03E-01	2.55E-01	3.85E-04	1.29E-02	1.19E-02	4.10E-04	7.65E-05	2.33E-03	1.17E-03	2.07E-06	1.75E-04	65.4	2.47E-02	1.46E-03
SI8_E	0.55	40	0	1	1.34E-01	1.69E-01	2.54E-04	8.52E-03	7.83E-03	2.71E-04	5.06E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.65E-04
SI8_E	0.55	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.21E-03	6.63E-03	2.29E-04	4.28E-05	1.30E-03	6.57E-04	1.16E-06	9.81E-05	36.6	1.38E-02	8.16E-04
SI8_E	0.55	29	0	1	9.65E-02	1.21E-01	1.83E-04	6.12E-03	5.62E-03	1.94E-04	3.63E-05	1.11E-03	5.57E-04	9.83E-07	8.32E-05	31.0	1.17E-02	6.92E-04
SI8_E	0.55	24	0	1	7.93E-02	9.94E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.09E-04	4.58E-04	8.08E-07	6.84E-05	25.5	9.62E-03	5.69E-04
SI8_E	0.55	17	0	1	5.86E-02	7.35E-02	1.11E-04	3.71E-03	3.41E-03	1.18E-04	2.20E-05	6.72E-04	3.38E-04	5.97E-07	5.05E-05	18.8	7.11E-03	4.20E-04
SI8_W	0.48	8	0	1	2.69E-02	3.38E-02	5.09E-05	1.71E-03	1.57E-03	5.42E-05	1.01E-05	3.09E-04	1.56E-04	2.74E-07	2.32E-05	8.7	3.27E-03	1.93E-04
SI8_W	0.48	5	0	1	1.80E-02	2.25E-02	3.40E-05	1.14E-03	1.05E-03	3.62E-05	6.76E-06	2.06E-04	1.04E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI8_W	0.48	5	0	1	1.57E-02	1.97E-02	2.97E-05	9.95E-04	9.15E-04	3.16E-05	5.91E-06	1.80E-04	9.07E-05	1.60E-07	1.35E-05	5.1	1.91E-03	1.13E-04
SI8_W	0.48	3	0	1	1.12E-02	1.41E-02	2.12E-05	7.11E-04	6.54E-04	2.26E-05	4.22E-06	1.29E-04	6.48E-05	1.14E-07	9.68E-06	3.6	1.36E-03	8.05E-05
SI8_W	0.48	5	0	1	1.57E-02	1.97E-02	2.97E-05	9.95E-04	9.15E-04	3.16E-05	5.91E-06	1.80E-04	9.07E-05	1.60E-07	1.35E-05	5.1	1.91E-03	1.13E-04
SI8_W	0.48	11	0	1	3.81E-02	4.78E-02	7.22E-05	2.42E-03	2.22E-03	7.68E-05	1.44E-05	4.38E-04	2.20E-04	3.89E-07	3.29E-05	12.3	4.63E-03	2.74E-04
SI8_W	0.48	34	0	1	1.14E-01	1.44E-01	2.16E-04	7.25E-03	6.67E-03	2.31E-04	4.31E-05	1.31E-03	6.61E-04	1.17E-06	9.87E-05	36.8	1.39E-02	8.21E-04
SI8_W	0.48	52	0	1	1.75E-01	2.20E-01	3.31E-04	1.11E-02	1.02E-02	3.53E-04	6.59E-05	2.01E-03	1.01E-03	1.78E-06	1.51E-04	56.3	2.12E-02	1.26E-03
SI8_W	0.48	42	0	1	1.41E-01	1.77E-01	2.67E-04	8.96E-03	8.24E-03	2.85E-04	5.32E-05	1.62E-03	8.16E-04	1.44E-06	1.22E-04	45.5	1.72E-02	1.01E-03
SI8_W	0.48	35	0	1	1.17E-01	1.46E-01	2.21E-04	7.39E-03	6.80E-03	2.35E-04	4.39E-05	1.34E-03	6.74E-04	1.19E-06	1.01E-04	37.5	1.42E-02	8.37E-04
SI8_W	0.48	31	0	1	1.05E-01	1.32E-01	2.00E-04	6.68E-03	6.15E-03	2.12E-04	3.97E-05	1.21E-03	6.09E-04	1.07E-06	9.10E-05	33.9	1.28E-02	7.57E-04
SI8_W	0.48	35	0	1	1.19E-01	1.49E-01	2.25E-04	7.54E-03	6.93E-03	2.40E-04	4.48E-05	1.36E-03	6.87E-04	1.21E-06	1.03E-04	38.3	1.44E-02	8.53E-04
SI8_W	0.48	37	0	1	1.26E-01	1.58E-01	2.38E-04	7.96E-03	7.32E-03	2.53E-04	4.73E-05	1.44E-03	7.26E-04	1.28E-06	1.08E-04	40.4	1.53E-02	9.02E-04
SI8_W	0.48	38	0	1	1.28E-01	1.60E-01	2.42E-04	8.10E-03	7.45E-03	2.58E-04	4.81E-05	1.47E-03	7.39E-04	1.30E-06	1.10E-04	41.1	1.55E-02	9.18E-04
SI8_W	0.48	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI8_W	0.48	43	0	1	1.44E-01	1.80E-01	2.72E-04	9.10E-03	8.37E-03	2.89E-04	5.40E-05	1.65E-03	8.29E-04	1.46E-06	1.24E-04	46.2	1.74E-02	1.03E-03
SI8_W	0.48	53	0	1	1.77E-01	2.22E-01	3.35E-04	1.12E-02	1.03E-02	3.57E-04	6.67E-05	2.03E-03	1.02E-03	1.81E-06	1.53E-04	57.0	2.15E-02	1.27E-03
SI8_W	0.48	57	0	1	1.91E-01	2.39E-01	3.61E-04	1.21E-02	1.11E-02	3.84E-04	7.18E-05	2.19E-03	1.10E-03	1.94E-06	1.64E-04	61.4	2.32E-02	1.37E-03
SI8_W	0.48	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI8_W	0.48	26	0	1	8.75E-02	1.10E-01	1.66E-04	5.55E-03	5.10E-03	1.76E-04	3.29E-05	1.00E-03	5.05E-04	8.92E-07	7.55E-05	28.2	1.06E-02	6.28E-04
SI8_W	0.48	22	0	1	7.40E-02	9.29E-02	1.40E-04	4.69E-03	4.32E-03	1.49E-04	2.79E-05	8.50E-04	4.28E-04	7.55E-07	6.39E-05	23.8	8.99E-03	5.31E-04
SI8_W	0.48	19	0	1	6.28E-02	7.88E-02	1.19E-04	3.98E-03	3.66E-03	1.27E-04	2.36E-05	7.21E-04	3.63E-04	6.40E-07	5.42E-05	20.2	7.63E-03	4.51E-04
SI8_W	0.48	15	0	1	5.16E-02	6.47E-02	9.76E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI8_W	0.48	11	0	1	3.81E-02	4.78E-02	7.22E-05	2.42E-03	2.22E-03	7.68E-05	1.44E-05	4.38E-04	2.20E-04	3.89E-07	3.29E-05	12.3	4.63E-03	2.74E-04
SI9_E	0.75	12	0	1	4.18E-02	5.24E-02	7.90E-05	2.65E-03	2.43E-03	8.42E-05	1.57E-05	4.79E-04	2.41E-04	4.26E-07	3.60E-05	13.4	5.07E-03	3.00E-04
SI9_E	0.75	8	0	1	2.79E-02	3.49E-02	5.27E-05	1.77E-03	1.62E-03	5.61E-05	1.05E-05	3.20E-04	1.61E-04	2.84E-07	2.40E-05	9.0	3.38E-03	2.00E-04
SI9_E	0.75	7	0	1	2.44E-02	3.06E-02	4.61E-05	1.54E-03	1.42E-03	4.91E-05	9.17E-06	2.80E-04	1.41E-04	2.48E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI9_E	0.75	5	0	1	1.74E-02	2.18E-02	3.29E-05	1.10E-03	1.01E-03	3.51E-05	6.55E-06	2.00E-04	1.01E-04	1.77E-07	1.50E-05	5.6	2.11E-03	1.25E-04
SI9_E	0.75	7	0	1	2.44E-02	3.06E-02	4.61E-05	1.54E-03	1.42E-03	4.91E-05	9.17E-06	2.80E-04	1.41E-04	2.48E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI9_E	0.75	18	0	1	5.92E-02	7.42E-02	1.12E-04	3.75E-03	3.45E-03	1.19E-04	2.23E-05	6.79E-04	3.42E-04	6.03E-07	5.10E-05	19.0	7.19E-03	4.25E-04
SI9_E	0.75	53	0	1	1.78E-01	2.23E-01	3.36E-04	1.13E-02	1.03E-02	3.58E-04	6.68E-05	2.04E-03	1.03E-03	1.81E-06	1.53E-04	57.1	2.16E-02	1.27E-03
SI9_E	0.75	81	0	1	2.72E-01	3.41E-01	5.14E-04	1.72E-02	1.58E-02	5.47E-04	1.02E-04	3.12E-03	1.57E-03	2.77E-06	2.34E-04	87.4	3.30E-02	1.95E-03
SI9_E	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.25E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI9_E	0.75	54	0	1	1.81E-01	2.27E-01	3.43E-04	1.15E-02	1.06E-02	3.65E-04	6.81E-05	2.08E-03	1.05E-03	1.85E-06	1.56E-04	58.2	2.20E-02	1.30E-03
SI9_E	0.75	49	0	1	1.64E-01	2.05E-01	3.10E-04	1.04E-02	9.54E-03	3.30E-04	6.16E-05	1.88E-03	9.45E-04	1.67E-06	1.41E-04	52.6	1.99E-02	1.17E-03
SI9_E	0.75	55	0	1	1.85E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.4	2.24E-02	1.32E-03
SI9_E	0.75	58	0	1	1.95E-01	2.45E-01	3.69E-04	1.24E-02	1.14E-02	3.93E-04	7.34E-05	2.24E-03	1.13E-03	1.99E-06	1.68E-04	62.7	2.37E-02	1.40E-03
SI9_E	0.75	59	0	1	1.98E-01	2.49E-01	3.75E-04	1.26E-02	1.16E-02	4.00E-04	7.47E-05	2.28E-03	1.15E-03	2.02E-06	1.71E-04	63.8	2.41E-02	1.42E-03
SI9_E	0.75	61	0	1	2.05E-01	2.58E-01	3.89E-04	1.30E-02	1.20E-02	4.14E-04	7.73E-05	2.36E-03	1.19E-03	2.09E-06	1.77E-04	66.1	2.49E-02	1.47E-03
SI9_E	0.75	66	0	1	2.23E-01	2.79E-01	4.22E-04	1.41E-02	1.30E-02	4.49E-04	8.39E-05	2.56E-03	1.29E-03	2.27E-06	1.92E-04	71.7	2.71E-02	1.60E-03
SI9_E	0.75	82	0	1	2.75E-01	3.45E-01	5.20E-04	1.74E-02	1.60E-02	5.54E-04	1.04E-04	3.16E-03	1.59E-03	2.80E-06	2.37E-04	88.5	3.34E-02	1.97E-03
SI9_E	0.75	88	0	1	2.96E-01	3.71E-01	5.60E-04	1.88E-02	1.72E-02	5.96E-04	1.11E-04	3.40E-03	1.71E-03	3.02E-06	2.55E-04	95.2	3.59E-02	2.12E-03
SI9_E	0.75	61	0	1	2.05E-01	2.58E-01	3.89E-04	1.30E-02	1.20E-02	4.14E-04	7.73E-05	2.36E-03	1.19E-03	2.09E-06	1.77E-04	66.1	2.49E-02	1.47E-03
SI9_E	0.75	40	0	1	1.36E-01	1.70E-01	2.57E-04	8.60E-03	7.91E-03	2.74E-04	5.11E-05	1.56E-03	7.84E-04	1.38E-06	1.17E-04	43.7	1.65E-02	9.74E-04
SI9_E	0.75	34	0	1	1.15E-01	1.44E-01	2.17E-04	7.28E-03	6.70E-03	2.31E-04	4.32E-05	1.32E-03	6.64E-04	1.17E-06	9.91E-05	37.0	1.39E-02	8.25E-04
SI9_E	0.75	29	0	1	9.75E-02	1.22E-01	1.84E-04	6.18E-03	5.68E-03	1.96E-04	3.67E-05	1.12E-03	5.63E-04	9.94E-07	8.41E-05	31.4	1.18E-02	7.00E-04
SI9_E	0.75	24	0	1	8.01E-02	1.00E-01	1.52E-04	5.07E-03	4.67E-03	1.61E-04	3.01E-05	9.19E-04	4.63E-04	8.16E-07	6.91E-05	25.8	9.72E-03	5.75E-04
SI9_E	0.75	18	0	1	5.92E-02	7.42E-02	1.12E-04	3.75E-03	3.45E-03	1.19E-04	2.23E-05	6.79E-04	3.42E-04	6.03E-07	5.10E-05	19.0	7.19E-03	4.25E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI9_W	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI9_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI9_W	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI9_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI9_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI9_W	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI9_W	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI9_W	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI9_W	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI9_W	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI9_W	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI9_W	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI9_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI9_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI9_W	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03
SI9_W	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI9_W	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI9_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI9_W	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04
SI9_W	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI9_W	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI9_W	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI9_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI10_E	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI10_E	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI10_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI10_E	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI10_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI10_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI10_E	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI10_E	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI10_E	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI10_E	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI10_E	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI10_E	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI10_E	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI10_E	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI10_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI10_E	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03
SI10_E	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI10_E	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI10_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI10_E	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04
SI10_E	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI10_E	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI10_E	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI10_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI10_W	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI10_W	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI10_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI10_W	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI10_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI10_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI10_W	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI10_W	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI10_W	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI10_W	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI10_W	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI10_W	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI10_W	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI10_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI10_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI10_W	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03
SI10_W	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI10_W	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI10_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI10_W	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI10_W	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI10_W	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI10_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI11_E	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI11_E	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI11_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI11_E	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI11_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI11_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI11_E	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI11_E	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI11_E	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI11_E	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI11_E	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI11_E	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI11_E	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI11_E	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI11_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI11_E	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03
SI11_E	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI11_E	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI11_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI11_E	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04
SI11_E	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI11_E	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI11_E	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI11_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI11_W	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI11_W	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI11_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI11_W	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI11_W	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI11_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI11_W	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI11_W	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI11_W	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI11_W	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI11_W	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI11_W	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI11_W	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI11_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI11_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI11_W	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03
SI11_W	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI11_W	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI11_W	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI11_W	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04
SI11_W	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI11_W	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI11_W	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI11_W	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI12_E	0.75	11	0	1	3.64E-02	4.56E-02	6.88E-05	2.31E-03	2.12E-03	7.33E-05	1.37E-05	4.17E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.61E-04
SI12_E	0.75	7	0	1	2.43E-02	3.04E-02	4.59E-05	1.54E-03	1.41E-03	4.89E-05	9.13E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI12_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI12_E	0.75	5	0	1	1.52E-02	1.90E-02	2.87E-05	9.61E-04	8.83E-04	3.05E-05	5.70E-06	1.74E-04	8.75E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI12_E	0.75	6	0	1	2.12E-02	2.66E-02	4.01E-05	1.34E-03	1.24E-03	4.27E-05	7.99E-06	2.43E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI12_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI12_E	0.75	46	0	1	1.55E-01	1.94E-01	2.93E-04	9.80E-03	9.01E-03	3.11E-04	5.82E-05	1.77E-03	8.93E-04	1.58E-06	1.33E-04	49.7	1.88E-02	1.11E-03
SI12_E	0.75	70	0	1	2.36E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI12_E	0.75	57	0	1	1.91E-01	2.40E-01	3.61E-04	1.21E-02	1.11E-02	3.85E-04	7.19E-05	2.19E-03	1.10E-03	1.95E-06	1.65E-04	61.4	2.32E-02	1.37E-03
SI12_E	0.75	47	0	1	1.58E-01	1.98E-01	2.98E-04	9.99E-03	9.19E-03	3.18E-04	5.93E-05	1.81E-03	9.11E-04	1.61E-06	1.36E-04	50.7	1.91E-02	1.13E-03
SI12_E	0.75	42	0	1	1.42E-01	1.79E-01	2.70E-04	9.03E-03	8.30E-03	2.87E-04	5.36E-05	1.63E-03	8.23E-04	1.45E-06	1.23E-04	45.8	1.73E-02	1.02E-03
SI12_E	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.05E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI12_E	0.75	50	0	1	1.70E-01	2.13E-01	3.21E-04	1.08E-02	9.89E-03	3.42E-04	6.39E-05	1.95E-03	9.81E-04	1.73E-06	1.46E-04	54.6	2.06E-02	1.22E-03
SI12_E	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI12_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI12_E	0.75	58	0	1	1.94E-01	2.43E-01	3.67E-04	1.23E-02	1.13E-02	3.91E-04	7.30E-05	2.23E-03	1.12E-03	1.98E-06	1.67E-04	62.4	2.36E-02	1.39E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	71	0	1	2.40E-01	3.00E-01	4.53E-04	1.52E-02	1.40E-02	4.82E-04	9.01E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.0	2.91E-02	1.72E-03
SI12_E	0.75	77	0	1	2.58E-01	3.23E-01	4.88E-04	1.63E-02	1.50E-02	5.19E-04	9.70E-05	2.96E-03	1.49E-03	2.63E-06	2.22E-04	82.9	3.13E-02	1.85E-03
SI12_E	0.75	53	0	1	1.79E-01	2.24E-01	3.38E-04	1.13E-02	1.04E-02	3.60E-04	6.73E-05	2.05E-03	1.03E-03	1.82E-06	1.54E-04	57.5	2.17E-02	1.28E-03
SI12_E	0.75	35	0	1	1.18E-01	1.48E-01	2.24E-04	7.49E-03	6.89E-03	2.38E-04	4.45E-05	1.36E-03	6.83E-04	1.21E-06	1.02E-04	38.0	1.44E-02	8.48E-04
SI12_E	0.75	30	0	1	1.00E-01	1.25E-01	1.89E-04	6.34E-03	5.83E-03	2.02E-04	3.77E-05	1.15E-03	5.78E-04	1.02E-06	8.63E-05	32.2	1.21E-02	7.18E-04
SI12_E	0.75	25	0	1	8.49E-02	1.06E-01	1.61E-04	5.38E-03	4.95E-03	1.71E-04	3.19E-05	9.74E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI12_E	0.75	21	0	1	6.97E-02	8.75E-02	1.32E-04	4.42E-03	4.06E-03	1.40E-04	2.62E-05	8.00E-04	4.03E-04	7.11E-07	6.01E-05	22.4	8.46E-03	5.00E-04
SI12_E	0.75	15	0	1	5.15E-02	6.46E-02	9.75E-05	3.27E-03	3.00E-03	1.04E-04	1.94E-05	5.91E-04	2.98E-04	5.25E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI12_W	0.75	12	0	1	4.07E-02	5.10E-02	7.69E-05	2.58E-03	2.37E-03	8.19E-05	1.53E-05	4.66E-04	2.35E-04	4.14E-07	3.51E-05	13.1	4.94E-03	2.92E-04
SI12_W	0.75	8	0	1	2.71E-02	3.40E-02	5.13E-05	1.72E-03	1.58E-03	5.46E-05	1.02E-05	3.11E-04	1.57E-04	2.76E-07	2.34E-05	8.7	3.29E-03	1.95E-04
SI12_W	0.75	7	0	1	2.37E-02	2.97E-02	4.49E-05	1.50E-03	1.38E-03	4.78E-05	8.93E-06	2.72E-04	1.37E-04	2.42E-07	2.05E-05	7.6	2.88E-03	1.70E-04
SI12_W	0.75	5	0	1	1.69E-02	2.12E-02	3.20E-05	1.07E-03	9.87E-04	3.41E-05	6.38E-06	1.94E-04	9.78E-05	1.73E-07	1.46E-05	5.4	2.06E-03	1.22E-04
SI12_W	0.75	7	0	1	2.37E-02	2.97E-02	4.49E-05	1.50E-03	1.38E-03	4.78E-05	8.93E-06	2.72E-04	1.37E-04	2.42E-07	2.05E-05	7.6	2.88E-03	1.70E-04
SI12_W	0.75	17	0	1	5.76E-02	7.22E-02	1.09E-04	3.65E-03	3.36E-03	1.16E-04	2.17E-05	6.61E-04	3.33E-04	5.87E-07	4.97E-05	18.5	6.99E-03	4.13E-04
SI12_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.09E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI12_W	0.75	79	0	1	2.64E-01	3.31E-01	5.00E-04	1.67E-02	1.54E-02	5.32E-04	9.95E-05	3.03E-03	1.53E-03	2.69E-06	2.28E-04	85.0	3.21E-02	1.90E-03
SI12_W	0.75	63	0	1	2.13E-01	2.68E-01	4.04E-04	1.35E-02	1.24E-02	4.30E-04	8.03E-05	2.45E-03	1.23E-03	2.18E-06	1.84E-04	68.7	2.59E-02	1.53E-03
SI12_W	0.75	52	0	1	1.76E-01	2.21E-01	3.33E-04	1.12E-02	1.03E-02	3.55E-04	6.63E-05	2.02E-03	1.02E-03	1.80E-06	1.52E-04	56.7	2.14E-02	1.26E-03
SI12_W	0.75	47	0	1	1.59E-01	2.00E-01	3.01E-04	1.01E-02	9.28E-03	3.21E-04	5.99E-05	1.83E-03	9.20E-04	1.62E-06	1.37E-04	51.2	1.93E-02	1.14E-03
SI12_W	0.75	53	0	1	1.80E-01	2.25E-01	3.40E-04	1.14E-02	1.05E-02	3.62E-04	6.76E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.8	2.18E-02	1.29E-03
SI12_W	0.75	56	0	1	1.90E-01	2.38E-01	3.59E-04	1.20E-02	1.11E-02	3.82E-04	7.14E-05	2.18E-03	1.10E-03	1.93E-06	1.64E-04	61.0	2.30E-02	1.36E-03
SI12_W	0.75	57	0	1	1.93E-01	2.42E-01	3.65E-04	1.22E-02	1.13E-02	3.89E-04	7.27E-05	2.22E-03	1.12E-03	1.97E-06	1.67E-04	62.1	2.34E-02	1.39E-03
SI12_W	0.75	59	0	1	2.00E-01	2.51E-01	3.78E-04	1.27E-02	1.16E-02	4.03E-04	7.52E-05	2.29E-03	1.15E-03	2.04E-06	1.72E-04	64.3	2.43E-02	1.43E-03
SI12_W	0.75	64	0	1	2.17E-01	2.72E-01	4.10E-04	1.37E-02	1.26E-02	4.37E-04	8.16E-05	2.49E-03	1.25E-03	2.21E-06	1.87E-04	69.8	2.63E-02	1.56E-03
SI12_W	0.75	80	0	1	2.68E-01	3.36E-01	5.06E-04	1.70E-02	1.56E-02	5.39E-04	1.01E-04	3.07E-03	1.55E-03	2.73E-06	2.31E-04	86.1	3.25E-02	1.92E-03
SI12_W	0.75	86	0	1	2.88E-01	3.61E-01	5.45E-04	1.82E-02	1.68E-02	5.80E-04	1.08E-04	3.30E-03	1.66E-03	2.94E-06	2.48E-04	92.6	3.50E-02	2.07E-03
SI12_W	0.75	59	0	1	2.00E-01	2.51E-01	3.78E-04	1.27E-02	1.16E-02	4.03E-04	7.52E-05	2.29E-03	1.15E-03	2.04E-06	1.72E-04	64.3	2.43E-02	1.43E-03
SI12_W	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.37E-03	7.70E-03	2.66E-04	4.97E-05	1.52E-03	7.63E-04	1.35E-06	1.14E-04	42.5	1.60E-02	9.48E-04
SI12_W	0.75	33	0	1	1.12E-01	1.40E-01	2.12E-04	7.09E-03	6.52E-03	2.25E-04	4.21E-05	1.28E-03	6.46E-04	1.14E-06	9.64E-05	36.0	1.36E-02	8.02E-04
SI12_W	0.75	28	0	1	9.49E-02	1.19E-01	1.79E-04	6.01E-03	5.53E-03	1.91E-04	3.57E-05	1.09E-03	5.48E-04	9.67E-07	8.18E-05	30.5	1.15E-02	6.81E-04
SI12_W	0.75	23	0	1	7.79E-02	9.77E-02	1.47E-04	4.94E-03	4.54E-03	1.57E-04	2.93E-05	8.94E-04	4.50E-04	7.94E-07	6.72E-05	25.1	9.46E-03	5.59E-04
SI12_W	0.75	17	0	1	5.76E-02	7.22E-02	1.09E-04	3.65E-03	3.36E-03	1.16E-04	2.17E-05	6.61E-04	3.33E-04	5.87E-07	4.97E-05	18.5	6.99E-03	4.13E-04
SI13_E	0.75	12	0	1	3.89E-02	4.88E-02	7.36E-05	2.47E-03	2.27E-03	7.84E-05	1.46E-05	4.47E-04	2.25E-04	3.97E-07	3.36E-05	12.5	4.73E-03	2.79E-04
SI13_E	0.75	8	0	1	2.60E-02	3.25E-02	4.91E-05	1.64E-03	1.51E-03	5.23E-05	9.77E-06	2.98E-04	1.50E-04	2.64E-07	2.24E-05	8.3	3.15E-03	1.86E-04
SI13_E	0.75	7	0	1	2.27E-02	2.85E-02	4.30E-05	1.44E-03	1.32E-03	4.57E-05	8.55E-06	2.61E-04	1.31E-04	2.31E-07	1.96E-05	7.3	2.76E-03	1.63E-04
SI13_E	0.75	5	0	1	1.62E-02	2.03E-02	3.07E-05	1.03E-03	9.45E-04	3.27E-05	6.10E-06	1.86E-04	9.37E-05	1.65E-07	1.40E-05	5.2	1.97E-03	1.16E-04
SI13_E	0.75	7	0	1	2.27E-02	2.85E-02	4.30E-05	1.44E-03	1.32E-03	4.57E-05	8.55E-06	2.61E-04	1.31E-04	2.31E-07	1.96E-05	7.3	2.76E-03	1.63E-04
SI13_E	0.75	16	0	1	5.51E-02	6.92E-02	1.04E-04	3.49E-03	3.21E-03	1.11E-04	2.08E-05	6.33E-04	3.18E-04	5.62E-07	4.76E-05	17.7	6.69E-03	3.96E-04
SI13_E	0.75	49	0	1	1.65E-01	2.07E-01	3.13E-04	1.05E-02	9.64E-03	3.33E-04	6.23E-05	1.90E-03	9.55E-04	1.69E-06	1.43E-04	53.2	2.01E-02	1.19E-03
SI13_E	0.75	75	0	1	2.53E-01	3.17E-01	4.79E-04	1.60E-02	1.47E-02	5.10E-04	9.52E-05	2.90E-03	1.46E-03	2.58E-06	2.18E-04	81.4	3.07E-02	1.82E-03
SI13_E	0.75	61	0	1	2.04E-01	2.56E-01	3.87E-04	1.30E-02	1.19E-02	4.12E-04	7.69E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.7	2.48E-02	1.47E-03
SI13_E	0.75	50	0	1	1.69E-01	2.12E-01	3.19E-04	1.07E-02	9.83E-03	3.40E-04	6.35E-05	1.94E-03	9.74E-04	1.72E-06	1.45E-04	54.3	2.05E-02	1.21E-03
SI13_E	0.75	45	0	1	1.52E-01	1.91E-01	2.88E-04	9.66E-03	8.89E-03	3.07E-04	5.74E-05	1.75E-03	8.81E-04	1.55E-06	1.31E-04	49.0	1.85E-02	1.09E-03
SI13_E	0.75	51	0	1	1.72E-01	2.16E-01	3.25E-04	1.09E-02	1.00E-02	3.46E-04	6.47E-05	1.97E-03	9.93E-04	1.75E-06	1.48E-04	55.3	2.09E-02	1.23E-03
SI13_E	0.75	54	0	1	1.82E-01	2.28E-01	3.44E-04	1.15E-02	1.06E-02	3.66E-04	6.84E-05	2.08E-03	1.05E-03	1.85E-06	1.57E-04	58.4	2.21E-02	1.30E-03
SI13_E	0.75	55	0	1	1.85E-01	2.32E-01	3.50E-04	1.17E-02	1.08E-02	3.72E-04	6.96E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.5	2.24E-02	1.33E-03
SI13_E	0.75	57	0	1	1.91E-01	2.40E-01	3.62E-04	1.21E-02	1.12E-02	3.86E-04	7.20E-05	2.20E-03	1.11E-03	1.95E-06	1.65E-04	61.6	2.32E-02	1.37E-03
SI13_E	0.75	62	0	1	2.08E-01	2.60E-01	3.93E-04	1.32E-02	1.21E-02	4.18E-04	7.81E-05	2.38E-03	1.20E-03	2.12E-06	1.79E-04	66.8	2.52E-02	1.49E-03
SI13_E	0.75	76	0	1	2.56E-01	3.21E-01	4.85E-04	1.62E-02	1.49E-02	5.16E-04	9.64E-05	2.94E-03	1.48E-03	2.61E-06	2.21E-04	82.4	3.11E-02	1.84E-03
SI13_E	0.75	82	0	1	2.76E-01	3.46E-01	5.22E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.7	3.35E-02	1.98E-03
SI13_E	0.75	57	0	1	1.91E-01	2.40E-01	3.62E-04	1.21E-02	1.12E-02	3.86E-04	7.20E-05	2.20E-03	1.11E-03	1.95E-06	1.65E-04	61.6	2.32E-02	1.37E-03
SI13_E	0.75	38	0	1	1.27E-01	1.59E-01	2.39E-04	8.02E-03	7.37E-03	2.55E-04	4.76E-05	1.45E-03	7.31E-04	1.29E-06	1.09E-04	40.7	1.54E-02	9.08E-04
SI13_E	0.75	32	0	1	1.07E-01	1.34E-01	2.03E-04	6.78E-03	6.24E-03	2.16E-04	4.03E-05	1.23E-03	6.18E-04	1.09E-06	9.23E-05	34.4	1.30E-02	7.68E-04
SI13_E	0.75	27	0	1	9.08E-02	1.14E-01	1.72E-04	5.76E-03	5.29E-03	1.83E-04	3.42E-05	1.04E-03	5.25E-04	9.26E-07	7.83E-05	29.2	1.10E-02	6.52E-04
SI13_E	0.75	22	0	1	7.46E-02	9.36E-02	1.41E-04	4.73E-03	4.35E-03	1.50E-04	2.81E-05	8.56E-04	4.31E-04	7.60E-07	6.43E-05	24.0	9.06E-03	5.35E-04
SI13_E	0.75	16	0	1	5.51E-02	6.92E-02	1.04E-04	3.49E-03	3.21E-03	1.11E-04	2.08E-05	6.33E-04	3.18E-04	5.62E-07	4.76E-05	17.7	6.69E-03	3.96E-04
SI13_W	0.75	12	0	1	4.11E-02	5.15E-02	7.77E-05	2.60E-03	2.39E-03	8.27E-05	1.55E-05	4.71E-04	2.37E-04	4.19E-07	3.54E-05	13.2	4.98E-03	2.95E-04
SI13_W	0.75	8	0	1	2.74E-02	3.43E-02	5.18E-05	1.73E-03	1.60E-03	5.51E-05	1.03E-05	3.14E-04	1.58E-04	2.79E-07	2.36E-05	8.8	3.32E-03	1.96E-04
SI13_W	0.75	7	0	1	2.40E-02	3.00E-02	4.53E-05	1.52E-03	1.40E-03	4.83E-05	9.01E-06	2.75E-04	1.38E-04	2.44E-07	2.07E-05	7.7	2.91E-03	1.72E-04
SI13_W	0.75	5	0	1	1.71E-02	2.15E-02	3.24E-05	1.08E-03	9.97E-04	3.45E-05	6.44E-06	1.96E-04	9.88E-05	1.74E-07	1.48E-05	5.5	2.08E-03	1.23E-04
SI13_W	0.75	7	0	1	2.40E-02	3.00E-02	4.53E-05	1.52E-03	1.40E-03	4.83E-05	9.01E-06	2.75E-04	1.38E-04	2.44E-07	2.07E-05	7.7	2.91E-03	1.72E-04
SI13_W	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.67E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.06E-03	4.17E-04
SI13_W	0.75	52	0	1	1.75E-01	2.19E-01	3.30E-04	1.11E-02	1.02E-02	3.52E-04	6.57E-05	2.00E-03	1.01E-03	1.78E-06	1.51E-04	56.1	2.12E-02	1.25E-03
SI13_W	0.75	79	0	1	2.67E-01	3.35E-01	5.05E-04	1.69E-02	1.56E-02	5.38E-04	1.00E-04	3.06E-03	1.54E-03	2.72E-06	2.30E-04	85.9	3.24E-02	1.92E-03
SI13_W	0.75	64	0	1	2.16E-01	2.70E-01	4.08E-04	1.37E-02	1.26E-02	4.34E-04	8.11E-05	2.47E-03	1.25E-03	2.20E-06	1.86E-04	69.4	2.62E-02	1.55E-03
SI13_W	0.75	53	0	1	1.78E-01	2.23E-01	3.37E-04	1.13E-02	1.04E-02	3.58E-04	6.70E-05	2.04E-03	1.03E-03	1.81E-06	1.53E-04	57.2	2.16E-02	1.28E-03
SI13_W	0.75	48	0	1	1.61E-01	2.02E-01	3.04E-04	1.02E-02	9.37E-03	3.24E-04	6.05E-05	1.85E-03	9.29E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI13_W	0.75	54	0	1	1.81E-01	2.27E-01	3.43E-04	1.15E-02	1.06E-02	3.65E-04	6.83E-05	2.08E-03	1.05E-03	1.85E-06	1.56E-04	58.3	2.20E-02	1.30E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	57	0	1	1.92E-01	2.40E-01	3.63E-04	1.21E-02	1.12E-02	3.86E-04	7.21E-05	2.20E-03	1.11E-03	1.95E-06	1.65E-04	61.6	2.33E-02	1.38E-03
SI13_W	0.75	58	0	1	1.95E-01	2.45E-01	3.69E-04	1.24E-02	1.14E-02	3.93E-04	7.34E-05	2.24E-03	1.13E-03	1.99E-06	1.68E-04	62.7	2.37E-02	1.40E-03
SI13_W	0.75	60	0	1	2.02E-01	2.53E-01	3.82E-04	1.28E-02	1.18E-02	4.07E-04	7.60E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	64.9	2.45E-02	1.45E-03
SI13_W	0.75	65	0	1	2.19E-01	2.75E-01	4.14E-04	1.39E-02	1.28E-02	4.41E-04	8.24E-05	2.51E-03	1.26E-03	2.23E-06	1.89E-04	70.5	2.66E-02	1.57E-03
SI13_W	0.75	80	0	1	2.70E-01	3.39E-01	5.11E-04	1.71E-02	1.58E-02	5.45E-04	1.02E-04	3.10E-03	1.56E-03	2.76E-06	2.33E-04	87.0	3.28E-02	1.94E-03
SI13_W	0.75	86	0	1	2.91E-01	3.65E-01	5.50E-04	1.84E-02	1.70E-02	5.86E-04	1.09E-04	3.34E-03	1.68E-03	2.96E-06	2.51E-04	93.6	3.53E-02	2.09E-03
SI13_W	0.75	60	0	1	2.02E-01	2.53E-01	3.82E-04	1.28E-02	1.18E-02	4.07E-04	7.60E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	64.9	2.45E-02	1.45E-03
SI13_W	0.75	40	0	1	1.33E-01	1.67E-01	2.52E-04	8.46E-03	7.78E-03	2.69E-04	5.02E-05	1.53E-03	7.71E-04	1.36E-06	1.15E-04	42.9	1.62E-02	9.58E-04
SI13_W	0.75	34	0	1	1.13E-01	1.42E-01	2.14E-04	7.16E-03	6.58E-03	2.27E-04	4.25E-05	1.30E-03	6.52E-04	1.15E-06	9.74E-05	36.3	1.37E-02	8.10E-04
SI13_W	0.75	28	0	1	9.58E-02	1.20E-01	1.81E-04	6.07E-03	5.58E-03	1.93E-04	3.61E-05	1.10E-03	5.53E-04	9.77E-07	8.26E-05	30.8	1.16E-02	6.88E-04
SI13_W	0.75	23	0	1	7.87E-02	9.87E-02	1.49E-04	4.99E-03	4.59E-03	1.59E-04	2.96E-05	9.03E-04	4.55E-04	8.02E-07	6.79E-05	25.3	9.55E-03	5.65E-04
SI13_W	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.67E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.06E-03	4.17E-04
SI14_E	0.75	12	0	1	4.15E-02	5.20E-02	7.85E-05	2.63E-03	2.42E-03	8.35E-05	1.56E-05	4.76E-04	2.40E-04	4.23E-07	3.58E-05	13.3	5.03E-03	2.98E-04
SI14_E	0.75	8	0	1	2.76E-02	3.47E-02	5.23E-05	1.75E-03	1.61E-03	5.57E-05	1.04E-05	3.17E-04	1.60E-04	2.82E-07	2.38E-05	8.9	3.36E-03	1.98E-04
SI14_E	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI14_E	0.75	5	0	1	1.73E-02	2.17E-02	3.27E-05	1.10E-03	1.01E-03	3.48E-05	6.50E-06	1.98E-04	9.98E-05	1.76E-07	1.49E-05	5.6	2.10E-03	1.24E-04
SI14_E	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI14_E	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI14_E	0.75	52	0	1	1.76E-01	2.21E-01	3.33E-04	1.12E-02	1.03E-02	3.55E-04	6.63E-05	2.02E-03	1.02E-03	1.80E-06	1.52E-04	56.7	2.14E-02	1.26E-03
SI14_E	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.32E-04	86.7	3.27E-02	1.93E-03
SI14_E	0.75	65	0	1	2.18E-01	2.73E-01	4.12E-04	1.38E-02	1.27E-02	4.39E-04	8.19E-05	2.50E-03	1.26E-03	2.22E-06	1.88E-04	70.0	2.64E-02	1.56E-03
SI14_E	0.75	53	0	1	1.80E-01	2.25E-01	3.40E-04	1.14E-02	1.05E-02	3.62E-04	6.76E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.8	2.18E-02	1.29E-03
SI14_E	0.75	48	0	1	1.62E-01	2.04E-01	3.07E-04	1.03E-02	9.47E-03	3.27E-04	6.11E-05	1.86E-03	9.38E-04	1.66E-06	1.40E-04	52.3	1.97E-02	1.17E-03
SI14_E	0.75	54	0	1	1.83E-01	2.30E-01	3.47E-04	1.16E-02	1.07E-02	3.69E-04	6.89E-05	2.10E-03	1.06E-03	1.87E-06	1.58E-04	58.9	2.22E-02	1.31E-03
SI14_E	0.75	58	0	1	1.94E-01	2.43E-01	3.66E-04	1.23E-02	1.13E-02	3.90E-04	7.28E-05	2.22E-03	1.12E-03	1.97E-06	1.67E-04	62.3	2.35E-02	1.39E-03
SI14_E	0.75	59	0	1	1.97E-01	2.47E-01	3.73E-04	1.25E-02	1.15E-02	3.97E-04	7.41E-05	2.26E-03	1.14E-03	2.01E-06	1.70E-04	63.4	2.39E-02	1.41E-03
SI14_E	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI14_E	0.75	66	0	1	2.21E-01	2.77E-01	4.18E-04	1.40E-02	1.29E-02	4.46E-04	8.32E-05	2.54E-03	1.28E-03	2.25E-06	1.91E-04	71.2	2.68E-02	1.59E-03
SI14_E	0.75	81	0	1	2.73E-01	3.42E-01	5.17E-04	1.73E-02	1.59E-02	5.50E-04	1.03E-04	3.13E-03	1.58E-03	2.78E-06	2.35E-04	87.8	3.31E-02	1.96E-03
SI14_E	0.75	87	0	1	2.94E-01	3.68E-01	5.56E-04	1.86E-02	1.71E-02	5.92E-04	1.11E-04	3.37E-03	1.70E-03	2.99E-06	2.53E-04	94.5	3.57E-02	2.11E-03
SI14_E	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI14_E	0.75	40	0	1	1.35E-01	1.69E-01	2.55E-04	8.54E-03	7.85E-03	2.71E-04	5.07E-05	1.55E-03	7.78E-04	1.37E-06	1.16E-04	43.4	1.64E-02	9.67E-04
SI14_E	0.75	34	0	1	1.14E-01	1.43E-01	2.16E-04	7.23E-03	6.65E-03	2.30E-04	4.29E-05	1.31E-03	6.59E-04	1.16E-06	9.84E-05	36.7	1.38E-02	8.18E-04
SI14_E	0.75	29	0	1	9.68E-02	1.21E-01	1.83E-04	6.13E-03	5.64E-03	1.95E-04	3.64E-05	1.11E-03	5.59E-04	9.86E-07	8.35E-05	31.1	1.17E-02	6.94E-04
SI14_E	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI14_E	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI14_W	0.75	12	0	1	4.15E-02	5.20E-02	7.85E-05	2.63E-03	2.42E-03	8.35E-05	1.56E-05	4.76E-04	2.40E-04	4.23E-07	3.58E-05	13.3	5.03E-03	2.98E-04
SI14_W	0.75	8	0	1	2.76E-02	3.47E-02	5.23E-05	1.75E-03	1.61E-03	5.57E-05	1.04E-05	3.17E-04	1.60E-04	2.82E-07	2.38E-05	8.9	3.36E-03	1.98E-04
SI14_W	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI14_W	0.75	5	0	1	1.73E-02	2.17E-02	3.27E-05	1.10E-03	1.01E-03	3.48E-05	6.50E-06	1.98E-04	9.98E-05	1.76E-07	1.49E-05	5.6	2.10E-03	1.24E-04
SI14_W	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI14_W	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI14_W	0.75	52	0	1	1.76E-01	2.21E-01	3.33E-04	1.12E-02	1.03E-02	3.55E-04	6.63E-05	2.02E-03	1.02E-03	1.80E-06	1.52E-04	56.7	2.14E-02	1.26E-03
SI14_W	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.32E-04	86.7	3.27E-02	1.93E-03
SI14_W	0.75	65	0	1	2.18E-01	2.73E-01	4.12E-04	1.38E-02	1.27E-02	4.39E-04	8.19E-05	2.50E-03	1.26E-03	2.22E-06	1.88E-04	70.0	2.64E-02	1.56E-03
SI14_W	0.75	53	0	1	1.80E-01	2.25E-01	3.40E-04	1.14E-02	1.05E-02	3.62E-04	6.76E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.8	2.18E-02	1.29E-03
SI14_W	0.75	48	0	1	1.62E-01	2.04E-01	3.07E-04	1.03E-02	9.47E-03	3.27E-04	6.11E-05	1.86E-03	9.38E-04	1.66E-06	1.40E-04	52.3	1.97E-02	1.17E-03
SI14_W	0.75	54	0	1	1.83E-01	2.30E-01	3.47E-04	1.16E-02	1.07E-02	3.69E-04	6.89E-05	2.10E-03	1.06E-03	1.87E-06	1.58E-04	58.9	2.22E-02	1.31E-03
SI14_W	0.75	58	0	1	1.94E-01	2.43E-01	3.66E-04	1.23E-02	1.13E-02	3.90E-04	7.28E-05	2.22E-03	1.12E-03	1.97E-06	1.67E-04	62.3	2.35E-02	1.39E-03
SI14_W	0.75	59	0	1	1.97E-01	2.47E-01	3.73E-04	1.25E-02	1.15E-02	3.97E-04	7.41E-05	2.26E-03	1.14E-03	2.01E-06	1.70E-04	63.4	2.39E-02	1.41E-03
SI14_W	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI14_W	0.75	66	0	1	2.21E-01	2.77E-01	4.18E-04	1.40E-02	1.29E-02	4.46E-04	8.32E-05	2.54E-03	1.28E-03	2.25E-06	1.91E-04	71.2	2.68E-02	1.59E-03
SI14_W	0.75	81	0	1	2.73E-01	3.42E-01	5.17E-04	1.73E-02	1.59E-02	5.50E-04	1.03E-04	3.13E-03	1.58E-03	2.78E-06	2.35E-04	87.8	3.31E-02	1.96E-03
SI14_W	0.75	87	0	1	2.94E-01	3.68E-01	5.56E-04	1.86E-02	1.71E-02	5.92E-04	1.11E-04	3.37E-03	1.70E-03	2.99E-06	2.53E-04	94.5	3.57E-02	2.11E-03
SI14_W	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI14_W	0.75	40	0	1	1.35E-01	1.69E-01	2.55E-04	8.54E-03	7.85E-03	2.71E-04	5.07E-05	1.55E-03	7.78E-04	1.37E-06	1.16E-04	43.4	1.64E-02	9.67E-04
SI14_W	0.75	34	0	1	1.14E-01	1.43E-01	2.16E-04	7.23E-03	6.65E-03	2.30E-04	4.29E-05	1.31E-03	6.59E-04	1.16E-06	9.84E-05	36.7	1.38E-02	8.18E-04
SI14_W	0.75	29	0	1	9.68E-02	1.21E-01	1.83E-04	6.13E-03	5.64E-03	1.95E-04	3.64E-05	1.11E-03	5.59E-04	9.86E-07	8.35E-05	31.1	1.17E-02	6.94E-04
SI14_W	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI14_W	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI15_E	0.75	12	0	1	4.15E-02	5.20E-02	7.85E-05	2.63E-03	2.42E-03	8.35E-05	1.56E-05	4.76E-04	2.40E-04	4.23E-07	3.58E-05	13.3	5.03E-03	2.98E-04
SI15_E	0.75	8	0	1	2.76E-02	3.47E-02	5.23E-05	1.75E-03	1.61E-03	5.57E-05	1.04E-05	3.17E-04	1.60E-04	2.82E-07	2.38E-05	8.9	3.36E-03	1.98E-04
SI15_E	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI15_E	0.75	5	0	1	1.73E-02	2.17E-02	3.27E-05	1.10E-03	1.01E-03	3.48E-05	6.50E-06	1.98E-04	9.98E-05	1.76E-07	1.49E-05	5.6	2.10E-03	1.24E-04
SI15_E	0.75	7	0	1	2.42E-02	3.03E-02	4.58E-05	1.53E-03	1.41E-03	4.87E-05	9.10E-06	2.78E-04	1.40E-04	2.47E-07	2.09E-05	7.8	2.94E-03	1.74E-04
SI15_E	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI15_E	0.75	52	0	1	1.76E-01	2.21E-01	3.33E-04	1.12E-02	1.03E-02	3.55E-04	6.63E-05	2.02E-03	1.02E-03	1.80E-06	1.52E-04	56.7	2.14E-02	1.26E-03
SI15_E	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.32E-04	86.7	3.27E-02	1.93E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	65	0	1	2.18E-01	2.73E-01	4.12E-04	1.38E-02	1.27E-02	4.39E-04	8.19E-05	2.50E-03	1.26E-03	2.22E-06	1.88E-04	70.0	2.64E-02	1.56E-03
SI15_E	0.75	53	0	1	1.80E-01	2.25E-01	3.40E-04	1.14E-02	1.05E-02	3.62E-04	6.76E-05	2.06E-03	1.04E-03	1.83E-06	1.55E-04	57.8	2.18E-02	1.29E-03
SI15_E	0.75	48	0	1	1.62E-01	2.04E-01	3.07E-04	1.03E-02	9.47E-03	3.27E-04	6.11E-05	1.86E-03	9.38E-04	1.66E-06	1.40E-04	52.3	1.97E-02	1.17E-03
SI15_E	0.75	54	0	1	1.83E-01	2.30E-01	3.47E-04	1.16E-02	1.07E-02	3.69E-04	6.89E-05	2.10E-03	1.06E-03	1.87E-06	1.58E-04	58.9	2.22E-02	1.31E-03
SI15_E	0.75	58	0	1	1.94E-01	2.43E-01	3.66E-04	1.23E-02	1.13E-02	3.90E-04	7.28E-05	2.22E-03	1.12E-03	1.97E-06	1.67E-04	62.3	2.35E-02	1.39E-03
SI15_E	0.75	59	0	1	1.97E-01	2.47E-01	3.73E-04	1.25E-02	1.15E-02	3.97E-04	7.41E-05	2.26E-03	1.14E-03	2.01E-06	1.70E-04	63.4	2.39E-02	1.41E-03
SI15_E	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI15_E	0.75	66	0	1	2.21E-01	2.77E-01	4.18E-04	1.40E-02	1.29E-02	4.46E-04	8.32E-05	2.54E-03	1.28E-03	2.25E-06	1.91E-04	71.2	2.68E-02	1.59E-03
SI15_E	0.75	81	0	1	2.73E-01	3.42E-01	5.17E-04	1.73E-02	1.59E-02	5.50E-04	1.03E-04	3.13E-03	1.58E-03	2.78E-06	2.35E-04	87.8	3.31E-02	1.96E-03
SI15_E	0.75	87	0	1	2.94E-01	3.68E-01	5.56E-04	1.86E-02	1.71E-02	5.92E-04	1.11E-04	3.37E-03	1.70E-03	2.99E-06	2.53E-04	94.5	3.57E-02	2.11E-03
SI15_E	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.67E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.6	2.48E-02	1.46E-03
SI15_E	0.75	40	0	1	1.35E-01	1.69E-01	2.55E-04	8.54E-03	7.85E-03	2.71E-04	5.07E-05	1.55E-03	7.78E-04	1.37E-06	1.16E-04	43.4	1.64E-02	9.67E-04
SI15_E	0.75	34	0	1	1.14E-01	1.43E-01	2.16E-04	7.23E-03	6.65E-03	2.30E-04	4.29E-05	1.31E-03	6.59E-04	1.16E-06	9.84E-05	36.7	1.38E-02	8.18E-04
SI15_E	0.75	29	0	1	9.68E-02	1.21E-01	1.83E-04	6.13E-03	5.64E-03	1.95E-04	3.64E-05	1.11E-03	5.59E-04	9.86E-07	8.35E-05	31.1	1.17E-02	6.94E-04
SI15_E	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI15_E	0.75	17	0	1	5.88E-02	7.37E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.99E-07	5.07E-05	18.9	7.13E-03	4.22E-04
SI15_W	0.75	17	0	1	5.64E-02	7.07E-02	1.07E-04	3.57E-03	3.29E-03	1.14E-04	2.12E-05	6.47E-04	3.26E-04	5.75E-07	4.87E-05	18.1	6.85E-03	4.05E-04
SI15_W	0.75	11	0	1	3.76E-02	4.72E-02	7.11E-05	2.38E-03	2.19E-03	7.58E-05	1.42E-05	4.31E-04	2.17E-04	3.83E-07	3.24E-05	12.1	4.57E-03	2.70E-04
SI15_W	0.75	10	0	1	3.29E-02	4.13E-02	6.23E-05	2.09E-03	1.92E-03	6.63E-05	1.24E-05	3.78E-04	1.90E-04	3.35E-07	2.84E-05	10.6	3.99E-03	2.36E-04
SI15_W	0.75	7	0	1	2.35E-02	2.95E-02	4.45E-05	1.49E-03	1.37E-03	4.73E-05	8.85E-06	2.70E-04	1.36E-04	2.40E-07	2.03E-05	7.6	2.85E-03	1.69E-04
SI15_W	0.75	10	0	1	3.29E-02	4.13E-02	6.23E-05	2.09E-03	1.92E-03	6.63E-05	1.24E-05	3.78E-04	1.90E-04	3.35E-07	2.84E-05	10.6	3.99E-03	2.36E-04
SI15_W	0.75	24	0	1	7.99E-02	1.00E-01	1.51E-04	5.06E-03	4.66E-03	1.61E-04	3.01E-05	9.17E-04	4.62E-04	8.14E-07	6.89E-05	25.7	9.70E-03	5.73E-04
SI15_W	0.75	71	0	1	2.40E-01	3.01E-01	4.54E-04	1.52E-02	1.40E-02	4.83E-04	9.02E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.1	2.91E-02	1.72E-03
SI15_W	0.75	109	0	1	3.67E-01	4.60E-01	6.94E-04	2.32E-02	2.14E-02	7.39E-04	1.38E-04	4.21E-03	2.12E-03	3.74E-06	3.16E-04	118.0	4.45E-02	2.63E-03
SI15_W	0.75	88	0	1	2.96E-01	3.71E-01	5.60E-04	1.88E-02	1.73E-02	5.97E-04	1.11E-04	3.40E-03	1.71E-03	3.02E-06	2.55E-04	95.3	3.60E-02	2.13E-03
SI15_W	0.75	73	0	1	2.44E-01	3.07E-01	4.62E-04	1.55E-02	1.42E-02	4.92E-04	9.20E-05	2.80E-03	1.41E-03	2.49E-06	2.11E-04	78.6	2.97E-02	1.75E-03
SI15_W	0.75	66	0	1	2.21E-01	2.77E-01	4.18E-04	1.40E-02	1.29E-02	4.45E-04	8.31E-05	2.53E-03	1.28E-03	2.25E-06	1.91E-04	71.1	2.68E-02	1.59E-03
SI15_W	0.75	74	0	1	2.49E-01	3.12E-01	4.71E-04	1.58E-02	1.45E-02	5.02E-04	9.38E-05	2.86E-03	1.44E-03	2.54E-06	2.15E-04	80.1	3.02E-02	1.79E-03
SI15_W	0.75	78	0	1	2.63E-01	3.30E-01	4.98E-04	1.67E-02	1.53E-02	5.30E-04	9.91E-05	3.02E-03	1.52E-03	2.68E-06	2.27E-04	84.7	3.20E-02	1.89E-03
SI15_W	0.75	80	0	1	2.68E-01	3.36E-01	5.07E-04	1.70E-02	1.56E-02	5.40E-04	1.01E-04	3.07E-03	1.55E-03	2.73E-06	2.31E-04	86.2	3.25E-02	1.92E-03
SI15_W	0.75	82	0	1	2.77E-01	3.48E-01	5.25E-04	1.76E-02	1.62E-02	5.59E-04	1.04E-04	3.18E-03	1.60E-03	2.83E-06	2.39E-04	89.2	3.37E-02	1.99E-03
SI15_W	0.75	89	0	1	3.01E-01	3.77E-01	5.69E-04	1.91E-02	1.75E-02	6.06E-04	1.13E-04	3.45E-03	1.74E-03	3.07E-06	2.59E-04	96.8	3.65E-02	2.16E-03
SI15_W	0.75	110	0	1	3.71E-01	4.66E-01	7.03E-04	2.35E-02	2.16E-02	7.48E-04	1.40E-04	4.26E-03	2.14E-03	3.78E-06	3.20E-04	119.5	4.51E-02	2.66E-03
SI15_W	0.75	119	0	1	4.00E-01	5.01E-01	7.56E-04	2.53E-02	2.33E-02	8.05E-04	1.50E-04	4.58E-03	2.31E-03	4.07E-06	3.45E-04	128.5	4.85E-02	2.87E-03
SI15_W	0.75	82	0	1	2.77E-01	3.48E-01	5.25E-04	1.76E-02	1.62E-02	5.59E-04	1.04E-04	3.18E-03	1.60E-03	2.83E-06	2.39E-04	89.2	3.37E-02	1.99E-03
SI15_W	0.75	55	0	1	1.83E-01	2.30E-01	3.47E-04	1.16E-02	1.07E-02	3.69E-04	6.90E-05	2.10E-03	1.06E-03	1.87E-06	1.58E-04	59.0	2.23E-02	1.32E-03
SI15_W	0.75	46	0	1	1.55E-01	1.95E-01	2.93E-04	9.83E-03	9.04E-03	3.12E-04	5.84E-05	1.78E-03	8.96E-04	1.58E-06	1.34E-04	49.9	1.88E-02	1.11E-03
SI15_W	0.75	39	0	1	1.32E-01	1.65E-01	2.49E-04	8.34E-03	7.67E-03	2.65E-04	4.95E-05	1.51E-03	7.60E-04	1.34E-06	1.14E-04	42.3	1.60E-02	9.45E-04
SI15_W	0.75	32	0	1	1.08E-01	1.36E-01	2.05E-04	6.85E-03	6.30E-03	2.18E-04	4.07E-05	1.24E-03	6.24E-04	1.10E-06	9.32E-05	34.8	1.31E-02	7.76E-04
SI15_W	0.75	24	0	1	7.99E-02	1.00E-01	1.51E-04	5.06E-03	4.66E-03	1.61E-04	3.01E-05	9.17E-04	4.62E-04	8.14E-07	6.89E-05	25.7	9.70E-03	5.73E-04
SI16_E	0.75	17	0	1	5.64E-02	7.07E-02	1.07E-04	3.57E-03	3.29E-03	1.14E-04	2.12E-05	6.47E-04	3.26E-04	5.75E-07	4.87E-05	18.1	6.85E-03	4.05E-04
SI16_E	0.75	11	0	1	3.76E-02	4.72E-02	7.11E-05	2.38E-03	2.19E-03	7.58E-05	1.42E-05	4.31E-04	2.17E-04	3.83E-07	3.24E-05	12.1	4.57E-03	2.70E-04
SI16_E	0.75	10	0	1	3.29E-02	4.13E-02	6.23E-05	2.09E-03	1.92E-03	6.63E-05	1.24E-05	3.78E-04	1.90E-04	3.35E-07	2.84E-05	10.6	3.99E-03	2.36E-04
SI16_E	0.75	7	0	1	2.35E-02	2.95E-02	4.45E-05	1.49E-03	1.37E-03	4.73E-05	8.85E-06	2.70E-04	1.36E-04	2.40E-07	2.03E-05	7.6	2.85E-03	1.69E-04
SI16_E	0.75	10	0	1	3.29E-02	4.13E-02	6.23E-05	2.09E-03	1.92E-03	6.63E-05	1.24E-05	3.78E-04	1.90E-04	3.35E-07	2.84E-05	10.6	3.99E-03	2.36E-04
SI16_E	0.75	24	0	1	7.99E-02	1.00E-01	1.51E-04	5.06E-03	4.66E-03	1.61E-04	3.01E-05	9.17E-04	4.62E-04	8.14E-07	6.89E-05	25.7	9.70E-03	5.73E-04
SI16_E	0.75	71	0	1	2.40E-01	3.01E-01	4.54E-04	1.52E-02	1.40E-02	4.83E-04	9.02E-05	2.75E-03	1.38E-03	2.44E-06	2.07E-04	77.1	2.91E-02	1.72E-03
SI16_E	0.75	109	0	1	3.67E-01	4.60E-01	6.94E-04	2.32E-02	2.14E-02	7.39E-04	1.38E-04	4.21E-03	2.12E-03	3.74E-06	3.16E-04	118.0	4.45E-02	2.63E-03
SI16_E	0.75	88	0	1	2.96E-01	3.71E-01	5.60E-04	1.88E-02	1.73E-02	5.97E-04	1.11E-04	3.40E-03	1.71E-03	3.02E-06	2.55E-04	95.3	3.60E-02	2.13E-03
SI16_E	0.75	73	0	1	2.44E-01	3.07E-01	4.62E-04	1.55E-02	1.42E-02	4.92E-04	9.20E-05	2.80E-03	1.41E-03	2.49E-06	2.11E-04	78.6	2.97E-02	1.75E-03
SI16_E	0.75	66	0	1	2.21E-01	2.77E-01	4.18E-04	1.40E-02	1.29E-02	4.45E-04	8.31E-05	2.53E-03	1.28E-03	2.25E-06	1.91E-04	71.1	2.68E-02	1.59E-03
SI16_E	0.75	74	0	1	2.49E-01	3.12E-01	4.71E-04	1.58E-02	1.45E-02	5.02E-04	9.38E-05	2.86E-03	1.44E-03	2.54E-06	2.15E-04	80.1	3.02E-02	1.79E-03
SI16_E	0.75	78	0	1	2.63E-01	3.30E-01	4.98E-04	1.67E-02	1.53E-02	5.30E-04	9.91E-05	3.02E-03	1.52E-03	2.68E-06	2.27E-04	84.7	3.20E-02	1.89E-03
SI16_E	0.75	80	0	1	2.68E-01	3.36E-01	5.07E-04	1.70E-02	1.56E-02	5.40E-04	1.01E-04	3.07E-03	1.55E-03	2.73E-06	2.31E-04	86.2	3.25E-02	1.92E-03
SI16_E	0.75	82	0	1	2.77E-01	3.48E-01	5.25E-04	1.76E-02	1.62E-02	5.59E-04	1.04E-04	3.18E-03	1.60E-03	2.83E-06	2.39E-04	89.2	3.37E-02	1.99E-03
SI16_E	0.75	89	0	1	3.01E-01	3.77E-01	5.69E-04	1.91E-02	1.75E-02	6.06E-04	1.13E-04	3.45E-03	1.74E-03	3.07E-06	2.59E-04	96.8	3.65E-02	2.16E-03
SI16_E	0.75	110	0	1	3.71E-01	4.66E-01	7.03E-04	2.35E-02	2.16E-02	7.48E-04	1.40E-04	4.26E-03	2.14E-03	3.78E-06	3.20E-04	119.5	4.51E-02	2.66E-03
SI16_E	0.75	119	0	1	4.00E-01	5.01E-01	7.56E-04	2.53E-02	2.33E-02	8.05E-04	1.50E-04	4.58E-03	2.31E-03	4.07E-06	3.45E-04	128.5	4.85E-02	2.87E-03
SI16_E	0.75	82	0	1	2.77E-01	3.48E-01	5.25E-04	1.76E-02	1.62E-02	5.59E-04	1.04E-04	3.18E-03	1.60E-03	2.83E-06	2.39E-04	89.2	3.37E-02	1.99E-03
SI16_E	0.75	55	0	1	1.83E-01	2.30E-01	3.47E-04	1.16E-02	1.07E-02	3.69E-04	6.90E-05	2.10E-03	1.06E-03	1.87E-06	1.58E-04	59.0	2.23E-02	1.32E-03
SI16_E	0.75	46	0	1	1.55E-01	1.95E-01	2.93E-04	9.83E-03	9.04E-03	3.12E-04	5.84E-05	1.78E-03	8.96E-04	1.58E-06	1.34E-04	49.9	1.88E-02	1.11E-03
SI16_E	0.75	39	0	1	1.32E-01	1.65E-01	2.49E-04	8.34E-03	7.67E-03	2.65E-04	4.95E-05	1.51E-03	7.60E-04	1.34E-06	1.14E-04	42.3	1.60E-02	9.45E-04
SI16_E	0.75	32	0	1	1.08E-01	1.36E-01	2.05E-04	6.85E-03	6.30E-03	2.18E-04	4.07E-05	1.24E-03	6.24E-04	1.10E-06	9.32E-05	34.8	1.31E-02	7.76E-04
SI16_E	0.75	24	0	1	7.99E-02	1.00E-01	1.51E-04	5.06E-03	4.66E-03	1.61E-04	3.01E-05	9.17E-04	4.62E-04	8.14E-07	6.89E-05	25.7	9.70E-03	5.73E-04
SI16_W	0.75	22	0	1	7.50E-02	9.41E-02	1.42E-04	4.76E-03	4.37E-03	1.51E-04	2.82E-05	8.61E-04	4.33E-04	7.65E-07	6.47E-05	24.1	9.11E-03	5.38E-04
SI16_W	0.75	15	0	1	5.00E-02	6.27E-02	9.46E-05	3.17E-03	2.92E-03	1.01E-04	1.88E-05	5.74E-04	2.89E-04	5.10E-07	4.31E-05	16.1	6.07E-03	3.59E-04
SI16_W	0.75	13	0	1	4.38E-02	5.49E-02	8.28E-05	2.77E-03	2.55E-03	8.82E-05	1.65E-05	5.02E-04	2.53E-04	4.46E-07	3.78E-05	14.1	5.31E-03	3.14E-04
SI16_W	0.75	9	0	1	3.13E-02	3.92E-02	5.92E-05	1.98E-03	1.82E-03	6.30E-05	1.18E-05	3.59E-04	1.81E-04	3.19E-07	2.70E-05	10.1	3.80E-03	2.24E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	13	0	1	4.38E-02	5.49E-02	8.28E-05	2.77E-03	2.55E-03	8.82E-05	1.65E-05	5.02E-04	2.53E-04	4.46E-07	3.78E-05	14.1	5.31E-03	3.14E-04
SI16_W	0.75	32	0	1	1.06E-01	1.33E-01	2.01E-04	6.74E-03	6.20E-03	2.14E-04	4.00E-05	1.22E-03	6.14E-04	1.08E-06	9.17E-05	34.2	1.29E-02	7.63E-04
SI16_W	0.75	95	0	1	3.19E-01	4.00E-01	6.03E-04	2.02E-02	1.86E-02	6.42E-04	1.20E-04	3.66E-03	1.84E-03	3.25E-06	2.75E-04	102.6	3.87E-02	2.29E-03
SI16_W	0.75	145	0	1	4.88E-01	6.12E-01	9.23E-04	3.09E-02	2.84E-02	9.83E-04	1.84E-04	5.60E-03	2.82E-03	4.97E-06	4.21E-04	156.9	5.92E-02	3.50E-03
SI16_W	0.75	117	0	1	3.94E-01	4.94E-01	7.45E-04	2.50E-02	2.30E-02	7.94E-04	1.48E-04	4.52E-03	2.28E-03	4.02E-06	3.40E-04	126.7	4.78E-02	2.83E-03
SI16_W	0.75	97	0	1	3.25E-01	4.08E-01	6.15E-04	2.06E-02	1.90E-02	6.55E-04	1.22E-04	3.73E-03	1.88E-03	3.31E-06	2.80E-04	104.6	3.95E-02	2.33E-03
SI16_W	0.75	87	0	1	2.94E-01	3.69E-01	5.56E-04	1.86E-02	1.71E-02	5.92E-04	1.11E-04	3.37E-03	1.70E-03	3.00E-06	2.53E-04	94.5	3.57E-02	2.11E-03
SI16_W	0.75	99	0	1	3.31E-01	4.16E-01	6.27E-04	2.10E-02	1.93E-02	6.68E-04	1.25E-04	3.80E-03	1.91E-03	3.38E-06	2.86E-04	106.6	4.02E-02	2.38E-03
SI16_W	0.75	104	0	1	3.50E-01	4.39E-01	6.63E-04	2.22E-02	2.04E-02	7.05E-04	1.32E-04	4.02E-03	2.02E-03	3.57E-06	3.02E-04	112.7	4.25E-02	2.51E-03
SI16_W	0.75	106	0	1	3.56E-01	4.47E-01	6.74E-04	2.26E-02	2.08E-02	7.18E-04	1.34E-04	4.09E-03	2.06E-03	3.63E-06	3.07E-04	114.7	4.33E-02	2.56E-03
SI16_W	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI16_W	0.75	119	0	1	4.00E-01	5.02E-01	7.57E-04	2.54E-02	2.33E-02	8.06E-04	1.51E-04	4.59E-03	2.31E-03	4.08E-06	3.45E-04	128.7	4.86E-02	2.87E-03
SI16_W	0.75	147	0	1	4.94E-01	6.20E-01	9.35E-04	3.13E-02	2.88E-02	9.95E-04	1.86E-04	5.67E-03	2.85E-03	5.03E-06	4.26E-04	158.9	6.00E-02	3.55E-03
SI16_W	0.75	158	0	1	5.32E-01	6.67E-01	1.01E-03	3.37E-02	3.10E-02	1.07E-03	2.00E-04	6.10E-03	3.07E-03	5.42E-06	4.58E-04	171.0	6.45E-02	3.81E-03
SI16_W	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI16_W	0.75	73	0	1	2.44E-01	3.06E-01	4.61E-04	1.55E-02	1.42E-02	4.91E-04	9.18E-05	2.80E-03	1.41E-03	2.49E-06	2.10E-04	78.5	2.96E-02	1.75E-03
SI16_W	0.75	61	0	1	2.06E-01	2.59E-01	3.90E-04	1.31E-02	1.20E-02	4.16E-04	7.77E-05	2.37E-03	1.19E-03	2.10E-06	1.78E-04	66.4	2.51E-02	1.48E-03
SI16_W	0.75	52	0	1	1.75E-01	2.20E-01	3.31E-04	1.11E-02	1.02E-02	3.53E-04	6.59E-05	2.01E-03	1.01E-03	1.78E-06	1.51E-04	56.3	2.13E-02	1.26E-03
SI16_W	0.75	43	0	1	1.44E-01	1.80E-01	2.72E-04	9.11E-03	8.38E-03	2.90E-04	5.41E-05	1.65E-03	8.31E-04	1.47E-06	1.24E-04	46.3	1.75E-02	1.03E-03
SI16_W	0.75	32	0	1	1.06E-01	1.33E-01	2.01E-04	6.74E-03	6.20E-03	2.14E-04	4.00E-05	1.22E-03	6.14E-04	1.08E-06	9.17E-05	34.2	1.29E-02	7.63E-04
SI17_E	0.75	22	0	1	7.50E-02	9.41E-02	1.42E-04	4.76E-03	4.37E-03	1.51E-04	2.82E-05	8.61E-04	4.33E-04	7.65E-07	6.47E-05	24.1	9.11E-03	5.38E-04
SI17_E	0.75	15	0	1	5.00E-02	6.27E-02	9.46E-05	3.17E-03	2.92E-03	1.01E-04	1.88E-05	5.74E-04	2.89E-04	5.10E-07	4.31E-05	16.1	6.07E-03	3.59E-04
SI17_E	0.75	13	0	1	4.38E-02	5.49E-02	8.28E-05	2.77E-03	2.55E-03	8.82E-05	1.65E-05	5.02E-04	2.53E-04	4.46E-07	3.78E-05	14.1	5.31E-03	3.14E-04
SI17_E	0.75	9	0	1	3.13E-02	3.92E-02	5.92E-05	1.98E-03	1.82E-03	6.30E-05	1.18E-05	3.59E-04	1.81E-04	3.19E-07	2.70E-05	10.1	3.80E-03	2.24E-04
SI17_E	0.75	13	0	1	4.38E-02	5.49E-02	8.28E-05	2.77E-03	2.55E-03	8.82E-05	1.65E-05	5.02E-04	2.53E-04	4.46E-07	3.78E-05	14.1	5.31E-03	3.14E-04
SI17_E	0.75	32	0	1	1.06E-01	1.33E-01	2.01E-04	6.74E-03	6.20E-03	2.14E-04	4.00E-05	1.22E-03	6.14E-04	1.08E-06	9.17E-05	34.2	1.29E-02	7.63E-04
SI17_E	0.75	95	0	1	3.19E-01	4.00E-01	6.03E-04	2.02E-02	1.86E-02	6.42E-04	1.20E-04	3.66E-03	1.84E-03	3.25E-06	2.75E-04	102.6	3.87E-02	2.29E-03
SI17_E	0.75	145	0	1	4.88E-01	6.12E-01	9.23E-04	3.09E-02	2.84E-02	9.83E-04	1.84E-04	5.60E-03	2.82E-03	4.97E-06	4.21E-04	156.9	5.92E-02	3.50E-03
SI17_E	0.75	117	0	1	3.94E-01	4.94E-01	7.45E-04	2.50E-02	2.30E-02	7.94E-04	1.48E-04	4.52E-03	2.28E-03	4.02E-06	3.40E-04	126.7	4.78E-02	2.83E-03
SI17_E	0.75	97	0	1	3.25E-01	4.08E-01	6.15E-04	2.06E-02	1.90E-02	6.55E-04	1.22E-04	3.73E-03	1.88E-03	3.31E-06	2.80E-04	104.6	3.95E-02	2.33E-03
SI17_E	0.75	87	0	1	2.94E-01	3.69E-01	5.56E-04	1.86E-02	1.71E-02	5.92E-04	1.11E-04	3.37E-03	1.70E-03	3.00E-06	2.53E-04	94.5	3.57E-02	2.11E-03
SI17_E	0.75	99	0	1	3.31E-01	4.16E-01	6.27E-04	2.10E-02	1.93E-02	6.68E-04	1.25E-04	3.80E-03	1.91E-03	3.38E-06	2.86E-04	106.6	4.02E-02	2.38E-03
SI17_E	0.75	104	0	1	3.50E-01	4.39E-01	6.63E-04	2.22E-02	2.04E-02	7.05E-04	1.32E-04	4.02E-03	2.02E-03	3.57E-06	3.02E-04	112.7	4.25E-02	2.51E-03
SI17_E	0.75	106	0	1	3.56E-01	4.47E-01	6.74E-04	2.26E-02	2.08E-02	7.18E-04	1.34E-04	4.09E-03	2.06E-03	3.63E-06	3.07E-04	114.7	4.33E-02	2.56E-03
SI17_E	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI17_E	0.75	119	0	1	4.00E-01	5.02E-01	7.57E-04	2.54E-02	2.33E-02	8.06E-04	1.51E-04	4.59E-03	2.31E-03	4.08E-06	3.45E-04	128.7	4.86E-02	2.87E-03
SI17_E	0.75	147	0	1	4.94E-01	6.20E-01	9.35E-04	3.13E-02	2.88E-02	9.95E-04	1.86E-04	5.67E-03	2.85E-03	5.03E-06	4.26E-04	158.9	6.00E-02	3.55E-03
SI17_E	0.75	158	0	1	5.32E-01	6.67E-01	1.01E-03	3.37E-02	3.10E-02	1.07E-03	2.00E-04	6.10E-03	3.07E-03	5.42E-06	4.58E-04	171.0	6.45E-02	3.81E-03
SI17_E	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI17_E	0.75	73	0	1	2.44E-01	3.06E-01	4.61E-04	1.55E-02	1.42E-02	4.91E-04	9.18E-05	2.80E-03	1.41E-03	2.49E-06	2.10E-04	78.5	2.96E-02	1.75E-03
SI17_E	0.75	61	0	1	2.06E-01	2.59E-01	3.90E-04	1.31E-02	1.20E-02	4.16E-04	7.77E-05	2.37E-03	1.19E-03	2.10E-06	1.78E-04	66.4	2.51E-02	1.48E-03
SI17_E	0.75	52	0	1	1.75E-01	2.20E-01	3.31E-04	1.11E-02	1.02E-02	3.53E-04	6.59E-05	2.01E-03	1.01E-03	1.78E-06	1.51E-04	56.3	2.13E-02	1.26E-03
SI17_E	0.75	43	0	1	1.44E-01	1.80E-01	2.72E-04	9.11E-03	8.38E-03	2.90E-04	5.41E-05	1.65E-03	8.31E-04	1.47E-06	1.24E-04	46.3	1.75E-02	1.03E-03
SI17_E	0.75	32	0	1	1.06E-01	1.33E-01	2.01E-04	6.74E-03	6.20E-03	2.14E-04	4.00E-05	1.22E-03	6.14E-04	1.08E-06	9.17E-05	34.2	1.29E-02	7.63E-04
SI17_W	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI17_W	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI17_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI17_W	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI17_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI17_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI17_W	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI17_W	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI17_W	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI17_W	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI17_W	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI17_W	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI17_W	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI17_W	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI17_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI17_W	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI17_W	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI17_W	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI17_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI17_W	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI17_W	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI17_W	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI17_W	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI17_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI18_E	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI18_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI18_E	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI18_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI18_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI18_E	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI18_E	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI18_E	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI18_E	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI18_E	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI18_E	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI18_E	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI18_E	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI18_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI18_E	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI18_E	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI18_E	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI18_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI18_E	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI18_E	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI18_E	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI18_E	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI18_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI18_W	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI18_W	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI18_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI18_W	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI18_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI18_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI18_W	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI18_W	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI18_W	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI18_W	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI18_W	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI18_W	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI18_W	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI18_W	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI18_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI18_W	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI18_W	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI18_W	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI18_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI18_W	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI18_W	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI18_W	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI18_W	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI18_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI19_E	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI19_E	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI19_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI19_E	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI19_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI19_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI19_E	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI19_E	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI19_E	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI19_E	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI19_E	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI19_E	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI19_E	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI19_E	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI19_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI19_E	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI19_E	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI19_E	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI19_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI19_E	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_E	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI19_E	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI19_E	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI19_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI19_W	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI19_W	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI19_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI19_W	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI19_W	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI19_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI19_W	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI19_W	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI19_W	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI19_W	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI19_W	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI19_W	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI19_W	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI19_W	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI19_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI19_W	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI19_W	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI19_W	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI19_W	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI19_W	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI19_W	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI19_W	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI19_W	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI19_W	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI20_E	0.75	15	0	1	5.16E-02	6.48E-02	9.77E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.27E-03	3.71E-04
SI20_E	0.75	10	0	1	3.44E-02	4.32E-02	6.51E-05	2.18E-03	2.01E-03	6.93E-05	1.30E-05	3.95E-04	1.99E-04	3.51E-07	2.97E-05	11.1	4.18E-03	2.47E-04
SI20_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI20_E	0.75	6	0	1	2.15E-02	2.70E-02	4.07E-05	1.36E-03	1.25E-03	4.33E-05	8.10E-06	2.47E-04	1.24E-04	2.19E-07	1.86E-05	6.9	2.61E-03	1.54E-04
SI20_E	0.75	9	0	1	3.01E-02	3.78E-02	5.70E-05	1.91E-03	1.76E-03	6.07E-05	1.13E-05	3.46E-04	1.74E-04	3.07E-07	2.60E-05	9.7	3.66E-03	2.16E-04
SI20_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI20_E	0.75	65	0	1	2.19E-01	2.75E-01	4.15E-04	1.39E-02	1.28E-02	4.42E-04	8.26E-05	2.52E-03	1.27E-03	2.24E-06	1.89E-04	70.6	2.66E-02	1.57E-03
SI20_E	0.75	100	0	1	3.36E-01	4.21E-01	6.35E-04	2.13E-02	1.96E-02	6.76E-04	1.26E-04	3.85E-03	1.94E-03	3.42E-06	2.89E-04	108.0	4.07E-02	2.41E-03
SI20_E	0.75	81	0	1	2.71E-01	3.40E-01	5.13E-04	1.72E-02	1.58E-02	5.46E-04	1.02E-04	3.11E-03	1.57E-03	2.76E-06	2.34E-04	87.2	3.29E-02	1.95E-03
SI20_E	0.75	67	0	1	2.24E-01	2.81E-01	4.23E-04	1.42E-02	1.30E-02	4.51E-04	8.42E-05	2.57E-03	1.29E-03	2.28E-06	1.93E-04	72.0	2.72E-02	1.61E-03
SI20_E	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.46E-02	1.45E-03
SI20_E	0.75	68	0	1	2.28E-01	2.86E-01	4.31E-04	1.45E-02	1.33E-02	4.59E-04	8.58E-05	2.62E-03	1.32E-03	2.32E-06	1.97E-04	73.4	2.77E-02	1.64E-03
SI20_E	0.75	72	0	1	2.41E-01	3.02E-01	4.56E-04	1.53E-02	1.40E-02	4.85E-04	9.07E-05	2.76E-03	1.39E-03	2.46E-06	2.08E-04	77.5	2.93E-02	1.73E-03
SI20_E	0.75	73	0	1	2.45E-01	3.08E-01	4.64E-04	1.55E-02	1.43E-02	4.94E-04	9.23E-05	2.81E-03	1.42E-03	2.50E-06	2.12E-04	78.9	2.98E-02	1.76E-03
SI20_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI20_E	0.75	82	0	1	2.75E-01	3.45E-01	5.21E-04	1.75E-02	1.61E-02	5.55E-04	1.04E-04	3.16E-03	1.59E-03	2.81E-06	2.38E-04	88.6	3.34E-02	1.98E-03
SI20_E	0.75	101	0	1	3.40E-01	4.26E-01	6.43E-04	2.15E-02	1.98E-02	6.85E-04	1.28E-04	3.90E-03	1.96E-03	3.46E-06	2.93E-04	109.4	4.13E-02	2.44E-03
SI20_E	0.75	109	0	1	3.66E-01	4.59E-01	6.92E-04	2.32E-02	2.13E-02	7.37E-04	1.38E-04	4.20E-03	2.11E-03	3.73E-06	3.15E-04	117.7	4.44E-02	2.62E-03
SI20_E	0.75	75	0	1	2.54E-01	3.18E-01	4.80E-04	1.61E-02	1.48E-02	5.11E-04	9.55E-05	2.91E-03	1.47E-03	2.59E-06	2.19E-04	81.7	3.08E-02	1.82E-03
SI20_E	0.75	50	0	1	1.68E-01	2.10E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.69E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI20_E	0.75	42	0	1	1.42E-01	1.78E-01	2.69E-04	9.00E-03	8.28E-03	2.86E-04	5.34E-05	1.63E-03	8.20E-04	1.45E-06	1.22E-04	45.7	1.72E-02	1.02E-03
SI20_E	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.53E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI20_E	0.75	29	0	1	9.90E-02	1.24E-01	1.87E-04	6.27E-03	5.77E-03	1.99E-04	3.72E-05	1.14E-03	5.72E-04	1.01E-06	8.54E-05	31.8	1.20E-02	7.10E-04
SI20_E	0.75	22	0	1	7.32E-02	9.18E-02	1.38E-04	4.64E-03	4.26E-03	1.47E-04	2.75E-05	8.39E-04	4.23E-04	7.46E-07	6.31E-05	23.5	8.88E-03	5.25E-04
SI20_W	0.75	16	0	1	5.48E-02	6.87E-02	1.04E-04	3.47E-03	3.19E-03	1.10E-04	2.06E-05	6.28E-04	3.16E-04	5.58E-07	4.72E-05	17.6	6.65E-03	3.93E-04
SI20_W	0.75	11	0	1	3.65E-02	4.58E-02	6.91E-05	2.31E-03	2.13E-03	7.35E-05	1.37E-05	4.19E-04	2.11E-04	3.72E-07	3.15E-05	11.7	4.43E-03	2.62E-04
SI20_W	0.75	9	0	1	3.19E-02	4.01E-02	6.04E-05	2.02E-03	1.86E-03	6.43E-05	1.20E-05	3.66E-04	1.84E-04	3.26E-07	2.75E-05	10.3	3.88E-03	2.29E-04
SI20_W	0.75	7	0	1	2.28E-02	2.86E-02	4.32E-05	1.45E-03	1.33E-03	4.60E-05	8.59E-06	2.62E-04	1.32E-04	2.33E-07	1.97E-05	7.3	2.77E-03	1.64E-04
SI20_W	0.75	9	0	1	3.19E-02	4.01E-02	6.04E-05	2.02E-03	1.86E-03	6.43E-05	1.20E-05	3.66E-04	1.84E-04	3.26E-07	2.75E-05	10.3	3.88E-03	2.29E-04
SI20_W	0.75	23	0	1	7.76E-02	9.73E-02	1.47E-04	4.92E-03	4.52E-03	1.56E-04	2.92E-05	8.90E-04	4.48E-04	7.91E-07	6.69E-05	25.0	9.42E-03	5.57E-04
SI20_W	0.75	69	0	1	2.33E-01	2.92E-01	4.40E-04	1.47E-02	1.36E-02	4.69E-04	8.76E-05	2.67E-03	1.34E-03	2.37E-06	2.01E-04	74.9	2.83E-02	1.67E-03
SI20_W	0.75	106	0	1	3.56E-01	4.46E-01	6.73E-04	2.26E-02	2.07E-02	7.17E-04	1.34E-04	4.08E-03	2.06E-03	3.63E-06	3.07E-04	114.5	4.32E-02	2.55E-03
SI20_W	0.75	85	0	1	2.87E-01	3.61E-01	5.44E-04	1.82E-02	1.68E-02	5.79E-04	1.08E-04	3.30E-03	1.66E-03	2.93E-06	2.48E-04	92.5	3.49E-02	2.06E-03
SI20_W	0.75	71	0	1	2.37E-01	2.98E-01	4.49E-04	1.50E-02	1.38E-02	4.78E-04	8.93E-05	2.72E-03	1.37E-03	2.42E-06	2.05E-04	76.3	2.88E-02	1.70E-03
SI20_W	0.75	64	0	1	2.14E-01	2.69E-01	4.06E-04	1.36E-02	1.25E-02	4.32E-04	8.07E-05	2.46E-03	1.24E-03	2.19E-06	1.85E-04	69.0	2.60E-02	1.54E-03
SI20_W	0.75	72	0	1	2.42E-01	3.03E-01	4.58E-04	1.53E-02	1.41E-02	4.87E-04	9.10E-05	2.77E-03	1.40E-03	2.46E-06	2.09E-04	77.8	2.94E-02	1.74E-03
SI20_W	0.75	76	0	1	2.56E-01	3.20E-01	4.83E-04	1.62E-02	1.49E-02	5.15E-04	9.62E-05	2.93E-03	1.48E-03	2.60E-06	2.20E-04	82.2	3.10E-02	1.83E-03
SI20_W	0.75	77	0	1	2.60E-01	3.26E-01	4.92E-04	1.65E-02	1.52E-02	5.24E-04	9.79E-05	2.98E-03	1.50E-03	2.65E-06	2.24E-04	83.7	3.16E-02	1.87E-03
SI20_W	0.75	80	0	1	2.69E-01	3.38E-01	5.09E-04	1.71E-02	1.57E-02	5.42E-04	1.01E-04	3.09E-03	1.55E-03	2.74E-06	2.32E-04	86.6	3.27E-02	1.93E-03
SI20_W	0.75	87	0	1	2.92E-01	3.66E-01	5.52E-04	1.85E-02	1.70E-02	5.88E-04	1.10E-04	3.35E-03	1.69E-03	2.98E-06	2.52E-04	93.9	3.55E-02	2.10E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI20_W	0.75	107	0	1	3.60E-01	4.52E-01	6.82E-04	2.28E-02	2.10E-02	7.26E-04	1.36E-04	4.14E-03	2.08E-03	3.67E-06	3.11E-04	116.0	4.38E-02	2.59E-03
SI20_W	0.75	115	0	1	3.88E-01	4.86E-01	7.34E-04	2.46E-02	2.26E-02	7.81E-04	1.46E-04	4.45E-03	2.24E-03	3.95E-06	3.35E-04	124.8	4.71E-02	2.78E-03
SI20_W	0.75	80	0	1	2.69E-01	3.38E-01	5.09E-04	1.71E-02	1.57E-02	5.42E-04	1.01E-04	3.09E-03	1.55E-03	2.74E-06	2.32E-04	86.6	3.27E-02	1.93E-03
SI20_W	0.75	53	0	1	1.78E-01	2.23E-01	3.37E-04	1.13E-02	1.04E-02	3.58E-04	6.70E-05	2.04E-03	1.03E-03	1.81E-06	1.53E-04	57.2	2.16E-02	1.28E-03
SI20_W	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.54E-03	8.78E-03	3.03E-04	5.67E-05	1.73E-03	8.70E-04	1.53E-06	1.30E-04	48.4	1.83E-02	1.08E-03
SI20_W	0.75	38	0	1	1.28E-01	1.60E-01	2.42E-04	8.10E-03	7.45E-03	2.57E-04	4.81E-05	1.47E-03	7.38E-04	1.30E-06	1.10E-04	41.1	1.55E-02	9.17E-04
SI20_W	0.75	31	0	1	1.05E-01	1.32E-01	1.99E-04	6.65E-03	6.12E-03	2.11E-04	3.95E-05	1.20E-03	6.06E-04	1.07E-06	9.05E-05	33.8	1.27E-02	7.53E-04
SI20_W	0.75	23	0	1	7.76E-02	9.73E-02	1.47E-04	4.92E-03	4.52E-03	1.56E-04	2.92E-05	8.90E-04	4.48E-04	7.91E-07	6.69E-05	25.0	9.42E-03	5.57E-04
SI21_E	0.75	16	0	1	5.48E-02	6.87E-02	1.04E-04	3.47E-03	3.19E-03	1.10E-04	2.06E-05	6.28E-04	3.16E-04	5.58E-07	4.72E-05	17.6	6.65E-03	3.93E-04
SI21_E	0.75	11	0	1	3.65E-02	4.58E-02	6.91E-05	2.31E-03	2.13E-03	7.35E-05	1.37E-05	4.19E-04	2.11E-04	3.72E-07	3.15E-05	11.7	4.43E-03	2.62E-04
SI21_E	0.75	9	0	1	3.19E-02	4.01E-02	6.04E-05	2.02E-03	1.86E-03	6.43E-05	1.20E-05	3.66E-04	1.84E-04	3.26E-07	2.75E-05	10.3	3.88E-03	2.29E-04
SI21_E	0.75	7	0	1	2.28E-02	2.86E-02	4.32E-05	1.45E-03	1.33E-03	4.60E-05	8.59E-06	2.62E-04	1.32E-04	2.33E-07	1.97E-05	7.3	2.77E-03	1.64E-04
SI21_E	0.75	9	0	1	3.19E-02	4.01E-02	6.04E-05	2.02E-03	1.86E-03	6.43E-05	1.20E-05	3.66E-04	1.84E-04	3.26E-07	2.75E-05	10.3	3.88E-03	2.29E-04
SI21_E	0.75	23	0	1	7.76E-02	9.73E-02	1.47E-04	4.92E-03	4.52E-03	1.56E-04	2.92E-05	8.90E-04	4.48E-04	7.91E-07	6.69E-05	25.0	9.42E-03	5.57E-04
SI21_E	0.75	69	0	1	2.33E-01	2.92E-01	4.40E-04	1.47E-02	1.36E-02	4.69E-04	8.76E-05	2.67E-03	1.34E-03	2.37E-06	2.01E-04	74.9	2.83E-02	1.67E-03
SI21_E	0.75	106	0	1	3.56E-01	4.46E-01	6.73E-04	2.26E-02	2.07E-02	7.17E-04	1.34E-04	4.08E-03	2.06E-03	3.63E-06	3.07E-04	114.5	4.32E-02	2.55E-03
SI21_E	0.75	85	0	1	2.87E-01	3.61E-01	5.44E-04	1.82E-02	1.68E-02	5.79E-04	1.08E-04	3.30E-03	1.66E-03	2.93E-06	2.48E-04	92.5	3.49E-02	2.06E-03
SI21_E	0.75	71	0	1	2.37E-01	2.98E-01	4.49E-04	1.50E-02	1.38E-02	4.78E-04	8.93E-05	2.72E-03	1.37E-03	2.42E-06	2.05E-04	76.3	2.88E-02	1.70E-03
SI21_E	0.75	64	0	1	2.14E-01	2.69E-01	4.06E-04	1.36E-02	1.25E-02	4.32E-04	8.07E-05	2.46E-03	1.24E-03	2.19E-06	1.85E-04	69.0	2.60E-02	1.54E-03
SI21_E	0.75	72	0	1	2.42E-01	3.03E-01	4.58E-04	1.53E-02	1.41E-02	4.87E-04	9.10E-05	2.77E-03	1.40E-03	2.46E-06	2.09E-04	77.8	2.94E-02	1.74E-03
SI21_E	0.75	76	0	1	2.56E-01	3.20E-01	4.83E-04	1.62E-02	1.49E-02	5.15E-04	9.62E-05	2.93E-03	1.48E-03	2.60E-06	2.20E-04	82.2	3.10E-02	1.83E-03
SI21_E	0.75	77	0	1	2.60E-01	3.26E-01	4.92E-04	1.65E-02	1.52E-02	5.24E-04	9.79E-05	2.98E-03	1.50E-03	2.65E-06	2.24E-04	83.7	3.16E-02	1.87E-03
SI21_E	0.75	80	0	1	2.69E-01	3.38E-01	5.09E-04	1.71E-02	1.57E-02	5.42E-04	1.01E-04	3.09E-03	1.55E-03	2.74E-06	2.32E-04	86.6	3.27E-02	1.93E-03
SI21_E	0.75	87	0	1	2.92E-01	3.66E-01	5.52E-04	1.85E-02	1.70E-02	5.88E-04	1.10E-04	3.35E-03	1.69E-03	2.98E-06	2.52E-04	93.9	3.55E-02	2.10E-03
SI21_E	0.75	107	0	1	3.60E-01	4.52E-01	6.82E-04	2.28E-02	2.10E-02	7.26E-04	1.36E-04	4.14E-03	2.08E-03	3.67E-06	3.11E-04	116.0	4.38E-02	2.59E-03
SI21_E	0.75	115	0	1	3.88E-01	4.86E-01	7.34E-04	2.46E-02	2.26E-02	7.81E-04	1.46E-04	4.45E-03	2.24E-03	3.95E-06	3.35E-04	124.8	4.71E-02	2.78E-03
SI21_E	0.75	80	0	1	2.69E-01	3.38E-01	5.09E-04	1.71E-02	1.57E-02	5.42E-04	1.01E-04	3.09E-03	1.55E-03	2.74E-06	2.32E-04	86.6	3.27E-02	1.93E-03
SI21_E	0.75	53	0	1	1.78E-01	2.23E-01	3.37E-04	1.13E-02	1.04E-02	3.58E-04	6.70E-05	2.04E-03	1.03E-03	1.81E-06	1.53E-04	57.2	2.16E-02	1.28E-03
SI21_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.54E-03	8.78E-03	3.03E-04	5.67E-05	1.73E-03	8.70E-04	1.53E-06	1.30E-04	48.4	1.83E-02	1.08E-03
SI21_E	0.75	38	0	1	1.28E-01	1.60E-01	2.42E-04	8.10E-03	7.45E-03	2.57E-04	4.81E-05	1.47E-03	7.38E-04	1.30E-06	1.10E-04	41.1	1.55E-02	9.17E-04
SI21_E	0.75	31	0	1	1.05E-01	1.32E-01	1.99E-04	6.65E-03	6.12E-03	2.11E-04	3.95E-05	1.20E-03	6.06E-04	1.07E-06	9.05E-05	33.8	1.27E-02	7.53E-04
SI21_E	0.75	23	0	1	7.76E-02	9.73E-02	1.47E-04	4.92E-03	4.52E-03	1.56E-04	2.92E-05	8.90E-04	4.48E-04	7.91E-07	6.69E-05	25.0	9.42E-03	5.57E-04
SI21_W	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI21_W	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI21_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI21_W	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI21_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI21_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI21_W	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI21_W	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI21_W	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI21_W	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI21_W	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI21_W	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03
SI21_W	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI21_W	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI21_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI21_W	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI21_W	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI21_W	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI21_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI21_W	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI21_W	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI21_W	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI21_W	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI21_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI22_E	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI22_E	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI22_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI22_E	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI22_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI22_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI22_E	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI22_E	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI22_E	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI22_E	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI22_E	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI22_E	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI22_E	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI22_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI22_E	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI22_E	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI22_E	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI22_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI22_E	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI22_E	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI22_E	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI22_E	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI22_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI22_W	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI22_W	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI22_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI22_W	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI22_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI22_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI22_W	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI22_W	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI22_W	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI22_W	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI22_W	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI22_W	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03
SI22_W	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI22_W	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI22_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI22_W	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI22_W	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI22_W	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI22_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI22_W	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI22_W	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI22_W	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI22_W	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI22_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI23_E	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI23_E	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI23_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI23_E	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI23_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI23_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI23_E	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI23_E	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI23_E	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI23_E	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI23_E	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI23_E	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03
SI23_E	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI23_E	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI23_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI23_E	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI23_E	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI23_E	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI23_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI23_E	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI23_E	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI23_E	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI23_E	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI23_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI23_W	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI23_W	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI23_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI23_W	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI23_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI23_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI23_W	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI23_W	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI23_W	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI23_W	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI23_W	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03
SI23_W	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI23_W	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI23_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI23_W	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI23_W	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI23_W	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI23_W	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI23_W	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI23_W	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI23_W	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI23_W	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI23_W	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI24_E	0.75	17	0	1	5.68E-02	7.12E-02	1.07E-04	3.60E-03	3.31E-03	1.14E-04	2.14E-05	6.51E-04	3.28E-04	5.78E-07	4.90E-05	18.3	6.89E-03	4.07E-04
SI24_E	0.75	11	0	1	3.78E-02	4.75E-02	7.16E-05	2.40E-03	2.21E-03	7.62E-05	1.42E-05	4.34E-04	2.19E-04	3.86E-07	3.26E-05	12.2	4.59E-03	2.72E-04
SI24_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI24_E	0.75	7	0	1	2.36E-02	2.97E-02	4.47E-05	1.50E-03	1.38E-03	4.76E-05	8.90E-06	2.71E-04	1.37E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.70E-04
SI24_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.37E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI24_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI24_E	0.75	72	0	1	2.41E-01	3.03E-01	4.56E-04	1.53E-02	1.41E-02	4.86E-04	9.08E-05	2.77E-03	1.39E-03	2.46E-06	2.08E-04	77.6	2.93E-02	1.73E-03
SI24_E	0.75	110	0	1	3.69E-01	4.63E-01	6.98E-04	2.34E-02	2.15E-02	7.43E-04	1.39E-04	4.23E-03	2.13E-03	3.76E-06	3.18E-04	118.7	4.48E-02	2.65E-03
SI24_E	0.75	89	0	1	2.98E-01	3.74E-01	5.64E-04	1.89E-02	1.74E-02	6.00E-04	1.12E-04	3.42E-03	1.72E-03	3.04E-06	2.57E-04	95.9	3.62E-02	2.14E-03
SI24_E	0.75	73	0	1	2.46E-01	3.08E-01	4.65E-04	1.56E-02	1.43E-02	4.95E-04	9.26E-05	2.82E-03	1.42E-03	2.51E-06	2.12E-04	79.1	2.99E-02	1.76E-03
SI24_E	0.75	66	0	1	2.22E-01	2.79E-01	4.21E-04	1.41E-02	1.30E-02	4.48E-04	8.37E-05	2.55E-03	1.28E-03	2.27E-06	1.92E-04	71.5	2.70E-02	1.60E-03
SI24_E	0.75	75	0	1	2.51E-01	3.14E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.43E-05	2.88E-03	1.45E-03	2.55E-06	2.16E-04	80.6	3.04E-02	1.80E-03
SI24_E	0.75	79	0	1	2.65E-01	3.32E-01	5.01E-04	1.68E-02	1.54E-02	5.34E-04	9.97E-05	3.04E-03	1.53E-03	2.70E-06	2.28E-04	85.2	3.22E-02	1.90E-03
SI24_E	0.75	80	0	1	2.70E-01	3.38E-01	5.10E-04	1.71E-02	1.57E-02	5.43E-04	1.01E-04	3.09E-03	1.56E-03	2.75E-06	2.33E-04	86.7	3.27E-02	1.93E-03
SI24_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI24_E	0.75	90	0	1	3.03E-01	3.80E-01	5.73E-04	1.92E-02	1.76E-02	6.10E-04	1.14E-04	3.47E-03	1.75E-03	3.09E-06	2.61E-04	97.4	3.67E-02	2.17E-03
SI24_E	0.75	111	0	1	3.74E-01	4.69E-01	7.07E-04	2.37E-02	2.18E-02	7.53E-04	1.41E-04	4.29E-03	2.16E-03	3.81E-06	3.22E-04	120.2	4.54E-02	2.68E-03
SI24_E	0.75	120	0	1	4.02E-01	5.04E-01	7.61E-04	2.55E-02	2.34E-02	8.10E-04	1.51E-04	4.61E-03	2.32E-03	4.10E-06	3.47E-04	129.3	4.88E-02	2.89E-03
SI24_E	0.75	83	0	1	2.79E-01	3.50E-01	5.28E-04	1.77E-02	1.63E-02	5.62E-04	1.05E-04	3.20E-03	1.61E-03	2.84E-06	2.41E-04	89.8	3.39E-02	2.00E-03
SI24_E	0.75	55	0	1	1.84E-01	2.31E-01	3.49E-04	1.17E-02	1.08E-02	3.72E-04	6.94E-05	2.12E-03	1.07E-03	1.88E-06	1.59E-04	59.3	2.24E-02	1.32E-03
SI24_E	0.75	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.10E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI24_E	0.75	39	0	1	1.32E-01	1.66E-01	2.51E-04	8.39E-03	7.72E-03	2.67E-04	4.98E-05	1.52E-03	7.65E-04	1.35E-06	1.14E-04	42.6	1.61E-02	9.50E-04
SI24_E	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.34E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.38E-05	35.0	1.32E-02	7.81E-04
SI24_E	0.75	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.23E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI24_W	0.75	11	0	1	3.54E-02	4.44E-02	6.70E-05	2.24E-03	2.06E-03	7.13E-05	1.33E-05	4.06E-04	2.04E-04	3.61E-07	3.05E-05	11.4	4.30E-03	2.54E-04
SI24_W	0.75	7	0	1	2.36E-02	2.96E-02	4.46E-05	1.50E-03	1.38E-03	4.75E-05	8.88E-06	2.71E-04	1.36E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.69E-04
SI24_W	0.75	6	0	1	2.07E-02	2.59E-02	3.91E-05	1.31E-03	1.20E-03	4.16E-05	7.77E-06	2.37E-04	1.19E-04	2.10E-07	1.78E-05	6.6	2.51E-03	1.48E-04
SI24_W	0.75	4	0	1	1.48E-02	1.85E-02	2.79E-05	9.35E-04	8.60E-04	2.97E-05	5.55E-06	1.69E-04	8.52E-05	1.50E-07	1.27E-05	4.7	1.79E-03	1.06E-04
SI24_W	0.75	6	0	1	2.07E-02	2.59E-02	3.91E-05	1.31E-03	1.20E-03	4.16E-05	7.77E-06	2.37E-04	1.19E-04	2.10E-07	1.78E-05	6.6	2.51E-03	1.48E-04
SI24_W	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.75E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI24_W	0.75	45	0	1	1.50E-01	1.89E-01	2.85E-04	9.53E-03	8.77E-03	3.03E-04	5.66E-05	1.73E-03	8.69E-04	1.53E-06	1.30E-04	48.4	1.83E-02	1.08E-03
SI24_W	0.75	68	0	1	2.30E-01	2.89E-01	4.35E-04	1.46E-02	1.34E-02	4.64E-04	8.66E-05	2.64E-03	1.33E-03	2.35E-06	1.98E-04	74.0	2.79E-02	1.65E-03
SI24_W	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.74E-04	6.99E-05	2.13E-03	1.07E-03	1.89E-06	1.60E-04	59.8	2.26E-02	1.33E-03
SI24_W	0.75	46	0	1	1.53E-01	1.92E-01	2.90E-04	9.72E-03	8.94E-03	3.09E-04	5.77E-05	1.76E-03	8.86E-04	1.56E-06	1.32E-04	49.3	1.86E-02	1.10E-03
SI24_W	0.75	41	0	1	1.39E-01	1.74E-01	2.62E-04	8.79E-03	8.08E-03	2.79E-04	5.22E-05	1.59E-03	8.01E-04	1.41E-06	1.20E-04	44.6	1.68E-02	9.95E-04
SI24_W	0.75	46	0	1	1.56E-01	1.96E-01	2.96E-04	9.91E-03	9.11E-03	3.15E-04	5.88E-05	1.79E-03	9.03E-04	1.59E-06	1.35E-04	50.3	1.90E-02	1.12E-03
SI24_W	0.75	49	0	1	1.65E-01	2.07E-01	3.13E-04	1.05E-02	9.63E-03	3.33E-04	6.22E-05	1.90E-03	9.54E-04	1.68E-06	1.42E-04	53.1	2.01E-02	1.19E-03
SI24_W	0.75	50	0	1	1.68E-01	2.11E-01	3.18E-04	1.07E-02	9.80E-03	3.39E-04	6.33E-05	1.93E-03	9.71E-04	1.71E-06	1.45E-04	54.1	2.04E-02	1.21E-03
SI24_W	0.75	52	0	1	1.74E-01	2.18E-01	3.29E-04	1.10E-02	1.01E-02	3.51E-04	6.55E-05	2.00E-03	1.01E-03	1.77E-06	1.50E-04	56.0	2.11E-02	1.25E-03
SI24_W	0.75	56	0	1	1.89E-01	2.37E-01	3.57E-04	1.20E-02	1.10E-02	3.80E-04	7.11E-05	2.17E-03	1.09E-03	1.92E-06	1.63E-04	60.7	2.29E-02	1.35E-03
SI24_W	0.75	69	0	1	2.33E-01	2.92E-01	4.41E-04	1.48E-02	1.36E-02	4.69E-04	8.77E-05	2.67E-03	1.35E-03	2.38E-06	2.01E-04	75.0	2.83E-02	1.67E-03
SI24_W	0.75	75	0	1	2.51E-01	3.15E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.44E-05	2.88E-03	1.45E-03	2.56E-06	2.16E-04	80.7	3.04E-02	1.80E-03
SI24_W	0.75	52	0	1	1.74E-01	2.18E-01	3.29E-04	1.10E-02	1.01E-02	3.51E-04	6.55E-05	2.00E-03	1.01E-03	1.77E-06	1.50E-04	56.0	2.11E-02	1.25E-03
SI24_W	0.75	34	0	1	1.15E-01	1.44E-01	2.18E-04	7.29E-03	6.71E-03	2.32E-04	4.33E-05	1.32E-03	6.65E-04	1.17E-06	9.92E-05	37.0	1.40E-02	8.26E-04
SI24_W	0.75	29	0	1	9.74E-02	1.22E-01	1.84E-04	6.17E-03	5.67E-03	1.96E-04	3.66E-05	1.12E-03	5.62E-04	9.92E-07	8.40E-05	31.3	1.18E-02	6.99E-04
SI24_W	0.75	25	0	1	8.26E-02	1.04E-01	1.56E-04	5.23E-03	4.81E-03	1.66E-04	3.11E-05	9.48E-04	4.77E-04	8.42E-07	7.12E-05	26.6	1.00E-02	5.93E-04
SI24_W	0.75	20	0	1	6.79E-02	8.51E-02	1.28E-04	4.30E-03	3.95E-03	1.37E-04	2.55E-05	7.78E-04	3.92E-04	6.92E-07	5.85E-05	21.8	8.24E-03	4.87E-04
SI24_W	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.75E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI25_E	0.75	11	0	1	3.54E-02	4.44E-02	6.70E-05	2.24E-03	2.06E-03	7.13E-05	1.33E-05	4.06E-04	2.04E-04	3.61E-07	3.05E-05	11.4	4.30E-03	2.54E-04
SI25_E	0.75	7	0	1	2.36E-02	2.96E-02	4.46E-05	1.50E-03	1.38E-03	4.75E-05	8.88E-06	2.71E-04	1.36E-04	2.41E-07	2.04E-05	7.6	2.87E-03	1.69E-04
SI25_E	0.75	6	0	1	2.07E-02	2.59E-02	3.91E-05	1.31E-03	1.20E-03	4.16E-05	7.77E-06	2.37E-04	1.19E-04	2.10E-07	1.78E-05	6.6	2.51E-03	1.48E-04
SI25_E	0.75	4	0	1	1.48E-02	1.85E-02	2.79E-05	9.35E-04	8.60E-04	2.97E-05	5.55E-06	1.69E-04	8.52E-05	1.50E-07	1.27E-05	4.7	1.79E-03	1.06E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	6	0	1	2.07E-02	2.59E-02	3.91E-05	1.31E-03	1.20E-03	4.16E-05	7.77E-06	2.37E-04	1.19E-04	2.10E-07	1.78E-05	6.6	2.51E-03	1.48E-04
SI25_E	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.75E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI25_E	0.75	45	0	1	1.50E-01	1.89E-01	2.85E-04	9.53E-03	8.77E-03	3.03E-04	5.66E-05	1.73E-03	8.69E-04	1.53E-06	1.30E-04	48.4	1.83E-02	1.08E-03
SI25_E	0.75	68	0	1	2.30E-01	2.89E-01	4.35E-04	1.46E-02	1.34E-02	4.64E-04	8.66E-05	2.64E-03	1.33E-03	2.35E-06	1.98E-04	74.0	2.79E-02	1.65E-03
SI25_E	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.74E-04	6.99E-05	2.13E-03	1.07E-03	1.89E-06	1.60E-04	59.8	2.26E-02	1.33E-03
SI25_E	0.75	46	0	1	1.53E-01	1.92E-01	2.90E-04	9.72E-03	8.94E-03	3.09E-04	5.77E-05	1.76E-03	8.86E-04	1.56E-06	1.32E-04	49.3	1.86E-02	1.10E-03
SI25_E	0.75	41	0	1	1.39E-01	1.74E-01	2.62E-04	8.79E-03	8.08E-03	2.79E-04	5.22E-05	1.59E-03	8.01E-04	1.41E-06	1.20E-04	44.6	1.68E-02	9.95E-04
SI25_E	0.75	46	0	1	1.56E-01	1.96E-01	2.96E-04	9.91E-03	9.11E-03	3.15E-04	5.88E-05	1.79E-03	9.03E-04	1.59E-06	1.35E-04	50.3	1.90E-02	1.12E-03
SI25_E	0.75	49	0	1	1.65E-01	2.07E-01	3.13E-04	1.05E-02	9.63E-03	3.33E-04	6.22E-05	1.90E-03	9.54E-04	1.68E-06	1.42E-04	53.1	2.01E-02	1.19E-03
SI25_E	0.75	50	0	1	1.68E-01	2.11E-01	3.18E-04	1.07E-02	9.80E-03	3.39E-04	6.33E-05	1.93E-03	9.71E-04	1.71E-06	1.45E-04	54.1	2.04E-02	1.21E-03
SI25_E	0.75	52	0	1	1.74E-01	2.18E-01	3.29E-04	1.10E-02	1.01E-02	3.51E-04	6.55E-05	2.00E-03	1.01E-03	1.77E-06	1.50E-04	56.0	2.11E-02	1.25E-03
SI25_E	0.75	56	0	1	1.89E-01	2.37E-01	3.57E-04	1.20E-02	1.10E-02	3.80E-04	7.11E-05	2.17E-03	1.09E-03	1.92E-06	1.63E-04	60.7	2.29E-02	1.35E-03
SI25_E	0.75	69	0	1	2.33E-01	2.92E-01	4.41E-04	1.48E-02	1.36E-02	4.69E-04	8.77E-05	2.67E-03	1.35E-03	2.38E-06	2.01E-04	75.0	2.83E-02	1.67E-03
SI25_E	0.75	75	0	1	2.51E-01	3.15E-01	4.74E-04	1.59E-02	1.46E-02	5.05E-04	9.44E-05	2.88E-03	1.45E-03	2.56E-06	2.16E-04	80.7	3.04E-02	1.80E-03
SI25_E	0.75	52	0	1	1.74E-01	2.18E-01	3.29E-04	1.10E-02	1.01E-02	3.51E-04	6.55E-05	2.00E-03	1.01E-03	1.77E-06	1.50E-04	56.0	2.11E-02	1.25E-03
SI25_E	0.75	34	0	1	1.15E-01	1.44E-01	2.18E-04	7.29E-03	6.71E-03	2.32E-04	4.33E-05	1.32E-03	6.65E-04	1.17E-06	9.92E-05	37.0	1.40E-02	8.26E-04
SI25_E	0.75	29	0	1	9.74E-02	1.22E-01	1.84E-04	6.17E-03	5.67E-03	1.96E-04	3.66E-05	1.12E-03	5.62E-04	9.92E-07	8.40E-05	31.3	1.18E-02	6.99E-04
SI25_E	0.75	25	0	1	8.26E-02	1.04E-01	1.56E-04	5.23E-03	4.81E-03	1.66E-04	3.11E-05	9.48E-04	4.77E-04	8.42E-07	7.12E-05	26.6	1.00E-02	5.93E-04
SI25_E	0.75	20	0	1	6.79E-02	8.51E-02	1.28E-04	4.30E-03	3.95E-03	1.37E-04	2.55E-05	7.78E-04	3.92E-04	6.92E-07	5.85E-05	21.8	8.24E-03	4.87E-04
SI25_E	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.75E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI25_W	0.75	8	0	1	2.86E-02	3.58E-02	5.40E-05	1.81E-03	1.66E-03	5.75E-05	1.07E-05	3.28E-04	1.65E-04	2.91E-07	2.46E-05	9.2	3.47E-03	2.05E-04
SI25_W	0.75	6	0	1	1.90E-02	2.39E-02	3.60E-05	1.21E-03	1.11E-03	3.84E-05	7.17E-06	2.18E-04	1.10E-04	1.94E-07	1.64E-05	6.1	2.31E-03	1.37E-04
SI25_W	0.75	5	0	1	1.67E-02	2.09E-02	3.15E-05	1.06E-03	9.71E-04	3.36E-05	6.27E-06	1.91E-04	9.62E-05	1.70E-07	1.44E-05	5.4	2.02E-03	1.20E-04
SI25_W	0.75	4	0	1	1.19E-02	1.49E-02	2.25E-05	7.54E-04	6.94E-04	2.40E-05	4.48E-06	1.37E-04	6.87E-05	1.21E-07	1.03E-05	3.8	1.44E-03	8.54E-05
SI25_W	0.75	5	0	1	1.67E-02	2.09E-02	3.15E-05	1.06E-03	9.71E-04	3.36E-05	6.27E-06	1.91E-04	9.62E-05	1.70E-07	1.44E-05	5.4	2.02E-03	1.20E-04
SI25_W	0.75	12	0	1	4.05E-02	5.08E-02	7.66E-05	2.56E-03	2.36E-03	8.15E-05	1.52E-05	4.64E-04	2.34E-04	4.12E-07	3.49E-05	13.0	4.91E-03	2.90E-04
SI25_W	0.75	36	0	1	1.21E-01	1.52E-01	2.30E-04	7.69E-03	7.08E-03	2.45E-04	4.57E-05	1.39E-03	7.01E-04	1.24E-06	1.05E-04	39.1	1.47E-02	8.71E-04
SI25_W	0.75	55	0	1	1.86E-01	2.33E-01	3.51E-04	1.18E-02	1.08E-02	3.74E-04	6.99E-05	2.13E-03	1.07E-03	1.89E-06	1.60E-04	59.7	2.25E-02	1.33E-03
SI25_W	0.75	45	0	1	1.50E-01	1.88E-01	2.84E-04	9.50E-03	8.74E-03	3.02E-04	5.64E-05	1.72E-03	8.66E-04	1.53E-06	1.29E-04	48.2	1.82E-02	1.08E-03
SI25_W	0.75	37	0	1	1.24E-01	1.55E-01	2.34E-04	7.84E-03	7.21E-03	2.49E-04	4.66E-05	1.42E-03	7.15E-04	1.26E-06	1.07E-04	39.8	1.50E-02	8.88E-04
SI25_W	0.75	33	0	1	1.12E-01	1.40E-01	2.12E-04	7.09E-03	6.52E-03	2.25E-04	4.21E-05	1.28E-03	6.46E-04	1.14E-06	9.65E-05	36.0	1.36E-02	8.03E-04
SI25_W	0.75	38	0	1	1.26E-01	1.58E-01	2.39E-04	7.99E-03	7.35E-03	2.54E-04	4.75E-05	1.45E-03	7.29E-04	1.29E-06	1.09E-04	40.6	1.53E-02	9.05E-04
SI25_W	0.75	40	0	1	1.33E-01	1.67E-01	2.52E-04	8.45E-03	7.77E-03	2.69E-04	5.02E-05	1.53E-03	7.70E-04	1.36E-06	1.15E-04	42.9	1.62E-02	9.57E-04
SI25_W	0.75	40	0	1	1.36E-01	1.70E-01	2.57E-04	8.60E-03	7.91E-03	2.73E-04	5.11E-05	1.56E-03	7.84E-04	1.38E-06	1.17E-04	43.6	1.65E-02	9.74E-04
SI25_W	0.75	42	0	1	1.40E-01	1.76E-01	2.66E-04	8.90E-03	8.19E-03	2.83E-04	5.29E-05	1.61E-03	8.11E-04	1.43E-06	1.21E-04	45.2	1.70E-02	1.01E-03
SI25_W	0.75	45	0	1	1.52E-01	1.91E-01	2.88E-04	9.65E-03	8.88E-03	3.07E-04	5.73E-05	1.75E-03	8.80E-04	1.55E-06	1.31E-04	49.0	1.85E-02	1.09E-03
SI25_W	0.75	56	0	1	1.88E-01	2.36E-01	3.56E-04	1.19E-02	1.10E-02	3.79E-04	7.08E-05	2.16E-03	1.09E-03	1.92E-06	1.62E-04	60.5	2.28E-02	1.35E-03
SI25_W	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.08E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.75E-04	65.1	2.46E-02	1.45E-03
SI25_W	0.75	42	0	1	1.40E-01	1.76E-01	2.66E-04	8.90E-03	8.19E-03	2.83E-04	5.29E-05	1.61E-03	8.11E-04	1.43E-06	1.21E-04	45.2	1.70E-02	1.01E-03
SI25_W	0.75	28	0	1	9.28E-02	1.16E-01	1.76E-04	5.88E-03	5.41E-03	1.87E-04	3.49E-05	1.07E-03	5.36E-04	9.46E-07	8.01E-05	29.9	1.13E-02	6.66E-04
SI25_W	0.75	23	0	1	7.86E-02	9.85E-02	1.49E-04	4.98E-03	4.58E-03	1.58E-04	2.96E-05	9.01E-04	4.54E-04	8.01E-07	6.77E-05	25.3	9.54E-03	5.64E-04
SI25_W	0.75	20	0	1	6.67E-02	8.36E-02	1.26E-04	4.22E-03	3.88E-03	1.34E-04	2.51E-05	7.65E-04	3.85E-04	6.79E-07	5.75E-05	21.4	8.09E-03	4.78E-04
SI25_W	0.75	16	0	1	5.48E-02	6.87E-02	1.04E-04	3.47E-03	3.19E-03	1.10E-04	2.06E-05	6.28E-04	3.16E-04	5.58E-07	4.72E-05	17.6	6.65E-03	3.93E-04
SI25_W	0.75	12	0	1	4.05E-02	5.08E-02	7.66E-05	2.56E-03	2.36E-03	8.15E-05	1.52E-05	4.64E-04	2.34E-04	4.12E-07	3.49E-05	13.0	4.91E-03	2.90E-04
SI26_E	0.52	6	0	1	1.99E-02	2.49E-02	3.76E-05	1.26E-03	1.16E-03	4.00E-05	7.47E-06	2.28E-04	1.15E-04	2.02E-07	1.71E-05	6.4	2.41E-03	1.43E-04
SI26_E	0.52	4	0	1	1.32E-02	1.66E-02	2.50E-05	8.39E-04	7.72E-04	2.67E-05	4.98E-06	1.52E-04	7.65E-05	1.35E-07	1.14E-05	4.3	1.61E-03	9.50E-05
SI26_E	0.52	3	0	1	1.16E-02	1.45E-02	2.19E-05	7.34E-04	6.75E-04	2.33E-05	4.36E-06	1.33E-04	6.69E-05	1.18E-07	9.99E-06	3.7	1.41E-03	8.31E-05
SI26_E	0.52	2	0	1	8.27E-03	1.04E-02	1.57E-05	5.24E-04	4.82E-04	1.67E-05	3.11E-06	9.49E-05	4.78E-05	8.43E-08	7.14E-06	2.7	1.00E-03	5.94E-05
SI26_E	0.52	3	0	1	1.16E-02	1.45E-02	2.19E-05	7.34E-04	6.75E-04	2.33E-05	4.36E-06	1.33E-04	6.69E-05	1.18E-07	9.99E-06	3.7	1.41E-03	8.31E-05
SI26_E	0.52	8	0	1	2.81E-02	3.53E-02	5.32E-05	1.78E-03	1.64E-03	5.67E-05	1.06E-05	3.23E-04	1.62E-04	2.87E-07	2.43E-05	9.1	3.42E-03	2.02E-04
SI26_E	0.52	25	0	1	8.44E-02	1.06E-01	1.60E-04	5.35E-03	4.92E-03	1.70E-04	3.18E-05	9.68E-04	4.87E-04	8.60E-07	7.28E-05	27.2	1.02E-02	6.06E-04
SI26_E	0.52	38	0	1	1.29E-01	1.62E-01	2.44E-04	8.18E-03	7.52E-03	2.60E-04	4.86E-05	1.48E-03	7.46E-04	1.32E-06	1.11E-04	41.5	1.57E-02	9.26E-04
SI26_E	0.52	31	0	1	1.04E-01	1.31E-01	1.97E-04	6.61E-03	6.08E-03	2.10E-04	3.92E-05	1.20E-03	6.02E-04	1.06E-06	8.99E-05	33.5	1.27E-02	7.48E-04
SI26_E	0.52	26	0	1	8.61E-02	1.08E-01	1.63E-04	5.45E-03	5.02E-03	1.73E-04	3.24E-05	9.87E-04	4.97E-04	8.77E-07	7.42E-05	27.7	1.04E-02	6.18E-04
SI26_E	0.52	23	0	1	7.78E-02	9.76E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI26_E	0.52	26	0	1	8.77E-02	1.10E-01	1.66E-04	5.56E-03	5.11E-03	1.77E-04	3.30E-05	1.01E-03	5.07E-04	8.94E-07	7.56E-05	28.2	1.06E-02	6.29E-04
SI26_E	0.52	28	0	1	9.27E-02	1.16E-01	1.75E-04	5.87E-03	5.40E-03	1.87E-04	3.49E-05	1.06E-03	5.35E-04	9.45E-07	7.99E-05	29.8	1.13E-02	6.65E-04
SI26_E	0.52	28	0	1	9.43E-02	1.18E-01	1.78E-04	5.98E-03	5.50E-03	1.90E-04	3.55E-05	1.08E-03	5.45E-04	9.61E-07	8.14E-05	30.3	1.15E-02	6.77E-04
SI26_E	0.52	29	0	1	9.76E-02	1.22E-01	1.85E-04	6.19E-03	5.69E-03	1.97E-04	3.67E-05	1.12E-03	5.64E-04	9.95E-07	8.42E-05	31.4	1.19E-02	7.01E-04
SI26_E	0.52	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.71E-03	6.17E-03	2.13E-04	3.99E-05	1.22E-03	6.12E-04	1.08E-06	9.13E-05	34.1	1.29E-02	7.60E-04
SI26_E	0.52	39	0	1	1.31E-01	1.64E-01	2.47E-04	8.29E-03	7.62E-03	2.63E-04	4.92E-05	1.50E-03	7.55E-04	1.33E-06	1.13E-04	42.1	1.59E-02	9.38E-04
SI26_E	0.52	42	0	1	1.41E-01	1.76E-01	2.66E-04	8.91E-03	8.20E-03	2.83E-04	5.29E-05	1.61E-03	8.12E-04	1.43E-06	1.21E-04	45.3	1.71E-02	1.01E-03
SI26_E	0.52	29	0	1	9.76E-02	1.22E-01	1.85E-04	6.19E-03	5.69E-03	1.97E-04	3.67E-05	1.12E-03	5.64E-04	9.95E-07	8.42E-05	31.4	1.19E-02	7.01E-04
SI26_E	0.52	19	0	1	6.45E-02	8.09E-02	1.22E-04	4.09E-03	3.76E-03	1.30E-04	2.43E-05	7.41E-04	3.73E-04	6.58E-07	5.57E-05	20.8	7.84E-03	4.63E-04
SI26_E	0.52	16	0	1	5.46E-02	6.85E-02	1.03E-04	3.46E-03	3.18E-03	1.10E-04	2.06E-05	6.27E-04	3.15E-04	5.57E-07	4.71E-05	17.6	6.63E-03	3.92E-04
SI26_E	0.52	14	0	1	4.63E-02	5.81E-02	8.77E-05	2.94E-03	2.70E-03	9.33E-05	1.74E-05	5.32E-04	2.68E-04	4.72E-07	4.00E-05	14.9	5.63E-03	3.33E-04
SI26_E	0.52	11	0	1	3.81E-02	4.77E-02	7.20E-05	2.41E-03	2.22E-03	7.67E-05	1.43E-05	4.37E-04	2.20E-04	3.88E-07	3.28E-05	12.2	4.62E-03	2.73E-04
SI26_E	0.52	8	0	1	2.81E-02	3.53E-02	5.32E-05	1.78E-03	1.64E-03	5.67E-05	1.06E-05	3.23E-04	1.62E-04	2.87E-07	2.43E-05	9.1	3.42E-03	2.02E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	3	0	1	9.44E-03	1.18E-02	1.79E-05	5.98E-04	5.50E-04	1.90E-05	3.55E-06	1.08E-04	5.45E-05	9.62E-08	8.14E-06	3.0	1.15E-03	6.78E-05
SI26_W	0.49	2	0	1	6.29E-03	7.90E-03	1.19E-05	3.99E-04	3.67E-04	1.27E-05	2.37E-06	7.22E-05	3.64E-05	6.42E-08	5.43E-06	2.0	7.64E-04	4.52E-05
SI26_W	0.49	2	0	1	5.51E-03	6.91E-03	1.04E-05	3.49E-04	3.21E-04	1.11E-05	2.07E-06	6.32E-05	3.18E-05	5.61E-08	4.75E-06	1.8	6.69E-04	3.95E-05
SI26_W	0.49	1	0	1	3.93E-03	4.93E-03	7.44E-06	2.49E-04	2.29E-04	7.92E-06	1.48E-06	4.51E-05	2.27E-05	4.01E-08	3.39E-06	1.3	4.78E-04	2.82E-05
SI26_W	0.49	2	0	1	5.51E-03	6.91E-03	1.04E-05	3.49E-04	3.21E-04	1.11E-05	2.07E-06	6.32E-05	3.18E-05	5.61E-08	4.75E-06	1.8	6.69E-04	3.95E-05
SI26_W	0.49	4	0	1	1.34E-02	1.68E-02	2.53E-05	8.48E-04	7.80E-04	2.69E-05	5.03E-06	1.53E-04	7.73E-05	1.36E-07	1.15E-05	4.3	1.62E-03	9.60E-05
SI26_W	0.49	12	0	1	4.01E-02	5.03E-02	7.59E-05	2.54E-03	2.34E-03	8.08E-05	1.51E-05	4.60E-04	2.32E-04	4.09E-07	3.46E-05	12.9	4.87E-03	2.88E-04
SI26_W	0.49	18	0	1	6.14E-02	7.70E-02	1.16E-04	3.89E-03	3.58E-03	1.24E-04	2.31E-05	7.04E-04	3.54E-04	6.26E-07	5.29E-05	19.7	7.45E-03	4.40E-04
SI26_W	0.49	15	0	1	4.96E-02	6.22E-02	9.38E-05	3.14E-03	2.89E-03	9.99E-05	1.87E-05	5.69E-04	2.86E-04	5.05E-07	4.28E-05	15.9	6.02E-03	3.56E-04
SI26_W	0.49	12	0	1	4.09E-02	5.13E-02	7.74E-05	2.59E-03	2.38E-03	8.24E-05	1.54E-05	4.69E-04	2.36E-04	4.17E-07	3.53E-05	13.2	4.97E-03	2.94E-04
SI26_W	0.49	11	0	1	3.70E-02	4.64E-02	7.00E-05	2.34E-03	2.16E-03	7.45E-05	1.39E-05	4.24E-04	2.14E-04	3.77E-07	3.19E-05	11.9	4.49E-03	2.65E-04
SI26_W	0.49	12	0	1	4.17E-02	5.23E-02	7.89E-05	2.64E-03	2.43E-03	8.40E-05	1.57E-05	4.78E-04	2.41E-04	4.25E-07	3.60E-05	13.4	5.06E-03	2.99E-04
SI26_W	0.49	13	0	1	4.41E-02	5.53E-02	8.34E-05	2.79E-03	2.57E-03	8.88E-05	1.66E-05	5.06E-04	2.54E-04	4.49E-07	3.80E-05	14.2	5.35E-03	3.16E-04
SI26_W	0.49	13	0	1	4.49E-02	5.63E-02	8.49E-05	2.84E-03	2.61E-03	9.03E-05	1.69E-05	5.15E-04	2.59E-04	4.57E-07	3.87E-05	14.4	5.44E-03	3.22E-04
SI26_W	0.49	14	0	1	4.64E-02	5.82E-02	8.78E-05	2.94E-03	2.71E-03	9.35E-05	1.75E-05	5.33E-04	2.68E-04	4.73E-07	4.00E-05	14.9	5.64E-03	3.33E-04
SI26_W	0.49	15	0	1	5.04E-02	6.32E-02	9.53E-05	3.19E-03	2.93E-03	1.01E-04	1.90E-05	5.78E-04	2.91E-04	5.13E-07	4.34E-05	16.2	6.11E-03	3.61E-04
SI26_W	0.49	18	0	1	6.22E-02	7.80E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.34E-07	5.36E-05	20.0	7.55E-03	4.46E-04
SI26_W	0.49	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.67E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI26_W	0.49	14	0	1	4.64E-02	5.82E-02	8.78E-05	2.94E-03	2.71E-03	9.35E-05	1.75E-05	5.33E-04	2.68E-04	4.73E-07	4.00E-05	14.9	5.64E-03	3.33E-04
SI26_W	0.49	9	0	1	3.07E-02	3.85E-02	5.81E-05	1.94E-03	1.79E-03	6.18E-05	1.15E-05	3.52E-04	1.77E-04	3.13E-07	2.65E-05	9.9	3.73E-03	2.20E-04
SI26_W	0.49	8	0	1	2.60E-02	3.26E-02	4.91E-05	1.65E-03	1.51E-03	5.23E-05	9.77E-06	2.98E-04	1.50E-04	2.65E-07	2.24E-05	8.4	3.15E-03	1.86E-04
SI26_W	0.49	7	0	1	2.20E-02	2.76E-02	4.17E-05	1.40E-03	1.28E-03	4.44E-05	8.29E-06	2.53E-04	1.27E-04	2.25E-07	1.90E-05	7.1	2.67E-03	1.58E-04
SI26_W	0.49	5	0	1	1.81E-02	2.27E-02	3.42E-05	1.15E-03	1.05E-03	3.65E-05	6.81E-06	2.08E-04	1.05E-04	1.84E-07	1.56E-05	5.8	2.20E-03	1.30E-04
SI26_W	0.49	4	0	1	1.34E-02	1.68E-02	2.53E-05	8.48E-04	7.80E-04	2.69E-05	5.03E-06	1.53E-04	7.73E-05	1.36E-07	1.15E-05	4.3	1.62E-03	9.60E-05
SI27_E	0.61	4	0	1	1.19E-02	1.50E-02	2.26E-05	7.57E-04	6.96E-04	2.41E-05	4.49E-06	1.37E-04	6.90E-05	1.22E-07	1.03E-05	3.8	1.45E-03	8.57E-05
SI27_E	0.61	2	0	1	7.96E-03	9.98E-03	1.51E-05	5.05E-04	4.64E-04	1.60E-05	3.00E-06	9.13E-05	4.60E-05	8.11E-08	6.87E-06	2.6	9.66E-04	5.71E-05
SI27_E	0.61	2	0	1	6.97E-03	8.74E-03	1.32E-05	4.41E-04	4.06E-04	1.40E-05	2.62E-06	7.99E-05	4.02E-05	7.10E-08	6.01E-06	2.2	8.46E-04	5.00E-05
SI27_E	0.61	1	0	1	4.98E-03	6.24E-03	9.41E-06	3.15E-04	2.90E-04	1.00E-05	1.87E-06	5.71E-05	2.87E-05	5.07E-08	4.29E-06	1.6	6.04E-04	3.57E-05
SI27_E	0.61	2	0	1	6.97E-03	8.74E-03	1.32E-05	4.41E-04	4.06E-04	1.40E-05	2.62E-06	7.99E-05	4.02E-05	7.10E-08	6.01E-06	2.2	8.46E-04	5.00E-05
SI27_E	0.61	5	0	1	1.69E-02	2.12E-02	3.20E-05	1.07E-03	9.86E-04	3.41E-05	6.37E-06	1.94E-04	9.77E-05	1.72E-07	1.46E-05	5.4	2.05E-03	1.21E-04
SI27_E	0.61	15	0	1	5.08E-02	6.37E-02	9.60E-05	3.22E-03	2.96E-03	1.02E-04	1.91E-05	5.82E-04	2.93E-04	5.17E-07	4.38E-05	16.3	6.16E-03	3.64E-04
SI27_E	0.61	23	0	1	7.76E-02	9.74E-02	1.47E-04	4.92E-03	4.52E-03	1.56E-04	2.92E-05	8.91E-04	4.48E-04	7.91E-07	6.69E-05	25.0	9.42E-03	5.57E-04
SI27_E	0.61	19	0	1	6.27E-02	7.86E-02	1.19E-04	3.97E-03	3.65E-03	1.26E-04	2.36E-05	7.19E-04	3.62E-04	6.39E-07	5.41E-05	20.2	7.61E-03	4.50E-04
SI27_E	0.61	15	0	1	5.17E-02	6.49E-02	9.79E-05	3.28E-03	3.02E-03	1.04E-04	1.95E-05	5.94E-04	2.99E-04	5.27E-07	4.46E-05	16.6	6.28E-03	3.71E-04
SI27_E	0.61	14	0	1	4.68E-02	5.87E-02	8.85E-05	2.96E-03	2.73E-03	9.42E-05	1.76E-05	5.37E-04	2.70E-04	4.77E-07	4.03E-05	15.0	5.68E-03	3.36E-04
SI27_E	0.61	16	0	1	5.27E-02	6.61E-02	9.98E-05	3.34E-03	3.07E-03	1.06E-04	1.98E-05	6.05E-04	3.05E-04	5.38E-07	4.55E-05	17.0	6.40E-03	3.78E-04
SI27_E	0.61	17	0	1	5.57E-02	6.99E-02	1.05E-04	3.53E-03	3.25E-03	1.12E-04	2.10E-05	6.39E-04	3.22E-04	5.68E-07	4.81E-05	17.9	6.77E-03	4.00E-04
SI27_E	0.61	17	0	1	5.67E-02	7.11E-02	1.07E-04	3.59E-03	3.31E-03	1.14E-04	2.13E-05	6.51E-04	3.28E-04	5.78E-07	4.89E-05	18.2	6.89E-03	4.07E-04
SI27_E	0.61	17	0	1	5.87E-02	7.36E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.98E-07	5.06E-05	18.9	7.13E-03	4.21E-04
SI27_E	0.61	19	0	1	6.37E-02	7.99E-02	1.20E-04	4.04E-03	3.71E-03	1.28E-04	2.40E-05	7.31E-04	3.68E-04	6.49E-07	5.49E-05	20.5	7.73E-03	4.57E-04
SI27_E	0.61	23	0	1	7.86E-02	9.86E-02	1.49E-04	4.98E-03	4.58E-03	1.58E-04	2.96E-05	9.02E-04	4.54E-04	8.01E-07	6.78E-05	25.3	9.54E-03	5.64E-04
SI27_E	0.61	25	0	1	8.46E-02	1.06E-01	1.60E-04	5.36E-03	4.93E-03	1.70E-04	3.18E-05	9.70E-04	4.89E-04	8.62E-07	7.30E-05	27.2	1.03E-02	6.07E-04
SI27_E	0.61	17	0	1	5.87E-02	7.36E-02	1.11E-04	3.72E-03	3.42E-03	1.18E-04	2.21E-05	6.74E-04	3.39E-04	5.98E-07	5.06E-05	18.9	7.13E-03	4.21E-04
SI27_E	0.61	12	0	1	3.88E-02	4.87E-02	7.34E-05	2.46E-03	2.26E-03	7.82E-05	1.46E-05	4.45E-04	2.24E-04	3.96E-07	3.35E-05	12.5	4.71E-03	2.79E-04
SI27_E	0.61	10	0	1	3.28E-02	4.12E-02	6.21E-05	2.08E-03	1.91E-03	6.61E-05	1.24E-05	3.77E-04	1.90E-04	3.35E-07	2.83E-05	10.6	3.99E-03	2.36E-04
SI27_E	0.61	8	0	1	2.79E-02	3.49E-02	5.27E-05	1.77E-03	1.62E-03	5.61E-05	1.05E-05	3.20E-04	1.61E-04	2.84E-07	2.40E-05	9.0	3.38E-03	2.00E-04
SI27_E	0.61	7	0	1	2.29E-02	2.87E-02	4.33E-05	1.45E-03	1.33E-03	4.61E-05	8.61E-06	2.63E-04	1.32E-04	2.33E-07	1.97E-05	7.4	2.78E-03	1.64E-04
SI27_E	0.61	5	0	1	1.69E-02	2.12E-02	3.20E-05	1.07E-03	9.86E-04	3.41E-05	6.37E-06	1.94E-04	9.77E-05	1.72E-07	1.46E-05	5.4	2.05E-03	1.21E-04
SI27_W	0.66	7	0	1	2.26E-02	2.83E-02	4.28E-05	1.43E-03	1.32E-03	4.55E-05	8.51E-06	2.59E-04	1.31E-04	2.30E-07	1.95E-05	7.3	2.74E-03	1.62E-04
SI27_W	0.66	4	0	1	1.51E-02	1.89E-02	2.85E-05	9.55E-04	8.78E-04	3.03E-05	5.67E-06	1.73E-04	8.70E-05	1.54E-07	1.30E-05	4.8	1.83E-03	1.08E-04
SI27_W	0.66	4	0	1	1.32E-02	1.65E-02	2.49E-05	8.35E-04	7.68E-04	2.66E-05	4.96E-06	1.51E-04	7.61E-05	1.34E-07	1.14E-05	4.2	1.60E-03	9.46E-05
SI27_W	0.66	3	0	1	9.42E-03	1.18E-02	1.78E-05	5.97E-04	5.49E-04	1.90E-05	3.54E-06	1.08E-04	5.44E-05	9.60E-08	8.12E-06	3.0	1.14E-03	6.76E-05
SI27_W	0.66	4	0	1	1.32E-02	1.65E-02	2.49E-05	8.35E-04	7.68E-04	2.66E-05	4.96E-06	1.51E-04	7.61E-05	1.34E-07	1.14E-05	4.2	1.60E-03	9.46E-05
SI27_W	0.66	10	0	1	3.20E-02	4.02E-02	6.06E-05	2.03E-03	1.87E-03	6.45E-05	1.20E-05	3.67E-04	1.85E-04	3.26E-07	2.76E-05	10.3	3.89E-03	2.30E-04
SI27_W	0.66	29	0	1	9.61E-02	1.20E-01	1.82E-04	6.09E-03	5.60E-03	1.93E-04	3.61E-05	1.10E-03	5.55E-04	9.79E-07	8.28E-05	30.9	1.17E-02	6.89E-04
SI27_W	0.66	44	0	1	1.47E-01	1.84E-01	2.78E-04	9.31E-03	8.56E-03	2.96E-04	5.53E-05	1.69E-03	8.48E-04	1.50E-06	1.27E-04	47.3	1.78E-02	1.05E-03
SI27_W	0.66	35	0	1	1.19E-01	1.49E-01	2.24E-04	7.52E-03	6.92E-03	2.39E-04	4.47E-05	1.36E-03	6.85E-04	1.21E-06	1.02E-04	38.2	1.44E-02	8.51E-04
SI27_W	0.66	29	0	1	9.79E-02	1.23E-01	1.85E-04	6.21E-03	5.71E-03	1.97E-04	3.69E-05	1.12E-03	5.66E-04	9.98E-07	8.45E-05	31.5	1.19E-02	7.03E-04
SI27_W	0.66	26	0	1	8.85E-02	1.11E-01	1.67E-04	5.61E-03	5.16E-03	1.78E-04	3.33E-05	1.02E-03	5.11E-04	9.02E-07	7.63E-05	28.5	1.07E-02	6.35E-04
SI27_W	0.66	30	0	1	9.98E-02	1.25E-01	1.89E-04	6.33E-03	5.82E-03	2.01E-04	3.76E-05	1.15E-03	5.77E-04	1.02E-06	8.61E-05	32.1	1.21E-02	7.16E-04
SI27_W	0.66	31	0	1	1.05E-01	1.32E-01	2.00E-04	6.68E-03	6.15E-03	2.12E-04	3.97E-05	1.21E-03	6.09E-04	1.07E-06	9.10E-05	33.9	1.28E-02	7.57E-04
SI27_W	0.66	32	0	1	1.07E-01	1.35E-01	2.03E-04	6.80E-03	6.26E-03	2.16E-04	4.04E-05	1.23E-03	6.20E-04	1.09E-06	9.26E-05	34.5	1.30E-02	7.70E-04
SI27_W	0.66	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.04E-03	6.48E-03	2.24E-04	4.18E-05	1.27E-03	6.42E-04	1.13E-06	9.58E-05	35.7	1.35E-02	7.97E-04
SI27_W	0.66	36	0	1	1.21E-01	1.51E-01	2.28E-04	7.64E-03	7.02E-03	2.43E-04	4.54E-05	1.38E-03	6.96E-04	1.23E-06	1.04E-04	38.8	1.46E-02	8.65E-04
SI27_W	0.66	44	0	1	1.49E-01	1.87E-01	2.81E-04	9.43E-03	8.67E-03	3.00E-04	5.60E-05	1.71E-03	8.59E-04	1.52E-06	1.28E-04	47.9	1.81E-02	1.07E-03
SI27_W	0.66	48	0	1	1.60E-01	2.01E-01	3.03E-04	1.01E-02	9.33E-03	3.22E-04	6.02E-05	1.84E-03	9.25E-04	1.63E-06	1.38E-04	51.5	1.94E-02	1.15E-03
SI27_W	0.66	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.04E-03	6.48E-03	2.24E-04	4.18E-05	1.27E-03	6.42E-04	1.13E-06	9.58E-05	35.7	1.35E-02	7.97E-04
SI27_W	0.66	22	0	1	7.35E-02	9.21E-02	1.39E-04	4.65E-03	4.28E-03	1.48E-04	2.76E-05	8.43E-04	4.24E-04	7.49E-07	6.34E-05	23.6	8.92E-03	5.27E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI27_W	0.66	18	0	1	6.22E-02	7.80E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI27_W	0.66	16	0	1	5.27E-02	6.61E-02	9.98E-05	3.34E-03	3.07E-03	1.06E-04	1.98E-05	6.05E-04	3.05E-04	5.37E-07	4.55E-05	17.0	6.40E-03	3.78E-04
SI27_W	0.66	13	0	1	4.33E-02	5.43E-02	8.20E-05	2.75E-03	2.52E-03	8.73E-05	1.63E-05	4.97E-04	2.50E-04	4.41E-07	3.74E-05	13.9	5.26E-03	3.11E-04
SI27_W	0.66	10	0	1	3.20E-02	4.02E-02	6.06E-05	2.03E-03	1.87E-03	6.45E-05	1.20E-05	3.67E-04	1.85E-04	3.26E-07	2.76E-05	10.3	3.89E-03	2.30E-04
SI28_E	0.55	6	0	1	1.89E-02	2.37E-02	3.58E-05	1.20E-03	1.10E-03	3.81E-05	7.12E-06	2.17E-04	1.09E-04	1.93E-07	1.63E-05	6.1	2.30E-03	1.36E-04
SI28_E	0.55	4	0	1	1.26E-02	1.58E-02	2.39E-05	7.99E-04	7.35E-04	2.54E-05	4.75E-06	1.45E-04	7.28E-05	1.29E-07	1.09E-05	4.1	1.53E-03	9.05E-05
SI28_E	0.55	3	0	1	1.10E-02	1.38E-02	2.09E-05	6.99E-04	6.43E-04	2.22E-05	4.15E-06	1.27E-04	6.37E-05	1.12E-07	9.52E-06	3.5	1.34E-03	7.92E-05
SI28_E	0.55	2	0	1	7.88E-03	9.89E-03	1.49E-05	4.99E-04	4.59E-04	1.59E-05	2.97E-06	9.04E-05	4.55E-05	8.03E-08	6.80E-06	2.5	9.57E-04	5.66E-05
SI28_E	0.55	3	0	1	1.10E-02	1.38E-02	2.09E-05	6.99E-04	6.43E-04	2.22E-05	4.15E-06	1.27E-04	6.37E-05	1.12E-07	9.52E-06	3.5	1.34E-03	7.92E-05
SI28_E	0.55	8	0	1	2.68E-02	3.36E-02	5.07E-05	1.70E-03	1.56E-03	5.40E-05	1.01E-05	3.07E-04	1.55E-04	2.73E-07	2.31E-05	8.6	3.25E-03	1.92E-04
SI28_E	0.55	24	0	1	8.04E-02	1.01E-01	1.52E-04	5.09E-03	4.69E-03	1.62E-04	3.03E-05	9.22E-04	4.64E-04	8.19E-07	6.93E-05	25.9	9.76E-03	5.77E-04
SI28_E	0.55	37	0	1	1.23E-01	1.54E-01	2.33E-04	7.79E-03	7.17E-03	2.48E-04	4.63E-05	1.41E-03	7.10E-04	1.25E-06	1.06E-04	39.6	1.49E-02	8.82E-04
SI28_E	0.55	30	0	1	9.93E-02	1.25E-01	1.88E-04	6.29E-03	5.79E-03	2.00E-04	3.74E-05	1.14E-03	5.74E-04	1.01E-06	8.56E-05	31.9	1.21E-02	7.13E-04
SI28_E	0.55	24	0	1	8.20E-02	1.03E-01	1.55E-04	5.19E-03	4.78E-03	1.65E-04	3.08E-05	9.40E-04	4.73E-04	8.35E-07	7.07E-05	26.4	9.95E-03	5.88E-04
SI28_E	0.55	22	0	1	7.41E-02	9.29E-02	1.40E-04	4.69E-03	4.32E-03	1.49E-04	2.79E-05	8.50E-04	4.28E-04	7.55E-07	6.39E-05	23.8	8.99E-03	5.32E-04
SI28_E	0.55	25	0	1	8.35E-02	1.05E-01	1.58E-04	5.29E-03	4.87E-03	1.68E-04	3.14E-05	9.59E-04	4.83E-04	8.51E-07	7.21E-05	26.9	1.01E-02	6.00E-04
SI28_E	0.55	26	0	1	8.83E-02	1.11E-01	1.67E-04	5.59E-03	5.14E-03	1.78E-04	3.32E-05	1.01E-03	5.10E-04	9.00E-07	7.61E-05	28.4	1.07E-02	6.33E-04
SI28_E	0.55	27	0	1	8.99E-02	1.13E-01	1.70E-04	5.69E-03	5.24E-03	1.81E-04	3.38E-05	1.03E-03	5.19E-04	9.16E-07	7.75E-05	28.9	1.09E-02	6.45E-04
SI28_E	0.55	28	0	1	9.30E-02	1.17E-01	1.76E-04	5.89E-03	5.42E-03	1.87E-04	3.50E-05	1.07E-03	5.37E-04	9.48E-07	8.02E-05	29.9	1.13E-02	6.67E-04
SI28_E	0.55	30	0	1	1.01E-01	1.27E-01	1.91E-04	6.39E-03	5.88E-03	2.03E-04	3.80E-05	1.16E-03	5.83E-04	1.03E-06	8.70E-05	32.5	1.22E-02	7.24E-04
SI28_E	0.55	37	0	1	1.25E-01	1.56E-01	2.36E-04	7.89E-03	7.26E-03	2.51E-04	4.69E-05	1.43E-03	7.19E-04	1.27E-06	1.07E-04	40.1	1.51E-02	8.94E-04
SI28_E	0.55	40	0	1	1.34E-01	1.68E-01	2.53E-04	8.49E-03	7.81E-03	2.70E-04	5.04E-05	1.54E-03	7.74E-04	1.37E-06	1.16E-04	43.1	1.63E-02	9.62E-04
SI28_E	0.55	28	0	1	9.30E-02	1.17E-01	1.76E-04	5.89E-03	5.42E-03	1.87E-04	3.50E-05	1.07E-03	5.37E-04	9.48E-07	8.02E-05	29.9	1.13E-02	6.67E-04
SI28_E	0.55	18	0	1	6.15E-02	7.71E-02	1.16E-04	3.90E-03	3.58E-03	1.24E-04	2.31E-05	7.05E-04	3.55E-04	6.27E-07	5.30E-05	19.8	7.46E-03	4.41E-04
SI28_E	0.55	15	0	1	5.20E-02	6.52E-02	9.84E-05	3.30E-03	3.03E-03	1.05E-04	1.96E-05	5.97E-04	3.00E-04	5.30E-07	4.49E-05	16.7	6.31E-03	3.73E-04
SI28_E	0.55	13	0	1	4.41E-02	5.54E-02	8.35E-05	2.80E-03	2.57E-03	8.89E-05	1.66E-05	5.06E-04	2.55E-04	4.50E-07	3.81E-05	14.2	5.36E-03	3.17E-04
SI28_E	0.55	11	0	1	3.63E-02	4.55E-02	6.86E-05	2.30E-03	2.11E-03	7.30E-05	1.36E-05	4.16E-04	2.09E-04	3.70E-07	3.13E-05	11.7	4.40E-03	2.60E-04
SI28_E	0.55	8	0	1	2.68E-02	3.36E-02	5.07E-05	1.70E-03	1.56E-03	5.40E-05	1.01E-05	3.07E-04	1.55E-04	2.73E-07	2.31E-05	8.6	3.25E-03	1.92E-04
SI28_W	0.63	7	0	1	2.37E-02	2.97E-02	4.48E-05	1.50E-03	1.38E-03	4.77E-05	8.92E-06	2.72E-04	1.37E-04	2.42E-07	2.04E-05	7.6	2.88E-03	1.70E-04
SI28_W	0.63	5	0	1	1.58E-02	1.98E-02	2.99E-05	1.00E-03	9.21E-04	3.18E-05	5.95E-06	1.81E-04	9.13E-05	1.61E-07	1.36E-05	5.1	1.92E-03	1.13E-04
SI28_W	0.63	4	0	1	1.38E-02	1.73E-02	2.62E-05	8.76E-04	8.06E-04	2.78E-05	5.20E-06	1.59E-04	7.98E-05	1.41E-07	1.19E-05	4.4	1.68E-03	9.92E-05
SI28_W	0.63	3	0	1	9.88E-03	1.24E-02	1.87E-05	6.26E-04	5.76E-04	1.99E-05	3.72E-06	1.13E-04	5.70E-05	1.01E-07	8.52E-06	3.2	1.20E-03	7.09E-05
SI28_W	0.63	4	0	1	1.38E-02	1.73E-02	2.62E-05	8.76E-04	8.06E-04	2.78E-05	5.20E-06	1.59E-04	7.98E-05	1.41E-07	1.19E-05	4.4	1.68E-03	9.92E-05
SI28_W	0.63	10	0	1	3.36E-02	4.21E-02	6.35E-05	2.13E-03	1.96E-03	6.76E-05	1.26E-05	3.85E-04	1.94E-04	3.42E-07	2.90E-05	10.8	4.08E-03	2.41E-04
SI28_W	0.63	30	0	1	1.01E-01	1.26E-01	1.91E-04	6.38E-03	5.87E-03	2.03E-04	3.79E-05	1.16E-03	5.82E-04	1.03E-06	8.69E-05	32.4	1.22E-02	7.23E-04
SI28_W	0.63	46	0	1	1.54E-01	1.93E-01	2.91E-04	9.76E-03	8.98E-03	3.10E-04	5.80E-05	1.77E-03	8.90E-04	1.57E-06	1.33E-04	49.6	1.87E-02	1.11E-03
SI28_W	0.63	37	0	1	1.24E-01	1.56E-01	2.35E-04	7.88E-03	7.25E-03	2.51E-04	4.68E-05	1.43E-03	7.19E-04	1.27E-06	1.07E-04	40.0	1.51E-02	8.93E-04
SI28_W	0.63	31	0	1	1.03E-01	1.29E-01	1.94E-04	6.51E-03	5.99E-03	2.07E-04	3.86E-05	1.18E-03	5.93E-04	1.05E-06	8.86E-05	33.0	1.25E-02	7.37E-04
SI28_W	0.63	28	0	1	9.28E-02	1.16E-01	1.76E-04	5.88E-03	5.41E-03	1.87E-04	3.49E-05	1.06E-03	5.36E-04	9.46E-07	8.01E-05	29.9	1.13E-02	6.66E-04
SI28_W	0.63	31	0	1	1.05E-01	1.31E-01	1.98E-04	6.63E-03	6.10E-03	2.11E-04	3.94E-05	1.20E-03	6.05E-04	1.07E-06	9.03E-05	33.7	1.27E-02	7.51E-04
SI28_W	0.63	33	0	1	1.11E-01	1.39E-01	2.09E-04	7.01E-03	6.45E-03	2.23E-04	4.16E-05	1.27E-03	6.39E-04	1.13E-06	9.54E-05	35.6	1.34E-02	7.94E-04
SI28_W	0.63	33	0	1	1.13E-01	1.41E-01	2.13E-04	7.13E-03	6.56E-03	2.27E-04	4.24E-05	1.29E-03	6.50E-04	1.15E-06	9.71E-05	36.2	1.37E-02	8.08E-04
SI28_W	0.63	35	0	1	1.17E-01	1.46E-01	2.20E-04	7.38E-03	6.79E-03	2.35E-04	4.39E-05	1.34E-03	6.73E-04	1.19E-06	1.00E-04	37.5	1.41E-02	8.36E-04
SI28_W	0.63	38	0	1	1.26E-01	1.59E-01	2.39E-04	8.01E-03	7.37E-03	2.55E-04	4.76E-05	1.45E-03	7.30E-04	1.29E-06	1.09E-04	40.7	1.53E-02	9.07E-04
SI28_W	0.63	46	0	1	1.56E-01	1.96E-01	2.95E-04	9.89E-03	9.09E-03	3.14E-04	5.87E-05	1.79E-03	9.01E-04	1.59E-06	1.35E-04	50.2	1.89E-02	1.12E-03
SI28_W	0.63	50	0	1	1.68E-01	2.11E-01	3.18E-04	1.06E-02	9.78E-03	3.38E-04	6.32E-05	1.93E-03	9.70E-04	1.71E-06	1.45E-04	54.0	2.04E-02	1.20E-03
SI28_W	0.63	35	0	1	1.17E-01	1.46E-01	2.20E-04	7.38E-03	6.79E-03	2.35E-04	4.39E-05	1.34E-03	6.73E-04	1.19E-06	1.00E-04	37.5	1.41E-02	8.36E-04
SI28_W	0.63	23	0	1	7.70E-02	9.66E-02	1.46E-04	4.88E-03	4.49E-03	1.55E-04	2.90E-05	8.84E-04	4.45E-04	7.85E-07	6.64E-05	24.8	9.35E-03	5.53E-04
SI28_W	0.63	19	0	1	6.52E-02	8.17E-02	1.23E-04	4.13E-03	3.80E-03	1.31E-04	2.45E-05	7.48E-04	3.76E-04	6.64E-07	5.62E-05	21.0	7.91E-03	4.68E-04
SI28_W	0.63	16	0	1	5.53E-02	6.94E-02	1.05E-04	3.50E-03	3.22E-03	1.11E-04	2.08E-05	6.34E-04	3.19E-04	5.64E-07	4.77E-05	17.8	6.71E-03	3.97E-04
SI28_W	0.63	14	0	1	4.54E-02	5.70E-02	8.59E-05	2.88E-03	2.65E-03	9.15E-05	1.71E-05	5.21E-04	2.62E-04	4.63E-07	3.92E-05	14.6	5.51E-03	3.26E-04
SI28_W	0.63	10	0	1	3.36E-02	4.21E-02	6.35E-05	2.13E-03	1.96E-03	6.76E-05	1.26E-05	3.85E-04	1.94E-04	3.42E-07	2.90E-05	10.8	4.08E-03	2.41E-04
SI29_E	0.75	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.06E-05	3.24E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.43E-03	2.03E-04
SI29_E	0.75	6	0	1	1.89E-02	2.36E-02	3.57E-05	1.19E-03	1.10E-03	3.80E-05	7.09E-06	2.16E-04	1.09E-04	1.92E-07	1.63E-05	6.1	2.29E-03	1.35E-04
SI29_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI29_E	0.75	4	0	1	1.18E-02	1.48E-02	2.23E-05	7.47E-04	6.87E-04	2.37E-05	4.43E-06	1.35E-04	6.81E-05	1.20E-07	1.02E-05	3.8	1.43E-03	8.46E-05
SI29_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI29_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI29_E	0.75	36	0	1	1.20E-01	1.51E-01	2.27E-04	7.62E-03	7.00E-03	2.42E-04	4.52E-05	1.38E-03	6.94E-04	1.22E-06	1.04E-04	38.7	1.46E-02	8.62E-04
SI29_E	0.75	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.16E-02	1.07E-02	3.70E-04	6.92E-05	2.11E-03	1.06E-03	1.87E-06	1.59E-04	59.1	2.23E-02	1.32E-03
SI29_E	0.75	44	0	1	1.48E-01	1.86E-01	2.81E-04	9.41E-03	8.65E-03	2.99E-04	5.59E-05	1.70E-03	8.57E-04	1.51E-06	1.28E-04	47.8	1.80E-02	1.07E-03
SI29_E	0.75	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.77E-03	7.14E-03	2.47E-04	4.61E-05	1.41E-03	7.08E-04	1.25E-06	1.06E-04	39.4	1.49E-02	8.79E-04
SI29_E	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.02E-03	6.45E-03	2.23E-04	4.17E-05	1.27E-03	6.40E-04	1.13E-06	9.55E-05	35.6	1.34E-02	7.95E-04
SI29_E	0.75	37	0	1	1.25E-01	1.57E-01	2.36E-04	7.91E-03	7.28E-03	2.52E-04	4.70E-05	1.43E-03	7.21E-04	1.27E-06	1.08E-04	40.2	1.52E-02	8.96E-04
SI29_E	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.36E-03	7.69E-03	2.66E-04	4.97E-05	1.51E-03	7.62E-04	1.34E-06	1.14E-04	42.5	1.60E-02	9.47E-04
SI29_E	0.75	40	0	1	1.34E-01	1.68E-01	2.54E-04	8.51E-03	7.83E-03	2.71E-04	5.05E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.64E-04
SI29_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI29_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_E	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.75E-04	7.01E-05	2.14E-03	1.08E-03	1.90E-06	1.61E-04	59.9	2.26E-02	1.34E-03
SI29_E	0.75	60	0	1	2.00E-01	2.51E-01	3.79E-04	1.27E-02	1.17E-02	4.03E-04	7.54E-05	2.30E-03	1.16E-03	2.04E-06	1.73E-04	64.4	2.43E-02	1.44E-03
SI29_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI29_E	0.75	27	0	1	9.19E-02	1.15E-01	1.74E-04	5.82E-03	5.36E-03	1.85E-04	3.46E-05	1.05E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI29_E	0.75	23	0	1	7.78E-02	9.75E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI29_E	0.75	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.57E-04	3.81E-04	6.72E-07	5.69E-05	21.2	8.01E-03	4.73E-04
SI29_E	0.75	16	0	1	5.42E-02	6.80E-02	1.03E-04	3.43E-03	3.16E-03	1.09E-04	2.04E-05	6.22E-04	3.13E-04	5.52E-07	4.67E-05	17.4	6.58E-03	3.89E-04
SI29_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI29_W	0.75	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.06E-05	3.24E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.43E-03	2.03E-04
SI29_W	0.75	6	0	1	1.89E-02	2.36E-02	3.57E-05	1.19E-03	1.10E-03	3.80E-05	7.09E-06	2.16E-04	1.09E-04	1.92E-07	1.63E-05	6.1	2.29E-03	1.35E-04
SI29_W	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI29_W	0.75	4	0	1	1.18E-02	1.48E-02	2.23E-05	7.47E-04	6.87E-04	2.37E-05	4.43E-06	1.35E-04	6.81E-05	1.20E-07	1.02E-05	3.8	1.43E-03	8.46E-05
SI29_W	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI29_W	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI29_W	0.75	36	0	1	1.20E-01	1.51E-01	2.27E-04	7.62E-03	7.00E-03	2.42E-04	4.52E-05	1.38E-03	6.94E-04	1.22E-06	1.04E-04	38.7	1.46E-02	8.62E-04
SI29_W	0.75	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.16E-02	1.07E-02	3.70E-04	6.92E-05	2.11E-03	1.06E-03	1.87E-06	1.59E-04	59.1	2.23E-02	1.32E-03
SI29_W	0.75	44	0	1	1.48E-01	1.86E-01	2.81E-04	9.41E-03	8.65E-03	2.99E-04	5.59E-05	1.70E-03	8.57E-04	1.51E-06	1.28E-04	47.8	1.80E-02	1.07E-03
SI29_W	0.75	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.77E-03	7.14E-03	2.47E-04	4.61E-05	1.41E-03	7.08E-04	1.25E-06	1.06E-04	39.4	1.49E-02	8.79E-04
SI29_W	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.02E-03	6.45E-03	2.23E-04	4.17E-05	1.27E-03	6.40E-04	1.13E-06	9.55E-05	35.6	1.34E-02	7.95E-04
SI29_W	0.75	37	0	1	1.25E-01	1.57E-01	2.36E-04	7.91E-03	7.28E-03	2.52E-04	4.70E-05	1.43E-03	7.21E-04	1.27E-06	1.08E-04	40.2	1.52E-02	8.96E-04
SI29_W	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.36E-03	7.69E-03	2.66E-04	4.97E-05	1.51E-03	7.62E-04	1.34E-06	1.14E-04	42.5	1.60E-02	9.47E-04
SI29_W	0.75	40	0	1	1.34E-01	1.68E-01	2.54E-04	8.51E-03	7.83E-03	2.71E-04	5.05E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.64E-04
SI29_W	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI29_W	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI29_W	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.75E-04	7.01E-05	2.14E-03	1.08E-03	1.90E-06	1.61E-04	59.9	2.26E-02	1.34E-03
SI29_W	0.75	60	0	1	2.00E-01	2.51E-01	3.79E-04	1.27E-02	1.17E-02	4.03E-04	7.54E-05	2.30E-03	1.16E-03	2.04E-06	1.73E-04	64.4	2.43E-02	1.44E-03
SI29_W	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI29_W	0.75	27	0	1	9.19E-02	1.15E-01	1.74E-04	5.82E-03	5.36E-03	1.85E-04	3.46E-05	1.05E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI29_W	0.75	23	0	1	7.78E-02	9.75E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI29_W	0.75	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.57E-04	3.81E-04	6.72E-07	5.69E-05	21.2	8.01E-03	4.73E-04
SI29_W	0.75	16	0	1	5.42E-02	6.80E-02	1.03E-04	3.43E-03	3.16E-03	1.09E-04	2.04E-05	6.22E-04	3.13E-04	5.52E-07	4.67E-05	17.4	6.58E-03	3.89E-04
SI29_W	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI30_E	0.75	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.06E-05	3.24E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.43E-03	2.03E-04
SI30_E	0.75	6	0	1	1.89E-02	2.36E-02	3.57E-05	1.19E-03	1.10E-03	3.80E-05	7.09E-06	2.16E-04	1.09E-04	1.92E-07	1.63E-05	6.1	2.29E-03	1.35E-04
SI30_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI30_E	0.75	4	0	1	1.18E-02	1.48E-02	2.23E-05	7.47E-04	6.87E-04	2.37E-05	4.43E-06	1.35E-04	6.81E-05	1.20E-07	1.02E-05	3.8	1.43E-03	8.46E-05
SI30_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI30_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI30_E	0.75	36	0	1	1.20E-01	1.51E-01	2.27E-04	7.62E-03	7.00E-03	2.42E-04	4.52E-05	1.38E-03	6.94E-04	1.22E-06	1.04E-04	38.7	1.46E-02	8.62E-04
SI30_E	0.75	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.16E-02	1.07E-02	3.70E-04	6.92E-05	2.11E-03	1.06E-03	1.87E-06	1.59E-04	59.1	2.23E-02	1.32E-03
SI30_E	0.75	44	0	1	1.48E-01	1.86E-01	2.81E-04	9.41E-03	8.65E-03	2.99E-04	5.59E-05	1.70E-03	8.57E-04	1.51E-06	1.28E-04	47.8	1.80E-02	1.07E-03
SI30_E	0.75	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.77E-03	7.14E-03	2.47E-04	4.61E-05	1.41E-03	7.08E-04	1.25E-06	1.06E-04	39.4	1.49E-02	8.79E-04
SI30_E	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.02E-03	6.45E-03	2.23E-04	4.17E-05	1.27E-03	6.40E-04	1.13E-06	9.55E-05	35.6	1.34E-02	7.95E-04
SI30_E	0.75	37	0	1	1.25E-01	1.57E-01	2.36E-04	7.91E-03	7.28E-03	2.52E-04	4.70E-05	1.43E-03	7.21E-04	1.27E-06	1.08E-04	40.2	1.52E-02	8.96E-04
SI30_E	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.36E-03	7.69E-03	2.66E-04	4.97E-05	1.51E-03	7.62E-04	1.34E-06	1.14E-04	42.5	1.60E-02	9.47E-04
SI30_E	0.75	40	0	1	1.34E-01	1.68E-01	2.54E-04	8.51E-03	7.83E-03	2.71E-04	5.05E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.64E-04
SI30_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI30_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI30_E	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.75E-04	7.01E-05	2.14E-03	1.08E-03	1.90E-06	1.61E-04	59.9	2.26E-02	1.34E-03
SI30_E	0.75	60	0	1	2.00E-01	2.51E-01	3.79E-04	1.27E-02	1.17E-02	4.03E-04	7.54E-05	2.30E-03	1.16E-03	2.04E-06	1.73E-04	64.4	2.43E-02	1.44E-03
SI30_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI30_E	0.75	27	0	1	9.19E-02	1.15E-01	1.74E-04	5.82E-03	5.36E-03	1.85E-04	3.46E-05	1.05E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI30_E	0.75	23	0	1	7.78E-02	9.75E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI30_E	0.75	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.57E-04	3.81E-04	6.72E-07	5.69E-05	21.2	8.01E-03	4.73E-04
SI30_E	0.75	16	0	1	5.42E-02	6.80E-02	1.03E-04	3.43E-03	3.16E-03	1.09E-04	2.04E-05	6.22E-04	3.13E-04	5.52E-07	4.67E-05	17.4	6.58E-03	3.89E-04
SI30_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI30_W	0.75	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.06E-05	3.24E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.43E-03	2.03E-04
SI30_W	0.75	6	0	1	1.89E-02	2.36E-02	3.57E-05	1.19E-03	1.10E-03	3.80E-05	7.09E-06	2.16E-04	1.09E-04	1.92E-07	1.63E-05	6.1	2.29E-03	1.35E-04
SI30_W	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI30_W	0.75	4	0	1	1.18E-02	1.48E-02	2.23E-05	7.47E-04	6.87E-04	2.37E-05	4.43E-06	1.35E-04	6.81E-05	1.20E-07	1.02E-05	3.8	1.43E-03	8.46E-05
SI30_W	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI30_W	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI30_W	0.75	36	0	1	1.20E-01	1.51E-01	2.27E-04	7.62E-03	7.00E-03	2.42E-04	4.52E-05	1.38E-03	6.94E-04	1.22E-06	1.04E-04	38.7	1.46E-02	8.62E-04
SI30_W	0.75	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.16E-02	1.07E-02	3.70E-04	6.92E-05	2.11E-03	1.06E-03	1.87E-06	1.59E-04	59.1	2.23E-02	1.32E-03
SI30_W	0.75	44	0	1	1.48E-01	1.86E-01	2.81E-04	9.41E-03	8.65E-03	2.99E-04	5.59E-05	1.70E-03	8.57E-04	1.51E-06	1.28E-04	47.8	1.80E-02	1.07E-03
SI30_W	0.75	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.77E-03	7.14E-03	2.47E-04	4.61E-05	1.41E-03	7.08E-04	1.25E-06	1.06E-04	39.4	1.49E-02	8.79E-04
SI30_W	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.02E-03	6.45E-03	2.23E-04	4.17E-05	1.27E-03	6.40E-04	1.13E-06	9.55E-05	35.6	1.34E-02	7.95E-04
SI30_W	0.75	37	0	1	1.25E-01	1.57E-01	2.36E-04	7.91E-03	7.28E-03	2.52E-04	4.70E-05	1.43E-03	7.21E-04	1.27E-06	1.08E-04	40.2	1.52E-02	8.96E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI30_W	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.36E-03	7.69E-03	2.66E-04	4.97E-05	1.51E-03	7.62E-04	1.34E-06	1.14E-04	42.5	1.60E-02	9.47E-04
SI30_W	0.75	40	0	1	1.34E-01	1.68E-01	2.54E-04	8.51E-03	7.83E-03	2.71E-04	5.05E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.64E-04
SI30_W	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI30_W	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI30_W	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.75E-04	7.01E-05	2.14E-03	1.08E-03	1.90E-06	1.61E-04	59.9	2.26E-02	1.34E-03
SI30_W	0.75	60	0	1	2.00E-01	2.51E-01	3.79E-04	1.27E-02	1.17E-02	4.03E-04	7.54E-05	2.30E-03	1.16E-03	2.04E-06	1.73E-04	64.4	2.43E-02	1.44E-03
SI30_W	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI30_W	0.75	27	0	1	9.19E-02	1.15E-01	1.74E-04	5.82E-03	5.36E-03	1.85E-04	3.46E-05	1.05E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI30_W	0.75	23	0	1	7.78E-02	9.75E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI30_W	0.75	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.57E-04	3.81E-04	6.72E-07	5.69E-05	21.2	8.01E-03	4.73E-04
SI30_W	0.75	16	0	1	5.42E-02	6.80E-02	1.03E-04	3.43E-03	3.16E-03	1.09E-04	2.04E-05	6.22E-04	3.13E-04	5.52E-07	4.67E-05	17.4	6.58E-03	3.89E-04
SI30_W	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI31_E	0.75	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.06E-05	3.24E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.43E-03	2.03E-04
SI31_E	0.75	6	0	1	1.89E-02	2.36E-02	3.57E-05	1.19E-03	1.10E-03	3.80E-05	7.09E-06	2.16E-04	1.09E-04	1.92E-07	1.63E-05	6.1	2.29E-03	1.35E-04
SI31_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI31_E	0.75	4	0	1	1.18E-02	1.48E-02	2.23E-05	7.47E-04	6.87E-04	2.37E-05	4.43E-06	1.35E-04	6.81E-05	1.20E-07	1.02E-05	3.8	1.43E-03	8.46E-05
SI31_E	0.75	5	0	1	1.65E-02	2.07E-02	3.12E-05	1.05E-03	9.61E-04	3.32E-05	6.21E-06	1.89E-04	9.53E-05	1.68E-07	1.42E-05	5.3	2.00E-03	1.18E-04
SI31_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI31_E	0.75	36	0	1	1.20E-01	1.51E-01	2.27E-04	7.62E-03	7.00E-03	2.42E-04	4.52E-05	1.38E-03	6.94E-04	1.22E-06	1.04E-04	38.7	1.46E-02	8.62E-04
SI31_E	0.75	55	0	1	1.84E-01	2.31E-01	3.48E-04	1.16E-02	1.07E-02	3.70E-04	6.92E-05	2.11E-03	1.06E-03	1.87E-06	1.59E-04	59.1	2.23E-02	1.32E-03
SI31_E	0.75	44	0	1	1.48E-01	1.86E-01	2.81E-04	9.41E-03	8.65E-03	2.99E-04	5.59E-05	1.70E-03	8.57E-04	1.51E-06	1.28E-04	47.8	1.80E-02	1.07E-03
SI31_E	0.75	36	0	1	1.23E-01	1.54E-01	2.32E-04	7.77E-03	7.14E-03	2.47E-04	4.61E-05	1.41E-03	7.08E-04	1.25E-06	1.06E-04	39.4	1.49E-02	8.79E-04
SI31_E	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.02E-03	6.45E-03	2.23E-04	4.17E-05	1.27E-03	6.40E-04	1.13E-06	9.55E-05	35.6	1.34E-02	7.95E-04
SI31_E	0.75	37	0	1	1.25E-01	1.57E-01	2.36E-04	7.91E-03	7.28E-03	2.52E-04	4.70E-05	1.43E-03	7.21E-04	1.27E-06	1.08E-04	40.2	1.52E-02	8.96E-04
SI31_E	0.75	39	0	1	1.32E-01	1.66E-01	2.50E-04	8.36E-03	7.69E-03	2.66E-04	4.97E-05	1.51E-03	7.62E-04	1.34E-06	1.14E-04	42.5	1.60E-02	9.47E-04
SI31_E	0.75	40	0	1	1.34E-01	1.68E-01	2.54E-04	8.51E-03	7.83E-03	2.71E-04	5.05E-05	1.54E-03	7.76E-04	1.37E-06	1.16E-04	43.2	1.63E-02	9.64E-04
SI31_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI31_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI31_E	0.75	55	0	1	1.86E-01	2.33E-01	3.52E-04	1.18E-02	1.08E-02	3.75E-04	7.01E-05	2.14E-03	1.08E-03	1.90E-06	1.61E-04	59.9	2.26E-02	1.34E-03
SI31_E	0.75	60	0	1	2.00E-01	2.51E-01	3.79E-04	1.27E-02	1.17E-02	4.03E-04	7.54E-05	2.30E-03	1.16E-03	2.04E-06	1.73E-04	64.4	2.43E-02	1.44E-03
SI31_E	0.75	41	0	1	1.39E-01	1.74E-01	2.63E-04	8.81E-03	8.10E-03	2.80E-04	5.23E-05	1.60E-03	8.03E-04	1.42E-06	1.20E-04	44.7	1.69E-02	9.98E-04
SI31_E	0.75	27	0	1	9.19E-02	1.15E-01	1.74E-04	5.82E-03	5.36E-03	1.85E-04	3.46E-05	1.05E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI31_E	0.75	23	0	1	7.78E-02	9.75E-02	1.47E-04	4.93E-03	4.53E-03	1.57E-04	2.93E-05	8.92E-04	4.49E-04	7.93E-07	6.71E-05	25.0	9.44E-03	5.58E-04
SI31_E	0.75	20	0	1	6.60E-02	8.28E-02	1.25E-04	4.18E-03	3.85E-03	1.33E-04	2.48E-05	7.57E-04	3.81E-04	6.72E-07	5.69E-05	21.2	8.01E-03	4.73E-04
SI31_E	0.75	16	0	1	5.42E-02	6.80E-02	1.03E-04	3.43E-03	3.16E-03	1.09E-04	2.04E-05	6.22E-04	3.13E-04	5.52E-07	4.67E-05	17.4	6.58E-03	3.89E-04
SI31_E	0.75	12	0	1	4.01E-02	5.02E-02	7.58E-05	2.54E-03	2.33E-03	8.07E-05	1.51E-05	4.60E-04	2.31E-04	4.08E-07	3.46E-05	12.9	4.86E-03	2.87E-04
SI31_W	0.75	7	0	1	2.44E-02	3.06E-02	4.62E-05	1.55E-03	1.42E-03	4.91E-05	9.18E-06	2.80E-04	1.41E-04	2.49E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI31_W	0.75	5	0	1	1.63E-02	2.04E-02	3.08E-05	1.03E-03	9.48E-04	3.28E-05	6.12E-06	1.87E-04	9.39E-05	1.66E-07	1.40E-05	5.2	1.97E-03	1.17E-04
SI31_W	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI31_W	0.75	3	0	1	1.02E-02	1.28E-02	1.92E-05	6.44E-04	5.92E-04	2.05E-05	3.83E-06	1.17E-04	5.87E-05	1.04E-07	8.77E-06	3.3	1.23E-03	7.30E-05
SI31_W	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI31_W	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI31_W	0.75	31	0	1	1.04E-01	1.30E-01	1.96E-04	6.57E-03	6.04E-03	2.09E-04	3.90E-05	1.19E-03	5.99E-04	1.06E-06	8.94E-05	33.4	1.26E-02	7.44E-04
SI31_W	0.75	47	0	1	1.59E-01	1.99E-01	3.00E-04	1.00E-02	9.24E-03	3.19E-04	5.97E-05	1.82E-03	9.16E-04	1.62E-06	1.37E-04	51.0	1.93E-02	1.14E-03
SI31_W	0.75	38	0	1	1.28E-01	1.61E-01	2.42E-04	8.12E-03	7.47E-03	2.58E-04	4.82E-05	1.47E-03	7.40E-04	1.31E-06	1.10E-04	41.2	1.55E-02	9.19E-04
SI31_W	0.75	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.70E-03	6.16E-03	2.13E-04	3.98E-05	1.21E-03	6.11E-04	1.08E-06	9.12E-05	34.0	1.28E-02	7.59E-04
SI31_W	0.75	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.92E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI31_W	0.75	32	0	1	1.08E-01	1.35E-01	2.04E-04	6.83E-03	6.28E-03	2.17E-04	4.06E-05	1.24E-03	6.22E-04	1.10E-06	9.29E-05	34.7	1.31E-02	7.73E-04
SI31_W	0.75	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.22E-03	6.64E-03	2.29E-04	4.28E-05	1.31E-03	6.58E-04	1.16E-06	9.82E-05	36.6	1.38E-02	8.17E-04
SI31_W	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	1.00E-04	37.3	1.41E-02	8.32E-04
SI31_W	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI31_W	0.75	39	0	1	1.30E-01	1.63E-01	2.46E-04	8.25E-03	7.58E-03	2.62E-04	4.90E-05	1.49E-03	7.52E-04	1.33E-06	1.12E-04	41.9	1.58E-02	9.34E-04
SI31_W	0.75	48	0	1	1.61E-01	2.01E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.04E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI31_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI31_W	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI31_W	0.75	24	0	1	7.93E-02	9.95E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.10E-04	4.58E-04	8.08E-07	6.84E-05	25.5	9.63E-03	5.69E-04
SI31_W	0.75	20	0	1	6.71E-02	8.42E-02	1.27E-04	4.25E-03	3.91E-03	1.35E-04	2.52E-05	7.70E-04	3.88E-04	6.84E-07	5.79E-05	21.6	8.15E-03	4.81E-04
SI31_W	0.75	17	0	1	5.69E-02	7.14E-02	1.08E-04	3.61E-03	3.32E-03	1.15E-04	2.14E-05	6.53E-04	3.29E-04	5.80E-07	4.91E-05	18.3	6.91E-03	4.09E-04
SI31_W	0.75	14	0	1	4.68E-02	5.87E-02	8.85E-05	2.96E-03	2.73E-03	9.42E-05	1.76E-05	5.37E-04	2.70E-04	4.77E-07	4.03E-05	15.0	5.68E-03	3.36E-04
SI31_W	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI32_E	0.75	7	0	1	2.44E-02	3.06E-02	4.62E-05	1.55E-03	1.42E-03	4.91E-05	9.18E-06	2.80E-04	1.41E-04	2.49E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI32_E	0.75	5	0	1	1.63E-02	2.04E-02	3.08E-05	1.03E-03	9.48E-04	3.28E-05	6.12E-06	1.87E-04	9.39E-05	1.66E-07	1.40E-05	5.2	1.97E-03	1.17E-04
SI32_E	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI32_E	0.75	3	0	1	1.02E-02	1.28E-02	1.92E-05	6.44E-04	5.92E-04	2.05E-05	3.83E-06	1.17E-04	5.87E-05	1.04E-07	8.77E-06	3.3	1.23E-03	7.30E-05
SI32_E	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI32_E	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI32_E	0.75	31	0	1	1.04E-01	1.30E-01	1.96E-04	6.57E-03	6.04E-03	2.09E-04	3.90E-05	1.19E-03	5.99E-04	1.06E-06	8.94E-05	33.4	1.26E-02	7.44E-04
SI32_E	0.75	47	0	1	1.59E-01	1.99E-01	3.00E-04	1.00E-02	9.24E-03	3.19E-04	5.97E-05	1.82E-03	9.16E-04	1.62E-06	1.37E-04	51.0	1.93E-02	1.14E-03

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_E	0.75	38	0	1	1.28E-01	1.61E-01	2.42E-04	8.12E-03	7.47E-03	2.58E-04	4.82E-05	1.47E-03	7.40E-04	1.31E-06	1.10E-04	41.2	1.55E-02	9.19E-04
SI32_E	0.75	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.70E-03	6.16E-03	2.13E-04	3.98E-05	1.21E-03	6.11E-04	1.08E-06	9.12E-05	34.0	1.28E-02	7.59E-04
SI32_E	0.75	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.92E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI32_E	0.75	32	0	1	1.08E-01	1.35E-01	2.04E-04	6.83E-03	6.28E-03	2.17E-04	4.06E-05	1.24E-03	6.22E-04	1.10E-06	9.29E-05	34.7	1.31E-02	7.73E-04
SI32_E	0.75	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.22E-03	6.64E-03	2.29E-04	4.28E-05	1.31E-03	6.58E-04	1.16E-06	9.82E-05	36.6	1.38E-02	8.17E-04
SI32_E	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	1.00E-04	37.3	1.41E-02	8.32E-04
SI32_E	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI32_E	0.75	39	0	1	1.30E-01	1.63E-01	2.46E-04	8.25E-03	7.58E-03	2.62E-04	4.90E-05	1.49E-03	7.52E-04	1.33E-06	1.12E-04	41.9	1.58E-02	9.34E-04
SI32_E	0.75	48	0	1	1.61E-01	2.01E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.04E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI32_E	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI32_E	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI32_E	0.75	24	0	1	7.93E-02	9.95E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.10E-04	4.58E-04	8.08E-07	6.84E-05	25.5	9.63E-03	5.69E-04
SI32_E	0.75	20	0	1	6.71E-02	8.42E-02	1.27E-04	4.25E-03	3.91E-03	1.35E-04	2.52E-05	7.70E-04	3.88E-04	6.84E-07	5.79E-05	21.6	8.15E-03	4.81E-04
SI32_E	0.75	17	0	1	5.69E-02	7.14E-02	1.08E-04	3.61E-03	3.32E-03	1.15E-04	2.14E-05	6.53E-04	3.29E-04	5.80E-07	4.91E-05	18.3	6.91E-03	4.09E-04
SI32_E	0.75	14	0	1	4.68E-02	5.87E-02	8.85E-05	2.96E-03	2.73E-03	9.42E-05	1.76E-05	5.37E-04	2.70E-04	4.77E-07	4.03E-05	15.0	5.68E-03	3.36E-04
SI32_E	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI32_W	0.75	7	0	1	2.44E-02	3.06E-02	4.62E-05	1.55E-03	1.42E-03	4.91E-05	9.18E-06	2.80E-04	1.41E-04	2.49E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI32_W	0.75	5	0	1	1.63E-02	2.04E-02	3.08E-05	1.03E-03	9.48E-04	3.28E-05	6.12E-06	1.87E-04	9.39E-05	1.66E-07	1.40E-05	5.2	1.97E-03	1.17E-04
SI32_W	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI32_W	0.75	3	0	1	1.02E-02	1.28E-02	1.92E-05	6.44E-04	5.92E-04	2.05E-05	3.83E-06	1.17E-04	5.87E-05	1.04E-07	8.77E-06	3.3	1.23E-03	7.30E-05
SI32_W	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI32_W	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI32_W	0.75	31	0	1	1.04E-01	1.30E-01	1.96E-04	6.57E-03	6.04E-03	2.09E-04	3.90E-05	1.19E-03	5.99E-04	1.06E-06	8.94E-05	33.4	1.26E-02	7.44E-04
SI32_W	0.75	47	0	1	1.59E-01	1.99E-01	3.00E-04	1.00E-02	9.24E-03	3.19E-04	5.97E-05	1.82E-03	9.16E-04	1.62E-06	1.37E-04	51.0	1.93E-02	1.14E-03
SI32_W	0.75	38	0	1	1.28E-01	1.61E-01	2.42E-04	8.12E-03	7.47E-03	2.58E-04	4.82E-05	1.47E-03	7.40E-04	1.31E-06	1.10E-04	41.2	1.55E-02	9.19E-04
SI32_W	0.75	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.70E-03	6.16E-03	2.13E-04	3.98E-05	1.21E-03	6.11E-04	1.08E-06	9.12E-05	34.0	1.28E-02	7.59E-04
SI32_W	0.75	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.92E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI32_W	0.75	32	0	1	1.08E-01	1.35E-01	2.04E-04	6.83E-03	6.28E-03	2.17E-04	4.06E-05	1.24E-03	6.22E-04	1.10E-06	9.29E-05	34.7	1.31E-02	7.73E-04
SI32_W	0.75	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.22E-03	6.64E-03	2.29E-04	4.28E-05	1.31E-03	6.58E-04	1.16E-06	9.82E-05	36.6	1.38E-02	8.17E-04
SI32_W	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	1.00E-04	37.3	1.41E-02	8.32E-04
SI32_W	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI32_W	0.75	39	0	1	1.30E-01	1.63E-01	2.46E-04	8.25E-03	7.58E-03	2.62E-04	4.90E-05	1.49E-03	7.52E-04	1.33E-06	1.12E-04	41.9	1.58E-02	9.34E-04
SI32_W	0.75	48	0	1	1.61E-01	2.01E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.04E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI32_W	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI32_W	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI32_W	0.75	24	0	1	7.93E-02	9.95E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.10E-04	4.58E-04	8.08E-07	6.84E-05	25.5	9.63E-03	5.69E-04
SI32_W	0.75	20	0	1	6.71E-02	8.42E-02	1.27E-04	4.25E-03	3.91E-03	1.35E-04	2.52E-05	7.70E-04	3.88E-04	6.84E-07	5.79E-05	21.6	8.15E-03	4.81E-04
SI32_W	0.75	17	0	1	5.69E-02	7.14E-02	1.08E-04	3.61E-03	3.32E-03	1.15E-04	2.14E-05	6.53E-04	3.29E-04	5.80E-07	4.91E-05	18.3	6.91E-03	4.09E-04
SI32_W	0.75	14	0	1	4.68E-02	5.87E-02	8.85E-05	2.96E-03	2.73E-03	9.42E-05	1.76E-05	5.37E-04	2.70E-04	4.77E-07	4.03E-05	15.0	5.68E-03	3.36E-04
SI32_W	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI33_E	0.75	7	0	1	2.44E-02	3.06E-02	4.62E-05	1.55E-03	1.42E-03	4.91E-05	9.18E-06	2.80E-04	1.41E-04	2.49E-07	2.10E-05	7.8	2.96E-03	1.75E-04
SI33_E	0.75	5	0	1	1.63E-02	2.04E-02	3.08E-05	1.03E-03	9.48E-04	3.28E-05	6.12E-06	1.87E-04	9.39E-05	1.66E-07	1.40E-05	5.2	1.97E-03	1.17E-04
SI33_E	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI33_E	0.75	3	0	1	1.02E-02	1.28E-02	1.92E-05	6.44E-04	5.92E-04	2.05E-05	3.83E-06	1.17E-04	5.87E-05	1.04E-07	8.77E-06	3.3	1.23E-03	7.30E-05
SI33_E	0.75	4	0	1	1.42E-02	1.79E-02	2.69E-05	9.02E-04	8.29E-04	2.87E-05	5.36E-06	1.63E-04	8.22E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI33_E	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI33_E	0.75	31	0	1	1.04E-01	1.30E-01	1.96E-04	6.57E-03	6.04E-03	2.09E-04	3.90E-05	1.19E-03	5.99E-04	1.06E-06	8.94E-05	33.4	1.26E-02	7.44E-04
SI33_E	0.75	47	0	1	1.59E-01	1.99E-01	3.00E-04	1.00E-02	9.24E-03	3.19E-04	5.97E-05	1.82E-03	9.16E-04	1.62E-06	1.37E-04	51.0	1.93E-02	1.14E-03
SI33_E	0.75	38	0	1	1.28E-01	1.61E-01	2.42E-04	8.12E-03	7.47E-03	2.58E-04	4.82E-05	1.47E-03	7.40E-04	1.31E-06	1.10E-04	41.2	1.55E-02	9.19E-04
SI33_E	0.75	31	0	1	1.06E-01	1.33E-01	2.00E-04	6.70E-03	6.16E-03	2.13E-04	3.98E-05	1.21E-03	6.11E-04	1.08E-06	9.12E-05	34.0	1.28E-02	7.59E-04
SI33_E	0.75	28	0	1	9.56E-02	1.20E-01	1.81E-04	6.06E-03	5.57E-03	1.92E-04	3.60E-05	1.10E-03	5.52E-04	9.74E-07	8.24E-05	30.7	1.16E-02	6.86E-04
SI33_E	0.75	32	0	1	1.08E-01	1.35E-01	2.04E-04	6.83E-03	6.28E-03	2.17E-04	4.06E-05	1.24E-03	6.22E-04	1.10E-06	9.29E-05	34.7	1.31E-02	7.73E-04
SI33_E	0.75	34	0	1	1.14E-01	1.43E-01	2.15E-04	7.22E-03	6.64E-03	2.29E-04	4.28E-05	1.31E-03	6.58E-04	1.16E-06	9.82E-05	36.6	1.38E-02	8.17E-04
SI33_E	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	1.00E-04	37.3	1.41E-02	8.32E-04
SI33_E	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI33_E	0.75	39	0	1	1.30E-01	1.63E-01	2.46E-04	8.25E-03	7.58E-03	2.62E-04	4.90E-05	1.49E-03	7.52E-04	1.33E-06	1.12E-04	41.9	1.58E-02	9.34E-04
SI33_E	0.75	48	0	1	1.61E-01	2.01E-01	3.04E-04	1.02E-02	9.36E-03	3.24E-04	6.04E-05	1.84E-03	9.28E-04	1.64E-06	1.39E-04	51.7	1.95E-02	1.15E-03
SI33_E	0.75	51	0	1	1.73E-01	2.17E-01	3.27E-04	1.10E-02	1.01E-02	3.48E-04	6.50E-05	1.98E-03	9.98E-04	1.76E-06	1.49E-04	55.6	2.10E-02	1.24E-03
SI33_E	0.75	36	0	1	1.20E-01	1.50E-01	2.27E-04	7.60E-03	6.99E-03	2.42E-04	4.51E-05	1.38E-03	6.93E-04	1.22E-06	1.03E-04	38.6	1.46E-02	8.61E-04
SI33_E	0.75	24	0	1	7.93E-02	9.95E-02	1.50E-04	5.02E-03	4.62E-03	1.60E-04	2.98E-05	9.10E-04	4.58E-04	8.08E-07	6.84E-05	25.5	9.63E-03	5.69E-04
SI33_E	0.75	20	0	1	6.71E-02	8.42E-02	1.27E-04	4.25E-03	3.91E-03	1.35E-04	2.52E-05	7.70E-04	3.88E-04	6.84E-07	5.79E-05	21.6	8.15E-03	4.81E-04
SI33_E	0.75	17	0	1	5.69E-02	7.14E-02	1.08E-04	3.61E-03	3.32E-03	1.15E-04	2.14E-05	6.53E-04	3.29E-04	5.80E-07	4.91E-05	18.3	6.91E-03	4.09E-04
SI33_E	0.75	14	0	1	4.68E-02	5.87E-02	8.85E-05	2.96E-03	2.73E-03	9.42E-05	1.76E-05	5.37E-04	2.70E-04	4.77E-07	4.03E-05	15.0	5.68E-03	3.36E-04
SI33_E	0.75	10	0	1	3.46E-02	4.34E-02	6.54E-05	2.19E-03	2.01E-03	6.96E-05	1.30E-05	3.97E-04	2.00E-04	3.52E-07	2.98E-05	11.1	4.20E-03	2.48E-04
SI33_W	0.75	7	0	1	2.46E-02	3.09E-02	4.66E-05	1.56E-03	1.43E-03	4.96E-05	9.26E-06	2.82E-04	1.42E-04	2.51E-07	2.12E-05	7.9	2.99E-03	1.77E-04
SI33_W	0.75	5	0	1	1.64E-02	2.06E-02	3.10E-05	1.04E-03	9.56E-04	3.30E-05	6.17E-06	1.88E-04	9.48E-05	1.67E-07	1.41E-05	5.3	1.99E-03	1.18E-04
SI33_W	0.75	4	0	1	1.44E-02	1.80E-02	2.72E-05	9.10E-04	8.37E-04	2.89E-05	5.40E-06	1.65E-04	8.29E-05	1.46E-07	1.24E-05	4.6	1.74E-03	1.03E-04
SI33_W	0.75	3	0	1	1.03E-02	1.29E-02	1.94E-05	6.50E-04	5.98E-04	2.07E-05	3.86E-06	1.18E-04	5.92E-05	1.05E-07	8.84E-06	3.3	1.24E-03	7.36E-05

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	4	0	1	1.44E-02	1.80E-02	2.72E-05	9.10E-04	8.37E-04	2.89E-05	5.40E-06	1.65E-04	8.29E-05	1.46E-07	1.24E-05	4.6	1.74E-03	1.03E-04
SI33_W	0.75	10	0	1	3.49E-02	4.37E-02	6.60E-05	2.21E-03	2.03E-03	7.02E-05	1.31E-05	4.00E-04	2.01E-04	3.55E-07	3.01E-05	11.2	4.23E-03	2.50E-04
SI33_W	0.75	31	0	1	1.05E-01	1.31E-01	1.98E-04	6.63E-03	6.10E-03	2.11E-04	3.94E-05	1.20E-03	6.04E-04	1.07E-06	9.02E-05	33.6	1.27E-02	7.51E-04
SI33_W	0.75	48	0	1	1.60E-01	2.01E-01	3.03E-04	1.01E-02	9.32E-03	3.22E-04	6.02E-05	1.84E-03	9.24E-04	1.63E-06	1.38E-04	51.5	1.94E-02	1.15E-03
SI33_W	0.75	38	0	1	1.29E-01	1.62E-01	2.44E-04	8.19E-03	7.53E-03	2.60E-04	4.86E-05	1.48E-03	7.46E-04	1.32E-06	1.11E-04	41.6	1.57E-02	9.27E-04
SI33_W	0.75	32	0	1	1.07E-01	1.34E-01	2.02E-04	6.76E-03	6.21E-03	2.15E-04	4.01E-05	1.22E-03	6.16E-04	1.09E-06	9.20E-05	34.3	1.29E-02	7.65E-04
SI33_W	0.75	29	0	1	9.64E-02	1.21E-01	1.82E-04	6.11E-03	5.62E-03	1.94E-04	3.63E-05	1.11E-03	5.57E-04	9.82E-07	8.31E-05	31.0	1.17E-02	6.92E-04
SI33_W	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.33E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.37E-05	35.0	1.32E-02	7.80E-04
SI33_W	0.75	34	0	1	1.15E-01	1.44E-01	2.17E-04	7.28E-03	6.69E-03	2.31E-04	4.32E-05	1.32E-03	6.63E-04	1.17E-06	9.90E-05	36.9	1.39E-02	8.24E-04
SI33_W	0.75	35	0	1	1.17E-01	1.47E-01	2.21E-04	7.41E-03	6.81E-03	2.35E-04	4.40E-05	1.34E-03	6.75E-04	1.19E-06	1.01E-04	37.6	1.42E-02	8.39E-04
SI33_W	0.75	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.67E-03	7.05E-03	2.44E-04	4.55E-05	1.39E-03	6.99E-04	1.23E-06	1.04E-04	38.9	1.47E-02	8.68E-04
SI33_W	0.75	39	0	1	1.31E-01	1.65E-01	2.48E-04	8.32E-03	7.65E-03	2.64E-04	4.94E-05	1.51E-03	7.58E-04	1.34E-06	1.13E-04	42.2	1.59E-02	9.42E-04
SI33_W	0.75	48	0	1	1.62E-01	2.03E-01	3.06E-04	1.03E-02	9.44E-03	3.26E-04	6.10E-05	1.86E-03	9.36E-04	1.65E-06	1.40E-04	52.1	1.97E-02	1.16E-03
SI33_W	0.75	52	0	1	1.74E-01	2.19E-01	3.30E-04	1.10E-02	1.02E-02	3.51E-04	6.56E-05	2.00E-03	1.01E-03	1.78E-06	1.50E-04	56.1	2.12E-02	1.25E-03
SI33_W	0.75	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.67E-03	7.05E-03	2.44E-04	4.55E-05	1.39E-03	6.99E-04	1.23E-06	1.04E-04	38.9	1.47E-02	8.68E-04
SI33_W	0.75	24	0	1	8.00E-02	1.00E-01	1.51E-04	5.07E-03	4.66E-03	1.61E-04	3.01E-05	9.18E-04	4.62E-04	8.15E-07	6.90E-05	25.7	9.71E-03	5.74E-04
SI33_W	0.75	20	0	1	6.77E-02	8.49E-02	1.28E-04	4.29E-03	3.94E-03	1.36E-04	2.55E-05	7.76E-04	3.91E-04	6.90E-07	5.84E-05	21.8	8.22E-03	4.86E-04
SI33_W	0.75	17	0	1	5.74E-02	7.20E-02	1.09E-04	3.64E-03	3.35E-03	1.16E-04	2.16E-05	6.59E-04	3.32E-04	5.85E-07	4.95E-05	18.5	6.97E-03	4.12E-04
SI33_W	0.75	14	0	1	4.72E-02	5.92E-02	8.92E-05	2.99E-03	2.75E-03	9.50E-05	1.78E-05	5.41E-04	2.72E-04	4.81E-07	4.07E-05	15.2	5.73E-03	3.38E-04
SI33_W	0.75	10	0	1	3.49E-02	4.37E-02	6.60E-05	2.21E-03	2.03E-03	7.02E-05	1.31E-05	4.00E-04	2.01E-04	3.55E-07	3.01E-05	11.2	4.23E-03	2.50E-04
SI34_E	0.75	7	0	1	2.46E-02	3.09E-02	4.66E-05	1.56E-03	1.43E-03	4.96E-05	9.26E-06	2.82E-04	1.42E-04	2.51E-07	2.12E-05	7.9	2.99E-03	1.77E-04
SI34_E	0.75	5	0	1	1.64E-02	2.06E-02	3.10E-05	1.04E-03	9.56E-04	3.30E-05	6.17E-06	1.88E-04	9.48E-05	1.67E-07	1.41E-05	5.3	1.99E-03	1.18E-04
SI34_E	0.75	4	0	1	1.44E-02	1.80E-02	2.72E-05	9.10E-04	8.37E-04	2.89E-05	5.40E-06	1.65E-04	8.29E-05	1.46E-07	1.24E-05	4.6	1.74E-03	1.03E-04
SI34_E	0.75	3	0	1	1.03E-02	1.29E-02	1.94E-05	6.50E-04	5.98E-04	2.07E-05	3.86E-06	1.18E-04	5.92E-05	1.05E-07	8.84E-06	3.3	1.24E-03	7.36E-05
SI34_E	0.75	4	0	1	1.44E-02	1.80E-02	2.72E-05	9.10E-04	8.37E-04	2.89E-05	5.40E-06	1.65E-04	8.29E-05	1.46E-07	1.24E-05	4.6	1.74E-03	1.03E-04
SI34_E	0.75	10	0	1	3.49E-02	4.37E-02	6.60E-05	2.21E-03	2.03E-03	7.02E-05	1.31E-05	4.00E-04	2.01E-04	3.55E-07	3.01E-05	11.2	4.23E-03	2.50E-04
SI34_E	0.75	31	0	1	1.05E-01	1.31E-01	1.98E-04	6.63E-03	6.10E-03	2.11E-04	3.94E-05	1.20E-03	6.04E-04	1.07E-06	9.02E-05	33.6	1.27E-02	7.51E-04
SI34_E	0.75	48	0	1	1.60E-01	2.01E-01	3.03E-04	1.01E-02	9.32E-03	3.22E-04	6.02E-05	1.84E-03	9.24E-04	1.63E-06	1.38E-04	51.5	1.94E-02	1.15E-03
SI34_E	0.75	38	0	1	1.29E-01	1.62E-01	2.44E-04	8.19E-03	7.53E-03	2.60E-04	4.86E-05	1.48E-03	7.46E-04	1.32E-06	1.11E-04	41.6	1.57E-02	9.27E-04
SI34_E	0.75	32	0	1	1.07E-01	1.34E-01	2.02E-04	6.76E-03	6.21E-03	2.15E-04	4.01E-05	1.22E-03	6.16E-04	1.09E-06	9.20E-05	34.3	1.29E-02	7.65E-04
SI34_E	0.75	29	0	1	9.64E-02	1.21E-01	1.82E-04	6.11E-03	5.62E-03	1.94E-04	3.63E-05	1.11E-03	5.57E-04	9.82E-07	8.31E-05	31.0	1.17E-02	6.92E-04
SI34_E	0.75	32	0	1	1.09E-01	1.36E-01	2.06E-04	6.89E-03	6.33E-03	2.19E-04	4.09E-05	1.25E-03	6.28E-04	1.11E-06	9.37E-05	35.0	1.32E-02	7.80E-04
SI34_E	0.75	34	0	1	1.15E-01	1.44E-01	2.17E-04	7.28E-03	6.69E-03	2.31E-04	4.32E-05	1.32E-03	6.63E-04	1.17E-06	9.90E-05	36.9	1.39E-02	8.24E-04
SI34_E	0.75	35	0	1	1.17E-01	1.47E-01	2.21E-04	7.41E-03	6.81E-03	2.35E-04	4.40E-05	1.34E-03	6.75E-04	1.19E-06	1.01E-04	37.6	1.42E-02	8.39E-04
SI34_E	0.75	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.67E-03	7.05E-03	2.44E-04	4.55E-05	1.39E-03	6.99E-04	1.23E-06	1.04E-04	38.9	1.47E-02	8.68E-04
SI34_E	0.75	39	0	1	1.31E-01	1.65E-01	2.48E-04	8.32E-03	7.65E-03	2.64E-04	4.94E-05	1.51E-03	7.58E-04	1.34E-06	1.13E-04	42.2	1.59E-02	9.42E-04
SI34_E	0.75	48	0	1	1.62E-01	2.03E-01	3.06E-04	1.03E-02	9.44E-03	3.26E-04	6.10E-05	1.86E-03	9.36E-04	1.65E-06	1.40E-04	52.1	1.97E-02	1.16E-03
SI34_E	0.75	52	0	1	1.74E-01	2.19E-01	3.30E-04	1.10E-02	1.02E-02	3.51E-04	6.56E-05	2.00E-03	1.01E-03	1.78E-06	1.50E-04	56.1	2.12E-02	1.25E-03
SI34_E	0.75	36	0	1	1.21E-01	1.52E-01	2.29E-04	7.67E-03	7.05E-03	2.44E-04	4.55E-05	1.39E-03	6.99E-04	1.23E-06	1.04E-04	38.9	1.47E-02	8.68E-04
SI34_E	0.75	24	0	1	8.00E-02	1.00E-01	1.51E-04	5.07E-03	4.66E-03	1.61E-04	3.01E-05	9.18E-04	4.62E-04	8.15E-07	6.90E-05	25.7	9.71E-03	5.74E-04
SI34_E	0.75	20	0	1	6.77E-02	8.49E-02	1.28E-04	4.29E-03	3.94E-03	1.36E-04	2.55E-05	7.76E-04	3.91E-04	6.90E-07	5.84E-05	21.8	8.22E-03	4.86E-04
SI34_E	0.75	17	0	1	5.74E-02	7.20E-02	1.09E-04	3.64E-03	3.35E-03	1.16E-04	2.16E-05	6.59E-04	3.32E-04	5.85E-07	4.95E-05	18.5	6.97E-03	4.12E-04
SI34_E	0.75	14	0	1	4.72E-02	5.92E-02	8.92E-05	2.99E-03	2.75E-03	9.50E-05	1.78E-05	5.41E-04	2.72E-04	4.81E-07	4.07E-05	15.2	5.73E-03	3.38E-04
SI34_E	0.75	10	0	1	3.49E-02	4.37E-02	6.60E-05	2.21E-03	2.03E-03	7.02E-05	1.31E-05	4.00E-04	2.01E-04	3.55E-07	3.01E-05	11.2	4.23E-03	2.50E-04
SI34_W	0.75	6	0	1	1.94E-02	2.43E-02	3.66E-05	1.23E-03	1.13E-03	3.90E-05	7.29E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.35E-03	1.39E-04
SI34_W	0.75	4	0	1	1.29E-02	1.62E-02	2.44E-05	8.18E-04	7.52E-04	2.60E-05	4.86E-06	1.48E-04	7.46E-05	1.32E-07	1.11E-05	4.2	1.57E-03	9.26E-05
SI34_W	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI34_W	0.75	2	0	1	8.07E-03	1.01E-02	1.53E-05	5.11E-04	4.70E-04	1.63E-05	3.04E-06	9.26E-05	4.66E-05	8.22E-08	6.96E-06	2.6	9.79E-04	5.79E-05
SI34_W	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI34_W	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04
SI34_W	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.21E-03	4.80E-03	1.66E-04	3.10E-05	9.44E-04	4.75E-04	8.39E-07	7.10E-05	26.5	9.99E-03	5.91E-04
SI34_W	0.75	37	0	1	1.26E-01	1.58E-01	2.38E-04	7.98E-03	7.33E-03	2.54E-04	4.74E-05	1.44E-03	7.27E-04	1.28E-06	1.09E-04	40.5	1.53E-02	9.03E-04
SI34_W	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.83E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI34_W	0.75	25	0	1	8.39E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.55E-07	7.24E-05	27.0	1.02E-02	6.02E-04
SI34_W	0.75	23	0	1	7.58E-02	9.51E-02	1.43E-04	4.81E-03	4.42E-03	1.53E-04	2.85E-05	8.70E-04	4.38E-04	7.73E-07	6.54E-05	24.4	9.21E-03	5.44E-04
SI34_W	0.75	25	0	1	8.55E-02	1.07E-01	1.62E-04	5.42E-03	4.98E-03	1.72E-04	3.22E-05	9.81E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI34_W	0.75	27	0	1	9.04E-02	1.13E-01	1.71E-04	5.73E-03	5.27E-03	1.82E-04	3.40E-05	1.04E-03	5.22E-04	9.21E-07	7.79E-05	29.1	1.10E-02	6.48E-04
SI34_W	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI34_W	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI34_W	0.75	31	0	1	1.03E-01	1.30E-01	1.95E-04	6.54E-03	6.02E-03	2.08E-04	3.89E-05	1.18E-03	5.96E-04	1.05E-06	8.91E-05	33.2	1.25E-02	7.41E-04
SI34_W	0.75	38	0	1	1.27E-01	1.60E-01	2.41E-04	8.08E-03	7.43E-03	2.57E-04	4.80E-05	1.46E-03	7.36E-04	1.30E-06	1.10E-04	41.0	1.55E-02	9.15E-04
SI34_W	0.75	41	0	1	1.37E-01	1.72E-01	2.59E-04	8.69E-03	7.99E-03	2.76E-04	5.16E-05	1.57E-03	7.92E-04	1.40E-06	1.18E-04	44.1	1.66E-02	9.84E-04
SI34_W	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI34_W	0.75	19	0	1	6.29E-02	7.89E-02	1.19E-04	3.99E-03	3.67E-03	1.27E-04	2.37E-05	7.22E-04	3.63E-04	6.41E-07	5.43E-05	20.2	7.64E-03	4.52E-04
SI34_W	0.75	16	0	1	5.32E-02	6.68E-02	1.01E-04	3.37E-03	3.10E-03	1.07E-04	2.00E-05	6.11E-04	3.08E-04	5.43E-07	4.59E-05	17.1	6.46E-03	3.82E-04
SI34_W	0.75	13	0	1	4.52E-02	5.67E-02	8.55E-05	2.86E-03	2.63E-03	9.10E-05	1.70E-05	5.18E-04	2.61E-04	4.60E-07	3.90E-05	14.5	5.48E-03	3.24E-04
SI34_W	0.75	11	0	1	3.71E-02	4.65E-02	7.02E-05	2.35E-03	2.16E-03	7.48E-05	1.40E-05	4.26E-04	2.14E-04	3.78E-07	3.20E-05	11.9	4.51E-03	2.66E-04
SI34_W	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	6	0	1	1.94E-02	2.43E-02	3.66E-05	1.23E-03	1.13E-03	3.90E-05	7.29E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.35E-03	1.39E-04
SI35_E	0.75	4	0	1	1.29E-02	1.62E-02	2.44E-05	8.18E-04	7.52E-04	2.60E-05	4.86E-06	1.48E-04	7.46E-05	1.32E-07	1.11E-05	4.2	1.57E-03	9.26E-05
SI35_E	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI35_E	0.75	2	0	1	8.07E-03	1.01E-02	1.53E-05	5.11E-04	4.70E-04	1.63E-05	3.04E-06	9.26E-05	4.66E-05	8.22E-08	6.96E-06	2.6	9.79E-04	5.79E-05
SI35_E	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI35_E	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04
SI35_E	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.21E-03	4.80E-03	1.66E-04	3.10E-05	9.44E-04	4.75E-04	8.39E-07	7.10E-05	26.5	9.99E-03	5.91E-04
SI35_E	0.75	37	0	1	1.26E-01	1.58E-01	2.38E-04	7.98E-03	7.33E-03	2.54E-04	4.74E-05	1.44E-03	7.27E-04	1.28E-06	1.09E-04	40.5	1.53E-02	9.03E-04
SI35_E	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.83E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI35_E	0.75	25	0	1	8.39E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.55E-07	7.24E-05	27.0	1.02E-02	6.02E-04
SI35_E	0.75	23	0	1	7.58E-02	9.51E-02	1.43E-04	4.81E-03	4.42E-03	1.53E-04	2.85E-05	8.70E-04	4.38E-04	7.73E-07	6.54E-05	24.4	9.21E-03	5.44E-04
SI35_E	0.75	25	0	1	8.55E-02	1.07E-01	1.62E-04	5.42E-03	4.98E-03	1.72E-04	3.22E-05	9.81E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI35_E	0.75	27	0	1	9.04E-02	1.13E-01	1.71E-04	5.73E-03	5.27E-03	1.82E-04	3.40E-05	1.04E-03	5.22E-04	9.21E-07	7.79E-05	29.1	1.10E-02	6.48E-04
SI35_E	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI35_E	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI35_E	0.75	31	0	1	1.03E-01	1.30E-01	1.95E-04	6.54E-03	6.02E-03	2.08E-04	3.89E-05	1.18E-03	5.96E-04	1.05E-06	8.91E-05	33.2	1.25E-02	7.41E-04
SI35_E	0.75	38	0	1	1.27E-01	1.60E-01	2.41E-04	8.08E-03	7.43E-03	2.57E-04	4.80E-05	1.46E-03	7.36E-04	1.30E-06	1.10E-04	41.0	1.55E-02	9.15E-04
SI35_E	0.75	41	0	1	1.37E-01	1.72E-01	2.59E-04	8.69E-03	7.99E-03	2.76E-04	5.16E-05	1.57E-03	7.92E-04	1.40E-06	1.18E-04	44.1	1.66E-02	9.84E-04
SI35_E	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI35_E	0.75	19	0	1	6.29E-02	7.89E-02	1.19E-04	3.99E-03	3.67E-03	1.27E-04	2.37E-05	7.22E-04	3.63E-04	6.41E-07	5.43E-05	20.2	7.64E-03	4.52E-04
SI35_E	0.75	16	0	1	5.32E-02	6.68E-02	1.01E-04	3.37E-03	3.10E-03	1.07E-04	2.00E-05	6.11E-04	3.08E-04	5.43E-07	4.59E-05	17.1	6.46E-03	3.82E-04
SI35_E	0.75	13	0	1	4.52E-02	5.67E-02	8.55E-05	2.86E-03	2.63E-03	9.10E-05	1.70E-05	5.18E-04	2.61E-04	4.60E-07	3.90E-05	14.5	5.48E-03	3.24E-04
SI35_E	0.75	11	0	1	3.71E-02	4.65E-02	7.02E-05	2.35E-03	2.16E-03	7.48E-05	1.40E-05	4.26E-04	2.14E-04	3.78E-07	3.20E-05	11.9	4.51E-03	2.66E-04
SI35_E	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04
SI35_W	0.75	6	0	1	1.94E-02	2.43E-02	3.66E-05	1.23E-03	1.13E-03	3.90E-05	7.29E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.35E-03	1.39E-04
SI35_W	0.75	4	0	1	1.29E-02	1.62E-02	2.44E-05	8.18E-04	7.52E-04	2.60E-05	4.86E-06	1.48E-04	7.46E-05	1.32E-07	1.11E-05	4.2	1.57E-03	9.26E-05
SI35_W	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI35_W	0.75	2	0	1	8.07E-03	1.01E-02	1.53E-05	5.11E-04	4.70E-04	1.63E-05	3.04E-06	9.26E-05	4.66E-05	8.22E-08	6.96E-06	2.6	9.79E-04	5.79E-05
SI35_W	0.75	3	0	1	1.13E-02	1.42E-02	2.14E-05	7.16E-04	6.58E-04	2.28E-05	4.25E-06	1.30E-04	6.52E-05	1.15E-07	9.74E-06	3.6	1.37E-03	8.11E-05
SI35_W	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04
SI35_W	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.21E-03	4.80E-03	1.66E-04	3.10E-05	9.44E-04	4.75E-04	8.39E-07	7.10E-05	26.5	9.99E-03	5.91E-04
SI35_W	0.75	37	0	1	1.26E-01	1.58E-01	2.38E-04	7.98E-03	7.33E-03	2.54E-04	4.74E-05	1.44E-03	7.27E-04	1.28E-06	1.09E-04	40.5	1.53E-02	9.03E-04
SI35_W	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.83E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI35_W	0.75	25	0	1	8.39E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.55E-07	7.24E-05	27.0	1.02E-02	6.02E-04
SI35_W	0.75	23	0	1	7.58E-02	9.51E-02	1.43E-04	4.81E-03	4.42E-03	1.53E-04	2.85E-05	8.70E-04	4.38E-04	7.73E-07	6.54E-05	24.4	9.21E-03	5.44E-04
SI35_W	0.75	25	0	1	8.55E-02	1.07E-01	1.62E-04	5.42E-03	4.98E-03	1.72E-04	3.22E-05	9.81E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI35_W	0.75	27	0	1	9.04E-02	1.13E-01	1.71E-04	5.73E-03	5.27E-03	1.82E-04	3.40E-05	1.04E-03	5.22E-04	9.21E-07	7.79E-05	29.1	1.10E-02	6.48E-04
SI35_W	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.37E-07	7.93E-05	29.6	1.12E-02	6.60E-04
SI35_W	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI35_W	0.75	31	0	1	1.03E-01	1.30E-01	1.95E-04	6.54E-03	6.02E-03	2.08E-04	3.89E-05	1.18E-03	5.96E-04	1.05E-06	8.91E-05	33.2	1.25E-02	7.41E-04
SI35_W	0.75	38	0	1	1.27E-01	1.60E-01	2.41E-04	8.08E-03	7.43E-03	2.57E-04	4.80E-05	1.46E-03	7.36E-04	1.30E-06	1.10E-04	41.0	1.55E-02	9.15E-04
SI35_W	0.75	41	0	1	1.37E-01	1.72E-01	2.59E-04	8.69E-03	7.99E-03	2.76E-04	5.16E-05	1.57E-03	7.92E-04	1.40E-06	1.18E-04	44.1	1.66E-02	9.84E-04
SI35_W	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI35_W	0.75	19	0	1	6.29E-02	7.89E-02	1.19E-04	3.99E-03	3.67E-03	1.27E-04	2.37E-05	7.22E-04	3.63E-04	6.41E-07	5.43E-05	20.2	7.64E-03	4.52E-04
SI35_W	0.75	16	0	1	5.32E-02	6.68E-02	1.01E-04	3.37E-03	3.10E-03	1.07E-04	2.00E-05	6.11E-04	3.08E-04	5.43E-07	4.59E-05	17.1	6.46E-03	3.82E-04
SI35_W	0.75	13	0	1	4.52E-02	5.67E-02	8.55E-05	2.86E-03	2.63E-03	9.10E-05	1.70E-05	5.18E-04	2.61E-04	4.60E-07	3.90E-05	14.5	5.48E-03	3.24E-04
SI35_W	0.75	11	0	1	3.71E-02	4.65E-02	7.02E-05	2.35E-03	2.16E-03	7.48E-05	1.40E-05	4.26E-04	2.14E-04	3.78E-07	3.20E-05	11.9	4.51E-03	2.66E-04
SI35_W	0.75	8	0	1	2.74E-02	3.44E-02	5.19E-05	1.74E-03	1.60E-03	5.53E-05	1.03E-05	3.15E-04	1.58E-04	2.80E-07	2.37E-05	8.8	3.33E-03	1.97E-04
SI36_E	0.75	5	0	1	1.73E-02	2.16E-02	3.26E-05	1.09E-03	1.01E-03	3.48E-05	6.49E-06	1.98E-04	9.96E-05	1.76E-07	1.49E-05	5.6	2.09E-03	1.24E-04
SI36_E	0.75	3	0	1	1.15E-02	1.44E-02	2.18E-05	7.29E-04	6.70E-04	2.32E-05	4.33E-06	1.32E-04	6.64E-05	1.17E-07	9.92E-06	3.7	1.40E-03	8.25E-05
SI36_E	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI36_E	0.75	2	0	1	7.19E-03	9.02E-03	1.36E-05	4.56E-04	4.19E-04	1.45E-05	2.71E-06	8.25E-05	4.15E-05	7.33E-08	6.20E-06	2.3	8.73E-04	5.16E-05
SI36_E	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI36_E	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI36_E	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI36_E	0.75	33	0	1	1.12E-01	1.41E-01	2.12E-04	7.11E-03	6.54E-03	2.26E-04	4.22E-05	1.29E-03	6.48E-04	1.14E-06	9.67E-05	36.1	1.36E-02	8.05E-04
SI36_E	0.75	27	0	1	9.06E-02	1.14E-01	1.71E-04	5.74E-03	5.28E-03	1.82E-04	3.41E-05	1.04E-03	5.23E-04	9.23E-07	7.81E-05	29.1	1.10E-02	6.50E-04
SI36_E	0.75	22	0	1	7.48E-02	9.38E-02	1.41E-04	4.74E-03	4.36E-03	1.51E-04	2.81E-05	8.58E-04	4.32E-04	7.62E-07	6.45E-05	24.1	9.08E-03	5.37E-04
SI36_E	0.75	20	0	1	6.76E-02	8.48E-02	1.28E-04	4.28E-03	3.94E-03	1.36E-04	2.54E-05	7.75E-04	3.90E-04	6.89E-07	5.83E-05	21.7	8.20E-03	4.85E-04
SI36_E	0.75	23	0	1	7.62E-02	9.56E-02	1.44E-04	4.83E-03	4.44E-03	1.53E-04	2.87E-05	8.74E-04	4.40E-04	7.77E-07	6.57E-05	24.5	9.25E-03	5.47E-04
SI36_E	0.75	24	0	1	8.05E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.24E-04	4.65E-04	8.21E-07	6.94E-05	25.9	9.77E-03	5.78E-04
SI36_E	0.75	24	0	1	8.20E-02	1.03E-01	1.55E-04	5.19E-03	4.78E-03	1.65E-04	3.08E-05	9.40E-04	4.73E-04	8.35E-07	7.07E-05	26.4	9.95E-03	5.88E-04
SI36_E	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI36_E	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.38E-07	7.94E-05	29.6	1.12E-02	6.60E-04
SI36_E	0.75	34	0	1	1.14E-01	1.42E-01	2.15E-04	7.20E-03	6.62E-03	2.29E-04	4.27E-05	1.30E-03	6.56E-04	1.16E-06	9.80E-05	36.5	1.38E-02	8.15E-04
SI36_E	0.75	36	0	1	1.22E-01	1.53E-01	2.31E-04	7.74E-03	7.12E-03	2.46E-04	4.60E-05	1.40E-03	7.06E-04	1.25E-06	1.05E-04	39.3	1.48E-02	8.77E-04
SI36_E	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI36_E	0.75	17	0	1	5.61E-02	7.03E-02	1.06E-04	3.55E-03	3.27E-03	1.13E-04	2.11E-05	6.43E-04	3.24E-04	5.71E-07	4.84E-05	18.0	6.81E-03	4.02E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_E	0.75	14	0	1	4.74E-02	5.95E-02	8.98E-05	3.01E-03	2.77E-03	9.56E-05	1.79E-05	5.44E-04	2.74E-04	4.84E-07	4.09E-05	15.3	5.76E-03	3.40E-04
SI36_E	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI36_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.66E-05	1.24E-05	3.79E-04	1.91E-04	3.37E-07	2.85E-05	10.6	4.01E-03	2.37E-04
SI36_E	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI36_W	0.75	5	0	1	1.73E-02	2.16E-02	3.26E-05	1.09E-03	1.01E-03	3.48E-05	6.49E-06	1.98E-04	9.96E-05	1.76E-07	1.49E-05	5.6	2.09E-03	1.24E-04
SI36_W	0.75	3	0	1	1.15E-02	1.44E-02	2.18E-05	7.29E-04	6.70E-04	2.32E-05	4.33E-06	1.32E-04	6.64E-05	1.17E-07	9.92E-06	3.7	1.40E-03	8.25E-05
SI36_W	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI36_W	0.75	2	0	1	7.19E-03	9.02E-03	1.36E-05	4.56E-04	4.19E-04	1.45E-05	2.71E-06	8.25E-05	4.15E-05	7.33E-08	6.20E-06	2.3	8.73E-04	5.16E-05
SI36_W	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI36_W	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI36_W	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI36_W	0.75	33	0	1	1.12E-01	1.41E-01	2.12E-04	7.11E-03	6.54E-03	2.26E-04	4.22E-05	1.29E-03	6.48E-04	1.14E-06	9.67E-05	36.1	1.36E-02	8.05E-04
SI36_W	0.75	27	0	1	9.06E-02	1.14E-01	1.71E-04	5.74E-03	5.28E-03	1.82E-04	3.41E-05	1.04E-03	5.23E-04	9.23E-07	7.81E-05	29.1	1.10E-02	6.50E-04
SI36_W	0.75	22	0	1	7.48E-02	9.38E-02	1.41E-04	4.74E-03	4.36E-03	1.51E-04	2.81E-05	8.58E-04	4.32E-04	7.62E-07	6.45E-05	24.1	9.08E-03	5.37E-04
SI36_W	0.75	20	0	1	6.76E-02	8.48E-02	1.28E-04	4.28E-03	3.94E-03	1.36E-04	2.54E-05	7.75E-04	3.90E-04	6.89E-07	5.83E-05	21.7	8.20E-03	4.85E-04
SI36_W	0.75	23	0	1	7.62E-02	9.56E-02	1.44E-04	4.83E-03	4.44E-03	1.53E-04	2.87E-05	8.74E-04	4.40E-04	7.77E-07	6.57E-05	24.5	9.25E-03	5.47E-04
SI36_W	0.75	24	0	1	8.05E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.24E-04	4.65E-04	8.21E-07	6.94E-05	25.9	9.77E-03	5.78E-04
SI36_W	0.75	24	0	1	8.20E-02	1.03E-01	1.55E-04	5.19E-03	4.78E-03	1.65E-04	3.08E-05	9.40E-04	4.73E-04	8.35E-07	7.07E-05	26.4	9.95E-03	5.88E-04
SI36_W	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI36_W	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.38E-07	7.94E-05	29.6	1.12E-02	6.60E-04
SI36_W	0.75	34	0	1	1.14E-01	1.42E-01	2.15E-04	7.20E-03	6.62E-03	2.29E-04	4.27E-05	1.30E-03	6.56E-04	1.16E-06	9.80E-05	36.5	1.38E-02	8.15E-04
SI36_W	0.75	36	0	1	1.22E-01	1.53E-01	2.31E-04	7.74E-03	7.12E-03	2.46E-04	4.60E-05	1.40E-03	7.06E-04	1.25E-06	1.05E-04	39.3	1.48E-02	8.77E-04
SI36_W	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI36_W	0.75	17	0	1	5.61E-02	7.03E-02	1.06E-04	3.55E-03	3.27E-03	1.13E-04	2.11E-05	6.43E-04	3.24E-04	5.71E-07	4.84E-05	18.0	6.81E-03	4.02E-04
SI36_W	0.75	14	0	1	4.74E-02	5.95E-02	8.98E-05	3.01E-03	2.77E-03	9.56E-05	1.79E-05	5.44E-04	2.74E-04	4.84E-07	4.09E-05	15.3	5.76E-03	3.40E-04
SI36_W	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI36_W	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.66E-05	1.24E-05	3.79E-04	1.91E-04	3.37E-07	2.85E-05	10.6	4.01E-03	2.37E-04
SI36_W	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI37_E	0.75	5	0	1	1.73E-02	2.16E-02	3.26E-05	1.09E-03	1.01E-03	3.48E-05	6.49E-06	1.98E-04	9.96E-05	1.76E-07	1.49E-05	5.6	2.09E-03	1.24E-04
SI37_E	0.75	3	0	1	1.15E-02	1.44E-02	2.18E-05	7.29E-04	6.70E-04	2.32E-05	4.33E-06	1.32E-04	6.64E-05	1.17E-07	9.92E-06	3.7	1.40E-03	8.25E-05
SI37_E	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI37_E	0.75	2	0	1	7.19E-03	9.02E-03	1.36E-05	4.56E-04	4.19E-04	1.45E-05	2.71E-06	8.25E-05	4.15E-05	7.33E-08	6.20E-06	2.3	8.73E-04	5.16E-05
SI37_E	0.75	3	0	1	1.01E-02	1.26E-02	1.90E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.15E-04	5.81E-05	1.03E-07	8.68E-06	3.2	1.22E-03	7.22E-05
SI37_E	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI37_E	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI37_E	0.75	33	0	1	1.12E-01	1.41E-01	2.12E-04	7.11E-03	6.54E-03	2.26E-04	4.22E-05	1.29E-03	6.48E-04	1.14E-06	9.67E-05	36.1	1.36E-02	8.05E-04
SI37_E	0.75	27	0	1	9.06E-02	1.14E-01	1.71E-04	5.74E-03	5.28E-03	1.82E-04	3.41E-05	1.04E-03	5.23E-04	9.23E-07	7.81E-05	29.1	1.10E-02	6.50E-04
SI37_E	0.75	22	0	1	7.48E-02	9.38E-02	1.41E-04	4.74E-03	4.36E-03	1.51E-04	2.81E-05	8.58E-04	4.32E-04	7.62E-07	6.45E-05	24.1	9.08E-03	5.37E-04
SI37_E	0.75	20	0	1	6.76E-02	8.48E-02	1.28E-04	4.28E-03	3.94E-03	1.36E-04	2.54E-05	7.75E-04	3.90E-04	6.89E-07	5.83E-05	21.7	8.20E-03	4.85E-04
SI37_E	0.75	23	0	1	7.62E-02	9.56E-02	1.44E-04	4.83E-03	4.44E-03	1.53E-04	2.87E-05	8.74E-04	4.40E-04	7.77E-07	6.57E-05	24.5	9.25E-03	5.47E-04
SI37_E	0.75	24	0	1	8.05E-02	1.01E-01	1.52E-04	5.10E-03	4.69E-03	1.62E-04	3.03E-05	9.24E-04	4.65E-04	8.21E-07	6.94E-05	25.9	9.77E-03	5.78E-04
SI37_E	0.75	24	0	1	8.20E-02	1.03E-01	1.55E-04	5.19E-03	4.78E-03	1.65E-04	3.08E-05	9.40E-04	4.73E-04	8.35E-07	7.07E-05	26.4	9.95E-03	5.88E-04
SI37_E	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI37_E	0.75	27	0	1	9.20E-02	1.15E-01	1.74E-04	5.83E-03	5.36E-03	1.85E-04	3.46E-05	1.06E-03	5.31E-04	9.38E-07	7.94E-05	29.6	1.12E-02	6.60E-04
SI37_E	0.75	34	0	1	1.14E-01	1.42E-01	2.15E-04	7.20E-03	6.62E-03	2.29E-04	4.27E-05	1.30E-03	6.56E-04	1.16E-06	9.80E-05	36.5	1.38E-02	8.15E-04
SI37_E	0.75	36	0	1	1.22E-01	1.53E-01	2.31E-04	7.74E-03	7.12E-03	2.46E-04	4.60E-05	1.40E-03	7.06E-04	1.25E-06	1.05E-04	39.3	1.48E-02	8.77E-04
SI37_E	0.75	25	0	1	8.48E-02	1.06E-01	1.60E-04	5.38E-03	4.94E-03	1.71E-04	3.19E-05	9.73E-04	4.90E-04	8.65E-07	7.32E-05	27.3	1.03E-02	6.09E-04
SI37_E	0.75	17	0	1	5.61E-02	7.03E-02	1.06E-04	3.55E-03	3.27E-03	1.13E-04	2.11E-05	6.43E-04	3.24E-04	5.71E-07	4.84E-05	18.0	6.81E-03	4.02E-04
SI37_E	0.75	14	0	1	4.74E-02	5.95E-02	8.98E-05	3.01E-03	2.77E-03	9.56E-05	1.79E-05	5.44E-04	2.74E-04	4.84E-07	4.09E-05	15.3	5.76E-03	3.40E-04
SI37_E	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI37_E	0.75	10	0	1	3.31E-02	4.15E-02	6.26E-05	2.10E-03	1.93E-03	6.66E-05	1.24E-05	3.79E-04	1.91E-04	3.37E-07	2.85E-05	10.6	4.01E-03	2.37E-04
SI37_E	0.75	7	0	1	2.44E-02	3.07E-02	4.62E-05	1.55E-03	1.42E-03	4.92E-05	9.20E-06	2.80E-04	1.41E-04	2.49E-07	2.11E-05	7.9	2.97E-03	1.75E-04
SI37_W	0.75	6	0	1	2.12E-02	2.65E-02	4.00E-05	1.34E-03	1.23E-03	4.26E-05	7.96E-06	2.43E-04	1.22E-04	2.16E-07	1.82E-05	6.8	2.57E-03	1.52E-04
SI37_W	0.75	4	0	1	1.41E-02	1.77E-02	2.67E-05	8.94E-04	8.22E-04	2.84E-05	5.31E-06	1.62E-04	8.15E-05	1.44E-07	1.22E-05	4.5	1.71E-03	1.01E-04
SI37_W	0.75	4	0	1	1.23E-02	1.55E-02	2.33E-05	7.82E-04	7.19E-04	2.49E-05	4.64E-06	1.42E-04	7.13E-05	1.26E-07	1.06E-05	4.0	1.50E-03	8.86E-05
SI37_W	0.75	3	0	1	8.82E-03	1.11E-02	1.67E-05	5.59E-04	5.14E-04	1.78E-05	3.32E-06	1.01E-04	5.09E-05	8.98E-08	7.60E-06	2.8	1.07E-03	6.33E-05
SI37_W	0.75	4	0	1	1.23E-02	1.55E-02	2.33E-05	7.82E-04	7.19E-04	2.49E-05	4.64E-06	1.42E-04	7.13E-05	1.26E-07	1.06E-05	4.0	1.50E-03	8.86E-05
SI37_W	0.75	9	0	1	3.00E-02	3.76E-02	5.67E-05	1.90E-03	1.75E-03	6.04E-05	1.13E-05	3.44E-04	1.73E-04	3.05E-07	2.58E-05	9.6	3.64E-03	2.15E-04
SI37_W	0.75	27	0	1	8.99E-02	1.13E-01	1.70E-04	5.70E-03	5.24E-03	1.81E-04	3.38E-05	1.03E-03	5.19E-04	9.16E-07	7.75E-05	28.9	1.09E-02	6.45E-04
SI37_W	0.75	41	0	1	1.38E-01	1.72E-01	2.60E-04	8.71E-03	8.01E-03	2.77E-04	5.18E-05	1.58E-03	7.94E-04	1.40E-06	1.19E-04	44.2	1.67E-02	9.87E-04
SI37_W	0.75	33	0	1	1.11E-01	1.39E-01	2.10E-04	7.04E-03	6.47E-03	2.24E-04	4.18E-05	1.27E-03	6.42E-04	1.13E-06	9.58E-05	35.7	1.35E-02	7.97E-04
SI37_W	0.75	27	0	1	9.17E-02	1.15E-01	1.73E-04	5.81E-03	5.34E-03	1.85E-04	3.45E-05	1.05E-03	5.30E-04	9.34E-07	7.91E-05	29.5	1.11E-02	6.58E-04
SI37_W	0.75	25	0	1	8.29E-02	1.04E-01	1.57E-04	5.25E-03	4.83E-03	1.67E-04	3.12E-05	9.51E-04	4.79E-04	8.45E-07	7.15E-05	26.7	1.01E-02	5.95E-04
SI37_W	0.75	28	0	1	9.34E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.52E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI37_W	0.75	29	0	1	9.87E-02	1.24E-01	1.87E-04	6.26E-03	5.75E-03	1.99E-04	3.72E-05	1.13E-03	5.70E-04	1.01E-06	8.52E-05	31.8	1.20E-02	7.09E-04
SI37_W	0.75	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.37E-03	5.86E-03	2.02E-04	3.78E-05	1.15E-03	5.80E-04	1.02E-06	8.67E-05	32.3	1.22E-02	7.21E-04
SI37_W	0.75	31	0	1	1.04E-01	1.30E-01	1.97E-04	6.59E-03	6.06E-03	2.10E-04	3.91E-05	1.19E-03	6.01E-04	1.06E-06	8.97E-05	33.5	1.26E-02	7.46E-04
SI37_W	0.75	34	0	1	1.13E-01	1.42E-01	2.13E-04	7.15E-03	6.58E-03	2.27E-04	4.25E-05	1.29E-03	6.52E-04	1.15E-06	9.73E-05	36.3	1.37E-02	8.10E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI37_W	0.75	41	0	1	1.39E-01	1.75E-01	2.64E-04	8.83E-03	8.12E-03	2.81E-04	5.24E-05	1.60E-03	8.04E-04	1.42E-06	1.20E-04	44.8	1.69E-02	1.00E-03
SI37_W	0.75	45	0	1	1.50E-01	1.88E-01	2.84E-04	9.50E-03	8.73E-03	3.02E-04	5.64E-05	1.72E-03	8.66E-04	1.53E-06	1.29E-04	48.2	1.82E-02	1.08E-03
SI37_W	0.75	31	0	1	1.04E-01	1.30E-01	1.97E-04	6.59E-03	6.06E-03	2.10E-04	3.91E-05	1.19E-03	6.01E-04	1.06E-06	8.97E-05	33.5	1.26E-02	7.46E-04
SI37_W	0.75	20	0	1	6.88E-02	8.62E-02	1.30E-04	4.36E-03	4.01E-03	1.39E-04	2.59E-05	7.89E-04	3.97E-04	7.01E-07	5.93E-05	22.1	8.35E-03	4.93E-04
SI37_W	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.68E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.06E-03	4.18E-04
SI37_W	0.75	15	0	1	4.94E-02	6.19E-02	9.34E-05	3.13E-03	2.88E-03	9.94E-05	1.86E-05	5.66E-04	2.85E-04	5.03E-07	4.26E-05	15.9	5.99E-03	3.54E-04
SI37_W	0.75	12	0	1	4.06E-02	5.09E-02	7.67E-05	2.57E-03	2.36E-03	8.17E-05	1.53E-05	4.65E-04	2.34E-04	4.13E-07	3.50E-05	13.0	4.92E-03	2.91E-04
SI37_W	0.75	9	0	1	3.00E-02	3.76E-02	5.67E-05	1.90E-03	1.75E-03	6.04E-05	1.13E-05	3.44E-04	1.73E-04	3.05E-07	2.58E-05	9.6	3.64E-03	2.15E-04
SI38_E	0.36	3	0	1	1.01E-02	1.26E-02	1.91E-05	6.38E-04	5.87E-04	2.03E-05	3.79E-06	1.16E-04	5.82E-05	1.03E-07	8.69E-06	3.2	1.22E-03	7.23E-05
SI38_E	0.36	2	0	1	6.72E-03	8.42E-03	1.27E-05	4.26E-04	3.91E-04	1.35E-05	2.53E-06	7.71E-05	3.88E-05	6.85E-08	5.79E-06	2.2	8.15E-04	4.82E-05
SI38_E	0.36	2	0	1	5.88E-03	7.37E-03	1.11E-05	3.72E-04	3.43E-04	1.18E-05	2.21E-06	6.74E-05	3.39E-05	5.99E-08	5.07E-06	1.9	7.13E-04	4.22E-05
SI38_E	0.36	1	0	1	4.20E-03	5.26E-03	7.94E-06	2.66E-04	2.45E-04	8.46E-06	1.58E-06	4.82E-05	2.42E-05	4.28E-08	3.62E-06	1.4	5.10E-04	3.01E-05
SI38_E	0.36	2	0	1	5.88E-03	7.37E-03	1.11E-05	3.72E-04	3.43E-04	1.18E-05	2.21E-06	6.74E-05	3.39E-05	5.99E-08	5.07E-06	1.9	7.13E-04	4.22E-05
SI38_E	0.36	4	0	1	1.43E-02	1.79E-02	2.70E-05	9.04E-04	8.32E-04	2.87E-05	5.37E-06	1.64E-04	8.24E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI38_E	0.36	13	0	1	4.28E-02	5.37E-02	8.10E-05	2.71E-03	2.50E-03	8.62E-05	1.61E-05	4.91E-04	2.47E-04	4.36E-07	3.69E-05	13.8	5.20E-03	3.07E-04
SI38_E	0.36	19	0	1	6.55E-02	8.21E-02	1.24E-04	4.15E-03	3.82E-03	1.32E-04	2.46E-05	7.51E-04	3.78E-04	6.67E-07	5.65E-05	21.1	7.95E-03	4.70E-04
SI38_E	0.36	16	0	1	5.29E-02	6.63E-02	1.00E-04	3.35E-03	3.08E-03	1.07E-04	1.99E-05	6.07E-04	3.05E-04	5.39E-07	4.56E-05	17.0	6.42E-03	3.80E-04
SI38_E	0.36	13	0	1	4.37E-02	5.48E-02	8.26E-05	2.77E-03	2.54E-03	8.79E-05	1.64E-05	5.01E-04	2.52E-04	4.45E-07	3.77E-05	14.0	5.30E-03	3.13E-04
SI38_E	0.36	12	0	1	3.95E-02	4.95E-02	7.47E-05	2.50E-03	2.30E-03	7.95E-05	1.48E-05	4.53E-04	2.28E-04	4.02E-07	3.40E-05	12.7	4.79E-03	2.83E-04
SI38_E	0.36	13	0	1	4.45E-02	5.58E-02	8.42E-05	2.82E-03	2.59E-03	8.96E-05	1.67E-05	5.11E-04	2.57E-04	4.53E-07	3.84E-05	14.3	5.40E-03	3.19E-04
SI38_E	0.36	14	0	1	4.70E-02	5.90E-02	8.89E-05	2.98E-03	2.74E-03	9.47E-05	1.77E-05	5.39E-04	2.72E-04	4.79E-07	4.05E-05	15.1	5.71E-03	3.37E-04
SI38_E	0.36	14	0	1	4.79E-02	6.00E-02	9.05E-05	3.03E-03	2.79E-03	9.64E-05	1.80E-05	5.49E-04	2.76E-04	4.88E-07	4.13E-05	15.4	5.81E-03	3.43E-04
SI38_E	0.36	15	0	1	4.95E-02	6.21E-02	9.37E-05	3.14E-03	2.89E-03	9.98E-05	1.86E-05	5.68E-04	2.86E-04	5.05E-07	4.27E-05	15.9	6.01E-03	3.55E-04
SI38_E	0.36	16	0	1	5.37E-02	6.74E-02	1.02E-04	3.41E-03	3.13E-03	1.08E-04	2.02E-05	6.16E-04	3.10E-04	5.48E-07	4.63E-05	17.3	6.52E-03	3.86E-04
SI38_E	0.36	20	0	1	6.63E-02	8.32E-02	1.25E-04	4.20E-03	3.87E-03	1.34E-04	2.50E-05	7.61E-04	3.83E-04	6.76E-07	5.72E-05	21.3	8.05E-03	4.76E-04
SI38_E	0.36	21	0	1	7.14E-02	8.95E-02	1.35E-04	4.52E-03	4.16E-03	1.44E-04	2.69E-05	8.19E-04	4.12E-04	7.27E-07	6.15E-05	23.0	8.66E-03	5.12E-04
SI38_E	0.36	15	0	1	4.95E-02	6.21E-02	9.37E-05	3.14E-03	2.89E-03	9.98E-05	1.86E-05	5.68E-04	2.86E-04	5.05E-07	4.27E-05	15.9	6.01E-03	3.55E-04
SI38_E	0.36	10	0	1	3.27E-02	4.11E-02	6.19E-05	2.07E-03	1.91E-03	6.60E-05	1.23E-05	3.76E-04	1.89E-04	3.34E-07	2.82E-05	10.5	3.97E-03	2.35E-04
SI38_E	0.36	8	0	1	2.77E-02	3.47E-02	5.24E-05	1.76E-03	1.61E-03	5.58E-05	1.04E-05	3.18E-04	1.60E-04	2.82E-07	2.39E-05	8.9	3.36E-03	1.99E-04
SI38_E	0.36	7	0	1	2.35E-02	2.95E-02	4.45E-05	1.49E-03	1.37E-03	4.74E-05	8.85E-06	2.70E-04	1.36E-04	2.40E-07	2.03E-05	7.6	2.85E-03	1.69E-04
SI38_E	0.36	6	0	1	1.93E-02	2.42E-02	3.65E-05	1.22E-03	1.13E-03	3.89E-05	7.27E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.34E-03	1.39E-04
SI38_E	0.36	4	0	1	1.43E-02	1.79E-02	2.70E-05	9.04E-04	8.32E-04	2.87E-05	5.37E-06	1.64E-04	8.24E-05	1.45E-07	1.23E-05	4.6	1.73E-03	1.02E-04
SI38_W	0.39	3	0	1	1.09E-02	1.36E-02	2.06E-05	6.90E-04	6.34E-04	2.19E-05	4.09E-06	1.25E-04	6.28E-05	1.11E-07	9.38E-06	3.5	1.32E-03	7.81E-05
SI38_W	0.39	2	0	1	7.25E-03	9.10E-03	1.37E-05	4.60E-04	4.23E-04	1.46E-05	2.73E-06	8.32E-05	4.19E-05	7.39E-08	6.26E-06	2.3	8.81E-04	5.21E-05
SI38_W	0.39	2	0	1	6.35E-03	7.96E-03	1.20E-05	4.02E-04	3.70E-04	1.28E-05	2.39E-06	7.28E-05	3.67E-05	6.47E-08	5.47E-06	2.0	7.71E-04	4.55E-05
SI38_W	0.39	1	0	1	4.53E-03	5.69E-03	8.58E-06	2.87E-04	2.64E-04	9.13E-06	1.71E-06	5.20E-05	2.62E-05	4.62E-08	3.91E-06	1.5	5.50E-04	3.25E-05
SI38_W	0.39	2	0	1	6.35E-03	7.96E-03	1.20E-05	4.02E-04	3.70E-04	1.28E-05	2.39E-06	7.28E-05	3.67E-05	6.47E-08	5.47E-06	2.0	7.71E-04	4.55E-05
SI38_W	0.39	5	0	1	1.54E-02	1.93E-02	2.92E-05	9.77E-04	8.98E-04	3.10E-05	5.80E-06	1.77E-04	8.90E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI38_W	0.39	14	0	1	4.62E-02	5.80E-02	8.75E-05	2.93E-03	2.70E-03	9.31E-05	1.74E-05	5.31E-04	2.67E-04	4.71E-07	3.99E-05	14.9	5.61E-03	3.32E-04
SI38_W	0.39	21	0	1	7.07E-02	8.87E-02	1.34E-04	4.48E-03	4.12E-03	1.42E-04	2.66E-05	8.11E-04	4.08E-04	7.21E-07	6.10E-05	22.8	8.59E-03	5.08E-04
SI38_W	0.39	17	0	1	5.71E-02	7.16E-02	1.08E-04	3.62E-03	3.33E-03	1.15E-04	2.15E-05	6.55E-04	3.30E-04	5.82E-07	4.93E-05	18.4	6.93E-03	4.10E-04
SI38_W	0.39	14	0	1	4.72E-02	5.91E-02	8.92E-05	2.99E-03	2.75E-03	9.50E-05	1.77E-05	5.41E-04	2.72E-04	4.81E-07	4.07E-05	15.2	5.72E-03	3.38E-04
SI38_W	0.39	13	0	1	4.26E-02	5.34E-02	8.06E-05	2.70E-03	2.48E-03	8.58E-05	1.60E-05	4.89E-04	2.46E-04	4.34E-07	3.68E-05	13.7	5.17E-03	3.06E-04
SI38_W	0.39	14	0	1	4.81E-02	6.03E-02	9.09E-05	3.05E-03	2.80E-03	9.68E-05	1.81E-05	5.51E-04	2.78E-04	4.90E-07	4.14E-05	15.5	5.83E-03	3.45E-04
SI38_W	0.39	15	0	1	5.08E-02	6.37E-02	9.61E-05	3.22E-03	2.96E-03	1.02E-04	1.91E-05	5.83E-04	2.93E-04	5.17E-07	4.38E-05	16.3	6.16E-03	3.64E-04
SI38_W	0.39	15	0	1	5.17E-02	6.48E-02	9.78E-05	3.28E-03	3.01E-03	1.04E-04	1.94E-05	5.93E-04	2.99E-04	5.27E-07	4.46E-05	16.6	6.27E-03	3.71E-04
SI38_W	0.39	16	0	1	5.35E-02	6.71E-02	1.01E-04	3.39E-03	3.12E-03	1.08E-04	2.01E-05	6.14E-04	3.09E-04	5.45E-07	4.61E-05	17.2	6.49E-03	3.84E-04
SI38_W	0.39	17	0	1	5.80E-02	7.28E-02	1.10E-04	3.68E-03	3.38E-03	1.17E-04	2.18E-05	6.66E-04	3.35E-04	5.91E-07	5.00E-05	18.7	7.04E-03	4.16E-04
SI38_W	0.39	21	0	1	7.16E-02	8.98E-02	1.36E-04	4.54E-03	4.17E-03	1.44E-04	2.70E-05	8.22E-04	4.14E-04	7.30E-07	6.18E-05	23.0	8.70E-03	5.14E-04
SI38_W	0.39	23	0	1	7.71E-02	9.67E-02	1.46E-04	4.88E-03	4.49E-03	1.55E-04	2.90E-05	8.84E-04	4.45E-04	7.85E-07	6.65E-05	24.8	9.36E-03	5.53E-04
SI38_W	0.39	16	0	1	5.35E-02	6.71E-02	1.01E-04	3.39E-03	3.12E-03	1.08E-04	2.01E-05	6.14E-04	3.09E-04	5.45E-07	4.61E-05	17.2	6.49E-03	3.84E-04
SI38_W	0.39	11	0	1	3.54E-02	4.44E-02	6.69E-05	2.24E-03	2.06E-03	7.12E-05	1.33E-05	4.06E-04	2.04E-04	3.60E-07	3.05E-05	11.4	4.29E-03	2.54E-04
SI38_W	0.39	9	0	1	2.99E-02	3.75E-02	5.66E-05	1.90E-03	1.74E-03	6.03E-05	1.13E-05	3.43E-04	1.73E-04	3.05E-07	2.58E-05	9.6	3.63E-03	2.15E-04
SI38_W	0.39	8	0	1	2.54E-02	3.18E-02	4.80E-05	1.61E-03	1.48E-03	5.11E-05	9.55E-06	2.91E-04	1.47E-04	2.59E-07	2.19E-05	8.2	3.08E-03	1.82E-04
SI38_W	0.39	6	0	1	2.09E-02	2.62E-02	3.95E-05	1.32E-03	1.22E-03	4.20E-05	7.85E-06	2.39E-04	1.20E-04	2.13E-07	1.80E-05	6.7	2.53E-03	1.50E-04
SI38_W	0.39	5	0	1	1.54E-02	1.93E-02	2.92E-05	9.77E-04	8.98E-04	3.10E-05	5.80E-06	1.77E-04	8.90E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI39_E	0.25	2	0	1	6.53E-03	8.19E-03	1.24E-05	4.14E-04	3.81E-04	1.32E-05	2.46E-06	7.49E-05	3.77E-05	6.66E-08	5.63E-06	2.1	7.93E-04	4.69E-05
SI39_E	0.25	1	0	1	4.35E-03	5.46E-03	8.24E-06	2.76E-04	2.54E-04	8.77E-06	1.64E-06	5.00E-05	2.51E-05	4.44E-08	3.76E-06	1.4	5.29E-04	3.12E-05
SI39_E	0.25	1	0	1	3.81E-03	4.78E-03	7.21E-06	2.41E-04	2.22E-04	7.67E-06	1.43E-06	4.37E-05	2.20E-05	3.88E-08	3.29E-06	1.2	4.62E-04	2.73E-05
SI39_E	0.25	1	0	1	2.72E-03	3.41E-03	5.15E-06	1.72E-04	1.59E-04	5.48E-06	1.02E-06	3.12E-05	1.57E-05	2.77E-08	2.35E-06	0.9	3.30E-04	1.95E-05
SI39_E	0.25	1	0	1	3.81E-03	4.78E-03	7.21E-06	2.41E-04	2.22E-04	7.67E-06	1.43E-06	4.37E-05	2.20E-05	3.88E-08	3.29E-06	1.2	4.62E-04	2.73E-05
SI39_E	0.25	3	0	1	9.25E-03	1.16E-02	1.75E-05	5.86E-04	5.39E-04	1.86E-05	3.48E-06	1.06E-04	5.34E-05	9.43E-08	7.98E-06	3.0	1.12E-03	6.64E-05
SI39_E	0.25	8	0	1	2.78E-02	3.48E-02	5.25E-05	1.76E-03	1.62E-03	5.59E-05	1.04E-05	3.18E-04	1.60E-04	2.83E-07	2.39E-05	8.9	3.37E-03	1.99E-04
SI39_E	0.25	13	0	1	4.25E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI39_E	0.25	10	0	1	3.43E-02	4.30E-02	6.49E-05	2.17E-03	2.00E-03	6.91E-05	1.29E-05	3.93E-04	1.98E-04	3.49E-07	2.96E-05	11.0	4.16E-03	2.46E-04
SI39_E	0.25	8	0	1	2.83E-02	3.55E-02	5.35E-05	1.79E-03	1.65E-03	5.70E-05	1.07E-05	3.25E-04	1.63E-04	2.88E-07	2.44E-05	9.1	3.44E-03	2.03E-04
SI39_E	0.25	8	0	1	2.56E-02	3.21E-02	4.84E-05	1.62E-03	1.49E-03	5.15E-05	9.63E-06	2.93E-04	1.48E-04	2.61E-07	2.21E-05	8.2	3.11E-03	1.84E-04
SI39_E	0.25	9	0	1	2.88E-02	3.62E-02	5.46E-05	1.83E-03	1.68E-03	5.81E-05	1.09E-05	3.31E-04	1.67E-04	2.94E-07	2.49E-05	9.3	3.50E-03	2.07E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_E	0.25	9	0	1	3.05E-02	3.82E-02	5.77E-05	1.93E-03	1.78E-03	6.14E-05	1.15E-05	3.50E-04	1.76E-04	3.11E-07	2.63E-05	9.8	3.70E-03	2.19E-04
SI39_E	0.25	9	0	1	3.10E-02	3.89E-02	5.87E-05	1.97E-03	1.81E-03	6.25E-05	1.17E-05	3.56E-04	1.79E-04	3.16E-07	2.68E-05	10.0	3.77E-03	2.23E-04
SI39_E	0.25	10	0	1	3.21E-02	4.03E-02	6.08E-05	2.03E-03	1.87E-03	6.47E-05	1.21E-05	3.68E-04	1.85E-04	3.27E-07	2.77E-05	10.3	3.90E-03	2.30E-04
SI39_E	0.25	10	0	1	3.48E-02	4.37E-02	6.59E-05	2.21E-03	2.03E-03	7.02E-05	1.31E-05	4.00E-04	2.01E-04	3.55E-07	3.00E-05	11.2	4.23E-03	2.50E-04
SI39_E	0.25	13	0	1	4.30E-02	5.39E-02	8.13E-05	2.72E-03	2.51E-03	8.66E-05	1.62E-05	4.93E-04	2.48E-04	4.38E-07	3.71E-05	13.8	5.22E-03	3.09E-04
SI39_E	0.25	14	0	1	4.63E-02	5.80E-02	8.75E-05	2.93E-03	2.70E-03	9.32E-05	1.74E-05	5.31E-04	2.67E-04	4.71E-07	3.99E-05	14.9	5.62E-03	3.32E-04
SI39_E	0.25	10	0	1	3.21E-02	4.03E-02	6.08E-05	2.03E-03	1.87E-03	6.47E-05	1.21E-05	3.68E-04	1.85E-04	3.27E-07	2.77E-05	10.3	3.90E-03	2.30E-04
SI39_E	0.25	6	0	1	2.12E-02	2.66E-02	4.02E-05	1.35E-03	1.24E-03	4.28E-05	7.99E-06	2.44E-04	1.23E-04	2.16E-07	1.83E-05	6.8	2.58E-03	1.52E-04
SI39_E	0.25	5	0	1	1.80E-02	2.25E-02	3.40E-05	1.14E-03	1.05E-03	3.62E-05	6.76E-06	2.06E-04	1.04E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI39_E	0.25	5	0	1	1.52E-02	1.91E-02	2.88E-05	9.66E-04	8.88E-04	3.07E-05	5.73E-06	1.75E-04	8.80E-05	1.55E-07	1.31E-05	4.9	1.85E-03	1.09E-04
SI39_E	0.25	4	0	1	1.25E-02	1.57E-02	2.37E-05	7.93E-04	7.30E-04	2.52E-05	4.71E-06	1.44E-04	7.23E-05	1.28E-07	1.08E-05	4.0	1.52E-03	8.98E-05
SI39_E	0.25	3	0	1	9.25E-03	1.16E-02	1.75E-05	5.86E-04	5.39E-04	1.86E-05	3.48E-06	1.06E-04	5.34E-05	9.43E-08	7.98E-06	3.0	1.12E-03	6.64E-05
SI39_W	0.17	1	0	1	4.15E-03	5.20E-03	7.85E-06	2.63E-04	2.42E-04	8.36E-06	1.56E-06	4.76E-05	2.40E-05	4.23E-08	3.58E-06	1.3	5.04E-04	2.98E-05
SI39_W	0.17	1	0	1	2.77E-03	3.47E-03	5.23E-06	1.75E-04	1.61E-04	5.57E-06	1.04E-06	3.17E-05	1.60E-05	2.82E-08	2.39E-06	0.9	3.36E-04	1.98E-05
SI39_W	0.17	1	0	1	2.42E-03	3.03E-03	4.58E-06	1.53E-04	1.41E-04	4.87E-06	9.11E-07	2.78E-05	1.40E-05	2.47E-08	2.09E-06	0.8	2.94E-04	1.74E-05
SI39_W	0.17	1	0	1	1.73E-03	2.17E-03	3.27E-06	1.10E-04	1.01E-04	3.48E-06	6.50E-07	1.98E-05	9.98E-06	1.76E-08	1.49E-06	0.6	2.10E-04	1.24E-05
SI39_W	0.17	1	0	1	2.42E-03	3.03E-03	4.58E-06	1.53E-04	1.41E-04	4.87E-06	9.11E-07	2.78E-05	1.40E-05	2.47E-08	2.09E-06	0.8	2.94E-04	1.74E-05
SI39_W	0.17	2	0	1	5.88E-03	7.37E-03	1.11E-05	3.72E-04	3.42E-04	1.18E-05	2.21E-06	6.74E-05	3.39E-05	5.99E-08	5.07E-06	1.9	7.13E-04	4.22E-05
SI39_W	0.17	5	0	1	1.76E-02	2.21E-02	3.34E-05	1.12E-03	1.03E-03	3.55E-05	6.63E-06	2.02E-04	1.02E-04	1.80E-07	1.52E-05	5.7	2.14E-03	1.27E-04
SI39_W	0.17	8	0	1	2.70E-02	3.38E-02	5.10E-05	1.71E-03	1.57E-03	5.43E-05	1.01E-05	3.09E-04	1.56E-04	2.75E-07	2.33E-05	8.7	3.27E-03	1.93E-04
SI39_W	0.17	6	0	1	2.18E-02	2.73E-02	4.12E-05	1.38E-03	1.27E-03	4.39E-05	8.20E-06	2.50E-04	1.26E-04	2.22E-07	1.88E-05	7.0	2.64E-03	1.56E-04
SI39_W	0.17	5	0	1	1.80E-02	2.25E-02	3.40E-05	1.14E-03	1.05E-03	3.62E-05	6.76E-06	2.06E-04	1.04E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI39_W	0.17	5	0	1	1.62E-02	2.04E-02	3.07E-05	1.03E-03	9.47E-04	3.27E-05	6.11E-06	1.86E-04	9.38E-05	1.66E-07	1.40E-05	5.2	1.97E-03	1.17E-04
SI39_W	0.17	5	0	1	1.83E-02	2.30E-02	3.47E-05	1.16E-03	1.07E-03	3.69E-05	6.89E-06	2.10E-04	1.06E-04	1.87E-07	1.58E-05	5.9	2.22E-03	1.31E-04
SI39_W	0.17	6	0	1	1.94E-02	2.43E-02	3.66E-05	1.23E-03	1.13E-03	3.90E-05	7.29E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.35E-03	1.39E-04
SI39_W	0.17	6	0	1	1.97E-02	2.47E-02	3.73E-05	1.25E-03	1.15E-03	3.97E-05	7.42E-06	2.26E-04	1.14E-04	2.01E-07	1.70E-05	6.3	2.39E-03	1.41E-04
SI39_W	0.17	6	0	1	2.04E-02	2.56E-02	3.86E-05	1.29E-03	1.19E-03	4.11E-05	7.68E-06	2.34E-04	1.18E-04	2.08E-07	1.76E-05	6.6	2.48E-03	1.46E-04
SI39_W	0.17	7	0	1	2.21E-02	2.77E-02	4.19E-05	1.40E-03	1.29E-03	4.46E-05	8.33E-06	2.54E-04	1.28E-04	2.25E-07	1.91E-05	7.1	2.69E-03	1.59E-04
SI39_W	0.17	8	0	1	2.73E-02	3.43E-02	5.17E-05	1.73E-03	1.59E-03	5.50E-05	1.03E-05	3.13E-04	1.58E-04	2.78E-07	2.36E-05	8.8	3.32E-03	1.96E-04
SI39_W	0.17	9	0	1	2.94E-02	3.69E-02	5.56E-05	1.86E-03	1.71E-03	5.92E-05	1.11E-05	3.37E-04	1.70E-04	2.99E-07	2.53E-05	9.5	3.57E-03	2.11E-04
SI39_W	0.17	6	0	1	2.04E-02	2.56E-02	3.86E-05	1.29E-03	1.19E-03	4.11E-05	7.68E-06	2.34E-04	1.18E-04	2.08E-07	1.76E-05	6.6	2.48E-03	1.46E-04
SI39_W	0.17	4	0	1	1.35E-02	1.69E-02	2.55E-05	8.54E-04	7.86E-04	2.72E-05	5.07E-06	1.55E-04	7.79E-05	1.37E-07	1.16E-05	4.3	1.64E-03	9.67E-05
SI39_W	0.17	3	0	1	1.14E-02	1.43E-02	2.16E-05	7.23E-04	6.65E-04	2.30E-05	4.29E-06	1.31E-04	6.59E-05	1.16E-07	9.84E-06	3.7	1.38E-03	8.19E-05
SI39_W	0.17	3	0	1	9.68E-03	1.21E-02	1.83E-05	6.13E-04	5.64E-04	1.95E-05	3.64E-06	1.11E-04	5.59E-05	9.86E-08	8.35E-06	3.1	1.18E-03	6.95E-05
SI39_W	0.17	2	0	1	7.95E-03	9.97E-03	1.50E-05	5.04E-04	4.63E-04	1.60E-05	2.99E-06	9.12E-05	4.59E-05	8.10E-08	6.86E-06	2.6	9.65E-04	5.71E-05
SI39_W	0.17	2	0	1	5.88E-03	7.37E-03	1.11E-05	3.72E-04	3.42E-04	1.18E-05	2.21E-06	6.74E-05	3.39E-05	5.99E-08	5.07E-06	1.9	7.13E-04	4.22E-05
SI40_E	0.49	3	0	1	1.17E-02	1.46E-02	2.21E-05	7.40E-04	6.81E-04	2.35E-05	4.39E-06	1.34E-04	6.74E-05	1.19E-07	1.01E-05	3.8	1.42E-03	8.38E-05
SI40_E	0.49	2	0	1	7.78E-03	9.76E-03	1.47E-05	4.93E-04	4.54E-04	1.57E-05	2.93E-06	8.93E-05	4.50E-05	7.93E-08	6.71E-06	2.5	9.45E-04	5.59E-05
SI40_E	0.49	2	0	1	6.81E-03	8.54E-03	1.29E-05	4.32E-04	3.97E-04	1.37E-05	2.56E-06	7.81E-05	3.93E-05	6.94E-08	5.87E-06	2.2	8.27E-04	4.89E-05
SI40_E	0.49	1	0	1	4.87E-03	6.10E-03	9.20E-06	3.08E-04	2.84E-04	9.80E-06	1.83E-06	5.58E-05	2.81E-05	4.96E-08	4.20E-06	1.6	5.91E-04	3.49E-05
SI40_E	0.49	2	0	1	6.81E-03	8.54E-03	1.29E-05	4.32E-04	3.97E-04	1.37E-05	2.56E-06	7.81E-05	3.93E-05	6.94E-08	5.87E-06	2.2	8.27E-04	4.89E-05
SI40_E	0.49	5	0	1	1.65E-02	2.07E-02	3.13E-05	1.05E-03	9.64E-04	3.33E-05	6.23E-06	1.90E-04	9.55E-05	1.69E-07	1.43E-05	5.3	2.01E-03	1.19E-04
SI40_E	0.49	15	0	1	4.96E-02	6.22E-02	9.39E-05	3.14E-03	2.89E-03	1.00E-04	1.87E-05	5.69E-04	2.87E-04	5.06E-07	4.28E-05	16.0	6.02E-03	3.56E-04
SI40_E	0.49	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI40_E	0.49	18	0	1	6.13E-02	7.69E-02	1.16E-04	3.88E-03	3.57E-03	1.23E-04	2.31E-05	7.03E-04	3.54E-04	6.25E-07	5.29E-05	19.7	7.44E-03	4.40E-04
SI40_E	0.49	15	0	1	5.06E-02	6.35E-02	9.57E-05	3.21E-03	2.95E-03	1.02E-04	1.90E-05	5.81E-04	2.92E-04	5.16E-07	4.36E-05	16.3	6.14E-03	3.63E-04
SI40_E	0.49	14	0	1	4.57E-02	5.74E-02	8.65E-05	2.90E-03	2.67E-03	9.21E-05	1.72E-05	5.25E-04	2.64E-04	4.66E-07	3.94E-05	14.7	5.55E-03	3.28E-04
SI40_E	0.49	15	0	1	5.16E-02	6.47E-02	9.76E-05	3.27E-03	3.01E-03	1.04E-04	1.94E-05	5.92E-04	2.98E-04	5.26E-07	4.45E-05	16.6	6.26E-03	3.70E-04
SI40_E	0.49	16	0	1	5.45E-02	6.83E-02	1.03E-04	3.45E-03	3.18E-03	1.10E-04	2.05E-05	6.25E-04	3.15E-04	5.55E-07	4.70E-05	17.5	6.61E-03	3.91E-04
SI40_E	0.49	16	0	1	5.55E-02	6.96E-02	1.05E-04	3.51E-03	3.23E-03	1.12E-04	2.09E-05	6.36E-04	3.20E-04	5.65E-07	4.78E-05	17.8	6.73E-03	3.98E-04
SI40_E	0.49	17	0	1	5.74E-02	7.20E-02	1.09E-04	3.64E-03	3.35E-03	1.16E-04	2.16E-05	6.59E-04	3.32E-04	5.85E-07	4.95E-05	18.5	6.97E-03	4.12E-04
SI40_E	0.49	19	0	1	6.23E-02	7.81E-02	1.18E-04	3.95E-03	3.63E-03	1.25E-04	2.34E-05	7.14E-04	3.60E-04	6.35E-07	5.37E-05	20.0	7.56E-03	4.47E-04
SI40_E	0.49	23	0	1	7.69E-02	9.64E-02	1.45E-04	4.87E-03	4.48E-03	1.55E-04	2.89E-05	8.82E-04	4.44E-04	7.83E-07	6.63E-05	24.7	9.33E-03	5.52E-04
SI40_E	0.49	25	0	1	8.27E-02	1.04E-01	1.56E-04	5.24E-03	4.82E-03	1.67E-04	3.11E-05	9.49E-04	4.78E-04	8.43E-07	7.13E-05	26.6	1.00E-02	5.94E-04
SI40_E	0.49	17	0	1	5.74E-02	7.20E-02	1.09E-04	3.64E-03	3.35E-03	1.16E-04	2.16E-05	6.59E-04	3.32E-04	5.85E-07	4.95E-05	18.5	6.97E-03	4.12E-04
SI40_E	0.49	11	0	1	3.79E-02	4.76E-02	7.18E-05	2.40E-03	2.21E-03	7.64E-05	1.43E-05	4.35E-04	2.19E-04	3.87E-07	3.27E-05	12.2	4.61E-03	2.72E-04
SI40_E	0.49	10	0	1	3.21E-02	4.03E-02	6.07E-05	2.03E-03	1.87E-03	6.47E-05	1.21E-05	3.68E-04	1.85E-04	3.27E-07	2.77E-05	10.3	3.90E-03	2.30E-04
SI40_E	0.49	8	0	1	2.72E-02	3.42E-02	5.15E-05	1.73E-03	1.59E-03	5.49E-05	1.03E-05	3.13E-04	1.57E-04	2.78E-07	2.35E-05	8.8	3.31E-03	1.96E-04
SI40_E	0.49	7	0	1	2.24E-02	2.81E-02	4.23E-05	1.42E-03	1.30E-03	4.51E-05	8.42E-06	2.57E-04	1.29E-04	2.28E-07	1.93E-05	7.2	2.72E-03	1.61E-04
SI40_E	0.49	5	0	1	1.65E-02	2.07E-02	3.13E-05	1.05E-03	9.64E-04	3.33E-05	6.23E-06	1.90E-04	9.55E-05	1.69E-07	1.43E-05	5.3	2.01E-03	1.19E-04
SI40_W	0.50	3	0	1	1.01E-02	1.27E-02	1.91E-05	6.40E-04	5.88E-04	2.03E-05	3.80E-06	1.16E-04	5.83E-05	1.03E-07	8.71E-06	3.2	1.23E-03	7.24E-05
SI40_W	0.50	2	0	1	6.73E-03	8.44E-03	1.27E-05	4.26E-04	3.92E-04	1.36E-05	2.53E-06	7.72E-05	3.89E-05	6.86E-08	5.80E-06	2.2	8.17E-04	4.83E-05
SI40_W	0.50	2	0	1	5.89E-03	7.38E-03	1.11E-05	3.73E-04	3.43E-04	1.19E-05	2.22E-06	6.76E-05	3.40E-05	6.00E-08	5.08E-06	1.9	7.15E-04	4.23E-05
SI40_W	0.50	1	0	1	4.21E-03	5.27E-03	7.96E-06	2.67E-04	2.45E-04	8.47E-06	1.58E-06	4.83E-05	2.43E-05	4.29E-08	3.63E-06	1.4	5.11E-04	3.02E-05
SI40_W	0.50	2	0	1	5.89E-03	7.38E-03	1.11E-05	3.73E-04	3.43E-04	1.19E-05	2.22E-06	6.76E-05	3.40E-05	6.00E-08	5.08E-06	1.9	7.15E-04	4.23E-05
SI40_W	0.50	4	0	1	1.43E-02	1.79E-02	2.71E-05	9.06E-04	8.33E-04	2.88E-05	5.38E-06	1.64E-04	8.26E-05	1.46E-07	1.23E-05	4.6	1.74E-03	1.03E-04
SI40_W	0.50	13	0	1	4.29E-02	5.38E-02	8.12E-05	2.72E-03	2.50E-03	8.64E-05	1.61E-05	4.92E-04	2.48E-04	4.37E-07	3.70E-05	13.8	5.21E-03	3.08E-04
SI40_W	0.50	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.96E-03	4.71E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI40_W	0.50	16	0	1	5.30E-02	6.65E-02	1.00E-04	3.36E-03	3.09E-03	1.07E-04	1.99E-05	6.08E-04	3.06E-04	5.40E-07	4.57E-05	17.0	6.43E-03	3.80E-04
SI40_W	0.50	13	0	1	4.37E-02	5.49E-02	8.27E-05	2.77E-03	2.55E-03	8.81E-05	1.65E-05	5.02E-04	2.53E-04	4.46E-07	3.77E-05	14.1	5.31E-03	3.14E-04
SI40_W	0.50	12	0	1	3.95E-02	4.96E-02	7.48E-05	2.51E-03	2.30E-03	7.96E-05	1.49E-05	4.54E-04	2.28E-04	4.03E-07	3.41E-05	12.7	4.80E-03	2.84E-04
SI40_W	0.50	13	0	1	4.46E-02	5.59E-02	8.43E-05	2.83E-03	2.60E-03	8.98E-05	1.68E-05	5.11E-04	2.57E-04	4.54E-07	3.84E-05	14.3	5.41E-03	3.20E-04
SI40_W	0.50	14	0	1	4.71E-02	5.91E-02	8.91E-05	2.98E-03	2.75E-03	9.49E-05	1.77E-05	5.40E-04	2.72E-04	4.80E-07	4.06E-05	15.2	5.72E-03	3.38E-04
SI40_W	0.50	14	0	1	4.79E-02	6.01E-02	9.07E-05	3.04E-03	2.79E-03	9.66E-05	1.80E-05	5.50E-04	2.77E-04	4.89E-07	4.13E-05	15.4	5.82E-03	3.44E-04
SI40_W	0.50	15	0	1	4.96E-02	6.22E-02	9.39E-05	3.14E-03	2.89E-03	1.00E-04	1.87E-05	5.69E-04	2.87E-04	5.06E-07	4.28E-05	16.0	6.02E-03	3.56E-04
SI40_W	0.50	16	0	1	5.38E-02	6.75E-02	1.02E-04	3.41E-03	3.14E-03	1.08E-04	2.03E-05	6.18E-04	3.11E-04	5.49E-07	4.64E-05	17.3	6.53E-03	3.86E-04
SI40_W	0.50	20	0	1	6.64E-02	8.33E-02	1.26E-04	4.21E-03	3.87E-03	1.34E-04	2.50E-05	7.62E-04	3.84E-04	6.77E-07	5.73E-05	21.4	8.07E-03	4.77E-04
SI40_W	0.50	21	0	1	7.15E-02	8.97E-02	1.35E-04	4.53E-03	4.17E-03	1.44E-04	2.69E-05	8.20E-04	4.13E-04	7.29E-07	6.17E-05	23.0	8.68E-03	5.13E-04
SI40_W	0.50	15	0	1	4.96E-02	6.22E-02	9.39E-05	3.14E-03	2.89E-03	1.00E-04	1.87E-05	5.69E-04	2.87E-04	5.06E-07	4.28E-05	16.0	6.02E-03	3.56E-04
SI40_W	0.50	10	0	1	3.28E-02	4.11E-02	6.21E-05	2.08E-03	1.91E-03	6.61E-05	1.23E-05	3.76E-04	1.89E-04	3.34E-07	2.83E-05	10.6	3.98E-03	2.35E-04
SI40_W	0.50	8	0	1	2.78E-02	3.48E-02	5.25E-05	1.76E-03	1.62E-03	5.59E-05	1.04E-05	3.18E-04	1.60E-04	2.83E-07	2.39E-05	8.9	3.37E-03	1.99E-04
SI40_W	0.50	7	0	1	2.36E-02	2.95E-02	4.46E-05	1.49E-03	1.37E-03	4.74E-05	8.86E-06	2.70E-04	1.36E-04	2.40E-07	2.03E-05	7.6	2.86E-03	1.69E-04
SI40_W	0.50	6	0	1	1.93E-02	2.43E-02	3.66E-05	1.23E-03	1.13E-03	3.90E-05	7.28E-06	2.22E-04	1.12E-04	1.97E-07	1.67E-05	6.2	2.35E-03	1.39E-04
SI40_W	0.50	4	0	1	1.43E-02	1.79E-02	2.71E-05	9.06E-04	8.33E-04	2.88E-05	5.38E-06	1.64E-04	8.26E-05	1.46E-07	1.23E-05	4.6	1.74E-03	1.03E-04
SI41_E	0.75	5	0	1	1.51E-02	1.90E-02	2.86E-05	9.59E-04	8.82E-04	3.05E-05	5.70E-06	1.74E-04	8.74E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI41_E	0.75	3	0	1	1.01E-02	1.27E-02	1.91E-05	6.40E-04	5.88E-04	2.03E-05	3.80E-06	1.16E-04	5.83E-05	1.03E-07	8.71E-06	3.2	1.23E-03	7.24E-05
SI41_E	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI41_E	0.75	2	0	1	6.31E-03	7.91E-03	1.19E-05	4.00E-04	3.68E-04	1.27E-05	2.37E-06	7.24E-05	3.64E-05	6.43E-08	5.44E-06	2.0	7.66E-04	4.53E-05
SI41_E	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI41_E	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI41_E	0.75	19	0	1	6.43E-02	8.07E-02	1.22E-04	4.08E-03	3.75E-03	1.30E-04	2.42E-05	7.38E-04	3.72E-04	6.56E-07	5.55E-05	20.7	7.81E-03	4.62E-04
SI41_E	0.75	29	0	1	9.84E-02	1.23E-01	1.86E-04	6.24E-03	5.74E-03	1.98E-04	3.70E-05	1.13E-03	5.68E-04	1.00E-06	8.49E-05	31.7	1.19E-02	7.06E-04
SI41_E	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI41_E	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.96E-03	4.71E-04
SI41_E	0.75	18	0	1	5.93E-02	7.44E-02	1.12E-04	3.76E-03	3.46E-03	1.19E-04	2.23E-05	6.80E-04	3.42E-04	6.04E-07	5.11E-05	19.1	7.20E-03	4.26E-04
SI41_E	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.67E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI41_E	0.75	21	0	1	7.07E-02	8.86E-02	1.34E-04	4.48E-03	4.12E-03	1.42E-04	2.66E-05	8.11E-04	4.08E-04	7.20E-07	6.09E-05	22.7	8.58E-03	5.07E-04
SI41_E	0.75	21	0	1	7.19E-02	9.02E-02	1.36E-04	4.56E-03	4.19E-03	1.45E-04	2.71E-05	8.25E-04	4.15E-04	7.33E-07	6.20E-05	23.1	8.73E-03	5.16E-04
SI41_E	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI41_E	0.75	24	0	1	8.07E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.26E-04	4.66E-04	8.23E-07	6.96E-05	26.0	9.80E-03	5.79E-04
SI41_E	0.75	30	0	1	9.97E-02	1.25E-01	1.89E-04	6.32E-03	5.81E-03	2.01E-04	3.75E-05	1.14E-03	5.76E-04	1.02E-06	8.60E-05	32.1	1.21E-02	7.15E-04
SI41_E	0.75	32	0	1	1.07E-01	1.35E-01	2.03E-04	6.80E-03	6.25E-03	2.16E-04	4.04E-05	1.23E-03	6.19E-04	1.09E-06	9.25E-05	34.5	1.30E-02	7.70E-04
SI41_E	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI41_E	0.75	15	0	1	4.92E-02	6.17E-02	9.31E-05	3.12E-03	2.87E-03	9.91E-05	1.85E-05	5.65E-04	2.84E-04	5.01E-07	4.24E-05	15.8	5.97E-03	3.53E-04
SI41_E	0.75	12	0	1	4.16E-02	5.22E-02	7.88E-05	2.64E-03	2.43E-03	8.39E-05	1.57E-05	4.78E-04	2.40E-04	4.24E-07	3.59E-05	13.4	5.05E-03	2.99E-04
SI41_E	0.75	11	0	1	3.53E-02	4.43E-02	6.68E-05	2.24E-03	2.06E-03	7.12E-05	1.33E-05	4.05E-04	2.04E-04	3.60E-07	3.05E-05	11.4	4.29E-03	2.54E-04
SI41_E	0.75	9	0	1	2.90E-02	3.64E-02	5.49E-05	1.84E-03	1.69E-03	5.85E-05	1.09E-05	3.33E-04	1.68E-04	2.96E-07	2.50E-05	9.3	3.52E-03	2.08E-04
SI41_E	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI41_W	0.75	5	0	1	1.51E-02	1.90E-02	2.86E-05	9.59E-04	8.82E-04	3.05E-05	5.70E-06	1.74E-04	8.74E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI41_W	0.75	3	0	1	1.01E-02	1.27E-02	1.91E-05	6.40E-04	5.88E-04	2.03E-05	3.80E-06	1.16E-04	5.83E-05	1.03E-07	8.71E-06	3.2	1.23E-03	7.24E-05
SI41_W	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI41_W	0.75	2	0	1	6.31E-03	7.91E-03	1.19E-05	4.00E-04	3.68E-04	1.27E-05	2.37E-06	7.24E-05	3.64E-05	6.43E-08	5.44E-06	2.0	7.66E-04	4.53E-05
SI41_W	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI41_W	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI41_W	0.75	19	0	1	6.43E-02	8.07E-02	1.22E-04	4.08E-03	3.75E-03	1.30E-04	2.42E-05	7.38E-04	3.72E-04	6.56E-07	5.55E-05	20.7	7.81E-03	4.62E-04
SI41_W	0.75	29	0	1	9.84E-02	1.23E-01	1.86E-04	6.24E-03	5.74E-03	1.98E-04	3.70E-05	1.13E-03	5.68E-04	1.00E-06	8.49E-05	31.7	1.19E-02	7.06E-04
SI41_W	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI41_W	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.96E-03	4.71E-04
SI41_W	0.75	18	0	1	5.93E-02	7.44E-02	1.12E-04	3.76E-03	3.46E-03	1.19E-04	2.23E-05	6.80E-04	3.42E-04	6.04E-07	5.11E-05	19.1	7.20E-03	4.26E-04
SI41_W	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.67E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI41_W	0.75	21	0	1	7.07E-02	8.86E-02	1.34E-04	4.48E-03	4.12E-03	1.42E-04	2.66E-05	8.11E-04	4.08E-04	7.20E-07	6.09E-05	22.7	8.58E-03	5.07E-04
SI41_W	0.75	21	0	1	7.19E-02	9.02E-02	1.36E-04	4.56E-03	4.19E-03	1.45E-04	2.71E-05	8.25E-04	4.15E-04	7.33E-07	6.20E-05	23.1	8.73E-03	5.16E-04
SI41_W	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI41_W	0.75	24	0	1	8.07E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.26E-04	4.66E-04	8.23E-07	6.96E-05	26.0	9.80E-03	5.79E-04
SI41_W	0.75	30	0	1	9.97E-02	1.25E-01	1.89E-04	6.32E-03	5.81E-03	2.01E-04	3.75E-05	1.14E-03	5.76E-04	1.02E-06	8.60E-05	32.1	1.21E-02	7.15E-04
SI41_W	0.75	32	0	1	1.07E-01	1.35E-01	2.03E-04	6.80E-03	6.25E-03	2.16E-04	4.04E-05	1.23E-03	6.19E-04	1.09E-06	9.25E-05	34.5	1.30E-02	7.70E-04
SI41_W	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI41_W	0.75	15	0	1	4.92E-02	6.17E-02	9.31E-05	3.12E-03	2.87E-03	9.91E-05	1.85E-05	5.65E-04	2.84E-04	5.01E-07	4.24E-05	15.8	5.97E-03	3.53E-04
SI41_W	0.75	12	0	1	4.16E-02	5.22E-02	7.88E-05	2.64E-03	2.43E-03	8.39E-05	1.57E-05	4.78E-04	2.40E-04	4.24E-07	3.59E-05	13.4	5.05E-03	2.99E-04
SI41_W	0.75	11	0	1	3.53E-02	4.43E-02	6.68E-05	2.24E-03	2.06E-03	7.12E-05	1.33E-05	4.05E-04	2.04E-04	3.60E-07	3.05E-05	11.4	4.29E-03	2.54E-04
SI41_W	0.75	9	0	1	2.90E-02	3.64E-02	5.49E-05	1.84E-03	1.69E-03	5.85E-05	1.09E-05	3.33E-04	1.68E-04	2.96E-07	2.50E-05	9.3	3.52E-03	2.08E-04
SI41_W	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI42_E	0.75	5	0	1	1.51E-02	1.90E-02	2.86E-05	9.59E-04	8.82E-04	3.05E-05	5.70E-06	1.74E-04	8.74E-05	1.54E-07	1.31E-05	4.9	1.84E-03	1.09E-04
SI42_E	0.75	3	0	1	1.01E-02	1.27E-02	1.91E-05	6.40E-04	5.88E-04	2.03E-05	3.80E-06	1.16E-04	5.83E-05	1.03E-07	8.71E-06	3.2	1.23E-03	7.24E-05
SI42_E	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI42_E	0.75	2	0	1	6.31E-03	7.91E-03	1.19E-05	4.00E-04	3.68E-04	1.27E-05	2.37E-06	7.24E-05	3.64E-05	6.43E-08	5.44E-06	2.0	7.66E-04	4.53E-05

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_E	0.75	3	0	1	8.83E-03	1.11E-02	1.67E-05	5.60E-04	5.15E-04	1.78E-05	3.32E-06	1.01E-04	5.10E-05	9.00E-08	7.62E-06	2.8	1.07E-03	6.34E-05
SI42_E	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI42_E	0.75	19	0	1	6.43E-02	8.07E-02	1.22E-04	4.08E-03	3.75E-03	1.30E-04	2.42E-05	7.38E-04	3.72E-04	6.56E-07	5.55E-05	20.7	7.81E-03	4.62E-04
SI42_E	0.75	29	0	1	9.84E-02	1.23E-01	1.86E-04	6.24E-03	5.74E-03	1.98E-04	3.70E-05	1.13E-03	5.68E-04	1.00E-06	8.49E-05	31.7	1.19E-02	7.06E-04
SI42_E	0.75	24	0	1	7.95E-02	9.97E-02	1.50E-04	5.04E-03	4.63E-03	1.60E-04	2.99E-05	9.12E-04	4.59E-04	8.10E-07	6.86E-05	25.6	9.65E-03	5.70E-04
SI42_E	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.96E-03	4.71E-04
SI42_E	0.75	18	0	1	5.93E-02	7.44E-02	1.12E-04	3.76E-03	3.46E-03	1.19E-04	2.23E-05	6.80E-04	3.42E-04	6.04E-07	5.11E-05	19.1	7.20E-03	4.26E-04
SI42_E	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.67E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI42_E	0.75	21	0	1	7.07E-02	8.86E-02	1.34E-04	4.48E-03	4.12E-03	1.42E-04	2.66E-05	8.11E-04	4.08E-04	7.20E-07	6.09E-05	22.7	8.58E-03	5.07E-04
SI42_E	0.75	21	0	1	7.19E-02	9.02E-02	1.36E-04	4.56E-03	4.19E-03	1.45E-04	2.71E-05	8.25E-04	4.15E-04	7.33E-07	6.20E-05	23.1	8.73E-03	5.16E-04
SI42_E	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI42_E	0.75	24	0	1	8.07E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.26E-04	4.66E-04	8.23E-07	6.96E-05	26.0	9.80E-03	5.79E-04
SI42_E	0.75	30	0	1	9.97E-02	1.25E-01	1.89E-04	6.32E-03	5.81E-03	2.01E-04	3.75E-05	1.14E-03	5.76E-04	1.02E-06	8.60E-05	32.1	1.21E-02	7.15E-04
SI42_E	0.75	32	0	1	1.07E-01	1.35E-01	2.03E-04	6.80E-03	6.25E-03	2.16E-04	4.04E-05	1.23E-03	6.19E-04	1.09E-06	9.25E-05	34.5	1.30E-02	7.70E-04
SI42_E	0.75	22	0	1	7.44E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	23.9	9.04E-03	5.34E-04
SI42_E	0.75	15	0	1	4.92E-02	6.17E-02	9.31E-05	3.12E-03	2.87E-03	9.91E-05	1.85E-05	5.65E-04	2.84E-04	5.01E-07	4.24E-05	15.8	5.97E-03	3.53E-04
SI42_E	0.75	12	0	1	4.16E-02	5.22E-02	7.88E-05	2.64E-03	2.43E-03	8.39E-05	1.57E-05	4.78E-04	2.40E-04	4.24E-07	3.59E-05	13.4	5.05E-03	2.99E-04
SI42_E	0.75	11	0	1	3.53E-02	4.43E-02	6.68E-05	2.24E-03	2.06E-03	7.12E-05	1.33E-05	4.05E-04	2.04E-04	3.60E-07	3.05E-05	11.4	4.29E-03	2.54E-04
SI42_E	0.75	9	0	1	2.90E-02	3.64E-02	5.49E-05	1.84E-03	1.69E-03	5.85E-05	1.09E-05	3.33E-04	1.68E-04	2.96E-07	2.50E-05	9.3	3.52E-03	2.08E-04
SI42_E	0.75	6	0	1	2.14E-02	2.69E-02	4.06E-05	1.36E-03	1.25E-03	4.32E-05	8.07E-06	2.46E-04	1.24E-04	2.19E-07	1.85E-05	6.9	2.60E-03	1.54E-04
SI42_W	0.75	4	0	1	1.38E-02	1.73E-02	2.61E-05	8.73E-04	8.03E-04	2.78E-05	5.19E-06	1.58E-04	7.96E-05	1.40E-07	1.19E-05	4.4	1.67E-03	9.89E-05
SI42_W	0.75	3	0	1	9.19E-03	1.15E-02	1.74E-05	5.82E-04	5.35E-04	1.85E-05	3.46E-06	1.05E-04	5.31E-05	9.36E-08	7.92E-06	3.0	1.12E-03	6.59E-05
SI42_W	0.75	2	0	1	8.04E-03	1.01E-02	1.52E-05	5.09E-04	4.68E-04	1.62E-05	3.03E-06	9.22E-05	4.64E-05	8.19E-08	6.93E-06	2.6	9.76E-04	5.77E-05
SI42_W	0.75	2	0	1	5.74E-03	7.20E-03	1.09E-05	3.64E-04	3.35E-04	1.16E-05	2.16E-06	6.59E-05	3.32E-05	5.85E-08	4.95E-06	1.8	6.97E-04	4.12E-05
SI42_W	0.75	2	0	1	8.04E-03	1.01E-02	1.52E-05	5.09E-04	4.68E-04	1.62E-05	3.03E-06	9.22E-05	4.64E-05	8.19E-08	6.93E-06	2.6	9.76E-04	5.77E-05
SI42_W	0.75	6	0	1	1.95E-02	2.45E-02	3.69E-05	1.24E-03	1.14E-03	3.93E-05	7.35E-06	2.24E-04	1.13E-04	1.99E-07	1.68E-05	6.3	2.37E-03	1.40E-04
SI42_W	0.75	17	0	1	5.86E-02	7.35E-02	1.11E-04	3.71E-03	3.41E-03	1.18E-04	2.20E-05	6.72E-04	3.38E-04	5.97E-07	5.05E-05	18.8	7.11E-03	4.20E-04
SI42_W	0.75	27	0	1	8.96E-02	1.12E-01	1.69E-04	5.68E-03	5.22E-03	1.80E-04	3.37E-05	1.03E-03	5.17E-04	9.13E-07	7.73E-05	28.8	1.09E-02	6.43E-04
SI42_W	0.75	22	0	1	7.23E-02	9.07E-02	1.37E-04	4.58E-03	4.22E-03	1.46E-04	2.72E-05	8.30E-04	4.18E-04	7.37E-07	6.24E-05	23.3	8.78E-03	5.19E-04
SI42_W	0.75	18	0	1	5.97E-02	7.49E-02	1.13E-04	3.78E-03	3.48E-03	1.20E-04	2.25E-05	6.85E-04	3.45E-04	6.09E-07	5.15E-05	19.2	7.25E-03	4.29E-04
SI42_W	0.75	16	0	1	5.40E-02	6.77E-02	1.02E-04	3.42E-03	3.15E-03	1.09E-04	2.03E-05	6.19E-04	3.12E-04	5.50E-07	4.66E-05	17.4	6.55E-03	3.87E-04
SI42_W	0.75	18	0	1	6.09E-02	7.63E-02	1.15E-04	3.86E-03	3.55E-03	1.23E-04	2.29E-05	6.98E-04	3.52E-04	6.20E-07	5.25E-05	19.6	7.39E-03	4.37E-04
SI42_W	0.75	19	0	1	6.43E-02	8.07E-02	1.22E-04	4.08E-03	3.75E-03	1.30E-04	2.42E-05	7.38E-04	3.71E-04	6.55E-07	5.55E-05	20.7	7.81E-03	4.61E-04
SI42_W	0.75	19	0	1	6.55E-02	8.21E-02	1.24E-04	4.15E-03	3.81E-03	1.32E-04	2.46E-05	7.51E-04	3.78E-04	6.67E-07	5.65E-05	21.1	7.95E-03	4.70E-04
SI42_W	0.75	20	0	1	6.78E-02	8.50E-02	1.28E-04	4.29E-03	3.95E-03	1.36E-04	2.55E-05	7.77E-04	3.91E-04	6.91E-07	5.84E-05	21.8	8.23E-03	4.86E-04
SI42_W	0.75	22	0	1	7.35E-02	9.22E-02	1.39E-04	4.66E-03	4.28E-03	1.48E-04	2.77E-05	8.43E-04	4.24E-04	7.49E-07	6.34E-05	23.6	8.92E-03	5.27E-04
SI42_W	0.75	27	0	1	9.07E-02	1.14E-01	1.72E-04	5.75E-03	5.29E-03	1.83E-04	3.41E-05	1.04E-03	5.24E-04	9.25E-07	7.82E-05	29.2	1.10E-02	6.51E-04
SI42_W	0.75	29	0	1	9.76E-02	1.22E-01	1.85E-04	6.19E-03	5.69E-03	1.97E-04	3.67E-05	1.12E-03	5.64E-04	9.95E-07	8.42E-05	31.4	1.18E-02	7.00E-04
SI42_W	0.75	20	0	1	6.78E-02	8.50E-02	1.28E-04	4.29E-03	3.95E-03	1.36E-04	2.55E-05	7.77E-04	3.91E-04	6.91E-07	5.84E-05	21.8	8.23E-03	4.86E-04
SI42_W	0.75	13	0	1	4.48E-02	5.62E-02	8.47E-05	2.84E-03	2.61E-03	9.02E-05	1.69E-05	5.14E-04	2.59E-04	4.56E-07	3.86E-05	14.4	5.44E-03	3.21E-04
SI42_W	0.75	11	0	1	3.79E-02	4.75E-02	7.17E-05	2.40E-03	2.21E-03	7.63E-05	1.43E-05	4.35E-04	2.19E-04	3.86E-07	3.27E-05	12.2	4.60E-03	2.72E-04
SI42_W	0.75	10	0	1	3.22E-02	4.03E-02	6.08E-05	2.04E-03	1.87E-03	6.48E-05	1.21E-05	3.69E-04	1.86E-04	3.28E-07	2.77E-05	10.3	3.90E-03	2.31E-04
SI42_W	0.75	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI42_W	0.75	6	0	1	1.95E-02	2.45E-02	3.69E-05	1.24E-03	1.14E-03	3.93E-05	7.35E-06	2.24E-04	1.13E-04	1.99E-07	1.68E-05	6.3	2.37E-03	1.40E-04
SI43_E	0.75	4	0	1	1.45E-02	1.81E-02	2.74E-05	9.16E-04	8.43E-04	2.91E-05	5.44E-06	1.66E-04	8.35E-05	1.47E-07	1.25E-05	4.7	1.76E-03	1.04E-04
SI43_E	0.75	3	0	1	9.64E-03	1.21E-02	1.82E-05	6.11E-04	5.62E-04	1.94E-05	3.63E-06	1.11E-04	5.57E-05	9.83E-08	8.31E-06	3.1	1.17E-03	6.92E-05
SI43_E	0.75	3	0	1	8.44E-03	1.06E-02	1.60E-05	5.35E-04	4.92E-04	1.70E-05	3.17E-06	9.68E-05	4.87E-05	8.60E-08	7.28E-06	2.7	1.02E-03	6.05E-05
SI43_E	0.75	2	0	1	6.03E-03	7.56E-03	1.14E-05	3.82E-04	3.51E-04	1.21E-05	2.27E-06	6.91E-05	3.48E-05	6.14E-08	5.20E-06	1.9	7.31E-04	4.32E-05
SI43_E	0.75	3	0	1	8.44E-03	1.06E-02	1.60E-05	5.35E-04	4.92E-04	1.70E-05	3.17E-06	9.68E-05	4.87E-05	8.60E-08	7.28E-06	2.7	1.02E-03	6.05E-05
SI43_E	0.75	6	0	1	2.05E-02	2.57E-02	3.88E-05	1.30E-03	1.19E-03	4.13E-05	7.71E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.49E-03	1.47E-04
SI43_E	0.75	18	0	1	6.15E-02	7.71E-02	1.16E-04	3.89E-03	3.58E-03	1.24E-04	2.31E-05	7.05E-04	3.55E-04	6.26E-07	5.30E-05	19.8	7.46E-03	4.41E-04
SI43_E	0.75	28	0	1	9.40E-02	1.18E-01	1.78E-04	5.96E-03	5.48E-03	1.89E-04	3.54E-05	1.08E-03	5.43E-04	9.58E-07	8.11E-05	30.2	1.14E-02	6.75E-04
SI43_E	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.22E-03	5.45E-04
SI43_E	0.75	19	0	1	6.27E-02	7.86E-02	1.19E-04	3.97E-03	3.65E-03	1.26E-04	2.36E-05	7.19E-04	3.62E-04	6.39E-07	5.40E-05	20.2	7.61E-03	4.50E-04
SI43_E	0.75	17	0	1	5.66E-02	7.10E-02	1.07E-04	3.59E-03	3.30E-03	1.14E-04	2.13E-05	6.50E-04	3.27E-04	5.77E-07	4.88E-05	18.2	6.88E-03	4.06E-04
SI43_E	0.75	19	0	1	6.39E-02	8.01E-02	1.21E-04	4.05E-03	3.72E-03	1.29E-04	2.40E-05	7.33E-04	3.69E-04	6.51E-07	5.51E-05	20.5	7.75E-03	4.58E-04
SI43_E	0.75	20	0	1	6.75E-02	8.46E-02	1.28E-04	4.28E-03	3.93E-03	1.36E-04	2.54E-05	7.74E-04	3.90E-04	6.88E-07	5.82E-05	21.7	8.19E-03	4.84E-04
SI43_E	0.75	20	0	1	6.87E-02	8.61E-02	1.30E-04	4.35E-03	4.00E-03	1.38E-04	2.58E-05	7.88E-04	3.97E-04	7.00E-07	5.92E-05	22.1	8.34E-03	4.93E-04
SI43_E	0.75	21	0	1	7.11E-02	8.92E-02	1.35E-04	4.51E-03	4.14E-03	1.43E-04	2.68E-05	8.16E-04	4.11E-04	7.25E-07	6.13E-05	22.9	8.63E-03	5.10E-04
SI43_E	0.75	23	0	1	7.71E-02	9.67E-02	1.46E-04	4.89E-03	4.49E-03	1.55E-04	2.90E-05	8.85E-04	4.45E-04	7.86E-07	6.65E-05	24.8	9.36E-03	5.53E-04
SI43_E	0.75	28	0	1	9.52E-02	1.19E-01	1.80E-04	6.03E-03	5.55E-03	1.92E-04	3.58E-05	1.09E-03	5.50E-04	9.70E-07	8.21E-05	30.6	1.16E-02	6.83E-04
SI43_E	0.75	30	0	1	1.02E-01	1.28E-01	1.94E-04	6.49E-03	5.97E-03	2.06E-04	3.85E-05	1.18E-03	5.92E-04	1.04E-06	8.83E-05	33.0	1.24E-02	7.35E-04
SI43_E	0.75	21	0	1	7.11E-02	8.92E-02	1.35E-04	4.51E-03	4.14E-03	1.43E-04	2.68E-05	8.16E-04	4.11E-04	7.25E-07	6.13E-05	22.9	8.63E-03	5.10E-04
SI43_E	0.75	14	0	1	4.70E-02	5.89E-02	8.89E-05	2.98E-03	2.74E-03	9.47E-05	1.77E-05	5.39E-04	2.71E-04	4.79E-07	4.05E-05	15.1	5.71E-03	3.37E-04
SI43_E	0.75	12	0	1	3.98E-02	4.99E-02	7.52E-05	2.52E-03	2.32E-03	8.01E-05	1.50E-05	4.56E-04	2.30E-04	4.05E-07	3.43E-05	12.8	4.83E-03	2.85E-04
SI43_E	0.75	10	0	1	3.37E-02	4.23E-02	6.38E-05	2.14E-03	1.97E-03	6.80E-05	1.27E-05	3.87E-04	1.95E-04	3.44E-07	2.91E-05	10.9	4.10E-03	2.42E-04
SI43_E	0.75	8	0	1	2.77E-02	3.48E-02	5.24E-05	1.76E-03	1.62E-03	5.58E-05	1.04E-05	3.18E-04	1.60E-04	2.82E-07	2.39E-05	8.9	3.36E-03	1.99E-04
SI43_E	0.75	6	0	1	2.05E-02	2.57E-02	3.88E-05	1.30E-03	1.19E-03	4.13E-05	7.71E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.49E-03	1.47E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI43_W	0.75	4	0	1	1.42E-02	1.78E-02	2.69E-05	9.00E-04	8.27E-04	2.86E-05	5.34E-06	1.63E-04	8.20E-05	1.45E-07	1.22E-05	4.6	1.72E-03	1.02E-04
SI43_W	0.75	3	0	1	9.46E-03	1.19E-02	1.79E-05	6.00E-04	5.52E-04	1.91E-05	3.56E-06	1.09E-04	5.47E-05	9.64E-08	8.16E-06	3.0	1.15E-03	6.79E-05
SI43_W	0.75	2	0	1	8.28E-03	1.04E-02	1.57E-05	5.25E-04	4.83E-04	1.67E-05	3.12E-06	9.50E-05	4.78E-05	8.44E-08	7.14E-06	2.7	1.01E-03	5.94E-05
SI43_W	0.75	2	0	1	5.91E-03	7.42E-03	1.12E-05	3.75E-04	3.45E-04	1.19E-05	2.23E-06	6.79E-05	3.42E-05	6.03E-08	5.10E-06	1.9	7.18E-04	4.24E-05
SI43_W	0.75	2	0	1	8.28E-03	1.04E-02	1.57E-05	5.25E-04	4.83E-04	1.67E-05	3.12E-06	9.50E-05	4.78E-05	8.44E-08	7.14E-06	2.7	1.01E-03	5.94E-05
SI43_W	0.75	6	0	1	2.01E-02	2.52E-02	3.80E-05	1.27E-03	1.17E-03	4.05E-05	7.57E-06	2.31E-04	1.16E-04	2.05E-07	1.73E-05	6.5	2.44E-03	1.44E-04
SI43_W	0.75	18	0	1	6.03E-02	7.57E-02	1.14E-04	3.82E-03	3.52E-03	1.22E-04	2.27E-05	6.92E-04	3.48E-04	6.15E-07	5.20E-05	19.4	7.32E-03	4.33E-04
SI43_W	0.75	27	0	1	9.23E-02	1.16E-01	1.75E-04	5.85E-03	5.38E-03	1.86E-04	3.47E-05	1.06E-03	5.33E-04	9.40E-07	7.96E-05	29.7	1.12E-02	6.62E-04
SI43_W	0.75	22	0	1	7.45E-02	9.35E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.55E-04	4.30E-04	7.59E-07	6.43E-05	24.0	9.05E-03	5.35E-04
SI43_W	0.75	18	0	1	6.15E-02	7.71E-02	1.16E-04	3.90E-03	3.58E-03	1.24E-04	2.31E-05	7.06E-04	3.55E-04	6.27E-07	5.31E-05	19.8	7.47E-03	4.41E-04
SI43_W	0.75	17	0	1	5.56E-02	6.97E-02	1.05E-04	3.52E-03	3.24E-03	1.12E-04	2.09E-05	6.38E-04	3.21E-04	5.67E-07	4.79E-05	17.9	6.75E-03	3.99E-04
SI43_W	0.75	19	0	1	6.27E-02	7.86E-02	1.19E-04	3.97E-03	3.65E-03	1.26E-04	2.36E-05	7.19E-04	3.62E-04	6.39E-07	5.41E-05	20.2	7.61E-03	4.50E-04
SI43_W	0.75	20	0	1	6.62E-02	8.31E-02	1.25E-04	4.20E-03	3.86E-03	1.33E-04	2.49E-05	7.60E-04	3.83E-04	6.75E-07	5.71E-05	21.3	8.04E-03	4.75E-04
SI43_W	0.75	20	0	1	6.74E-02	8.46E-02	1.28E-04	4.27E-03	3.93E-03	1.36E-04	2.54E-05	7.74E-04	3.89E-04	6.87E-07	5.82E-05	21.7	8.18E-03	4.84E-04
SI43_W	0.75	21	0	1	6.98E-02	8.75E-02	1.32E-04	4.42E-03	4.07E-03	1.41E-04	2.63E-05	8.01E-04	4.03E-04	7.11E-07	6.02E-05	22.5	8.47E-03	5.01E-04
SI43_W	0.75	23	0	1	7.57E-02	9.49E-02	1.43E-04	4.80E-03	4.41E-03	1.52E-04	2.85E-05	8.69E-04	4.37E-04	7.72E-07	6.53E-05	24.4	9.19E-03	5.43E-04
SI43_W	0.75	28	0	1	9.34E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.52E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI43_W	0.75	30	0	1	1.01E-01	1.26E-01	1.90E-04	6.37E-03	5.86E-03	2.03E-04	3.78E-05	1.15E-03	5.81E-04	1.02E-06	8.67E-05	32.3	1.22E-02	7.22E-04
SI43_W	0.75	21	0	1	6.98E-02	8.75E-02	1.32E-04	4.42E-03	4.07E-03	1.41E-04	2.63E-05	8.01E-04	4.03E-04	7.11E-07	6.02E-05	22.5	8.47E-03	5.01E-04
SI43_W	0.75	14	0	1	4.61E-02	5.79E-02	8.73E-05	2.92E-03	2.69E-03	9.29E-05	1.74E-05	5.29E-04	2.66E-04	4.70E-07	3.98E-05	14.8	5.60E-03	3.31E-04
SI43_W	0.75	12	0	1	3.90E-02	4.90E-02	7.38E-05	2.47E-03	2.27E-03	7.86E-05	1.47E-05	4.48E-04	2.25E-04	3.98E-07	3.37E-05	12.6	4.74E-03	2.80E-04
SI43_W	0.75	10	0	1	3.31E-02	4.15E-02	6.27E-05	2.10E-03	1.93E-03	6.67E-05	1.25E-05	3.80E-04	1.91E-04	3.38E-07	2.86E-05	10.7	4.02E-03	2.38E-04
SI43_W	0.75	8	0	1	2.72E-02	3.41E-02	5.15E-05	1.72E-03	1.59E-03	5.48E-05	1.02E-05	3.12E-04	1.57E-04	2.77E-07	2.35E-05	8.8	3.30E-03	1.95E-04
SI43_W	0.75	6	0	1	2.01E-02	2.52E-02	3.80E-05	1.27E-03	1.17E-03	4.05E-05	7.57E-06	2.31E-04	1.16E-04	2.05E-07	1.73E-05	6.5	2.44E-03	1.44E-04
SI44_E	0.75	4	0	1	1.38E-02	1.73E-02	2.61E-05	8.73E-04	8.03E-04	2.78E-05	5.19E-06	1.58E-04	7.96E-05	1.40E-07	1.19E-05	4.4	1.67E-03	9.89E-05
SI44_E	0.75	3	0	1	9.19E-03	1.15E-02	1.74E-05	5.82E-04	5.35E-04	1.85E-05	3.46E-06	1.05E-04	5.31E-05	9.36E-08	7.92E-06	3.0	1.12E-03	6.59E-05
SI44_E	0.75	2	0	1	8.04E-03	1.01E-02	1.52E-05	5.09E-04	4.68E-04	1.62E-05	3.03E-06	9.22E-05	4.64E-05	8.19E-08	6.93E-06	2.6	9.76E-04	5.77E-05
SI44_E	0.75	2	0	1	5.74E-03	7.20E-03	1.09E-05	3.64E-04	3.35E-04	1.16E-05	2.16E-06	6.59E-05	3.32E-05	5.85E-08	4.95E-06	1.8	6.97E-04	4.12E-05
SI44_E	0.75	2	0	1	8.04E-03	1.01E-02	1.52E-05	5.09E-04	4.68E-04	1.62E-05	3.03E-06	9.22E-05	4.64E-05	8.19E-08	6.93E-06	2.6	9.76E-04	5.77E-05
SI44_E	0.75	6	0	1	1.95E-02	2.45E-02	3.69E-05	1.24E-03	1.14E-03	3.93E-05	7.35E-06	2.24E-04	1.13E-04	1.99E-07	1.68E-05	6.3	2.37E-03	1.40E-04
SI44_E	0.75	17	0	1	5.86E-02	7.35E-02	1.11E-04	3.71E-03	3.41E-03	1.18E-04	2.20E-05	6.72E-04	3.38E-04	5.97E-07	5.05E-05	18.8	7.11E-03	4.20E-04
SI44_E	0.75	27	0	1	8.96E-02	1.12E-01	1.69E-04	5.68E-03	5.22E-03	1.80E-04	3.37E-05	1.03E-03	5.17E-04	9.13E-07	7.73E-05	28.8	1.09E-02	6.43E-04
SI44_E	0.75	22	0	1	7.23E-02	9.07E-02	1.37E-04	4.58E-03	4.22E-03	1.46E-04	2.72E-05	8.30E-04	4.18E-04	7.37E-07	6.24E-05	23.3	8.78E-03	5.19E-04
SI44_E	0.75	18	0	1	5.97E-02	7.49E-02	1.13E-04	3.78E-03	3.48E-03	1.20E-04	2.25E-05	6.85E-04	3.45E-04	6.09E-07	5.15E-05	19.2	7.25E-03	4.29E-04
SI44_E	0.75	16	0	1	5.40E-02	6.77E-02	1.02E-04	3.42E-03	3.15E-03	1.09E-04	2.03E-05	6.19E-04	3.12E-04	5.50E-07	4.66E-05	17.4	6.55E-03	3.87E-04
SI44_E	0.75	18	0	1	6.09E-02	7.63E-02	1.15E-04	3.86E-03	3.55E-03	1.23E-04	2.29E-05	6.98E-04	3.52E-04	6.20E-07	5.25E-05	19.6	7.39E-03	4.37E-04
SI44_E	0.75	19	0	1	6.43E-02	8.07E-02	1.22E-04	4.08E-03	3.75E-03	1.30E-04	2.42E-05	7.38E-04	3.71E-04	6.55E-07	5.55E-05	20.7	7.81E-03	4.61E-04
SI44_E	0.75	19	0	1	6.55E-02	8.21E-02	1.24E-04	4.15E-03	3.81E-03	1.32E-04	2.46E-05	7.51E-04	3.78E-04	6.67E-07	5.65E-05	21.1	7.95E-03	4.70E-04
SI44_E	0.75	20	0	1	6.78E-02	8.50E-02	1.28E-04	4.29E-03	3.95E-03	1.36E-04	2.55E-05	7.77E-04	3.91E-04	6.91E-07	5.84E-05	21.8	8.23E-03	4.86E-04
SI44_E	0.75	22	0	1	7.35E-02	9.22E-02	1.39E-04	4.66E-03	4.28E-03	1.48E-04	2.77E-05	8.43E-04	4.24E-04	7.49E-07	6.34E-05	23.6	8.92E-03	5.27E-04
SI44_E	0.75	27	0	1	9.07E-02	1.14E-01	1.72E-04	5.75E-03	5.29E-03	1.83E-04	3.41E-05	1.04E-03	5.24E-04	9.25E-07	7.82E-05	29.2	1.10E-02	6.51E-04
SI44_E	0.75	29	0	1	9.76E-02	1.22E-01	1.85E-04	6.19E-03	5.69E-03	1.97E-04	3.67E-05	1.12E-03	5.64E-04	9.95E-07	8.42E-05	31.4	1.18E-02	7.00E-04
SI44_E	0.75	20	0	1	6.78E-02	8.50E-02	1.28E-04	4.29E-03	3.95E-03	1.36E-04	2.55E-05	7.77E-04	3.91E-04	6.91E-07	5.84E-05	21.8	8.23E-03	4.86E-04
SI44_E	0.75	13	0	1	4.48E-02	5.62E-02	8.47E-05	2.84E-03	2.61E-03	9.02E-05	1.69E-05	5.14E-04	2.59E-04	4.56E-07	3.86E-05	14.4	5.44E-03	3.21E-04
SI44_E	0.75	11	0	1	3.79E-02	4.75E-02	7.17E-05	2.40E-03	2.21E-03	7.63E-05	1.43E-05	4.35E-04	2.19E-04	3.86E-07	3.27E-05	12.2	4.60E-03	2.72E-04
SI44_E	0.75	10	0	1	3.22E-02	4.03E-02	6.08E-05	2.04E-03	1.87E-03	6.48E-05	1.21E-05	3.69E-04	1.86E-04	3.28E-07	2.77E-05	10.3	3.90E-03	2.31E-04
SI44_E	0.75	8	0	1	2.64E-02	3.31E-02	5.00E-05	1.67E-03	1.54E-03	5.32E-05	9.94E-06	3.03E-04	1.53E-04	2.69E-07	2.28E-05	8.5	3.21E-03	1.90E-04
SI44_E	0.75	6	0	1	1.95E-02	2.45E-02	3.69E-05	1.24E-03	1.14E-03	3.93E-05	7.35E-06	2.24E-04	1.13E-04	1.99E-07	1.68E-05	6.3	2.37E-03	1.40E-04
SI44_W	0.75	4	0	1	1.46E-02	1.83E-02	2.76E-05	9.26E-04	8.51E-04	2.94E-05	5.50E-06	1.68E-04	8.44E-05	1.49E-07	1.26E-05	4.7	1.77E-03	1.05E-04
SI44_W	0.75	3	0	1	9.74E-03	1.22E-02	1.84E-05	6.17E-04	5.68E-04	1.96E-05	3.67E-06	1.12E-04	5.62E-05	9.93E-08	8.40E-06	3.1	1.18E-03	6.99E-05
SI44_W	0.75	3	0	1	8.52E-03	1.07E-02	1.61E-05	5.40E-04	4.97E-04	1.72E-05	3.21E-06	9.78E-05	4.92E-05	8.68E-08	7.35E-06	2.7	1.03E-03	6.12E-05
SI44_W	0.75	2	0	1	6.09E-03	7.63E-03	1.15E-05	3.86E-04	3.55E-04	1.23E-05	2.29E-06	6.98E-05	3.52E-05	6.20E-08	5.25E-06	2.0	7.39E-04	4.37E-05
SI44_W	0.75	3	0	1	8.52E-03	1.07E-02	1.61E-05	5.40E-04	4.97E-04	1.72E-05	3.21E-06	9.78E-05	4.92E-05	8.68E-08	7.35E-06	2.7	1.03E-03	6.12E-05
SI44_W	0.75	6	0	1	2.07E-02	2.60E-02	3.92E-05	1.31E-03	1.21E-03	4.17E-05	7.79E-06	2.37E-04	1.20E-04	2.11E-07	1.78E-05	6.7	2.51E-03	1.49E-04
SI44_W	0.75	18	0	1	6.21E-02	7.79E-02	1.17E-04	3.93E-03	3.62E-03	1.25E-04	2.34E-05	7.12E-04	3.59E-04	6.33E-07	5.35E-05	20.0	7.54E-03	4.46E-04
SI44_W	0.75	28	0	1	9.50E-02	1.19E-01	1.80E-04	6.02E-03	5.53E-03	1.91E-04	3.57E-05	1.09E-03	5.48E-04	9.68E-07	8.19E-05	30.5	1.15E-02	6.81E-04
SI44_W	0.75	23	0	1	7.67E-02	9.62E-02	1.45E-04	4.86E-03	4.47E-03	1.54E-04	2.89E-05	8.80E-04	4.43E-04	7.82E-07	6.61E-05	24.7	9.31E-03	5.50E-04
SI44_W	0.75	19	0	1	6.33E-02	7.94E-02	1.20E-04	4.01E-03	3.69E-03	1.28E-04	2.38E-05	7.26E-04	3.66E-04	6.45E-07	5.46E-05	20.4	7.68E-03	4.54E-04
SI44_W	0.75	17	0	1	5.72E-02	7.18E-02	1.08E-04	3.63E-03	3.33E-03	1.15E-04	2.15E-05	6.56E-04	3.30E-04	5.83E-07	4.93E-05	18.4	6.95E-03	4.11E-04
SI44_W	0.75	19	0	1	6.45E-02	8.09E-02	1.22E-04	4.09E-03	3.76E-03	1.30E-04	2.43E-05	7.40E-04	3.73E-04	6.58E-07	5.56E-05	20.8	7.83E-03	4.63E-04
SI44_W	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04
SI44_W	0.75	21	0	1	6.94E-02	8.70E-02	1.31E-04	4.40E-03	4.04E-03	1.40E-04	2.61E-05	7.96E-04	4.01E-04	7.07E-07	5.98E-05	22.3	8.42E-03	4.98E-04
SI44_W	0.75	21	0	1	7.18E-02	9.01E-02	1.36E-04	4.55E-03	4.19E-03	1.45E-04	2.70E-05	8.24E-04	4.15E-04	7.32E-07	6.19E-05	23.1	8.72E-03	5.15E-04
SI44_W	0.75	23	0	1	7.79E-02	9.77E-02	1.47E-04	4.94E-03	4.54E-03	1.57E-04	2.93E-05	8.94E-04	4.50E-04	7.94E-07	6.72E-05	25.1	9.46E-03	5.59E-04
SI44_W	0.75	29	0	1	9.62E-02	1.21E-01	1.82E-04	6.09E-03	5.60E-03	1.94E-04	3.62E-05	1.10E-03	5.55E-04	9.80E-07	8.29E-05	30.9	1.17E-02	6.90E-04
SI44_W	0.75	31	0	1	1.03E-01	1.30E-01	1.96E-04	6.56E-03	6.03E-03	2.08E-04	3.89E-05	1.19E-03	5.98E-04	1.05E-06	8.92E-05	33.3	1.26E-02	7.43E-04
SI44_W	0.75	21	0	1	7.18E-02	9.01E-02	1.36E-04	4.55E-03	4.19E-03	1.45E-04	2.70E-05	8.24E-04	4.15E-04	7.32E-07	6.19E-05	23.1	8.72E-03	5.15E-04
SI44_W	0.75	14	0	1	4.75E-02	5.95E-02	8.98E-05	3.01E-03	2.77E-03	9.56E-05	1.79E-05	5.45E-04	2.74E-04	4.84E-07	4.09E-05	15.3	5.76E-03	3.41E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_W	0.75	12	0	1	4.02E-02	5.04E-02	7.60E-05	2.55E-03	2.34E-03	8.09E-05	1.51E-05	4.61E-04	2.32E-04	4.09E-07	3.46E-05	12.9	4.88E-03	2.88E-04
SI44_W	0.75	10	0	1	3.41E-02	4.28E-02	6.45E-05	2.16E-03	1.99E-03	6.87E-05	1.28E-05	3.91E-04	1.97E-04	3.47E-07	2.94E-05	11.0	4.14E-03	2.45E-04
SI44_W	0.75	8	0	1	2.80E-02	3.51E-02	5.30E-05	1.77E-03	1.63E-03	5.64E-05	1.05E-05	3.21E-04	1.62E-04	2.85E-07	2.41E-05	9.0	3.40E-03	2.01E-04
SI44_W	0.75	6	0	1	2.07E-02	2.60E-02	3.92E-05	1.31E-03	1.21E-03	4.17E-05	7.79E-06	2.37E-04	1.20E-04	2.11E-07	1.78E-05	6.7	2.51E-03	1.49E-04
SI45_E	0.75	4	0	1	1.46E-02	1.83E-02	2.76E-05	9.26E-04	8.51E-04	2.94E-05	5.50E-06	1.68E-04	8.44E-05	1.49E-07	1.26E-05	4.7	1.77E-03	1.05E-04
SI45_E	0.75	3	0	1	9.74E-03	1.22E-02	1.84E-05	6.17E-04	5.68E-04	1.96E-05	3.67E-06	1.12E-04	5.62E-05	9.93E-08	8.40E-06	3.1	1.18E-03	6.99E-05
SI45_E	0.75	3	0	1	8.52E-03	1.07E-02	1.61E-05	5.40E-04	4.97E-04	1.72E-05	3.21E-06	9.78E-05	4.92E-05	8.68E-08	7.35E-06	2.7	1.03E-03	6.12E-05
SI45_E	0.75	2	0	1	6.09E-03	7.63E-03	1.15E-05	3.86E-04	3.55E-04	1.23E-05	2.29E-06	6.98E-05	3.52E-05	6.20E-08	5.25E-06	2.0	7.39E-04	4.37E-05
SI45_E	0.75	3	0	1	8.52E-03	1.07E-02	1.61E-05	5.40E-04	4.97E-04	1.72E-05	3.21E-06	9.78E-05	4.92E-05	8.68E-08	7.35E-06	2.7	1.03E-03	6.12E-05
SI45_E	0.75	6	0	1	2.07E-02	2.60E-02	3.92E-05	1.31E-03	1.21E-03	4.17E-05	7.79E-06	2.37E-04	1.20E-04	2.11E-07	1.78E-05	6.7	2.51E-03	1.49E-04
SI45_E	0.75	18	0	1	6.21E-02	7.79E-02	1.17E-04	3.93E-03	3.62E-03	1.25E-04	2.34E-05	7.12E-04	3.59E-04	6.33E-07	5.35E-05	20.0	7.54E-03	4.46E-04
SI45_E	0.75	28	0	1	9.50E-02	1.19E-01	1.80E-04	6.02E-03	5.53E-03	1.91E-04	3.57E-05	1.09E-03	5.48E-04	9.68E-07	8.19E-05	30.5	1.15E-02	6.81E-04
SI45_E	0.75	23	0	1	7.67E-02	9.62E-02	1.45E-04	4.86E-03	4.47E-03	1.54E-04	2.89E-05	8.80E-04	4.43E-04	7.82E-07	6.61E-05	24.7	9.31E-03	5.50E-04
SI45_E	0.75	19	0	1	6.33E-02	7.94E-02	1.20E-04	4.01E-03	3.69E-03	1.28E-04	2.38E-05	7.26E-04	3.66E-04	6.45E-07	5.46E-05	20.4	7.68E-03	4.54E-04
SI45_E	0.75	17	0	1	5.72E-02	7.18E-02	1.08E-04	3.63E-03	3.33E-03	1.15E-04	2.15E-05	6.56E-04	3.30E-04	5.83E-07	4.93E-05	18.4	6.95E-03	4.11E-04
SI45_E	0.75	19	0	1	6.45E-02	8.09E-02	1.22E-04	4.09E-03	3.76E-03	1.30E-04	2.43E-05	7.40E-04	3.73E-04	6.58E-07	5.56E-05	20.8	7.83E-03	4.63E-04
SI45_E	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04
SI45_E	0.75	21	0	1	6.94E-02	8.70E-02	1.31E-04	4.40E-03	4.04E-03	1.40E-04	2.61E-05	7.96E-04	4.01E-04	7.07E-07	5.98E-05	22.3	8.42E-03	4.98E-04
SI45_E	0.75	21	0	1	7.18E-02	9.01E-02	1.36E-04	4.55E-03	4.19E-03	1.45E-04	2.70E-05	8.24E-04	4.15E-04	7.32E-07	6.19E-05	23.1	8.72E-03	5.15E-04
SI45_E	0.75	23	0	1	7.79E-02	9.77E-02	1.47E-04	4.94E-03	4.54E-03	1.57E-04	2.93E-05	8.94E-04	4.50E-04	7.94E-07	6.72E-05	25.1	9.46E-03	5.59E-04
SI45_E	0.75	29	0	1	9.62E-02	1.21E-01	1.82E-04	6.09E-03	5.60E-03	1.94E-04	3.62E-05	1.10E-03	5.55E-04	9.80E-07	8.29E-05	30.9	1.17E-02	6.90E-04
SI45_E	0.75	31	0	1	1.03E-01	1.30E-01	1.96E-04	6.56E-03	6.03E-03	2.08E-04	3.89E-05	1.19E-03	5.98E-04	1.05E-06	8.92E-05	33.3	1.26E-02	7.43E-04
SI45_E	0.75	21	0	1	7.18E-02	9.01E-02	1.36E-04	4.55E-03	4.19E-03	1.45E-04	2.70E-05	8.24E-04	4.15E-04	7.32E-07	6.19E-05	23.1	8.72E-03	5.15E-04
SI45_E	0.75	14	0	1	4.75E-02	5.95E-02	8.98E-05	3.01E-03	2.77E-03	9.56E-05	1.79E-05	5.45E-04	2.74E-04	4.84E-07	4.09E-05	15.3	5.76E-03	3.41E-04
SI45_E	0.75	12	0	1	4.02E-02	5.04E-02	7.60E-05	2.55E-03	2.34E-03	8.09E-05	1.51E-05	4.61E-04	2.32E-04	4.09E-07	3.46E-05	12.9	4.88E-03	2.88E-04
SI45_E	0.75	10	0	1	3.41E-02	4.28E-02	6.45E-05	2.16E-03	1.99E-03	6.87E-05	1.28E-05	3.91E-04	1.97E-04	3.47E-07	2.94E-05	11.0	4.14E-03	2.45E-04
SI45_E	0.75	8	0	1	2.80E-02	3.51E-02	5.30E-05	1.77E-03	1.63E-03	5.64E-05	1.05E-05	3.21E-04	1.62E-04	2.85E-07	2.41E-05	9.0	3.40E-03	2.01E-04
SI45_E	0.75	6	0	1	2.07E-02	2.60E-02	3.92E-05	1.31E-03	1.21E-03	4.17E-05	7.79E-06	2.37E-04	1.20E-04	2.11E-07	1.78E-05	6.7	2.51E-03	1.49E-04
SI45_W	0.75	4	0	1	1.18E-02	1.48E-02	2.24E-05	7.50E-04	6.90E-04	2.38E-05	4.45E-06	1.36E-04	6.84E-05	1.21E-07	1.02E-05	3.8	1.44E-03	8.49E-05
SI45_W	0.75	2	0	1	7.89E-03	9.90E-03	1.49E-05	5.00E-04	4.60E-04	1.59E-05	2.97E-06	9.05E-05	4.56E-05	8.04E-08	6.81E-06	2.5	9.58E-04	5.66E-05
SI45_W	0.75	2	0	1	6.91E-03	8.66E-03	1.31E-05	4.38E-04	4.02E-04	1.39E-05	2.60E-06	7.92E-05	3.99E-05	7.04E-08	5.96E-06	2.2	8.38E-04	4.96E-05
SI45_W	0.75	1	0	1	4.93E-03	6.19E-03	9.33E-06	3.13E-04	2.87E-04	9.94E-06	1.86E-06	5.66E-05	2.85E-05	5.03E-08	4.25E-06	1.6	5.99E-04	3.54E-05
SI45_W	0.75	2	0	1	6.91E-03	8.66E-03	1.31E-05	4.38E-04	4.02E-04	1.39E-05	2.60E-06	7.92E-05	3.99E-05	7.04E-08	5.96E-06	2.2	8.38E-04	4.96E-05
SI45_W	0.75	5	0	1	1.68E-02	2.10E-02	3.17E-05	1.06E-03	9.77E-04	3.38E-05	6.31E-06	1.92E-04	9.69E-05	1.71E-07	1.45E-05	5.4	2.04E-03	1.20E-04
SI45_W	0.75	15	0	1	5.03E-02	6.31E-02	9.52E-05	3.19E-03	2.93E-03	1.01E-04	1.89E-05	5.77E-04	2.91E-04	5.13E-07	4.34E-05	16.2	6.11E-03	3.61E-04
SI45_W	0.75	23	0	1	7.69E-02	9.65E-02	1.46E-04	4.88E-03	4.48E-03	1.55E-04	2.90E-05	8.83E-04	4.44E-04	7.84E-07	6.64E-05	24.8	9.34E-03	5.52E-04
SI45_W	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI45_W	0.75	15	0	1	5.13E-02	6.43E-02	9.70E-05	3.25E-03	2.99E-03	1.03E-04	1.93E-05	5.89E-04	2.96E-04	5.23E-07	4.42E-05	16.5	6.23E-03	3.68E-04
SI45_W	0.75	14	0	1	4.64E-02	5.81E-02	8.77E-05	2.94E-03	2.70E-03	9.34E-05	1.74E-05	5.32E-04	2.68E-04	4.73E-07	4.00E-05	14.9	5.63E-03	3.33E-04
SI45_W	0.75	16	0	1	5.23E-02	6.56E-02	9.89E-05	3.31E-03	3.05E-03	1.05E-04	1.97E-05	6.00E-04	3.02E-04	5.33E-07	4.51E-05	16.8	6.35E-03	3.75E-04
SI45_W	0.75	16	0	1	5.52E-02	6.93E-02	1.05E-04	3.50E-03	3.22E-03	1.11E-04	2.08E-05	6.34E-04	3.19E-04	5.63E-07	4.76E-05	17.8	6.71E-03	3.96E-04
SI45_W	0.75	17	0	1	5.62E-02	7.05E-02	1.06E-04	3.56E-03	3.28E-03	1.13E-04	2.12E-05	6.45E-04	3.25E-04	5.73E-07	4.85E-05	18.1	6.83E-03	4.03E-04
SI45_W	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.68E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.07E-03	4.18E-04
SI45_W	0.75	19	0	1	6.31E-02	7.92E-02	1.19E-04	4.00E-03	3.68E-03	1.27E-04	2.38E-05	7.24E-04	3.65E-04	6.43E-07	5.45E-05	20.3	7.66E-03	4.53E-04
SI45_W	0.75	23	0	1	7.79E-02	9.77E-02	1.47E-04	4.94E-03	4.54E-03	1.57E-04	2.93E-05	8.94E-04	4.50E-04	7.94E-07	6.72E-05	25.1	9.46E-03	5.59E-04
SI45_W	0.75	25	0	1	8.38E-02	1.05E-01	1.59E-04	5.31E-03	4.89E-03	1.69E-04	3.16E-05	9.62E-04	4.84E-04	8.55E-07	7.23E-05	27.0	1.02E-02	6.02E-04
SI45_W	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.68E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.07E-03	4.18E-04
SI45_W	0.75	11	0	1	3.85E-02	4.83E-02	7.28E-05	2.44E-03	2.24E-03	7.75E-05	1.45E-05	4.41E-04	2.22E-04	3.92E-07	3.32E-05	12.4	4.67E-03	2.76E-04
SI45_W	0.75	10	0	1	3.26E-02	4.08E-02	6.16E-05	2.06E-03	1.90E-03	6.56E-05	1.23E-05	3.73E-04	1.88E-04	3.32E-07	2.81E-05	10.5	3.95E-03	2.34E-04
SI45_W	0.75	8	0	1	2.76E-02	3.46E-02	5.23E-05	1.75E-03	1.61E-03	5.56E-05	1.04E-05	3.17E-04	1.60E-04	2.82E-07	2.38E-05	8.9	3.35E-03	1.98E-04
SI45_W	0.75	7	0	1	2.27E-02	2.85E-02	4.29E-05	1.44E-03	1.32E-03	4.57E-05	8.54E-06	2.60E-04	1.31E-04	2.31E-07	1.96E-05	7.3	2.75E-03	1.63E-04
SI45_W	0.75	5	0	1	1.68E-02	2.10E-02	3.17E-05	1.06E-03	9.77E-04	3.38E-05	6.31E-06	1.92E-04	9.69E-05	1.71E-07	1.45E-05	5.4	2.04E-03	1.20E-04
SI46_E	0.75	4	0	1	1.18E-02	1.48E-02	2.24E-05	7.50E-04	6.90E-04	2.38E-05	4.45E-06	1.36E-04	6.84E-05	1.21E-07	1.02E-05	3.8	1.44E-03	8.49E-05
SI46_E	0.75	2	0	1	7.89E-03	9.90E-03	1.49E-05	5.00E-04	4.60E-04	1.59E-05	2.97E-06	9.05E-05	4.56E-05	8.04E-08	6.81E-06	2.5	9.58E-04	5.66E-05
SI46_E	0.75	2	0	1	6.91E-03	8.66E-03	1.31E-05	4.38E-04	4.02E-04	1.39E-05	2.60E-06	7.92E-05	3.99E-05	7.04E-08	5.96E-06	2.2	8.38E-04	4.96E-05
SI46_E	0.75	1	0	1	4.93E-03	6.19E-03	9.33E-06	3.13E-04	2.87E-04	9.94E-06	1.86E-06	5.66E-05	2.85E-05	5.03E-08	4.25E-06	1.6	5.99E-04	3.54E-05
SI46_E	0.75	2	0	1	6.91E-03	8.66E-03	1.31E-05	4.38E-04	4.02E-04	1.39E-05	2.60E-06	7.92E-05	3.99E-05	7.04E-08	5.96E-06	2.2	8.38E-04	4.96E-05
SI46_E	0.75	5	0	1	1.68E-02	2.10E-02	3.17E-05	1.06E-03	9.77E-04	3.38E-05	6.31E-06	1.92E-04	9.69E-05	1.71E-07	1.45E-05	5.4	2.04E-03	1.20E-04
SI46_E	0.75	15	0	1	5.03E-02	6.31E-02	9.52E-05	3.19E-03	2.93E-03	1.01E-04	1.89E-05	5.77E-04	2.91E-04	5.13E-07	4.34E-05	16.2	6.11E-03	3.61E-04
SI46_E	0.75	23	0	1	7.69E-02	9.65E-02	1.46E-04	4.88E-03	4.48E-03	1.55E-04	2.90E-05	8.83E-04	4.44E-04	7.84E-07	6.64E-05	24.8	9.34E-03	5.52E-04
SI46_E	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI46_E	0.75	15	0	1	5.13E-02	6.43E-02	9.70E-05	3.25E-03	2.99E-03	1.03E-04	1.93E-05	5.89E-04	2.96E-04	5.23E-07	4.42E-05	16.5	6.23E-03	3.68E-04
SI46_E	0.75	14	0	1	4.64E-02	5.81E-02	8.77E-05	2.94E-03	2.70E-03	9.34E-05	1.74E-05	5.32E-04	2.68E-04	4.73E-07	4.00E-05	14.9	5.63E-03	3.33E-04
SI46_E	0.75	16	0	1	5.23E-02	6.56E-02	9.89E-05	3.31E-03	3.05E-03	1.05E-04	1.97E-05	6.00E-04	3.02E-04	5.33E-07	4.51E-05	16.8	6.35E-03	3.75E-04
SI46_E	0.75	16	0	1	5.52E-02	6.93E-02	1.05E-04	3.50E-03	3.22E-03	1.11E-04	2.08E-05	6.34E-04	3.19E-04	5.63E-07	4.76E-05	17.8	6.71E-03	3.96E-04
SI46_E	0.75	17	0	1	5.62E-02	7.05E-02	1.06E-04	3.56E-03	3.28E-03	1.13E-04	2.12E-05	6.45E-04	3.25E-04	5.73E-07	4.85E-05	18.1	6.83E-03	4.03E-04
SI46_E	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.68E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.07E-03	4.18E-04
SI46_E	0.75	19	0	1	6.31E-02	7.92E-02	1.19E-04	4.00E-03	3.68E-03	1.27E-04	2.38E-05	7.24E-04	3.65E-04	6.43E-07	5.45E-05	20.3	7.66E-03	4.53E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_E	0.75	23	0	1	7.79E-02	9.77E-02	1.47E-04	4.94E-03	4.54E-03	1.57E-04	2.93E-05	8.94E-04	4.50E-04	7.94E-07	6.72E-05	25.1	9.46E-03	5.59E-04
SI46_E	0.75	25	0	1	8.38E-02	1.05E-01	1.59E-04	5.31E-03	4.89E-03	1.69E-04	3.16E-05	9.62E-04	4.84E-04	8.55E-07	7.23E-05	27.0	1.02E-02	6.02E-04
SI46_E	0.75	17	0	1	5.82E-02	7.30E-02	1.10E-04	3.69E-03	3.39E-03	1.17E-04	2.19E-05	6.68E-04	3.36E-04	5.93E-07	5.02E-05	18.7	7.07E-03	4.18E-04
SI46_E	0.75	11	0	1	3.85E-02	4.83E-02	7.28E-05	2.44E-03	2.24E-03	7.75E-05	1.45E-05	4.41E-04	2.22E-04	3.92E-07	3.32E-05	12.4	4.67E-03	2.76E-04
SI46_E	0.75	10	0	1	3.26E-02	4.08E-02	6.16E-05	2.06E-03	1.90E-03	6.56E-05	1.23E-05	3.73E-04	1.88E-04	3.32E-07	2.81E-05	10.5	3.95E-03	2.34E-04
SI46_E	0.75	8	0	1	2.76E-02	3.46E-02	5.23E-05	1.75E-03	1.61E-03	5.56E-05	1.04E-05	3.17E-04	1.60E-04	2.82E-07	2.38E-05	8.9	3.35E-03	1.98E-04
SI46_E	0.75	7	0	1	2.27E-02	2.85E-02	4.29E-05	1.44E-03	1.32E-03	4.57E-05	8.54E-06	2.60E-04	1.31E-04	2.31E-07	1.96E-05	7.3	2.75E-03	1.63E-04
SI46_E	0.75	5	0	1	1.68E-02	2.10E-02	3.17E-05	1.06E-03	9.77E-04	3.38E-05	6.31E-06	1.92E-04	9.69E-05	1.71E-07	1.45E-05	5.4	2.04E-03	1.20E-04
SI46_W	0.75	5	0	1	1.54E-02	1.94E-02	2.92E-05	9.78E-04	9.00E-04	3.11E-05	5.81E-06	1.77E-04	8.92E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI46_W	0.75	3	0	1	1.03E-02	1.29E-02	1.95E-05	6.52E-04	6.00E-04	2.07E-05	3.87E-06	1.18E-04	5.94E-05	1.05E-07	8.88E-06	3.3	1.25E-03	7.39E-05
SI46_W	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI46_W	0.75	2	0	1	6.43E-03	8.07E-03	1.22E-05	4.08E-04	3.75E-04	1.30E-05	2.42E-06	7.38E-05	3.72E-05	6.56E-08	5.55E-06	2.1	7.81E-04	4.62E-05
SI46_W	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI46_W	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI46_W	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.97E-03	4.71E-04
SI46_W	0.75	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.36E-03	5.85E-03	2.02E-04	3.78E-05	1.15E-03	5.80E-04	1.02E-06	8.65E-05	32.3	1.22E-02	7.20E-04
SI46_W	0.75	24	0	1	8.11E-02	1.02E-01	1.53E-04	5.14E-03	4.72E-03	1.63E-04	3.05E-05	9.30E-04	4.68E-04	8.26E-07	6.99E-05	26.1	9.84E-03	5.82E-04
SI46_W	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.68E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI46_W	0.75	18	0	1	6.05E-02	7.58E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.28E-05	6.94E-04	3.49E-04	6.16E-07	5.22E-05	19.5	7.34E-03	4.34E-04
SI46_W	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04
SI46_W	0.75	21	0	1	7.20E-02	9.04E-02	1.36E-04	4.57E-03	4.20E-03	1.45E-04	2.71E-05	8.27E-04	4.16E-04	7.34E-07	6.21E-05	23.2	8.75E-03	5.17E-04
SI46_W	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI46_W	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI46_W	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI46_W	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.82E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI46_W	0.75	33	0	1	1.09E-01	1.37E-01	2.07E-04	6.93E-03	6.37E-03	2.20E-04	4.12E-05	1.25E-03	6.32E-04	1.11E-06	9.43E-05	35.2	1.33E-02	7.85E-04
SI46_W	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI46_W	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.76E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI46_W	0.75	13	0	1	4.25E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI46_W	0.75	11	0	1	3.60E-02	4.52E-02	6.82E-05	2.28E-03	2.10E-03	7.26E-05	1.36E-05	4.13E-04	2.08E-04	3.67E-07	3.11E-05	11.6	4.37E-03	2.59E-04
SI46_W	0.75	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.72E-03	5.96E-05	1.11E-05	3.39E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.12E-04
SI46_W	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI47_E	0.75	5	0	1	1.54E-02	1.94E-02	2.92E-05	9.78E-04	9.00E-04	3.11E-05	5.81E-06	1.77E-04	8.92E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI47_E	0.75	3	0	1	1.03E-02	1.29E-02	1.95E-05	6.52E-04	6.00E-04	2.07E-05	3.87E-06	1.18E-04	5.94E-05	1.05E-07	8.88E-06	3.3	1.25E-03	7.39E-05
SI47_E	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI47_E	0.75	2	0	1	6.43E-03	8.07E-03	1.22E-05	4.08E-04	3.75E-04	1.30E-05	2.42E-06	7.38E-05	3.72E-05	6.56E-08	5.55E-06	2.1	7.81E-04	4.62E-05
SI47_E	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI47_E	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI47_E	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.97E-03	4.71E-04
SI47_E	0.75	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.36E-03	5.85E-03	2.02E-04	3.78E-05	1.15E-03	5.80E-04	1.02E-06	8.65E-05	32.3	1.22E-02	7.20E-04
SI47_E	0.75	24	0	1	8.11E-02	1.02E-01	1.53E-04	5.14E-03	4.72E-03	1.63E-04	3.05E-05	9.30E-04	4.68E-04	8.26E-07	6.99E-05	26.1	9.84E-03	5.82E-04
SI47_E	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.68E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI47_E	0.75	18	0	1	6.05E-02	7.58E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.28E-05	6.94E-04	3.49E-04	6.16E-07	5.22E-05	19.5	7.34E-03	4.34E-04
SI47_E	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04
SI47_E	0.75	21	0	1	7.20E-02	9.04E-02	1.36E-04	4.57E-03	4.20E-03	1.45E-04	2.71E-05	8.27E-04	4.16E-04	7.34E-07	6.21E-05	23.2	8.75E-03	5.17E-04
SI47_E	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI47_E	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI47_E	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI47_E	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.82E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI47_E	0.75	33	0	1	1.09E-01	1.37E-01	2.07E-04	6.93E-03	6.37E-03	2.20E-04	4.12E-05	1.25E-03	6.32E-04	1.11E-06	9.43E-05	35.2	1.33E-02	7.85E-04
SI47_E	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI47_E	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.76E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI47_E	0.75	13	0	1	4.25E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI47_E	0.75	11	0	1	3.60E-02	4.52E-02	6.82E-05	2.28E-03	2.10E-03	7.26E-05	1.36E-05	4.13E-04	2.08E-04	3.67E-07	3.11E-05	11.6	4.37E-03	2.59E-04
SI47_E	0.75	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.72E-03	5.96E-05	1.11E-05	3.39E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.12E-04
SI47_E	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI47_W	0.75	5	0	1	1.54E-02	1.94E-02	2.92E-05	9.78E-04	9.00E-04	3.11E-05	5.81E-06	1.77E-04	8.92E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI47_W	0.75	3	0	1	1.03E-02	1.29E-02	1.95E-05	6.52E-04	6.00E-04	2.07E-05	3.87E-06	1.18E-04	5.94E-05	1.05E-07	8.88E-06	3.3	1.25E-03	7.39E-05
SI47_W	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI47_W	0.75	2	0	1	6.43E-03	8.07E-03	1.22E-05	4.08E-04	3.75E-04	1.30E-05	2.42E-06	7.38E-05	3.72E-05	6.56E-08	5.55E-06	2.1	7.81E-04	4.62E-05
SI47_W	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI47_W	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI47_W	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.97E-03	4.71E-04
SI47_W	0.75	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.36E-03	5.85E-03	2.02E-04	3.78E-05	1.15E-03	5.80E-04	1.02E-06	8.65E-05	32.3	1.22E-02	7.20E-04
SI47_W	0.75	24	0	1	8.11E-02	1.02E-01	1.53E-04	5.14E-03	4.72E-03	1.63E-04	3.05E-05	9.30E-04	4.68E-04	8.26E-07	6.99E-05	26.1	9.84E-03	5.82E-04
SI47_W	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.68E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI47_W	0.75	18	0	1	6.05E-02	7.58E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.28E-05	6.94E-04	3.49E-04	6.16E-07	5.22E-05	19.5	7.34E-03	4.34E-04
SI47_W	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI47_W	0.75	21	0	1	7.20E-02	9.04E-02	1.36E-04	4.57E-03	4.20E-03	1.45E-04	2.71E-05	8.27E-04	4.16E-04	7.34E-07	6.21E-05	23.2	8.75E-03	5.17E-04
SI47_W	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI47_W	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI47_W	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI47_W	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.82E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI47_W	0.75	33	0	1	1.09E-01	1.37E-01	2.07E-04	6.93E-03	6.37E-03	2.20E-04	4.12E-05	1.25E-03	6.32E-04	1.11E-06	9.43E-05	35.2	1.33E-02	7.85E-04
SI47_W	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI47_W	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.76E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI47_W	0.75	13	0	1	4.25E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI47_W	0.75	11	0	1	3.60E-02	4.52E-02	6.82E-05	2.28E-03	2.10E-03	7.26E-05	1.36E-05	4.13E-04	2.08E-04	3.67E-07	3.11E-05	11.6	4.37E-03	2.59E-04
SI47_W	0.75	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.72E-03	5.96E-05	1.11E-05	3.39E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.12E-04
SI47_W	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI48_E	0.75	5	0	1	1.54E-02	1.94E-02	2.92E-05	9.78E-04	9.00E-04	3.11E-05	5.81E-06	1.77E-04	8.92E-05	1.57E-07	1.33E-05	5.0	1.87E-03	1.11E-04
SI48_E	0.75	3	0	1	1.03E-02	1.29E-02	1.95E-05	6.52E-04	6.00E-04	2.07E-05	3.87E-06	1.18E-04	5.94E-05	1.05E-07	8.88E-06	3.3	1.25E-03	7.39E-05
SI48_E	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI48_E	0.75	2	0	1	6.43E-03	8.07E-03	1.22E-05	4.08E-04	3.75E-04	1.30E-05	2.42E-06	7.38E-05	3.72E-05	6.56E-08	5.55E-06	2.1	7.81E-04	4.62E-05
SI48_E	0.75	3	0	1	9.01E-03	1.13E-02	1.70E-05	5.71E-04	5.25E-04	1.81E-05	3.39E-06	1.03E-04	5.20E-05	9.18E-08	7.77E-06	2.9	1.09E-03	6.46E-05
SI48_E	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI48_E	0.75	20	0	1	6.56E-02	8.23E-02	1.24E-04	4.16E-03	3.82E-03	1.32E-04	2.47E-05	7.53E-04	3.79E-04	6.69E-07	5.66E-05	21.1	7.97E-03	4.71E-04
SI48_E	0.75	30	0	1	1.00E-01	1.26E-01	1.90E-04	6.36E-03	5.85E-03	2.02E-04	3.78E-05	1.15E-03	5.80E-04	1.02E-06	8.65E-05	32.3	1.22E-02	7.20E-04
SI48_E	0.75	24	0	1	8.11E-02	1.02E-01	1.53E-04	5.14E-03	4.72E-03	1.63E-04	3.05E-05	9.30E-04	4.68E-04	8.26E-07	6.99E-05	26.1	9.84E-03	5.82E-04
SI48_E	0.75	20	0	1	6.69E-02	8.39E-02	1.27E-04	4.24E-03	3.90E-03	1.35E-04	2.52E-05	7.68E-04	3.86E-04	6.82E-07	5.77E-05	21.5	8.12E-03	4.80E-04
SI48_E	0.75	18	0	1	6.05E-02	7.58E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.28E-05	6.94E-04	3.49E-04	6.16E-07	5.22E-05	19.5	7.34E-03	4.34E-04
SI48_E	0.75	20	0	1	6.82E-02	8.55E-02	1.29E-04	4.32E-03	3.97E-03	1.37E-04	2.57E-05	7.82E-04	3.94E-04	6.95E-07	5.88E-05	21.9	8.28E-03	4.89E-04
SI48_E	0.75	21	0	1	7.20E-02	9.04E-02	1.36E-04	4.57E-03	4.20E-03	1.45E-04	2.71E-05	8.27E-04	4.16E-04	7.34E-07	6.21E-05	23.2	8.75E-03	5.17E-04
SI48_E	0.75	22	0	1	7.33E-02	9.20E-02	1.39E-04	4.65E-03	4.27E-03	1.48E-04	2.76E-05	8.41E-04	4.24E-04	7.47E-07	6.32E-05	23.6	8.90E-03	5.26E-04
SI48_E	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI48_E	0.75	24	0	1	8.23E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.39E-07	7.10E-05	26.5	1.00E-02	5.91E-04
SI48_E	0.75	30	0	1	1.02E-01	1.27E-01	1.92E-04	6.44E-03	5.92E-03	2.05E-04	3.82E-05	1.17E-03	5.87E-04	1.04E-06	8.77E-05	32.7	1.23E-02	7.29E-04
SI48_E	0.75	33	0	1	1.09E-01	1.37E-01	2.07E-04	6.93E-03	6.37E-03	2.20E-04	4.12E-05	1.25E-03	6.32E-04	1.11E-06	9.43E-05	35.2	1.33E-02	7.85E-04
SI48_E	0.75	23	0	1	7.59E-02	9.52E-02	1.44E-04	4.81E-03	4.42E-03	1.53E-04	2.86E-05	8.71E-04	4.38E-04	7.74E-07	6.55E-05	24.4	9.21E-03	5.45E-04
SI48_E	0.75	15	0	1	5.02E-02	6.29E-02	9.49E-05	3.18E-03	2.92E-03	1.01E-04	1.89E-05	5.76E-04	2.90E-04	5.11E-07	4.33E-05	16.1	6.09E-03	3.60E-04
SI48_E	0.75	13	0	1	4.25E-02	5.32E-02	8.03E-05	2.69E-03	2.47E-03	8.55E-05	1.60E-05	4.87E-04	2.45E-04	4.33E-07	3.66E-05	13.7	5.15E-03	3.05E-04
SI48_E	0.75	11	0	1	3.60E-02	4.52E-02	6.82E-05	2.28E-03	2.10E-03	7.26E-05	1.36E-05	4.13E-04	2.08E-04	3.67E-07	3.11E-05	11.6	4.37E-03	2.59E-04
SI48_E	0.75	9	0	1	2.96E-02	3.71E-02	5.60E-05	1.88E-03	1.72E-03	5.96E-05	1.11E-05	3.39E-04	1.71E-04	3.02E-07	2.55E-05	9.5	3.59E-03	2.12E-04
SI48_E	0.75	7	0	1	2.19E-02	2.74E-02	4.14E-05	1.39E-03	1.27E-03	4.41E-05	8.23E-06	2.51E-04	1.26E-04	2.23E-07	1.89E-05	7.0	2.66E-03	1.57E-04
SI48_W	0.75	6	0	1	1.90E-02	2.38E-02	3.60E-05	1.20E-03	1.11E-03	3.83E-05	7.15E-06	2.18E-04	1.10E-04	1.94E-07	1.64E-05	6.1	2.31E-03	1.36E-04
SI48_W	0.75	4	0	1	1.27E-02	1.59E-02	2.40E-05	8.03E-04	7.39E-04	2.55E-05	4.77E-06	1.45E-04	7.32E-05	1.29E-07	1.09E-05	4.1	1.54E-03	9.10E-05
SI48_W	0.75	3	0	1	1.11E-02	1.39E-02	2.10E-05	7.03E-04	6.46E-04	2.23E-05	4.17E-06	1.27E-04	6.41E-05	1.13E-07	9.57E-06	3.6	1.35E-03	7.96E-05
SI48_W	0.75	2	0	1	7.92E-03	9.94E-03	1.50E-05	5.02E-04	4.62E-04	1.60E-05	2.98E-06	9.09E-05	4.58E-05	8.07E-08	6.83E-06	2.5	9.62E-04	5.68E-05
SI48_W	0.75	3	0	1	1.11E-02	1.39E-02	2.10E-05	7.03E-04	6.46E-04	2.23E-05	4.17E-06	1.27E-04	6.41E-05	1.13E-07	9.57E-06	3.6	1.35E-03	7.96E-05
SI48_W	0.75	8	0	1	2.69E-02	3.38E-02	5.10E-05	1.71E-03	1.57E-03	5.43E-05	1.01E-05	3.09E-04	1.56E-04	2.75E-07	2.32E-05	8.7	3.27E-03	1.93E-04
SI48_W	0.75	24	0	1	8.08E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.27E-04	4.67E-04	8.24E-07	6.97E-05	26.0	9.81E-03	5.80E-04
SI48_W	0.75	37	0	1	1.24E-01	1.55E-01	2.34E-04	7.83E-03	7.20E-03	2.49E-04	4.65E-05	1.42E-03	7.14E-04	1.26E-06	1.07E-04	39.8	1.50E-02	8.87E-04
SI48_W	0.75	30	0	1	9.98E-02	1.25E-01	1.89E-04	6.33E-03	5.82E-03	2.01E-04	3.76E-05	1.15E-03	5.76E-04	1.02E-06	8.61E-05	32.1	1.21E-02	7.16E-04
SI48_W	0.75	24	0	1	8.24E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.40E-07	7.11E-05	26.5	1.00E-02	5.91E-04
SI48_W	0.75	22	0	1	7.45E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	24.0	9.04E-03	5.34E-04
SI48_W	0.75	25	0	1	8.40E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.56E-07	7.24E-05	27.0	1.02E-02	6.03E-04
SI48_W	0.75	26	0	1	8.87E-02	1.11E-01	1.68E-04	5.62E-03	5.17E-03	1.79E-04	3.34E-05	1.02E-03	5.12E-04	9.04E-07	7.65E-05	28.5	1.08E-02	6.37E-04
SI48_W	0.75	27	0	1	9.03E-02	1.13E-01	1.71E-04	5.72E-03	5.26E-03	1.82E-04	3.40E-05	1.04E-03	5.22E-04	9.20E-07	7.79E-05	29.1	1.10E-02	6.48E-04
SI48_W	0.75	28	0	1	9.35E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.53E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI48_W	0.75	30	0	1	1.01E-01	1.27E-01	1.92E-04	6.43E-03	5.91E-03	2.04E-04	3.82E-05	1.16E-03	5.86E-04	1.03E-06	8.75E-05	32.6	1.23E-02	7.28E-04
SI48_W	0.75	37	0	1	1.25E-01	1.57E-01	2.37E-04	7.93E-03	7.29E-03	2.52E-04	4.71E-05	1.44E-03	7.23E-04	1.28E-06	1.08E-04	40.3	1.52E-02	8.98E-04
SI48_W	0.75	40	0	1	1.35E-01	1.69E-01	2.55E-04	8.53E-03	7.85E-03	2.71E-04	5.07E-05	1.55E-03	7.78E-04	1.37E-06	1.16E-04	43.3	1.63E-02	9.66E-04
SI48_W	0.75	28	0	1	9.35E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.53E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI48_W	0.75	18	0	1	6.18E-02	7.75E-02	1.17E-04	3.92E-03	3.60E-03	1.24E-04	2.33E-05	7.09E-04	3.57E-04	6.30E-07	5.33E-05	19.9	7.50E-03	4.43E-04
SI48_W	0.75	16	0	1	5.23E-02	6.56E-02	9.89E-05	3.31E-03	3.05E-03	1.05E-04	1.97E-05	6.00E-04	3.02E-04	5.33E-07	4.51E-05	16.8	6.35E-03	3.75E-04
SI48_W	0.75	13	0	1	4.44E-02	5.56E-02	8.39E-05	2.81E-03	2.59E-03	8.94E-05	1.67E-05	5.09E-04	2.56E-04	4.52E-07	3.83E-05	14.3	5.39E-03	3.18E-04
SI48_W	0.75	11	0	1	3.64E-02	4.57E-02	6.89E-05	2.31E-03	2.12E-03	7.34E-05	1.37E-05	4.18E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.62E-04
SI48_W	0.75	8	0	1	2.69E-02	3.38E-02	5.10E-05	1.71E-03	1.57E-03	5.43E-05	1.01E-05	3.09E-04	1.56E-04	2.75E-07	2.32E-05	8.7	3.27E-03	1.93E-04
SI49_E	0.75	6	0	1	1.90E-02	2.38E-02	3.60E-05	1.20E-03	1.11E-03	3.83E-05	7.15E-06	2.18E-04	1.10E-04	1.94E-07	1.64E-05	6.1	2.31E-03	1.36E-04
SI49_E	0.75	4	0	1	1.27E-02	1.59E-02	2.40E-05	8.03E-04	7.39E-04	2.55E-05	4.77E-06	1.45E-04	7.32E-05	1.29E-07	1.09E-05	4.1	1.54E-03	9.10E-05
SI49_E	0.75	3	0	1	1.11E-02	1.39E-02	2.10E-05	7.03E-04	6.46E-04	2.23E-05	4.17E-06	1.27E-04	6.41E-05	1.13E-07	9.57E-06	3.6	1.35E-03	7.96E-05
SI49_E	0.75	2	0	1	7.92E-03	9.94E-03	1.50E-05	5.02E-04	4.62E-04	1.60E-05	2.98E-06	9.09E-05	4.58E-05	8.07E-08	6.83E-06	2.5	9.62E-04	5.68E-05
SI49_E	0.75	3	0	1	1.11E-02	1.39E-02	2.10E-05	7.03E-04	6.46E-04	2.23E-05	4.17E-06	1.27E-04	6.41E-05	1.13E-07	9.57E-06	3.6	1.35E-03	7.96E-05
SI49_E	0.75	8	0	1	2.69E-02	3.38E-02	5.10E-05	1.71E-03	1.57E-03	5.43E-05	1.01E-05	3.09E-04	1.56E-04	2.75E-07	2.32E-05	8.7	3.27E-03	1.93E-04
SI49_E	0.75	24	0	1	8.08E-02	1.01E-01	1.53E-04	5.12E-03	4.71E-03	1.63E-04	3.04E-05	9.27E-04	4.67E-04	8.24E-07	6.97E-05	26.0	9.81E-03	5.80E-04
SI49_E	0.75	37	0	1	1.24E-01	1.55E-01	2.34E-04	7.83E-03	7.20E-03	2.49E-04	4.65E-05	1.42E-03	7.14E-04	1.26E-06	1.07E-04	39.8	1.50E-02	8.87E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_E	0.75	30	0	1	9.98E-02	1.25E-01	1.89E-04	6.33E-03	5.82E-03	2.01E-04	3.76E-05	1.15E-03	5.76E-04	1.02E-06	8.61E-05	32.1	1.21E-02	7.16E-04
SI49_E	0.75	24	0	1	8.24E-02	1.03E-01	1.56E-04	5.22E-03	4.80E-03	1.66E-04	3.10E-05	9.45E-04	4.76E-04	8.40E-07	7.11E-05	26.5	1.00E-02	5.91E-04
SI49_E	0.75	22	0	1	7.45E-02	9.34E-02	1.41E-04	4.72E-03	4.34E-03	1.50E-04	2.80E-05	8.54E-04	4.30E-04	7.59E-07	6.42E-05	24.0	9.04E-03	5.34E-04
SI49_E	0.75	25	0	1	8.40E-02	1.05E-01	1.59E-04	5.32E-03	4.89E-03	1.69E-04	3.16E-05	9.63E-04	4.85E-04	8.56E-07	7.24E-05	27.0	1.02E-02	6.03E-04
SI49_E	0.75	26	0	1	8.87E-02	1.11E-01	1.68E-04	5.62E-03	5.17E-03	1.79E-04	3.34E-05	1.02E-03	5.12E-04	9.04E-07	7.65E-05	28.5	1.08E-02	6.37E-04
SI49_E	0.75	27	0	1	9.03E-02	1.13E-01	1.71E-04	5.72E-03	5.26E-03	1.82E-04	3.40E-05	1.04E-03	5.22E-04	9.20E-07	7.79E-05	29.1	1.10E-02	6.48E-04
SI49_E	0.75	28	0	1	9.35E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.53E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI49_E	0.75	30	0	1	1.01E-01	1.27E-01	1.92E-04	6.43E-03	5.91E-03	2.04E-04	3.82E-05	1.16E-03	5.86E-04	1.03E-06	8.75E-05	32.6	1.23E-02	7.28E-04
SI49_E	0.75	37	0	1	1.25E-01	1.57E-01	2.37E-04	7.93E-03	7.29E-03	2.52E-04	4.71E-05	1.44E-03	7.23E-04	1.28E-06	1.08E-04	40.3	1.52E-02	8.98E-04
SI49_E	0.75	40	0	1	1.35E-01	1.69E-01	2.55E-04	8.53E-03	7.85E-03	2.71E-04	5.07E-05	1.55E-03	7.78E-04	1.37E-06	1.16E-04	43.3	1.63E-02	9.66E-04
SI49_E	0.75	28	0	1	9.35E-02	1.17E-01	1.77E-04	5.92E-03	5.45E-03	1.88E-04	3.52E-05	1.07E-03	5.40E-04	9.53E-07	8.06E-05	30.1	1.13E-02	6.71E-04
SI49_E	0.75	18	0	1	6.18E-02	7.75E-02	1.17E-04	3.92E-03	3.60E-03	1.24E-04	2.33E-05	7.09E-04	3.57E-04	6.30E-07	5.33E-05	19.9	7.50E-03	4.43E-04
SI49_E	0.75	16	0	1	5.23E-02	6.56E-02	9.89E-05	3.31E-03	3.05E-03	1.05E-04	1.97E-05	6.00E-04	3.02E-04	5.33E-07	4.51E-05	16.8	6.35E-03	3.75E-04
SI49_E	0.75	13	0	1	4.44E-02	5.56E-02	8.39E-05	2.81E-03	2.59E-03	8.94E-05	1.67E-05	5.09E-04	2.56E-04	4.52E-07	3.83E-05	14.3	5.39E-03	3.18E-04
SI49_E	0.75	11	0	1	3.64E-02	4.57E-02	6.89E-05	2.31E-03	2.12E-03	7.34E-05	1.37E-05	4.18E-04	2.10E-04	3.71E-07	3.14E-05	11.7	4.42E-03	2.62E-04
SI49_E	0.75	8	0	1	2.69E-02	3.38E-02	5.10E-05	1.71E-03	1.57E-03	5.43E-05	1.01E-05	3.09E-04	1.56E-04	2.75E-07	2.32E-05	8.7	3.27E-03	1.93E-04
SI49_W	0.75	9	0	1	3.07E-02	3.85E-02	5.81E-05	1.95E-03	1.79E-03	6.19E-05	1.16E-05	3.52E-04	1.77E-04	3.13E-07	2.65E-05	9.9	3.73E-03	2.20E-04
SI49_W	0.75	6	0	1	2.05E-02	2.57E-02	3.87E-05	1.30E-03	1.19E-03	4.12E-05	7.71E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.49E-03	1.47E-04
SI49_W	0.75	5	0	1	1.79E-02	2.25E-02	3.39E-05	1.14E-03	1.04E-03	3.61E-05	6.74E-06	2.06E-04	1.03E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI49_W	0.75	4	0	1	1.28E-02	1.61E-02	2.42E-05	8.11E-04	7.46E-04	2.58E-05	4.82E-06	1.47E-04	7.39E-05	1.30E-07	1.10E-05	4.1	1.55E-03	9.18E-05
SI49_W	0.75	5	0	1	1.79E-02	2.25E-02	3.39E-05	1.14E-03	1.04E-03	3.61E-05	6.74E-06	2.06E-04	1.03E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI49_W	0.75	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.77E-05	1.64E-05	4.99E-04	2.51E-04	4.44E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI49_W	0.75	39	0	1	1.31E-01	1.64E-01	2.47E-04	8.27E-03	7.61E-03	2.63E-04	4.91E-05	1.50E-03	7.54E-04	1.33E-06	1.13E-04	42.0	1.58E-02	9.37E-04
SI49_W	0.75	59	0	1	2.00E-01	2.50E-01	3.78E-04	1.27E-02	1.16E-02	4.02E-04	7.51E-05	2.29E-03	1.15E-03	2.03E-06	1.72E-04	64.2	2.42E-02	1.43E-03
SI49_W	0.75	48	0	1	1.61E-01	2.02E-01	3.05E-04	1.02E-02	9.40E-03	3.25E-04	6.07E-05	1.85E-03	9.31E-04	1.64E-06	1.39E-04	51.9	1.96E-02	1.16E-03
SI49_W	0.75	40	0	1	1.33E-01	1.67E-01	2.52E-04	8.44E-03	7.76E-03	2.68E-04	5.01E-05	1.53E-03	7.69E-04	1.36E-06	1.15E-04	42.8	1.62E-02	9.55E-04
SI49_W	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.62E-03	7.01E-03	2.42E-04	4.53E-05	1.38E-03	6.95E-04	1.23E-06	1.04E-04	38.7	1.46E-02	8.63E-04
SI49_W	0.75	40	0	1	1.36E-01	1.70E-01	2.57E-04	8.60E-03	7.91E-03	2.73E-04	5.11E-05	1.56E-03	7.84E-04	1.38E-06	1.17E-04	43.6	1.65E-02	9.74E-04
SI49_W	0.75	43	0	1	1.43E-01	1.80E-01	2.71E-04	9.08E-03	8.35E-03	2.89E-04	5.39E-05	1.64E-03	8.28E-04	1.46E-06	1.24E-04	46.1	1.74E-02	1.03E-03
SI49_W	0.75	43	0	1	1.46E-01	1.83E-01	2.76E-04	9.25E-03	8.50E-03	2.94E-04	5.49E-05	1.67E-03	8.43E-04	1.49E-06	1.26E-04	46.9	1.77E-02	1.05E-03
SI49_W	0.75	45	0	1	1.51E-01	1.89E-01	2.86E-04	9.57E-03	8.80E-03	3.04E-04	5.68E-05	1.73E-03	8.72E-04	1.54E-06	1.30E-04	48.6	1.83E-02	1.08E-03
SI49_W	0.75	49	0	1	1.64E-01	2.05E-01	3.10E-04	1.04E-02	9.55E-03	3.30E-04	6.17E-05	1.88E-03	9.46E-04	1.67E-06	1.41E-04	52.7	1.99E-02	1.18E-03
SI49_W	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.45E-02	1.45E-03
SI49_W	0.75	65	0	1	2.18E-01	2.73E-01	4.12E-04	1.38E-02	1.27E-02	4.38E-04	8.19E-05	2.50E-03	1.26E-03	2.22E-06	1.88E-04	70.0	2.64E-02	1.56E-03
SI49_W	0.75	45	0	1	1.51E-01	1.89E-01	2.86E-04	9.57E-03	8.80E-03	3.04E-04	5.68E-05	1.73E-03	8.72E-04	1.54E-06	1.30E-04	48.6	1.83E-02	1.08E-03
SI49_W	0.75	30	0	1	9.98E-02	1.25E-01	1.89E-04	6.33E-03	5.82E-03	2.01E-04	3.76E-05	1.15E-03	5.77E-04	1.02E-06	8.61E-05	32.1	1.21E-02	7.16E-04
SI49_W	0.75	25	0	1	8.45E-02	1.06E-01	1.60E-04	5.35E-03	4.92E-03	1.70E-04	3.18E-05	9.69E-04	4.88E-04	8.61E-07	7.29E-05	27.2	1.03E-02	6.06E-04
SI49_W	0.75	21	0	1	7.17E-02	8.99E-02	1.36E-04	4.54E-03	4.18E-03	1.44E-04	2.70E-05	8.22E-04	4.14E-04	7.30E-07	6.18E-05	23.1	8.70E-03	5.14E-04
SI49_W	0.75	18	0	1	5.89E-02	7.38E-02	1.11E-04	3.73E-03	3.43E-03	1.19E-04	2.22E-05	6.75E-04	3.40E-04	6.00E-07	5.08E-05	18.9	7.15E-03	4.22E-04
SI49_W	0.75	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.77E-05	1.64E-05	4.99E-04	2.51E-04	4.44E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI50_E	0.75	9	0	1	3.07E-02	3.85E-02	5.81E-05	1.95E-03	1.79E-03	6.19E-05	1.16E-05	3.52E-04	1.77E-04	3.13E-07	2.65E-05	9.9	3.73E-03	2.20E-04
SI50_E	0.75	6	0	1	2.05E-02	2.57E-02	3.87E-05	1.30E-03	1.19E-03	4.12E-05	7.71E-06	2.35E-04	1.18E-04	2.09E-07	1.77E-05	6.6	2.49E-03	1.47E-04
SI50_E	0.75	5	0	1	1.79E-02	2.25E-02	3.39E-05	1.14E-03	1.04E-03	3.61E-05	6.74E-06	2.06E-04	1.03E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI50_E	0.75	4	0	1	1.28E-02	1.61E-02	2.42E-05	8.11E-04	7.46E-04	2.58E-05	4.82E-06	1.47E-04	7.39E-05	1.30E-07	1.10E-05	4.1	1.55E-03	9.18E-05
SI50_E	0.75	5	0	1	1.79E-02	2.25E-02	3.39E-05	1.14E-03	1.04E-03	3.61E-05	6.74E-06	2.06E-04	1.03E-04	1.83E-07	1.55E-05	5.8	2.18E-03	1.29E-04
SI50_E	0.75	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.77E-05	1.64E-05	4.99E-04	2.51E-04	4.44E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI50_E	0.75	39	0	1	1.31E-01	1.64E-01	2.47E-04	8.27E-03	7.61E-03	2.63E-04	4.91E-05	1.50E-03	7.54E-04	1.33E-06	1.13E-04	42.0	1.58E-02	9.37E-04
SI50_E	0.75	59	0	1	2.00E-01	2.50E-01	3.78E-04	1.27E-02	1.16E-02	4.02E-04	7.51E-05	2.29E-03	1.15E-03	2.03E-06	1.72E-04	64.2	2.42E-02	1.43E-03
SI50_E	0.75	48	0	1	1.61E-01	2.02E-01	3.05E-04	1.02E-02	9.40E-03	3.25E-04	6.07E-05	1.85E-03	9.31E-04	1.64E-06	1.39E-04	51.9	1.96E-02	1.16E-03
SI50_E	0.75	40	0	1	1.33E-01	1.67E-01	2.52E-04	8.44E-03	7.76E-03	2.68E-04	5.01E-05	1.53E-03	7.69E-04	1.36E-06	1.15E-04	42.8	1.62E-02	9.55E-04
SI50_E	0.75	36	0	1	1.20E-01	1.51E-01	2.28E-04	7.62E-03	7.01E-03	2.42E-04	4.53E-05	1.38E-03	6.95E-04	1.23E-06	1.04E-04	38.7	1.46E-02	8.63E-04
SI50_E	0.75	40	0	1	1.36E-01	1.70E-01	2.57E-04	8.60E-03	7.91E-03	2.73E-04	5.11E-05	1.56E-03	7.84E-04	1.38E-06	1.17E-04	43.6	1.65E-02	9.74E-04
SI50_E	0.75	43	0	1	1.43E-01	1.80E-01	2.71E-04	9.08E-03	8.35E-03	2.89E-04	5.39E-05	1.64E-03	8.28E-04	1.46E-06	1.24E-04	46.1	1.74E-02	1.03E-03
SI50_E	0.75	43	0	1	1.46E-01	1.83E-01	2.76E-04	9.25E-03	8.50E-03	2.94E-04	5.49E-05	1.67E-03	8.43E-04	1.49E-06	1.26E-04	46.9	1.77E-02	1.05E-03
SI50_E	0.75	45	0	1	1.51E-01	1.89E-01	2.86E-04	9.57E-03	8.80E-03	3.04E-04	5.68E-05	1.73E-03	8.72E-04	1.54E-06	1.30E-04	48.6	1.83E-02	1.08E-03
SI50_E	0.75	49	0	1	1.64E-01	2.05E-01	3.10E-04	1.04E-02	9.55E-03	3.30E-04	6.17E-05	1.88E-03	9.46E-04	1.67E-06	1.41E-04	52.7	1.99E-02	1.18E-03
SI50_E	0.75	60	0	1	2.02E-01	2.54E-01	3.83E-04	1.28E-02	1.18E-02	4.07E-04	7.61E-05	2.32E-03	1.17E-03	2.06E-06	1.74E-04	65.1	2.45E-02	1.45E-03
SI50_E	0.75	65	0	1	2.18E-01	2.73E-01	4.12E-04	1.38E-02	1.27E-02	4.38E-04	8.19E-05	2.50E-03	1.26E-03	2.22E-06	1.88E-04	70.0	2.64E-02	1.56E-03
SI50_E	0.75	45	0	1	1.51E-01	1.89E-01	2.86E-04	9.57E-03	8.80E-03	3.04E-04	5.68E-05	1.73E-03	8.72E-04	1.54E-06	1.30E-04	48.6	1.83E-02	1.08E-03
SI50_E	0.75	30	0	1	9.98E-02	1.25E-01	1.89E-04	6.33E-03	5.82E-03	2.01E-04	3.76E-05	1.15E-03	5.77E-04	1.02E-06	8.61E-05	32.1	1.21E-02	7.16E-04
SI50_E	0.75	25	0	1	8.45E-02	1.06E-01	1.60E-04	5.35E-03	4.92E-03	1.70E-04	3.18E-05	9.69E-04	4.88E-04	8.61E-07	7.29E-05	27.2	1.03E-02	6.06E-04
SI50_E	0.75	21	0	1	7.17E-02	8.99E-02	1.36E-04	4.54E-03	4.18E-03	1.44E-04	2.70E-05	8.22E-04	4.14E-04	7.30E-07	6.18E-05	23.1	8.70E-03	5.14E-04
SI50_E	0.75	18	0	1	5.89E-02	7.38E-02	1.11E-04	3.73E-03	3.43E-03	1.19E-04	2.22E-05	6.75E-04	3.40E-04	6.00E-07	5.08E-05	18.9	7.15E-03	4.22E-04
SI50_E	0.75	13	0	1	4.35E-02	5.46E-02	8.23E-05	2.76E-03	2.54E-03	8.77E-05	1.64E-05	4.99E-04	2.51E-04	4.44E-07	3.75E-05	14.0	5.28E-03	3.12E-04
SI50_W	0.75	32	0	1	1.06E-01	1.34E-01	2.01E-04	6.75E-03	6.21E-03	2.15E-04	4.01E-05	1.22E-03	6.15E-04	1.09E-06	9.18E-05	34.3	1.29E-02	7.64E-04
SI50_W	0.75	21	0	1	7.10E-02	8.90E-02	1.34E-04	4.50E-03	4.14E-03	1.43E-04	2.67E-05	8.15E-04	4.10E-04	7.24E-07	6.12E-05	22.8	8.62E-03	5.09E-04
SI50_W	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI50_W	0.75	13	0	1	4.44E-02	5.57E-02	8.39E-05	2.81E-03	2.59E-03	8.94E-05	1.67E-05	5.09E-04	2.56E-04	4.52E-07	3.83E-05	14.3	5.39E-03	3.18E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI50_W	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI50_W	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI50_W	0.75	135	0	1	4.53E-01	5.68E-01	8.56E-04	2.87E-02	2.64E-02	9.12E-04	1.70E-04	5.19E-03	2.61E-03	4.61E-06	3.90E-04	145.6	5.49E-02	3.25E-03
SI50_W	0.75	206	0	1	6.92E-01	8.68E-01	1.31E-03	4.39E-02	4.03E-02	1.39E-03	2.60E-04	7.94E-03	4.00E-03	7.05E-06	5.97E-04	222.7	8.40E-02	4.97E-03
SI50_W	0.75	166	0	1	5.59E-01	7.01E-01	1.06E-03	3.54E-02	3.26E-02	1.13E-03	2.10E-04	6.41E-03	3.23E-03	5.70E-06	4.82E-04	179.9	6.79E-02	4.01E-03
SI50_W	0.75	137	0	1	4.61E-01	5.79E-01	8.73E-04	2.92E-02	2.69E-02	9.30E-04	1.74E-04	5.29E-03	2.67E-03	4.70E-06	3.98E-04	148.4	5.60E-02	3.31E-03
SI50_W	0.75	124	0	1	4.17E-01	5.23E-01	7.89E-04	2.64E-02	2.43E-02	8.40E-04	1.57E-04	4.79E-03	2.41E-03	4.25E-06	3.60E-04	134.2	5.06E-02	2.99E-03
SI50_W	0.75	140	0	1	4.70E-01	5.90E-01	8.90E-04	2.98E-02	2.74E-02	9.47E-04	1.77E-04	5.40E-03	2.72E-03	4.79E-06	4.06E-04	151.3	5.71E-02	3.38E-03
SI50_W	0.75	148	0	1	4.97E-01	6.23E-01	9.40E-04	3.15E-02	2.90E-02	1.00E-03	1.87E-04	5.70E-03	2.87E-03	5.06E-06	4.29E-04	159.9	6.03E-02	3.57E-03
SI50_W	0.75	150	0	1	5.06E-01	6.34E-01	9.57E-04	3.21E-02	2.95E-02	1.02E-03	1.90E-04	5.80E-03	2.92E-03	5.16E-06	4.36E-04	162.7	6.14E-02	3.63E-03
SI50_W	0.75	156	0	1	5.24E-01	6.57E-01	9.91E-04	3.32E-02	3.05E-02	1.05E-03	1.97E-04	6.01E-03	3.02E-03	5.34E-06	4.52E-04	168.4	6.36E-02	3.76E-03
SI50_W	0.75	169	0	1	5.68E-01	7.12E-01	1.07E-03	3.60E-02	3.31E-02	1.14E-03	2.14E-04	6.52E-03	3.28E-03	5.79E-06	4.90E-04	182.7	6.89E-02	4.08E-03
SI50_W	0.75	208	0	1	7.01E-01	8.79E-01	1.33E-03	4.44E-02	4.09E-02	1.41E-03	2.64E-04	8.04E-03	4.05E-03	7.15E-06	6.05E-04	225.5	8.51E-02	5.03E-03
SI50_W	0.75	224	0	1	7.54E-01	9.46E-01	1.43E-03	4.78E-02	4.40E-02	1.52E-03	2.84E-04	8.65E-03	4.36E-03	7.69E-06	6.51E-04	242.7	9.16E-02	5.41E-03
SI50_W	0.75	156	0	1	5.24E-01	6.57E-01	9.91E-04	3.32E-02	3.05E-02	1.05E-03	1.97E-04	6.01E-03	3.02E-03	5.34E-06	4.52E-04	168.4	6.36E-02	3.76E-03
SI50_W	0.75	103	0	1	3.46E-01	4.34E-01	6.55E-04	2.19E-02	2.02E-02	6.97E-04	1.30E-04	3.97E-03	2.00E-03	3.53E-06	2.98E-04	111.3	4.20E-02	2.48E-03
SI50_W	0.75	87	0	1	2.93E-01	3.67E-01	5.54E-04	1.86E-02	1.71E-02	5.90E-04	1.10E-04	3.36E-03	1.69E-03	2.98E-06	2.53E-04	94.2	3.56E-02	2.10E-03
SI50_W	0.75	74	0	1	2.48E-01	3.12E-01	4.70E-04	1.57E-02	1.45E-02	5.01E-04	9.35E-05	2.85E-03	1.44E-03	2.53E-06	2.14E-04	79.9	3.02E-02	1.78E-03
SI50_W	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.68E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.7	2.48E-02	1.46E-03
SI50_W	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI51_E	0.75	32	0	1	1.06E-01	1.34E-01	2.01E-04	6.75E-03	6.21E-03	2.15E-04	4.01E-05	1.22E-03	6.15E-04	1.09E-06	9.18E-05	34.3	1.29E-02	7.64E-04
SI51_E	0.75	21	0	1	7.10E-02	8.90E-02	1.34E-04	4.50E-03	4.14E-03	1.43E-04	2.67E-05	8.15E-04	4.10E-04	7.24E-07	6.12E-05	22.8	8.62E-03	5.09E-04
SI51_E	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI51_E	0.75	13	0	1	4.44E-02	5.57E-02	8.39E-05	2.81E-03	2.59E-03	8.94E-05	1.67E-05	5.09E-04	2.56E-04	4.52E-07	3.83E-05	14.3	5.39E-03	3.18E-04
SI51_E	0.75	18	0	1	6.21E-02	7.79E-02	1.18E-04	3.94E-03	3.62E-03	1.25E-04	2.34E-05	7.13E-04	3.59E-04	6.33E-07	5.36E-05	20.0	7.54E-03	4.46E-04
SI51_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI51_E	0.75	135	0	1	4.53E-01	5.68E-01	8.56E-04	2.87E-02	2.64E-02	9.12E-04	1.70E-04	5.19E-03	2.61E-03	4.61E-06	3.90E-04	145.6	5.49E-02	3.25E-03
SI51_E	0.75	206	0	1	6.92E-01	8.68E-01	1.31E-03	4.39E-02	4.03E-02	1.39E-03	2.60E-04	7.94E-03	4.00E-03	7.05E-06	5.97E-04	222.7	8.40E-02	4.97E-03
SI51_E	0.75	166	0	1	5.59E-01	7.01E-01	1.06E-03	3.54E-02	3.26E-02	1.13E-03	2.10E-04	6.41E-03	3.23E-03	5.70E-06	4.82E-04	179.9	6.79E-02	4.01E-03
SI51_E	0.75	137	0	1	4.61E-01	5.79E-01	8.73E-04	2.92E-02	2.69E-02	9.30E-04	1.74E-04	5.29E-03	2.67E-03	4.70E-06	3.98E-04	148.4	5.60E-02	3.31E-03
SI51_E	0.75	124	0	1	4.17E-01	5.23E-01	7.89E-04	2.64E-02	2.43E-02	8.40E-04	1.57E-04	4.79E-03	2.41E-03	4.25E-06	3.60E-04	134.2	5.06E-02	2.99E-03
SI51_E	0.75	140	0	1	4.70E-01	5.90E-01	8.90E-04	2.98E-02	2.74E-02	9.47E-04	1.77E-04	5.40E-03	2.72E-03	4.79E-06	4.06E-04	151.3	5.71E-02	3.38E-03
SI51_E	0.75	148	0	1	4.97E-01	6.23E-01	9.40E-04	3.15E-02	2.90E-02	1.00E-03	1.87E-04	5.70E-03	2.87E-03	5.06E-06	4.29E-04	159.9	6.03E-02	3.57E-03
SI51_E	0.75	150	0	1	5.06E-01	6.34E-01	9.57E-04	3.21E-02	2.95E-02	1.02E-03	1.90E-04	5.80E-03	2.92E-03	5.16E-06	4.36E-04	162.7	6.14E-02	3.63E-03
SI51_E	0.75	156	0	1	5.24E-01	6.57E-01	9.91E-04	3.32E-02	3.05E-02	1.05E-03	1.97E-04	6.01E-03	3.02E-03	5.34E-06	4.52E-04	168.4	6.36E-02	3.76E-03
SI51_E	0.75	169	0	1	5.68E-01	7.12E-01	1.07E-03	3.60E-02	3.31E-02	1.14E-03	2.14E-04	6.52E-03	3.28E-03	5.79E-06	4.90E-04	182.7	6.89E-02	4.08E-03
SI51_E	0.75	208	0	1	7.01E-01	8.79E-01	1.33E-03	4.44E-02	4.09E-02	1.41E-03	2.64E-04	8.04E-03	4.05E-03	7.15E-06	6.05E-04	225.5	8.51E-02	5.03E-03
SI51_E	0.75	224	0	1	7.54E-01	9.46E-01	1.43E-03	4.78E-02	4.40E-02	1.52E-03	2.84E-04	8.65E-03	4.36E-03	7.69E-06	6.51E-04	242.7	9.16E-02	5.41E-03
SI51_E	0.75	156	0	1	5.24E-01	6.57E-01	9.91E-04	3.32E-02	3.05E-02	1.05E-03	1.97E-04	6.01E-03	3.02E-03	5.34E-06	4.52E-04	168.4	6.36E-02	3.76E-03
SI51_E	0.75	103	0	1	3.46E-01	4.34E-01	6.55E-04	2.19E-02	2.02E-02	6.97E-04	1.30E-04	3.97E-03	2.00E-03	3.53E-06	2.98E-04	111.3	4.20E-02	2.48E-03
SI51_E	0.75	87	0	1	2.93E-01	3.67E-01	5.54E-04	1.86E-02	1.71E-02	5.90E-04	1.10E-04	3.36E-03	1.69E-03	2.98E-06	2.53E-04	94.2	3.56E-02	2.10E-03
SI51_E	0.75	74	0	1	2.48E-01	3.12E-01	4.70E-04	1.57E-02	1.45E-02	5.01E-04	9.35E-05	2.85E-03	1.44E-03	2.53E-06	2.14E-04	79.9	3.02E-02	1.78E-03
SI51_E	0.75	61	0	1	2.04E-01	2.56E-01	3.86E-04	1.29E-02	1.19E-02	4.11E-04	7.68E-05	2.34E-03	1.18E-03	2.08E-06	1.76E-04	65.7	2.48E-02	1.46E-03
SI51_E	0.75	45	0	1	1.51E-01	1.89E-01	2.85E-04	9.56E-03	8.79E-03	3.04E-04	5.68E-05	1.73E-03	8.71E-04	1.54E-06	1.30E-04	48.5	1.83E-02	1.08E-03
SI51_W	0.75	18	0	1	6.04E-02	7.57E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.27E-05	6.93E-04	3.49E-04	6.15E-07	5.21E-05	19.4	7.33E-03	4.33E-04
SI51_W	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI51_W	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI51_W	0.75	7	0	1	2.52E-02	3.16E-02	4.76E-05	1.59E-03	1.47E-03	5.07E-05	9.47E-06	2.89E-04	1.45E-04	2.56E-07	2.17E-05	8.1	3.05E-03	1.81E-04
SI51_W	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI51_W	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI51_W	0.75	76	0	1	2.57E-01	3.22E-01	4.86E-04	1.63E-02	1.50E-02	5.17E-04	9.66E-05	2.94E-03	1.48E-03	2.62E-06	2.21E-04	82.6	3.12E-02	1.84E-03
SI51_W	0.75	117	0	1	3.93E-01	4.92E-01	7.43E-04	2.49E-02	2.29E-02	7.91E-04	1.48E-04	4.50E-03	2.27E-03	4.00E-06	3.39E-04	126.3	4.77E-02	2.82E-03
SI51_W	0.75	94	0	1	3.17E-01	3.98E-01	6.00E-04	2.01E-02	1.85E-02	6.39E-04	1.19E-04	3.64E-03	1.83E-03	3.23E-06	2.73E-04	102.0	3.85E-02	2.28E-03
SI51_W	0.75	78	0	1	2.62E-01	3.28E-01	4.95E-04	1.66E-02	1.53E-02	5.27E-04	9.85E-05	3.00E-03	1.51E-03	2.67E-06	2.26E-04	84.2	3.18E-02	1.88E-03
SI51_W	0.75	70	0	1	2.37E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI51_W	0.75	79	0	1	2.67E-01	3.35E-01	5.05E-04	1.69E-02	1.55E-02	5.37E-04	1.00E-04	3.06E-03	1.54E-03	2.72E-06	2.30E-04	85.8	3.24E-02	1.91E-03
SI51_W	0.75	84	0	1	2.82E-01	3.53E-01	5.33E-04	1.79E-02	1.64E-02	5.68E-04	1.06E-04	3.23E-03	1.63E-03	2.87E-06	2.43E-04	90.7	3.42E-02	2.02E-03
SI51_W	0.75	85	0	1	2.87E-01	3.60E-01	5.43E-04	1.82E-02	1.67E-02	5.78E-04	1.08E-04	3.29E-03	1.66E-03	2.92E-06	2.47E-04	92.3	3.48E-02	2.06E-03
SI51_W	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI51_W	0.75	96	0	1	3.22E-01	4.04E-01	6.09E-04	2.04E-02	1.88E-02	6.49E-04	1.21E-04	3.70E-03	1.86E-03	3.28E-06	2.78E-04	103.6	3.91E-02	2.31E-03
SI51_W	0.75	118	0	1	3.98E-01	4.99E-01	7.52E-04	2.52E-02	2.32E-02	8.01E-04	1.50E-04	4.56E-03	2.30E-03	4.05E-06	3.43E-04	127.9	4.83E-02	2.85E-03
SI51_W	0.75	127	0	1	4.28E-01	5.37E-01	8.09E-04	2.71E-02	2.49E-02	8.62E-04	1.61E-04	4.91E-03	2.47E-03	4.36E-06	3.69E-04	137.6	5.19E-02	3.07E-03
SI51_W	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI51_W	0.75	58	0	1	1.96E-01	2.46E-01	3.71E-04	1.24E-02	1.14E-02	3.95E-04	7.39E-05	2.25E-03	1.13E-03	2.00E-06	1.69E-04	63.1	2.38E-02	1.41E-03
SI51_W	0.75	49	0	1	1.66E-01	2.08E-01	3.14E-04	1.05E-02	9.68E-03	3.35E-04	6.25E-05	1.91E-03	9.59E-04	1.69E-06	1.43E-04	53.4	2.02E-02	1.19E-03
SI51_W	0.75	42	0	1	1.41E-01	1.77E-01	2.67E-04	8.93E-03	8.21E-03	2.84E-04	5.30E-05	1.62E-03	8.14E-04	1.44E-06	1.22E-04	45.3	1.71E-02	1.01E-03
SI51_W	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	9.98E-05	37.2	1.41E-02	8.31E-04
SI51_W	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04

Table F-10: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Existing Conditions (2019)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_E	0.75	18	0	1	6.04E-02	7.57E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.27E-05	6.93E-04	3.49E-04	6.15E-07	5.21E-05	19.4	7.33E-03	4.33E-04
SI52_E	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI52_E	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI52_E	0.75	7	0	1	2.52E-02	3.16E-02	4.76E-05	1.59E-03	1.47E-03	5.07E-05	9.47E-06	2.89E-04	1.45E-04	2.56E-07	2.17E-05	8.1	3.05E-03	1.81E-04
SI52_E	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI52_E	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI52_E	0.75	76	0	1	2.57E-01	3.22E-01	4.86E-04	1.63E-02	1.50E-02	5.17E-04	9.66E-05	2.94E-03	1.48E-03	2.62E-06	2.21E-04	82.6	3.12E-02	1.84E-03
SI52_E	0.75	117	0	1	3.93E-01	4.92E-01	7.43E-04	2.49E-02	2.29E-02	7.91E-04	1.48E-04	4.50E-03	2.27E-03	4.00E-06	3.39E-04	126.3	4.77E-02	2.82E-03
SI52_E	0.75	94	0	1	3.17E-01	3.98E-01	6.00E-04	2.01E-02	1.85E-02	6.39E-04	1.19E-04	3.64E-03	1.83E-03	3.23E-06	2.73E-04	102.0	3.85E-02	2.28E-03
SI52_E	0.75	78	0	1	2.62E-01	3.28E-01	4.95E-04	1.66E-02	1.53E-02	5.27E-04	9.85E-05	3.00E-03	1.51E-03	2.67E-06	2.26E-04	84.2	3.18E-02	1.88E-03
SI52_E	0.75	70	0	1	2.37E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI52_E	0.75	79	0	1	2.67E-01	3.35E-01	5.05E-04	1.69E-02	1.55E-02	5.37E-04	1.00E-04	3.06E-03	1.54E-03	2.72E-06	2.30E-04	85.8	3.24E-02	1.91E-03
SI52_E	0.75	84	0	1	2.82E-01	3.53E-01	5.33E-04	1.79E-02	1.64E-02	5.68E-04	1.06E-04	3.23E-03	1.63E-03	2.87E-06	2.43E-04	90.7	3.42E-02	2.02E-03
SI52_E	0.75	85	0	1	2.87E-01	3.60E-01	5.43E-04	1.82E-02	1.67E-02	5.78E-04	1.08E-04	3.29E-03	1.66E-03	2.92E-06	2.47E-04	92.3	3.48E-02	2.06E-03
SI52_E	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI52_E	0.75	96	0	1	3.22E-01	4.04E-01	6.09E-04	2.04E-02	1.88E-02	6.49E-04	1.21E-04	3.70E-03	1.86E-03	3.28E-06	2.78E-04	103.6	3.91E-02	2.31E-03
SI52_E	0.75	118	0	1	3.98E-01	4.99E-01	7.52E-04	2.52E-02	2.32E-02	8.01E-04	1.50E-04	4.56E-03	2.30E-03	4.05E-06	3.43E-04	127.9	4.83E-02	2.85E-03
SI52_E	0.75	127	0	1	4.28E-01	5.37E-01	8.09E-04	2.71E-02	2.49E-02	8.62E-04	1.61E-04	4.91E-03	2.47E-03	4.36E-06	3.69E-04	137.6	5.19E-02	3.07E-03
SI52_E	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI52_E	0.75	58	0	1	1.96E-01	2.46E-01	3.71E-04	1.24E-02	1.14E-02	3.95E-04	7.39E-05	2.25E-03	1.13E-03	2.00E-06	1.69E-04	63.1	2.38E-02	1.41E-03
SI52_E	0.75	49	0	1	1.66E-01	2.08E-01	3.14E-04	1.05E-02	9.68E-03	3.35E-04	6.25E-05	1.91E-03	9.59E-04	1.69E-06	1.43E-04	53.4	2.02E-02	1.19E-03
SI52_E	0.75	42	0	1	1.41E-01	1.77E-01	2.67E-04	8.93E-03	8.21E-03	2.84E-04	5.30E-05	1.62E-03	8.14E-04	1.44E-06	1.22E-04	45.3	1.71E-02	1.01E-03
SI52_E	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	9.98E-05	37.2	1.41E-02	8.31E-04
SI52_E	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI52_W	0.75	18	0	1	6.04E-02	7.57E-02	1.14E-04	3.83E-03	3.52E-03	1.22E-04	2.27E-05	6.93E-04	3.49E-04	6.15E-07	5.21E-05	19.4	7.33E-03	4.33E-04
SI52_W	0.75	12	0	1	4.03E-02	5.05E-02	7.62E-05	2.55E-03	2.35E-03	8.11E-05	1.52E-05	4.62E-04	2.33E-04	4.10E-07	3.47E-05	13.0	4.89E-03	2.89E-04
SI52_W	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI52_W	0.75	7	0	1	2.52E-02	3.16E-02	4.76E-05	1.59E-03	1.47E-03	5.07E-05	9.47E-06	2.89E-04	1.45E-04	2.56E-07	2.17E-05	8.1	3.05E-03	1.81E-04
SI52_W	0.75	10	0	1	3.52E-02	4.42E-02	6.66E-05	2.23E-03	2.05E-03	7.10E-05	1.33E-05	4.04E-04	2.03E-04	3.59E-07	3.04E-05	11.3	4.28E-03	2.53E-04
SI52_W	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04
SI52_W	0.75	76	0	1	2.57E-01	3.22E-01	4.86E-04	1.63E-02	1.50E-02	5.17E-04	9.66E-05	2.94E-03	1.48E-03	2.62E-06	2.21E-04	82.6	3.12E-02	1.84E-03
SI52_W	0.75	117	0	1	3.93E-01	4.92E-01	7.43E-04	2.49E-02	2.29E-02	7.91E-04	1.48E-04	4.50E-03	2.27E-03	4.00E-06	3.39E-04	126.3	4.77E-02	2.82E-03
SI52_W	0.75	94	0	1	3.17E-01	3.98E-01	6.00E-04	2.01E-02	1.85E-02	6.39E-04	1.19E-04	3.64E-03	1.83E-03	3.23E-06	2.73E-04	102.0	3.85E-02	2.28E-03
SI52_W	0.75	78	0	1	2.62E-01	3.28E-01	4.95E-04	1.66E-02	1.53E-02	5.27E-04	9.85E-05	3.00E-03	1.51E-03	2.67E-06	2.26E-04	84.2	3.18E-02	1.88E-03
SI52_W	0.75	70	0	1	2.37E-01	2.97E-01	4.47E-04	1.50E-02	1.38E-02	4.76E-04	8.90E-05	2.71E-03	1.37E-03	2.41E-06	2.04E-04	76.1	2.87E-02	1.70E-03
SI52_W	0.75	79	0	1	2.67E-01	3.35E-01	5.05E-04	1.69E-02	1.55E-02	5.37E-04	1.00E-04	3.06E-03	1.54E-03	2.72E-06	2.30E-04	85.8	3.24E-02	1.91E-03
SI52_W	0.75	84	0	1	2.82E-01	3.53E-01	5.33E-04	1.79E-02	1.64E-02	5.68E-04	1.06E-04	3.23E-03	1.63E-03	2.87E-06	2.43E-04	90.7	3.42E-02	2.02E-03
SI52_W	0.75	85	0	1	2.87E-01	3.60E-01	5.43E-04	1.82E-02	1.67E-02	5.78E-04	1.08E-04	3.29E-03	1.66E-03	2.92E-06	2.47E-04	92.3	3.48E-02	2.06E-03
SI52_W	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI52_W	0.75	96	0	1	3.22E-01	4.04E-01	6.09E-04	2.04E-02	1.88E-02	6.49E-04	1.21E-04	3.70E-03	1.86E-03	3.28E-06	2.78E-04	103.6	3.91E-02	2.31E-03
SI52_W	0.75	118	0	1	3.98E-01	4.99E-01	7.52E-04	2.52E-02	2.32E-02	8.01E-04	1.50E-04	4.56E-03	2.30E-03	4.05E-06	3.43E-04	127.9	4.83E-02	2.85E-03
SI52_W	0.75	127	0	1	4.28E-01	5.37E-01	8.09E-04	2.71E-02	2.49E-02	8.62E-04	1.61E-04	4.91E-03	2.47E-03	4.36E-06	3.69E-04	137.6	5.19E-02	3.07E-03
SI52_W	0.75	88	0	1	2.97E-01	3.72E-01	5.62E-04	1.88E-02	1.73E-02	5.98E-04	1.12E-04	3.41E-03	1.71E-03	3.03E-06	2.56E-04	95.5	3.60E-02	2.13E-03
SI52_W	0.75	58	0	1	1.96E-01	2.46E-01	3.71E-04	1.24E-02	1.14E-02	3.95E-04	7.39E-05	2.25E-03	1.13E-03	2.00E-06	1.69E-04	63.1	2.38E-02	1.41E-03
SI52_W	0.75	49	0	1	1.66E-01	2.08E-01	3.14E-04	1.05E-02	9.68E-03	3.35E-04	6.25E-05	1.91E-03	9.59E-04	1.69E-06	1.43E-04	53.4	2.02E-02	1.19E-03
SI52_W	0.75	42	0	1	1.41E-01	1.77E-01	2.67E-04	8.93E-03	8.21E-03	2.84E-04	5.30E-05	1.62E-03	8.14E-04	1.44E-06	1.22E-04	45.3	1.71E-02	1.01E-03
SI52_W	0.75	34	0	1	1.16E-01	1.45E-01	2.19E-04	7.34E-03	6.75E-03	2.33E-04	4.36E-05	1.33E-03	6.69E-04	1.18E-06	9.98E-05	37.2	1.41E-02	8.31E-04
SI52_W	0.75	25	0	1	8.56E-02	1.07E-01	1.62E-04	5.42E-03	4.99E-03	1.72E-04	3.22E-05	9.82E-04	4.94E-04	8.72E-07	7.38E-05	27.5	1.04E-02	6.14E-04

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	1.86E-02	4.24E-04	2.06E-05	5.00E-03	1.17E-03	2.13E-05	0.00E+00	5.79E-06	2.72E-06	8.12E-09	2.99E-07	3.2	9.46E-05	1.61E-05
S1	60	8	2	5	1.21E-02	2.83E-04	1.37E-05	3.33E-03	7.79E-04	1.42E-05	0.00E+00	3.85E-06	1.81E-06	5.41E-09	1.99E-07	2.1	6.28E-05	1.07E-05
S1	60	8	3	5	1.03E-02	2.47E-04	1.19E-05	2.92E-03	6.81E-04	1.24E-05	0.00E+00	3.36E-06	1.58E-06	4.74E-09	1.74E-07	1.8	5.48E-05	9.36E-06
S1	60	8	4	5	7.29E-03	1.77E-04	8.49E-06	2.08E-03	4.87E-04	8.84E-06	0.00E+00	2.40E-06	1.13E-06	3.38E-09	1.24E-07	1.3	3.91E-05	6.69E-06
S1	60	8	5	5	1.01E-02	2.47E-04	1.19E-05	2.92E-03	6.81E-04	1.24E-05	0.00E+00	3.36E-06	1.58E-06	4.74E-09	1.73E-07	1.8	5.47E-05	9.36E-06
S1	60	8	6	5	2.46E-02	6.01E-04	2.88E-05	7.08E-03	1.65E-03	3.01E-05	0.00E+00	8.16E-06	3.84E-06	1.15E-08	4.21E-07	4.5	1.33E-04	2.27E-05
S1	60	8	7	5	7.49E-02	1.80E-03	8.67E-05	2.12E-02	4.96E-03	9.03E-05	0.00E+00	2.45E-05	1.15E-05	3.45E-08	1.26E-06	13.4	3.99E-04	6.82E-05
S1	60	8	8	5	1.21E-01	2.76E-03	1.34E-04	3.25E-02	7.59E-03	1.39E-04	0.00E+00	3.76E-05	1.77E-05	5.28E-08	1.94E-06	20.7	6.14E-04	1.04E-04
S1	60	8	9	5	1.04E-01	2.23E-03	1.10E-04	2.62E-02	6.13E-03	1.13E-04	0.00E+00	3.05E-05	1.44E-05	4.26E-08	1.58E-06	17.0	5.01E-04	8.43E-05
S1	60	8	10	5	8.99E-02	1.84E-03	9.18E-05	2.17E-02	5.06E-03	9.33E-05	0.00E+00	2.53E-05	1.19E-05	3.52E-08	1.31E-06	14.2	4.16E-04	6.96E-05
S1	60	8	11	5	8.40E-02	1.66E-03	8.36E-05	1.96E-02	4.57E-03	8.46E-05	0.00E+00	2.29E-05	1.08E-05	3.18E-08	1.19E-06	12.9	3.78E-04	6.29E-05
S1	60	8	12	5	1.00E-01	1.87E-03	9.57E-05	2.21E-02	5.16E-03	9.59E-05	0.00E+00	2.60E-05	1.23E-05	3.59E-08	1.34E-06	14.8	4.31E-04	7.09E-05
S1	60	8	13	5	1.08E-01	1.98E-03	1.02E-04	2.33E-02	5.45E-03	1.02E-04	0.00E+00	2.75E-05	1.30E-05	3.79E-08	1.42E-06	15.7	4.56E-04	7.49E-05
S1	60	8	14	5	1.11E-01	2.01E-03	1.04E-04	2.37E-02	5.55E-03	1.03E-04	0.00E+00	2.80E-05	1.32E-05	3.86E-08	1.45E-06	16.0	4.65E-04	7.63E-05
S1	60	8	15	5	1.15E-01	2.09E-03	1.07E-04	2.46E-02	5.74E-03	1.07E-04	0.00E+00	2.90E-05	1.37E-05	3.99E-08	1.50E-06	16.6	4.82E-04	7.89E-05
S1	60	8	16	5	1.25E-01	2.26E-03	1.16E-04	2.67E-02	6.23E-03	1.16E-04	0.00E+00	3.15E-05	1.48E-05	4.33E-08	1.63E-06	18.0	5.23E-04	8.56E-05
S1	60	8	17	5	1.54E-01	2.79E-03	1.44E-04	3.29E-02	7.69E-03	1.44E-04	0.00E+00	3.88E-05	1.83E-05	5.35E-08	2.01E-06	22.2	6.45E-04	1.06E-04
S1	60	8	18	5	1.64E-01	3.00E-03	1.54E-04	3.54E-02	8.27E-03	1.54E-04	0.00E+00	4.17E-05	1.97E-05	5.75E-08	2.16E-06	23.8	6.93E-04	1.14E-04
S1	60	8	19	5	1.12E-01	2.09E-03	1.07E-04	2.46E-02	5.74E-03	1.07E-04	0.00E+00	2.89E-05	1.37E-05	3.99E-08	1.50E-06	16.5	4.80E-04	7.89E-05
S1	60	8	20	5	7.06E-02	1.38E-03	6.96E-05	1.62E-02	3.80E-03	7.03E-05	0.00E+00	1.90E-05	8.98E-06	2.64E-08	9.84E-07	10.8	3.15E-04	5.22E-05
S1	60	8	21	5	5.77E-02	1.17E-03	5.84E-05	1.37E-02	3.21E-03	5.93E-05	0.00E+00	1.61E-05	7.57E-06	2.23E-08	8.30E-07	9.0	2.65E-04	4.41E-05
S1	60	8	22	5	4.74E-02	9.90E-04	4.92E-05	1.17E-02	2.73E-03	5.01E-05	0.00E+00	1.36E-05	6.40E-06	1.89E-08	7.02E-07	7.6	2.23E-04	3.75E-05
S1	60	8	23	5	3.78E-02	8.13E-04	4.01E-05	9.58E-03	2.24E-03	4.11E-05	0.00E+00	1.11E-05	5.25E-06	1.56E-08	5.75E-07	6.2	1.83E-04	3.08E-05
S1	60	8	24	5	2.72E-02	6.01E-04	2.94E-05	7.08E-03	1.65E-03	3.03E-05	0.00E+00	8.22E-06	3.87E-06	1.15E-08	4.24E-07	4.6	1.35E-04	2.27E-05
S2	60	8	1	5	8.51E-03	1.94E-04	9.44E-06	2.28E-03	5.34E-04	9.74E-06	0.00E+00	2.64E-06	1.24E-06	3.71E-09	1.37E-07	1.5	4.32E-05	7.34E-06
S2	60	8	2	5	5.55E-03	1.29E-04	6.26E-06	1.52E-03	3.56E-04	6.48E-06	0.00E+00	1.76E-06	8.28E-07	2.47E-09	9.08E-08	1.0	2.87E-05	4.89E-06
S2	60	8	3	5	4.73E-03	1.13E-04	5.45E-06	1.33E-03	3.11E-04	5.66E-06	0.00E+00	1.54E-06	7.23E-07	2.16E-09	7.93E-08	0.8	2.50E-05	4.28E-06
S2	60	8	4	5	3.33E-03	8.07E-05	3.88E-06	9.52E-04	2.22E-04	4.04E-06	0.00E+00	1.10E-06	5.16E-07	1.55E-09	5.66E-08	0.6	1.79E-05	3.06E-06
S2	60	8	5	5	4.64E-03	1.13E-04	5.42E-06	1.33E-03	3.11E-04	5.66E-06	0.00E+00	1.54E-06	7.22E-07	2.16E-09	7.92E-08	0.8	2.50E-05	4.28E-06
S2	60	8	6	5	1.13E-02	2.75E-04	1.32E-05	3.24E-03	7.56E-04	1.37E-05	0.00E+00	3.73E-06	1.75E-06	5.26E-09	1.92E-07	2.0	6.06E-05	1.04E-05
S2	60	8	7	5	3.42E-02	8.24E-04	3.96E-05	9.71E-03	2.27E-03	4.12E-05	0.00E+00	1.12E-05	5.26E-06	1.58E-08	5.78E-07	6.1	1.82E-04	3.12E-05
S2	60	8	8	5	5.51E-02	1.26E-03	6.13E-05	1.48E-02	3.47E-03	6.33E-05	0.00E+00	1.72E-05	8.09E-06	2.41E-08	8.87E-07	9.5	2.81E-04	4.77E-05
S2	60	8	9	5	4.77E-02	1.02E-03	5.03E-05	1.20E-02	2.80E-03	5.14E-05	0.00E+00	1.40E-05	6.57E-06	1.95E-08	7.21E-07	7.8	2.29E-04	3.85E-05
S2	60	8	10	5	4.11E-02	8.40E-04	4.19E-05	9.90E-03	2.31E-03	4.26E-05	0.00E+00	1.16E-05	5.45E-06	1.61E-08	5.97E-07	6.5	1.90E-04	3.18E-05
S2	60	8	11	5	3.84E-02	7.59E-04	3.82E-05	8.95E-03	2.09E-03	3.86E-05	0.00E+00	1.05E-05	4.94E-06	1.45E-08	5.42E-07	5.9	1.73E-04	2.87E-05
S2	60	8	12	5	4.59E-02	8.56E-04	4.37E-05	1.01E-02	2.36E-03	4.38E-05	0.00E+00	1.19E-05	5.60E-06	1.64E-08	6.14E-07	6.8	1.97E-04	3.24E-05
S2	60	8	13	5	4.92E-02	9.04E-04	4.64E-05	1.07E-02	2.49E-03	4.64E-05	0.00E+00	1.26E-05	5.93E-06	1.73E-08	6.50E-07	7.2	2.09E-04	3.42E-05
S2	60	8	14	5	5.05E-02	9.21E-04	4.73E-05	1.08E-02	2.53E-03	4.73E-05	0.00E+00	1.28E-05	6.04E-06	1.76E-08	6.62E-07	7.3	2.13E-04	3.48E-05
S2	60	8	15	5	5.28E-02	9.53E-04	4.91E-05	1.12E-02	2.62E-03	4.90E-05	0.00E+00	1.33E-05	6.26E-06	1.82E-08	6.86E-07	7.6	2.20E-04	3.61E-05
S2	60	8	16	5	5.70E-02	1.03E-03	5.32E-05	1.22E-02	2.85E-03	5.31E-05	0.00E+00	1.44E-05	6.79E-06	1.98E-08	7.44E-07	8.2	2.39E-04	3.91E-05
S2	60	8	17	5	7.03E-02	1.28E-03	6.57E-05	1.50E-02	3.51E-03	6.56E-05	0.00E+00	1.77E-05	8.37E-06	2.44E-08	9.18E-07	10.1	2.95E-04	4.83E-05
S2	60	8	18	5	7.48E-02	1.37E-03	7.04E-05	1.62E-02	3.78E-03	7.05E-05	0.00E+00	1.91E-05	9.00E-06	2.63E-08	9.86E-07	10.9	3.17E-04	5.20E-05
S2	60	8	19	5	5.12E-02	9.53E-04	4.87E-05	1.12E-02	2.62E-03	4.88E-05	0.00E+00	1.32E-05	6.24E-06	1.82E-08	6.84E-07	7.5	2.19E-04	3.61E-05
S2	60	8	20	5	3.23E-02	6.30E-04	3.18E-05	7.42E-03	1.73E-03	3.21E-05	0.00E+00	8.70E-06	4.10E-06	1.21E-08	4.50E-07	4.9	1.44E-04	2.38E-05
S2	60	8	21	5	2.64E-02	5.33E-04	2.67E-05	6.28E-03	1.47E-03	2.71E-05	0.00E+00	7.34E-06	3.46E-06	1.02E-08	3.79E-07	4.1	1.21E-04	2.02E-05
S2	60	8	22	5	2.16E-02	4.52E-04	2.25E-05	5.33E-03	1.25E-03	2.29E-05	0.00E+00	6.21E-06	2.93E-06	8.66E-09	3.21E-07	3.5	1.02E-04	1.71E-05
S2	60	8	23	5	1.73E-02	3.71E-04	1.83E-05	4.38E-03	1.02E-03	1.88E-05	0.00E+00	5.09E-06	2.40E-06	7.11E-09	2.63E-07	2.8	8.35E-05	1.41E-05
S2	60	8	24	5	1.24E-02	2.75E-04	1.35E-05	3.24E-03	7.56E-04	1.38E-05	0.00E+00	3.76E-06	1.77E-06	5.26E-09	1.94E-07	2.1	6.15E-05	1.04E-05
S3	60	8	1	5	8.62E-03	1.96E-04	9.55E-06	8.37E-04	1.83E-04	9.86E-06	0.00E+00	2.68E-06	1.26E-06	3.76E-09	1.38E-07	1.5	4.37E-05	7.43E-06
S3	60	8	2	5	5.62E-03	1.31E-04	6.34E-06	5.58E-04	1.22E-04	6.56E-06	0.00E+00	1.78E-06	8.38E-07	2.50E-09	9.20E-08	1.0	2.91E-05	4.95E-06
S3	60	8	3	5	4.79E-03	1.14E-04	5.51E-06	4.88E-04	1.07E-04	5.73E-06	0.00E+00	1.56E-06	7.32E-07	2.19E-09	8.03E-08	0.9	2.53E-05	4.33E-06
S3	60	8	4	5	3.37E-03	8.17E-05	3.93E-06	3.49E-04	7.64E-05	4.09E-06	0.00E+00	1.11E-06	5.22E-07	1.56E-09	5.73E-08	0.6	1.81E-05	3.09E-06
S3	60	8	5	5	4.69E-03	1.14E-04	5.49E-06	4.88E-04	1.07E-04	5.73E-06	0.00E+00	1.55E-06	7.31E-07	2.19E-09	8.02E-08	0.8	2.53E-05	4.33E-06
S3	60	8	6	5	1.14E-02	2.78E-04	1.33E-05	1.19E-03	2.60E-04	1.39E-05	0.00E+00	3.77E-06	1.77E-06	5.32E-09	1.95E-07	2.1	6.14E-05	1.05E-05
S3	60	8	7	5	3.46E-02	8.34E-04	4.01E-05	3.56E-03	7.79E-04	4.18E-05	0.00E+00	1.13E-05	5.33E-06	1.60E-08	5.85E-07	6.2	1.85E-04	3.16E-05
S3	60	8	8	5	5.58E-02	1.28E-03	6.20E-05	5.44E-03	1.19E-03	6.41E-05	0.00E+00	1.74E-05	8.19E-06	2.44E-08	8.98E-07	9.6	2.84E-04	4.83E-05
S3	60	8	9	5	4.83E-02	1.03E-03	5.09E-05	4.39E-03	9.63E-04	5.21E-05	0.00E+00	1.41E-05	6.65E-06	1.97E-08	7.30E-07	7.9	2.32E-04	3.90E-05
S3	60	8	10	5	4.16E-02	8.50E-04	4.24E-05	3.63E-03	7.95E-04	4.31E-05	0.00E+00	1.17E-05	5.51E-06	1.63E-08	6.05E-07	6.6	1.93E-04	3.22E-05
S3	60	8	11	5	3.89E-02	7.68E-04	3.87E-05	3.28E-03	7.18E-04	3.91E-05	0.00E+00	1.06E-05	5.00E-06	1.47E-08	5.48E-07	6.0	1.75E-04	2.91E-05
S3	60	8	12	5	4.65E-02	8.66E-04	4.43E-05	3.70E-03	8.10E-04	4.44E-05	0.00E+00	1.20E-05	5.67E-06	1.66E-08	6.22E-07	6.8	1.99E-04	3.28E-05
S3	60	8	13	5	4.98E-02	9.16E-04	4.70E-05	3.91E-03	8.56E-04	4.70E-05	0.00E+00	1.27E-05	6.00E-06	1.75E-08	6.58E-07	7.3	2.11E-04	3.47E-05
S3	60	8	14	5	5.11E-02	9.32E-04	4.79E-05	3.98E-03	8.71E-04	4.79E-05	0.00E+00	1.30E-05	6.11E-06	1.78E-08	6.70E-07	7.4	2.15E-04	3.53E-05
S3	60	8	15	5	5.34E-02	9.65E-04	4.97E-05	4.11E-03	9.02E-04	4.96E-05	0.00E+00	1.34E-05	6.33E-06	1.85E-08	6.94E-07	7.7	2.23E-04	3.65E-05
S3	60	8	16	5	5.77E-02	1.05E-03	5.39E-05	4.46E-03	9.78E-04	5.38E-05	0.00E+00	1.46E-05	6.87E-06	2.00E-08	7.53E-07	8.3	2.42E-04	3.96E-05
S3	60	8	17	5	7.12E-02	1.29E-03	6.65E-05	5.51E-03	1.21E-03	6.64E-05	0.00E+00	1.80E-05	8.48E-06	2.47E-08	9.29E-07	10.3	2.98E-04	4.89E-05
S3	60	8	18	5	7.57E-02	1.39E-03	7.13E-05	5.93E-03	1.30E-03	7.13E-05	0.00E+00	1.93E-05	9.11E-06	2.66E-08	9.99E-07	11.0	3.20E-04	5.26E-05
S3	60	8	19	5	5.19E-02	9.65E-04	4.93E-05	4.11E-03	9.02E-04	4.94E-05	0.00E+00	1.34E-05	6.31E-06	1.85E-08	6.92E-07	7.6	2.22E-04	3.65E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	20	5	3.27E-02	6.38E-04	3.22E-05	2.72E-03	5.96E-04	3.25E-05	0.00E+00	8.81E-06	4.15E-06	1.22E-08	4.55E-07	5.0	1.46E-04	2.41E-05
S3	60	8	21	5	2.67E-02	5.39E-04	2.70E-05	2.30E-03	5.04E-04	2.74E-05	0.00E+00	7.43E-06	3.50E-06	1.03E-08	3.84E-07	4.2	1.22E-04	2.04E-05
S3	60	8	22	5	2.19E-02	4.58E-04	2.27E-05	1.95E-03	4.28E-04	2.32E-05	0.00E+00	6.29E-06	2.96E-06	8.76E-09	3.25E-07	3.5	1.03E-04	1.73E-05
S3	60	8	23	5	1.75E-02	3.76E-04	1.85E-05	1.60E-03	3.51E-04	1.90E-05	0.00E+00	5.15E-06	2.43E-06	7.20E-09	2.66E-07	2.9	8.45E-05	1.42E-05
S3	60	8	24	5	1.26E-02	2.78E-04	1.36E-05	1.19E-03	2.60E-04	1.40E-05	0.00E+00	3.80E-06	1.79E-06	5.32E-09	1.96E-07	2.1	6.22E-05	1.05E-05
S4	60	8	1	5	1.99E-02	4.53E-04	2.20E-05	1.93E-03	4.23E-04	2.28E-05	0.00E+00	6.18E-06	2.91E-06	8.67E-09	3.19E-07	3.4	1.01E-04	1.71E-05
S4	60	8	2	5	1.30E-02	3.02E-04	1.46E-05	1.29E-03	2.82E-04	1.52E-05	0.00E+00	4.11E-06	1.93E-06	5.78E-09	2.12E-07	2.3	6.71E-05	1.14E-05
S4	60	8	3	5	1.10E-02	2.64E-04	1.27E-05	1.13E-03	2.47E-04	1.32E-05	0.00E+00	3.59E-06	1.69E-06	5.06E-09	1.85E-07	2.0	5.85E-05	1.00E-05
S4	60	8	4	5	7.78E-03	1.89E-04	9.06E-06	8.05E-04	1.76E-04	9.44E-06	0.00E+00	2.56E-06	1.20E-06	3.61E-09	1.32E-07	1.4	4.17E-05	7.14E-06
S4	60	8	5	5	1.08E-02	2.64E-04	1.27E-05	1.13E-03	2.47E-04	1.32E-05	0.00E+00	3.59E-06	1.69E-06	5.06E-09	1.85E-07	2.0	5.83E-05	1.00E-05
S4	60	8	6	5	2.63E-02	6.41E-04	3.08E-05	2.74E-03	6.00E-04	3.21E-05	0.00E+00	8.71E-06	4.09E-06	1.23E-08	4.49E-07	4.8	1.42E-04	2.43E-05
S4	60	8	7	5	8.00E-02	1.92E-03	9.26E-05	8.21E-03	1.80E-03	9.64E-05	0.00E+00	2.62E-05	1.23E-05	3.68E-08	1.35E-06	14.3	4.26E-04	7.28E-05
S4	60	8	8	5	1.29E-01	2.94E-03	1.43E-04	1.26E-02	2.75E-03	1.48E-04	0.00E+00	4.02E-05	1.89E-05	5.63E-08	2.07E-06	22.1	6.56E-04	1.11E-04
S4	60	8	9	5	1.11E-01	2.38E-03	1.17E-04	1.01E-02	2.22E-03	1.20E-04	0.00E+00	3.26E-05	1.54E-05	4.55E-08	1.68E-06	18.2	5.35E-04	9.00E-05
S4	60	8	10	5	9.60E-02	1.96E-03	9.80E-05	8.37E-03	1.83E-03	9.96E-05	0.00E+00	2.70E-05	1.27E-05	3.76E-08	1.40E-06	15.1	4.45E-04	7.43E-05
S4	60	8	11	5	8.97E-02	1.77E-03	8.93E-05	7.57E-03	1.66E-03	9.03E-05	0.00E+00	2.45E-05	1.15E-05	3.40E-08	1.27E-06	13.8	4.04E-04	6.71E-05
S4	60	8	12	5	1.07E-01	2.00E-03	1.02E-04	8.53E-03	1.87E-03	1.02E-04	0.00E+00	2.77E-05	1.31E-05	3.83E-08	1.43E-06	15.8	4.60E-04	7.57E-05
S4	60	8	13	5	1.15E-01	2.11E-03	1.08E-04	9.01E-03	1.97E-03	1.08E-04	0.00E+00	2.94E-05	1.39E-05	4.05E-08	1.52E-06	16.8	4.87E-04	8.00E-05
S4	60	8	14	5	1.18E-01	2.15E-03	1.11E-04	9.17E-03	2.01E-03	1.10E-04	0.00E+00	2.99E-05	1.41E-05	4.12E-08	1.55E-06	17.1	4.97E-04	8.14E-05
S4	60	8	15	5	1.23E-01	2.23E-03	1.15E-04	9.50E-03	2.08E-03	1.15E-04	0.00E+00	3.10E-05	1.46E-05	4.26E-08	1.60E-06	17.7	5.15E-04	8.43E-05
S4	60	8	16	5	1.33E-01	2.41E-03	1.24E-04	1.03E-02	2.26E-03	1.24E-04	0.00E+00	3.36E-05	1.59E-05	4.62E-08	1.74E-06	19.2	5.58E-04	9.14E-05
S4	60	8	17	5	1.64E-01	2.98E-03	1.53E-04	1.27E-02	2.79E-03	1.53E-04	0.00E+00	4.15E-05	1.96E-05	5.71E-08	2.14E-06	23.7	6.89E-04	1.13E-04
S4	60	8	18	5	1.75E-01	3.21E-03	1.65E-04	1.37E-02	3.00E-03	1.65E-04	0.00E+00	4.46E-05	2.10E-05	6.14E-08	2.30E-06	25.4	7.40E-04	1.21E-04
S4	60	8	19	5	1.20E-01	2.23E-03	1.14E-04	9.50E-03	2.08E-03	1.14E-04	0.00E+00	3.09E-05	1.46E-05	4.26E-08	1.60E-06	17.6	5.12E-04	8.43E-05
S4	60	8	20	5	7.54E-02	1.47E-03	7.43E-05	6.28E-03	1.38E-03	7.50E-05	0.00E+00	2.03E-05	9.59E-06	2.82E-08	1.05E-06	11.5	3.36E-04	5.57E-05
S4	60	8	21	5	6.16E-02	1.25E-03	6.23E-05	5.31E-03	1.16E-03	6.33E-05	0.00E+00	1.72E-05	8.08E-06	2.38E-08	8.86E-07	9.6	2.83E-04	4.71E-05
S4	60	8	22	5	5.06E-02	1.06E-03	5.25E-05	4.51E-03	9.87E-04	5.35E-05	0.00E+00	1.45E-05	6.84E-06	2.02E-08	7.50E-07	8.1	2.39E-04	4.00E-05
S4	60	8	23	5	4.03E-02	8.68E-04	4.28E-05	3.70E-03	8.11E-04	4.38E-05	0.00E+00	1.19E-05	5.60E-06	1.66E-08	6.14E-07	6.6	1.95E-04	3.28E-05
S4	60	8	24	5	2.90E-02	6.41E-04	3.14E-05	2.74E-03	6.00E-04	3.23E-05	0.00E+00	8.77E-06	4.13E-06	1.23E-08	4.53E-07	4.9	1.44E-04	2.43E-05
S5	60	8	1	5	6.20E-03	1.41E-04	6.87E-06	6.02E-04	1.32E-04	7.09E-06	0.00E+00	1.93E-06	9.06E-07	2.70E-09	9.94E-08	1.1	3.15E-05	5.34E-06
S5	60	8	2	5	4.04E-03	9.40E-05	4.56E-06	4.01E-04	8.79E-05	4.72E-06	0.00E+00	1.28E-06	6.03E-07	1.80E-09	6.61E-08	0.7	2.09E-05	3.56E-06
S5	60	8	3	5	3.44E-03	8.23E-05	3.96E-06	3.51E-04	7.69E-05	4.12E-06	0.00E+00	1.12E-06	5.26E-07	1.58E-09	5.77E-08	0.6	1.82E-05	3.11E-06
S5	60	8	4	5	2.42E-03	5.88E-05	2.82E-06	2.51E-04	5.49E-05	2.94E-06	0.00E+00	7.98E-07	3.75E-07	1.13E-09	4.12E-08	0.4	1.30E-05	2.22E-06
S5	60	8	5	5	3.38E-03	8.23E-05	3.95E-06	3.51E-04	7.69E-05	4.12E-06	0.00E+00	1.12E-06	5.25E-07	1.58E-09	5.76E-08	0.6	1.82E-05	3.11E-06
S5	60	8	6	5	8.20E-03	2.00E-04	9.59E-06	8.53E-04	1.87E-04	1.00E-05	0.00E+00	2.71E-06	1.28E-06	3.83E-09	1.40E-07	1.5	4.41E-05	7.56E-06
S5	60	8	7	5	2.49E-02	6.00E-04	2.88E-05	2.56E-03	5.60E-04	3.00E-05	0.00E+00	8.15E-06	3.83E-06	1.15E-08	4.20E-07	4.5	1.33E-04	2.27E-05
S5	60	8	8	5	4.01E-02	9.17E-04	4.46E-05	3.91E-03	8.57E-04	4.61E-05	0.00E+00	1.25E-05	5.89E-06	1.76E-08	6.46E-07	6.9	2.04E-04	3.47E-05
S5	60	8	9	5	3.47E-02	7.41E-04	3.66E-05	3.16E-03	6.92E-04	3.74E-05	0.00E+00	1.02E-05	4.78E-06	1.42E-08	5.25E-07	5.7	1.67E-04	2.80E-05
S5	60	8	10	5	2.99E-02	6.11E-04	3.05E-05	2.61E-03	5.71E-04	3.10E-05	0.00E+00	8.41E-06	3.96E-06	1.17E-08	4.35E-07	4.7	1.39E-04	2.31E-05
S5	60	8	11	5	2.79E-02	5.52E-04	2.78E-05	2.36E-03	5.16E-04	2.81E-05	0.00E+00	7.63E-06	3.59E-06	1.06E-08	3.94E-07	4.3	1.26E-04	2.09E-05
S5	60	8	12	5	3.34E-02	6.23E-04	3.18E-05	2.66E-03	5.82E-04	3.19E-05	0.00E+00	8.64E-06	4.08E-06	1.19E-08	4.47E-07	4.9	1.43E-04	2.36E-05
S5	60	8	13	5	3.58E-02	6.58E-04	3.38E-05	2.81E-03	6.15E-04	3.38E-05	0.00E+00	9.15E-06	4.32E-06	1.26E-08	4.73E-07	5.2	1.52E-04	2.49E-05
S5	60	8	14	5	3.68E-02	6.70E-04	3.44E-05	2.86E-03	6.26E-04	3.44E-05	0.00E+00	9.32E-06	4.40E-06	1.28E-08	4.82E-07	5.3	1.55E-04	2.54E-05
S5	60	8	15	5	3.84E-02	6.94E-04	3.57E-05	2.96E-03	6.48E-04	3.57E-05	0.00E+00	9.65E-06	4.55E-06	1.33E-08	4.99E-07	5.5	1.60E-04	2.63E-05
S5	60	8	16	5	4.15E-02	7.52E-04	3.87E-05	3.21E-03	7.03E-04	3.87E-05	0.00E+00	1.05E-05	4.94E-06	1.44E-08	5.41E-07	6.0	1.74E-04	2.85E-05
S5	60	8	17	5	5.12E-02	9.29E-04	4.78E-05	3.96E-03	8.68E-04	4.77E-05	0.00E+00	1.29E-05	6.10E-06	1.78E-08	6.68E-07	7.4	2.15E-04	3.52E-05
S5	60	8	18	5	5.44E-02	9.99E-04	5.13E-05	4.26E-03	9.34E-04	5.13E-05	0.00E+00	1.39E-05	6.55E-06	1.91E-08	7.18E-07	7.9	2.30E-04	3.78E-05
S5	60	8	19	5	3.73E-02	6.94E-04	3.55E-05	2.96E-03	6.48E-04	3.55E-05	0.00E+00	9.63E-06	4.54E-06	1.33E-08	4.98E-07	5.5	1.60E-04	2.63E-05
S5	60	8	20	5	2.35E-02	4.58E-04	2.32E-05	1.96E-03	4.28E-04	2.34E-05	0.00E+00	6.33E-06	2.99E-06	8.78E-09	3.27E-07	3.6	1.05E-04	1.74E-05
S5	60	8	21	5	1.92E-02	3.88E-04	1.94E-05	1.65E-03	3.63E-04	1.97E-05	0.00E+00	5.34E-06	2.52E-06	7.43E-09	2.76E-07	3.0	8.81E-05	1.47E-05
S5	60	8	22	5	1.58E-02	3.29E-04	1.63E-05	1.40E-03	3.08E-04	1.67E-05	0.00E+00	4.52E-06	2.13E-06	6.30E-09	2.34E-07	2.5	7.43E-05	1.25E-05
S5	60	8	23	5	1.26E-02	2.70E-04	1.33E-05	1.15E-03	2.53E-04	1.37E-05	0.00E+00	3.71E-06	1.74E-06	5.18E-09	1.91E-07	2.1	6.08E-05	1.02E-05
S5	60	8	24	5	9.03E-03	2.00E-04	9.79E-06	8.53E-04	1.87E-04	1.01E-05	0.00E+00	2.73E-06	1.29E-06	3.83E-09	1.41E-07	1.5	4.47E-05	7.56E-06
S6	60	8	1	5	6.73E-03	1.53E-04	7.46E-06	6.53E-04	1.43E-04	7.70E-06	0.00E+00	2.09E-06	9.83E-07	2.93E-09	1.08E-07	1.2	3.41E-05	5.80E-06
S6	60	8	2	5	4.38E-03	1.02E-04	4.95E-06	4.35E-04	9.54E-05	5.12E-06	0.00E+00	1.39E-06	6.54E-07	1.95E-09	7.18E-08	0.8	2.27E-05	3.86E-06
S6	60	8	3	5	3.74E-03	8.93E-05	4.30E-06	3.81E-04	8.35E-05	4.48E-06	0.00E+00	1.21E-06	5.71E-07	1.71E-09	6.27E-08	0.7	1.98E-05	3.38E-06
S6	60	8	4	5	2.63E-03	6.38E-05	3.06E-06	2.72E-04	5.96E-05	3.19E-06	0.00E+00	8.67E-07	4.07E-07	1.22E-09	4.47E-08	0.5	1.41E-05	2.42E-06
S6	60	8	5	5	3.66E-03	8.93E-05	4.28E-06	3.81E-04	8.35E-05	4.47E-06	0.00E+00	1.21E-06	5.70E-07	1.71E-09	6.26E-08	0.7	1.97E-05	3.38E-06
S6	60	8	6	5	8.90E-03	2.17E-04	1.04E-05	9.25E-04	2.03E-04	1.09E-05	0.00E+00	2.95E-06	1.38E-06	4.15E-09	1.52E-07	1.6	4.79E-05	8.21E-06
S6	60	8	7	5	2.70E-02	6.51E-04	3.13E-05	2.78E-03	6.08E-04	3.26E-05	0.00E+00	8.85E-06	4.16E-06	1.25E-08	4.56E-07	4.8	1.44E-04	2.46E-05
S6	60	8	8	5	4.36E-02	9.95E-04	4.84E-05	4.25E-03	9.30E-04	5.00E-05	0.00E+00	1.36E-05	6.39E-06	1.91E-08	7.01E-07	7.5	2.22E-04	3.77E-05
S6	60	8	9	5	3.77E-02	8.04E-04	3.97E-05	3.43E-03	7.51E-04	4.06E-05	0.00E+00	1.10E-05	5.19E-06	1.54E-08	5.70E-07	6.1	1.81E-04	3.04E-05
S6	60	8	10	5	3.25E-02	6.64E-04	3.31E-05	2.83E-03	6.20E-04	3.37E-05	0.00E+00	9.13E-06	4.30E-06	1.27E-08	4.72E-07	5.1	1.50E-04	2.51E-05
S6	60	8	11	5	3.03E-02	6.00E-04	3.02E-05	2.56E-03	5.61E-04	3.05E-05	0.00E+00	8.28E-06	3.90E-06	1.15E-08	4.28E-07	4.7	1.37E-04	2.27E-05
S6	60	8	12	5	3.63E-02	6.76E-04	3.46E-05	2.89E-03	6.32E-04	3.46E-05	0.00E+00	9.38E-06	4.43E-06	1.29E-08	4.85E-07	5.3	1.56E-04	2.56E-05
S6	60	8	13	5	3.89E-02	7.15E-04	3.67E-05	3.05E-03	6.68E-04	3.67E-05	0.00E+00	9.93E-06	4.68E-06	1.37E-08	5.13E-07	5.7	1.65E-04	2.70E-05
S6	60	8	14	5	3.99E-02	7.27E-04	3.74E-05	3.10E-03	6.80E-04	3.74E-05	0.00E+00	1.01E-05	4.77E-06	1.39E-08	5.23E-07	5.8	1.68E-04	2.75E-05
S6	60	8	15	5	4.17E-02	7.53E-04	3.88E-05	3.21E-03	7.04E-04	3.87E-05	0.00E+00	1.05E-05	4.94E-06	1.44E-08	5.42E-07	6.0	1.74E-04	2.85E-05
S6	60	8	16	5	4.51E-02	8.17E-04	4.20E-05	3.48E-03	7.63E-04	4.20E-05	0.00E+00	1.14E-05	5.36E-06	1.56E-08	5.88E-07	6.5	1.89E-04	3.09E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	17	5	5.55E-02	1.01E-03	5.19E-05	4.30E-03	9.42E-04	5.18E-05	0.00E+00	1.40E-05	6.62E-06	1.93E-08	7.25E-07	8.0	2.33E-04	3.82E-05
S6	60	8	18	5	5.91E-02	1.08E-03	5.56E-05	4.63E-03	1.01E-03	5.57E-05	0.00E+00	1.51E-05	7.11E-06	2.08E-08	7.79E-07	8.6	2.50E-04	4.11E-05
S6	60	8	19	5	4.05E-02	7.53E-04	3.85E-05	3.21E-03	7.04E-04	3.86E-05	0.00E+00	1.04E-05	4.93E-06	1.44E-08	5.40E-07	5.9	1.73E-04	2.85E-05
S6	60	8	20	5	2.55E-02	4.98E-04	2.51E-05	2.12E-03	4.65E-04	2.54E-05	0.00E+00	6.88E-06	3.24E-06	9.53E-09	3.55E-07	3.9	1.14E-04	1.88E-05
S6	60	8	21	5	2.08E-02	4.21E-04	2.11E-05	1.80E-03	3.94E-04	2.14E-05	0.00E+00	5.80E-06	2.73E-06	8.06E-09	3.00E-07	3.3	9.56E-05	1.59E-05
S6	60	8	22	5	1.71E-02	3.57E-04	1.77E-05	1.52E-03	3.34E-04	1.81E-05	0.00E+00	4.91E-06	2.31E-06	6.84E-09	2.54E-07	2.7	8.07E-05	1.35E-05
S6	60	8	23	5	1.36E-02	2.93E-04	1.45E-05	1.25E-03	2.74E-04	1.48E-05	0.00E+00	4.02E-06	1.89E-06	5.62E-09	2.08E-07	2.2	6.60E-05	1.11E-05
S6	60	8	24	5	9.81E-03	2.17E-04	1.06E-05	9.25E-04	2.03E-04	1.09E-05	0.00E+00	2.97E-06	1.40E-06	4.15E-09	1.53E-07	1.6	4.86E-05	8.21E-06
S7	60	8	1	5	1.11E-02	2.52E-04	1.23E-05	1.08E-03	2.36E-04	1.27E-05	0.00E+00	3.44E-06	1.62E-06	4.83E-09	1.78E-07	1.9	5.63E-05	9.55E-06
S7	60	8	2	5	7.22E-03	1.68E-04	8.15E-06	7.18E-04	1.57E-04	8.44E-06	0.00E+00	2.29E-06	1.08E-06	3.22E-09	1.18E-07	1.3	3.74E-05	6.37E-06
S7	60	8	3	5	6.16E-03	1.47E-04	7.09E-06	6.28E-04	1.38E-04	7.37E-06	0.00E+00	2.00E-06	9.41E-07	2.82E-09	1.03E-07	1.1	3.26E-05	5.57E-06
S7	60	8	4	5	4.34E-03	1.05E-04	5.05E-06	4.49E-04	9.83E-05	5.26E-06	0.00E+00	1.43E-06	6.71E-07	2.01E-09	7.37E-08	0.8	2.32E-05	3.98E-06
S7	60	8	5	5	6.04E-03	1.47E-04	7.06E-06	6.28E-04	1.38E-04	7.36E-06	0.00E+00	2.00E-06	9.40E-07	2.82E-09	1.03E-07	1.1	3.25E-05	5.57E-06
S7	60	8	6	5	1.47E-02	3.57E-04	1.71E-05	1.52E-03	3.34E-04	1.79E-05	0.00E+00	4.85E-06	2.28E-06	6.84E-09	2.50E-07	2.6	7.90E-05	1.35E-05
S7	60	8	7	5	4.46E-02	1.07E-03	5.16E-05	4.57E-03	1.00E-03	5.37E-05	0.00E+00	1.46E-05	6.85E-06	2.05E-08	7.52E-07	8.0	2.37E-04	4.06E-05
S7	60	8	8	5	7.18E-02	1.64E-03	7.98E-05	7.00E-03	1.53E-03	8.24E-05	0.00E+00	2.24E-05	1.05E-05	3.14E-08	1.16E-06	12.3	3.66E-04	6.21E-05
S7	60	8	9	5	6.21E-02	1.32E-03	6.55E-05	5.65E-03	1.24E-03	6.70E-05	0.00E+00	1.82E-05	8.56E-06	2.54E-08	9.38E-07	10.1	2.98E-04	5.01E-05
S7	60	8	10	5	5.35E-02	1.09E-03	5.46E-05	4.66E-03	1.02E-03	5.55E-05	0.00E+00	1.50E-05	7.09E-06	2.09E-08	7.78E-07	8.4	2.48E-04	4.14E-05
S7	60	8	11	5	5.00E-02	9.88E-04	4.98E-05	4.22E-03	9.24E-04	5.03E-05	0.00E+00	1.36E-05	6.43E-06	1.89E-08	7.05E-07	7.7	2.25E-04	3.74E-05
S7	60	8	12	5	5.98E-02	1.11E-03	5.69E-05	4.75E-03	1.04E-03	5.71E-05	0.00E+00	1.55E-05	7.29E-06	2.13E-08	8.00E-07	8.8	2.56E-04	4.22E-05
S7	60	8	13	5	6.41E-02	1.18E-03	6.04E-05	5.02E-03	1.10E-03	6.04E-05	0.00E+00	1.64E-05	7.72E-06	2.25E-08	8.46E-07	9.3	2.71E-04	4.46E-05
S7	60	8	14	5	6.58E-02	1.20E-03	6.16E-05	5.11E-03	1.12E-03	6.16E-05	0.00E+00	1.67E-05	7.86E-06	2.29E-08	8.62E-07	9.5	2.77E-04	4.54E-05
S7	60	8	15	5	6.87E-02	1.24E-03	6.39E-05	5.29E-03	1.16E-03	6.38E-05	0.00E+00	1.73E-05	8.15E-06	2.38E-08	8.93E-07	9.9	2.87E-04	4.70E-05
S7	60	8	16	5	7.43E-02	1.35E-03	6.93E-05	5.74E-03	1.26E-03	6.92E-05	0.00E+00	1.87E-05	8.83E-06	2.58E-08	9.68E-07	10.7	3.11E-04	5.09E-05
S7	60	8	17	5	9.15E-02	1.66E-03	8.55E-05	7.09E-03	1.55E-03	8.54E-05	0.00E+00	2.31E-05	1.09E-05	3.18E-08	1.20E-06	13.2	3.84E-04	6.29E-05
S7	60	8	18	5	9.73E-02	1.79E-03	9.17E-05	7.62E-03	1.67E-03	9.17E-05	0.00E+00	2.48E-05	1.17E-05	3.42E-08	1.28E-06	14.2	4.12E-04	6.77E-05
S7	60	8	19	5	6.67E-02	1.24E-03	6.34E-05	5.29E-03	1.16E-03	6.36E-05	0.00E+00	1.72E-05	8.12E-06	2.38E-08	8.90E-07	9.8	2.85E-04	4.70E-05
S7	60	8	20	5	4.20E-02	8.20E-04	4.14E-05	3.50E-03	7.66E-04	4.18E-05	0.00E+00	1.13E-05	5.34E-06	1.57E-08	5.86E-07	6.4	1.87E-04	3.10E-05
S7	60	8	21	5	3.43E-02	6.94E-04	3.47E-05	2.96E-03	6.49E-04	3.53E-05	0.00E+00	9.56E-06	4.50E-06	1.33E-08	4.94E-07	5.4	1.58E-04	2.63E-05
S7	60	8	22	5	2.82E-02	5.89E-04	2.92E-05	2.51E-03	5.50E-04	2.98E-05	0.00E+00	8.09E-06	3.81E-06	1.13E-08	4.18E-07	4.5	1.33E-04	2.23E-05
S7	60	8	23	5	2.25E-02	4.84E-04	2.39E-05	2.06E-03	4.52E-04	2.44E-05	0.00E+00	6.63E-06	3.12E-06	9.26E-09	3.42E-07	3.7	1.09E-04	1.83E-05
S7	60	8	24	5	1.62E-02	3.57E-04	1.75E-05	1.52E-03	3.34E-04	1.80E-05	0.00E+00	4.89E-06	2.30E-06	6.84E-09	2.52E-07	2.7	8.00E-05	1.35E-05
S8	60	8	1	5	9.74E-03	2.22E-04	1.08E-05	9.46E-04	2.07E-04	1.11E-05	0.00E+00	3.03E-06	1.42E-06	4.25E-09	1.56E-07	1.7	4.95E-05	8.39E-06
S8	60	8	2	5	6.35E-03	1.48E-04	7.16E-06	6.31E-04	1.38E-04	7.42E-06	0.00E+00	2.01E-06	9.47E-07	2.83E-09	1.04E-07	1.1	3.29E-05	5.60E-06
S8	60	8	3	5	5.41E-03	1.29E-04	6.23E-06	5.52E-04	1.21E-04	6.48E-06	0.00E+00	1.76E-06	8.27E-07	2.48E-09	9.08E-08	1.0	2.87E-05	4.90E-06
S8	60	8	4	5	3.81E-03	9.24E-05	4.44E-06	3.94E-04	8.64E-05	4.62E-06	0.00E+00	1.26E-06	5.90E-07	1.77E-09	6.48E-08	0.7	2.04E-05	3.50E-06
S8	60	8	5	5	5.31E-03	1.29E-04	6.21E-06	5.52E-04	1.21E-04	6.47E-06	0.00E+00	1.76E-06	8.26E-07	2.48E-09	9.06E-08	1.0	2.86E-05	4.90E-06
S8	60	8	6	5	1.29E-02	3.14E-04	1.51E-05	1.34E-03	2.94E-04	1.57E-05	0.00E+00	4.27E-06	2.01E-06	6.01E-09	2.20E-07	2.3	6.94E-05	1.19E-05
S8	60	8	7	5	3.92E-02	9.42E-04	4.53E-05	4.02E-03	8.81E-04	4.72E-05	0.00E+00	1.28E-05	6.02E-06	1.80E-08	6.61E-07	7.0	2.09E-04	3.57E-05
S8	60	8	8	5	6.31E-02	1.44E-03	7.01E-05	6.15E-03	1.35E-03	7.25E-05	0.00E+00	1.97E-05	9.25E-06	2.76E-08	1.02E-06	10.8	3.21E-04	5.46E-05
S8	60	8	9	5	5.46E-02	1.16E-03	5.75E-05	4.97E-03	1.09E-03	5.88E-05	0.00E+00	1.60E-05	7.52E-06	2.23E-08	8.25E-07	8.9	2.62E-04	4.41E-05
S8	60	8	10	5	4.70E-02	9.61E-04	4.80E-05	4.10E-03	8.98E-04	4.88E-05	0.00E+00	1.32E-05	6.23E-06	1.84E-08	6.83E-07	7.4	2.18E-04	3.64E-05
S8	60	8	11	5	4.39E-02	8.69E-04	4.37E-05	3.71E-03	8.12E-04	4.42E-05	0.00E+00	1.20E-05	5.65E-06	1.66E-08	6.20E-07	6.8	1.98E-04	3.29E-05
S8	60	8	12	5	5.25E-02	9.79E-04	5.00E-05	4.18E-03	9.15E-04	5.02E-05	0.00E+00	1.36E-05	6.41E-06	1.88E-08	7.03E-07	7.7	2.25E-04	3.71E-05
S8	60	8	13	5	5.63E-02	1.03E-03	5.31E-05	4.41E-03	9.67E-04	5.31E-05	0.00E+00	1.44E-05	6.78E-06	1.98E-08	7.44E-07	8.2	2.39E-04	3.92E-05
S8	60	8	14	5	5.78E-02	1.05E-03	5.42E-05	4.49E-03	9.85E-04	5.41E-05	0.00E+00	1.46E-05	6.91E-06	2.02E-08	7.58E-07	8.4	2.43E-04	3.99E-05
S8	60	8	15	5	6.04E-02	1.09E-03	5.62E-05	4.65E-03	1.02E-03	5.61E-05	0.00E+00	1.52E-05	7.16E-06	2.09E-08	7.85E-07	8.7	2.52E-04	4.13E-05
S8	60	8	16	5	6.53E-02	1.18E-03	6.09E-05	5.05E-03	1.11E-03	6.08E-05	0.00E+00	1.65E-05	7.76E-06	2.26E-08	8.51E-07	9.4	2.73E-04	4.48E-05
S8	60	8	17	5	8.04E-02	1.46E-03	7.51E-05	6.23E-03	1.36E-03	7.51E-05	0.00E+00	2.03E-05	9.58E-06	2.80E-08	1.05E-06	11.6	3.37E-04	5.53E-05
S8	60	8	18	5	8.56E-02	1.57E-03	8.06E-05	6.70E-03	1.47E-03	8.06E-05	0.00E+00	2.18E-05	1.03E-05	3.01E-08	1.13E-06	12.5	3.62E-04	5.95E-05
S8	60	8	19	5	5.86E-02	1.09E-03	5.57E-05	4.65E-03	1.02E-03	5.59E-05	0.00E+00	1.51E-05	7.14E-06	2.09E-08	7.83E-07	8.6	2.51E-04	4.13E-05
S8	60	8	20	5	3.69E-02	7.21E-04	3.64E-05	3.07E-03	6.74E-04	3.68E-05	0.00E+00	9.96E-06	4.69E-06	1.38E-08	5.15E-07	5.6	1.65E-04	2.73E-05
S8	60	8	21	5	3.02E-02	6.10E-04	3.05E-05	2.60E-03	5.70E-04	3.10E-05	0.00E+00	8.40E-06	3.96E-06	1.17E-08	4.34E-07	4.7	1.38E-04	2.31E-05
S8	60	8	22	5	2.48E-02	5.17E-04	2.57E-05	2.21E-03	4.84E-04	2.62E-05	0.00E+00	7.11E-06	3.35E-06	9.91E-09	3.67E-07	4.0	1.17E-04	1.96E-05
S8	60	8	23	5	1.97E-02	4.25E-04	2.10E-05	1.81E-03	3.97E-04	2.15E-05	0.00E+00	5.83E-06	2.74E-06	8.14E-09	3.01E-07	3.2	9.56E-05	1.61E-05
S8	60	8	24	5	1.42E-02	3.14E-04	1.54E-05	1.34E-03	2.94E-04	1.58E-05	0.00E+00	4.30E-06	2.02E-06	6.01E-09	2.22E-07	2.4	7.03E-05	1.19E-05
S9	60	8	1	5	1.04E-02	2.36E-04	1.15E-05	1.01E-03	2.21E-04	1.19E-05	0.00E+00	3.22E-06	1.52E-06	4.52E-09	1.66E-07	1.8	5.27E-05	8.94E-06
S9	60	8	2	5	6.76E-03	1.57E-04	7.63E-06	6.72E-04	1.47E-04	7.91E-06	0.00E+00	2.15E-06	1.01E-06	3.01E-09	1.11E-07	1.2	3.50E-05	5.96E-06
S9	60	8	3	5	5.76E-03	1.38E-04	6.64E-06	5.88E-04	1.29E-04	6.90E-06	0.00E+00	1.87E-06	8.81E-07	2.64E-09	9.67E-08	1.0	3.05E-05	5.22E-06
S9	60	8	4	5	4.06E-03	9.84E-05	4.73E-06	4.20E-04	9.20E-05	4.93E-06	0.00E+00	1.34E-06	6.29E-07	1.88E-09	6.90E-08	0.7	2.18E-05	3.73E-06
S9	60	8	5	5	5.65E-03	1.38E-04	6.61E-06	5.88E-04	1.29E-04	6.89E-06	0.00E+00	1.87E-06	8.80E-07	2.64E-09	9.65E-08	1.0	3.04E-05	5.22E-06
S9	60	8	6	5	1.37E-02	3.35E-04	1.61E-05	1.43E-03	3.13E-04	1.67E-05	0.00E+00	4.54E-06	2.14E-06	6.41E-09	2.34E-07	2.5	7.39E-05	1.27E-05
S9	60	8	7	5	4.17E-02	1.00E-03	4.83E-05	4.28E-03	9.38E-04	5.03E-05	0.00E+00	1.36E-05	6.42E-06	1.92E-08	7.04E-07	7.5	2.22E-04	3.80E-05
S9	60	8	8	5	6.72E-02	1.54E-03	7.47E-05	6.55E-03	1.44E-03	7.72E-05	0.00E+00	2.10E-05	9.86E-06	2.94E-08	1.08E-06	11.5	3.42E-04	5.81E-05
S9	60	8	9	5	5.82E-02	1.24E-03	6.13E-05	5.29E-03	1.16E-03	6.27E-05	0.00E+00	1.70E-05	8.01E-06	2.37E-08	8.79E-07	9.5	2.79E-04	4.69E-05
S9	60	8	10	5	5.01E-02	1.02E-03	5.11E-05	4.37E-03	9.57E-04	5.19E-05	0.00E+00	1.41E-05	6.64E-06	1.96E-08	7.28E-07	7.9	2.32E-04	3.88E-05
S9	60	8	11	5	4.68E-02	9.25E-04	4.66E-05	3.95E-03	8.65E-04	4.71E-05	0.00E+00	1.28E-05	6.02E-06	1.77E-08	6.60E-07	7.2	2.11E-04	3.50E-05
S9	60	8	12	5	5.60E-02	1.04E-03	5.33E-05	4.45E-03	9.75E-04	5.34E-05	0.00E+00	1.45E-05	6.83E-06	2.00E-08	7.49E-07	8.2	2.40E-04	3.95E-05
S9	60	8	13	5	6.00E-02	1.10E-03	5.66E-05	4.70E-03	1.03E-03	5.66E-05	0.00E+00	1.53E-05	7.23E-06	2.11E-08	7.92E-07	8.7	2.54E-04	4.17E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	14	5	6.16E-02	1.12E-03	5.77E-05	4.79E-03	1.05E-03	5.76E-05	0.00E+00	1.56E-05	7.36E-06	2.15E-08	8.07E-07	8.9	2.59E-04	4.25E-05
S9	60	8	15	5	6.43E-02	1.16E-03	5.99E-05	4.96E-03	1.09E-03	5.98E-05	0.00E+00	1.62E-05	7.63E-06	2.22E-08	8.36E-07	9.3	2.69E-04	4.40E-05
S9	60	8	16	5	6.95E-02	1.26E-03	6.49E-05	5.38E-03	1.18E-03	6.48E-05	0.00E+00	1.75E-05	8.27E-06	2.41E-08	9.07E-07	10.0	2.91E-04	4.77E-05
S9	60	8	17	5	8.57E-02	1.56E-03	8.00E-05	6.64E-03	1.45E-03	8.00E-05	0.00E+00	2.16E-05	1.02E-05	2.98E-08	1.12E-06	12.4	3.59E-04	5.89E-05
S9	60	8	18	5	9.11E-02	1.67E-03	8.59E-05	7.14E-03	1.56E-03	8.59E-05	0.00E+00	2.33E-05	1.10E-05	3.20E-08	1.20E-06	13.3	3.86E-04	6.33E-05
S9	60	8	19	5	6.24E-02	1.16E-03	5.94E-05	4.96E-03	1.09E-03	5.95E-05	0.00E+00	1.61E-05	7.60E-06	2.22E-08	8.34E-07	9.2	2.67E-04	4.40E-05
S9	60	8	20	5	3.93E-02	7.68E-04	3.88E-05	3.28E-03	7.18E-04	3.92E-05	0.00E+00	1.06E-05	5.00E-06	1.47E-08	5.48E-07	6.0	1.75E-04	2.91E-05
S9	60	8	21	5	3.21E-02	6.50E-04	3.25E-05	2.77E-03	6.07E-04	3.30E-05	0.00E+00	8.95E-06	4.22E-06	1.24E-08	4.63E-07	5.0	1.47E-04	2.46E-05
S9	60	8	22	5	2.64E-02	5.51E-04	2.74E-05	2.35E-03	5.15E-04	2.79E-05	0.00E+00	7.57E-06	3.57E-06	1.06E-08	3.91E-07	4.2	1.24E-04	2.09E-05
S9	60	8	23	5	2.10E-02	4.53E-04	2.23E-05	1.93E-03	4.23E-04	2.29E-05	0.00E+00	6.21E-06	2.92E-06	8.67E-09	3.21E-07	3.5	1.02E-04	1.71E-05
S9	60	8	24	5	1.51E-02	3.35E-04	1.64E-05	1.43E-03	3.13E-04	1.69E-05	0.00E+00	4.58E-06	2.15E-06	6.41E-09	2.36E-07	2.5	7.49E-05	1.27E-05
S10	60	8	1	5	2.27E-02	5.16E-04	2.51E-05	2.20E-03	4.83E-04	2.60E-05	0.00E+00	7.05E-06	3.32E-06	9.89E-09	3.64E-07	3.9	1.15E-04	1.96E-05
S10	60	8	2	5	1.48E-02	3.44E-04	1.67E-05	1.47E-03	3.22E-04	1.73E-05	0.00E+00	4.69E-06	2.21E-06	6.59E-09	2.42E-07	2.6	7.65E-05	1.30E-05
S10	60	8	3	5	1.26E-02	3.01E-04	1.45E-05	1.29E-03	2.82E-04	1.51E-05	0.00E+00	4.10E-06	1.93E-06	5.77E-09	2.11E-07	2.2	6.67E-05	1.14E-05
S10	60	8	4	5	8.87E-03	2.15E-04	1.03E-05	9.18E-04	2.01E-04	1.08E-05	0.00E+00	2.92E-06	1.37E-06	4.12E-09	1.51E-07	1.6	4.76E-05	8.15E-06
S10	60	8	5	5	1.24E-02	3.01E-04	1.45E-05	1.29E-03	2.82E-04	1.51E-05	0.00E+00	4.09E-06	1.92E-06	5.77E-09	2.11E-07	2.2	6.66E-05	1.14E-05
S10	60	8	6	5	3.00E-02	7.32E-04	3.51E-05	3.12E-03	6.84E-04	3.66E-05	0.00E+00	9.94E-06	4.67E-06	1.40E-08	5.13E-07	5.4	1.62E-04	2.77E-05
S10	60	8	7	5	9.12E-02	2.19E-03	1.06E-04	9.36E-03	2.05E-03	1.10E-04	0.00E+00	2.98E-05	1.40E-05	4.20E-08	1.54E-06	16.3	4.86E-04	8.31E-05
S10	60	8	8	5	1.47E-01	3.36E-03	1.63E-04	1.43E-02	3.14E-03	1.69E-04	0.00E+00	4.58E-05	2.15E-05	6.43E-08	2.36E-06	25.2	7.48E-04	1.27E-04
S10	60	8	9	5	1.27E-01	2.71E-03	1.34E-04	1.16E-02	2.53E-03	1.37E-04	0.00E+00	3.72E-05	1.75E-05	5.19E-08	1.92E-06	20.7	6.10E-04	1.03E-04
S10	60	8	10	5	1.09E-01	2.24E-03	1.12E-04	9.55E-03	2.09E-03	1.14E-04	0.00E+00	3.08E-05	1.45E-05	4.28E-08	1.59E-06	17.3	5.07E-04	8.47E-05
S10	60	8	11	5	1.02E-01	2.02E-03	1.02E-04	8.63E-03	1.89E-03	1.03E-04	0.00E+00	2.79E-05	1.32E-05	3.87E-08	1.44E-06	15.7	4.61E-04	7.66E-05
S10	60	8	12	5	1.22E-01	2.28E-03	1.17E-04	9.73E-03	2.13E-03	1.17E-04	0.00E+00	3.16E-05	1.49E-05	4.37E-08	1.64E-06	18.0	5.25E-04	8.63E-05
S10	60	8	13	5	1.31E-01	2.41E-03	1.24E-04	1.03E-02	2.25E-03	1.24E-04	0.00E+00	3.35E-05	1.58E-05	4.61E-08	1.73E-06	19.1	5.56E-04	9.12E-05
S10	60	8	14	5	1.35E-01	2.45E-03	1.26E-04	1.05E-02	2.29E-03	1.26E-04	0.00E+00	3.41E-05	1.61E-05	4.70E-08	1.76E-06	19.5	5.66E-04	9.29E-05
S10	60	8	15	5	1.41E-01	2.54E-03	1.31E-04	1.08E-02	2.37E-03	1.31E-04	0.00E+00	3.53E-05	1.67E-05	4.86E-08	1.83E-06	20.2	5.87E-04	9.61E-05
S10	60	8	16	5	1.52E-01	2.75E-03	1.42E-04	1.18E-02	2.57E-03	1.42E-04	0.00E+00	3.83E-05	1.81E-05	5.27E-08	1.98E-06	21.9	6.37E-04	1.04E-04
S10	60	8	17	5	1.87E-01	3.40E-03	1.75E-04	1.45E-02	3.18E-03	1.75E-04	0.00E+00	4.73E-05	2.23E-05	6.51E-08	2.45E-06	27.0	7.86E-04	1.29E-04
S10	60	8	18	5	1.99E-01	3.66E-03	1.88E-04	1.56E-02	3.42E-03	1.88E-04	0.00E+00	5.08E-05	2.40E-05	7.00E-08	2.63E-06	29.0	8.44E-04	1.38E-04
S10	60	8	19	5	1.37E-01	2.54E-03	1.30E-04	1.08E-02	2.37E-03	1.30E-04	0.00E+00	3.52E-05	1.66E-05	4.86E-08	1.82E-06	20.1	5.84E-04	9.61E-05
S10	60	8	20	5	8.60E-02	1.68E-03	8.48E-05	7.16E-03	1.57E-03	8.56E-05	0.00E+00	2.32E-05	1.09E-05	3.21E-08	1.20E-06	13.1	3.83E-04	6.35E-05
S10	60	8	21	5	7.03E-02	1.42E-03	7.11E-05	6.06E-03	1.33E-03	7.22E-05	0.00E+00	1.96E-05	9.22E-06	2.72E-08	1.01E-06	11.0	3.22E-04	5.38E-05
S10	60	8	22	5	5.77E-02	1.21E-03	5.99E-05	5.14E-03	1.13E-03	6.10E-05	0.00E+00	1.66E-05	7.80E-06	2.31E-08	8.55E-07	9.3	2.72E-04	4.56E-05
S10	60	8	23	5	4.60E-02	9.90E-04	4.88E-05	4.22E-03	9.25E-04	5.00E-05	0.00E+00	1.36E-05	6.39E-06	1.90E-08	7.01E-07	7.5	2.23E-04	3.75E-05
S10	60	8	24	5	3.31E-02	7.32E-04	3.59E-05	3.12E-03	6.84E-04	3.69E-05	0.00E+00	1.00E-05	4.71E-06	1.40E-08	5.17E-07	5.5	1.64E-04	2.77E-05
S11	60	8	1	5	8.79E-03	2.00E-04	9.75E-06	8.54E-04	1.87E-04	1.01E-05	0.00E+00	2.73E-06	1.29E-06	3.83E-09	1.41E-07	1.5	4.46E-05	7.58E-06
S11	60	8	2	5	5.73E-03	1.33E-04	6.46E-06	5.69E-04	1.25E-04	6.70E-06	0.00E+00	1.82E-06	8.55E-07	2.55E-09	9.38E-08	1.0	2.97E-05	5.05E-06
S11	60	8	3	5	4.88E-03	1.17E-04	5.62E-06	4.98E-04	1.09E-04	5.85E-06	0.00E+00	1.59E-06	7.47E-07	2.23E-09	8.19E-08	0.9	2.59E-05	4.42E-06
S11	60	8	4	5	3.44E-03	8.34E-05	4.01E-06	3.56E-04	7.79E-05	4.17E-06	0.00E+00	1.13E-06	5.33E-07	1.60E-09	5.84E-08	0.6	1.84E-05	3.16E-06
S11	60	8	5	5	4.79E-03	1.17E-04	5.60E-06	4.98E-04	1.09E-04	5.84E-06	0.00E+00	1.59E-06	7.45E-07	2.23E-09	8.18E-08	0.9	2.58E-05	4.42E-06
S11	60	8	6	5	1.16E-02	2.84E-04	1.36E-05	1.21E-03	2.65E-04	1.42E-05	0.00E+00	3.85E-06	1.81E-06	5.43E-09	1.99E-07	2.1	6.26E-05	1.07E-05
S11	60	8	7	5	3.53E-02	8.51E-04	4.09E-05	3.63E-03	7.95E-04	4.26E-05	0.00E+00	1.16E-05	5.44E-06	1.63E-08	5.97E-07	6.3	1.88E-04	3.22E-05
S11	60	8	8	5	5.69E-02	1.30E-03	6.33E-05	5.55E-03	1.22E-03	6.54E-05	0.00E+00	1.77E-05	8.35E-06	2.49E-08	9.16E-07	9.8	2.90E-04	4.92E-05
S11	60	8	9	5	4.93E-02	1.05E-03	5.19E-05	4.48E-03	9.82E-04	5.31E-05	0.00E+00	1.44E-05	6.79E-06	2.01E-08	7.44E-07	8.0	2.37E-04	3.98E-05
S11	60	8	10	5	4.24E-02	8.67E-04	4.33E-05	3.70E-03	8.11E-04	4.40E-05	0.00E+00	1.19E-05	5.62E-06	1.66E-08	6.17E-07	6.7	1.97E-04	3.28E-05
S11	60	8	11	5	3.97E-02	7.84E-04	3.95E-05	3.34E-03	7.33E-04	3.99E-05	0.00E+00	1.08E-05	5.10E-06	1.50E-08	5.59E-07	6.1	1.79E-04	2.97E-05
S11	60	8	12	5	4.74E-02	8.84E-04	4.52E-05	3.77E-03	8.26E-04	4.53E-05	0.00E+00	1.23E-05	5.79E-06	1.69E-08	6.34E-07	7.0	2.03E-04	3.35E-05
S11	60	8	13	5	5.08E-02	9.34E-04	4.79E-05	3.98E-03	8.73E-04	4.79E-05	0.00E+00	1.30E-05	6.12E-06	1.79E-08	6.71E-07	7.4	2.15E-04	3.54E-05
S11	60	8	14	5	5.22E-02	9.51E-04	4.89E-05	4.06E-03	8.89E-04	4.88E-05	0.00E+00	1.32E-05	6.24E-06	1.82E-08	6.84E-07	7.6	2.20E-04	3.60E-05
S11	60	8	15	5	5.45E-02	9.84E-04	5.07E-05	4.20E-03	9.20E-04	5.06E-05	0.00E+00	1.37E-05	6.46E-06	1.88E-08	7.08E-07	7.8	2.28E-04	3.72E-05
S11	60	8	16	5	5.89E-02	1.07E-03	5.50E-05	4.55E-03	9.98E-04	5.49E-05	0.00E+00	1.48E-05	7.01E-06	2.04E-08	7.68E-07	8.5	2.47E-04	4.04E-05
S11	60	8	17	5	7.26E-02	1.32E-03	6.78E-05	5.62E-03	1.23E-03	6.77E-05	0.00E+00	1.83E-05	8.65E-06	2.52E-08	9.48E-07	10.5	3.04E-04	4.99E-05
S11	60	8	18	5	7.72E-02	1.42E-03	7.27E-05	6.05E-03	1.33E-03	7.28E-05	0.00E+00	1.97E-05	9.29E-06	2.71E-08	1.02E-06	11.2	3.27E-04	5.37E-05
S11	60	8	19	5	5.29E-02	9.84E-04	5.03E-05	4.20E-03	9.20E-04	5.04E-05	0.00E+00	1.37E-05	6.44E-06	1.88E-08	7.06E-07	7.8	2.26E-04	3.72E-05
S11	60	8	20	5	3.33E-02	6.50E-04	3.28E-05	2.78E-03	6.08E-04	3.32E-05	0.00E+00	8.99E-06	4.24E-06	1.25E-08	4.65E-07	5.1	1.48E-04	2.46E-05
S11	60	8	21	5	2.72E-02	5.50E-04	2.76E-05	2.35E-03	5.14E-04	2.80E-05	0.00E+00	7.58E-06	3.57E-06	1.05E-08	3.92E-07	4.3	1.25E-04	2.08E-05
S11	60	8	22	5	2.24E-02	4.67E-04	2.32E-05	1.99E-03	4.36E-04	2.37E-05	0.00E+00	6.42E-06	3.02E-06	8.94E-09	3.31E-07	3.6	1.05E-04	1.77E-05
S11	60	8	23	5	1.78E-02	3.84E-04	1.89E-05	1.64E-03	3.59E-04	1.94E-05	0.00E+00	5.26E-06	2.48E-06	7.34E-09	2.72E-07	2.9	8.62E-05	1.45E-05
S11	60	8	24	5	1.28E-02	2.84E-04	1.39E-05	1.21E-03	2.65E-04	1.43E-05	0.00E+00	3.88E-06	1.83E-06	5.43E-09	2.00E-07	2.1	6.35E-05	1.07E-05
S12	60	8	1	5	1.73E-02	3.94E-04	1.92E-05	1.68E-03	3.69E-04	1.98E-05	0.00E+00	5.38E-06	2.53E-06	7.55E-09	2.78E-07	3.0	8.79E-05	1.49E-05
S12	60	8	2	5	1.13E-02	2.63E-04	1.27E-05	1.12E-03	2.46E-04	1.32E-05	0.00E+00	3.58E-06	1.68E-06	5.03E-09	1.85E-07	2.0	5.84E-05	9.95E-06
S12	60	8	3	5	9.62E-03	2.30E-04	1.11E-05	9.81E-04	2.15E-04	1.15E-05	0.00E+00	3.13E-06	1.47E-06	4.40E-09	1.61E-07	1.7	5.09E-05	8.71E-06
S12	60	8	4	5	6.77E-03	1.64E-04	7.89E-06	7.01E-04	1.54E-04	8.22E-06	0.00E+00	2.23E-06	1.05E-06	3.14E-09	1.15E-07	1.2	3.63E-05	6.22E-06
S12	60	8	5	5	9.43E-03	2.30E-04	1.10E-05	9.81E-04	2.15E-04	1.15E-05	0.00E+00	3.12E-06	1.47E-06	4.40E-09	1.61E-07	1.7	5.08E-05	8.71E-06
S12	60	8	6	5	2.29E-02	5.59E-04	2.68E-05	2.38E-03	5.22E-04	2.79E-05	0.00E+00	7.58E-06	3.57E-06	1.07E-08	3.91E-07	4.1	1.23E-04	2.11E-05
S12	60	8	7	5	6.96E-02	1.68E-03	8.06E-05	7.15E-03	1.57E-03	8.39E-05	0.00E+00	2.28E-05	1.07E-05	3.21E-08	1.18E-06	12.5	3.71E-04	6.34E-05
S12	60	8	8	5	1.12E-01	2.56E-03	1.25E-04	1.09E-02	2.40E-03	1.29E-04	0.00E+00	3.50E-05	1.64E-05	4.91E-08	1.80E-06	19.3	5.71E-04	9.70E-05
S12	60	8	9	5	9.71E-02	2.07E-03	1.02E-04	8.83E-03	1.93E-03	1.05E-04	0.00E+00	2.84E-05	1.34E-05	3.96E-08	1.47E-06	15.8	4.66E-04	7.84E-05
S12	60	8	10	5	8.36E-02	1.71E-03	8.53E-05	7.29E-03	1.60E-03	8.67E-05	0.00E+00	2.35E-05	1.11E-05	3.27E-08	1.22E-06	13.2	3.87E-04	6.47E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	11	5	7.81E-02	1.54E-03	7.77E-05	6.59E-03	1.44E-03	7.86E-05	0.00E+00	2.13E-05	1.00E-05	2.96E-08	1.10E-06	12.0	3.52E-04	5.85E-05
S12	60	8	12	5	9.34E-02	1.74E-03	8.90E-05	7.43E-03	1.63E-03	8.92E-05	0.00E+00	2.42E-05	1.14E-05	3.33E-08	1.25E-06	13.8	4.00E-04	6.59E-05
S12	60	8	13	5	1.00E-01	1.84E-03	9.44E-05	7.85E-03	1.72E-03	9.44E-05	0.00E+00	2.56E-05	1.21E-05	3.52E-08	1.32E-06	14.6	4.24E-04	6.96E-05
S12	60	8	14	5	1.03E-01	1.87E-03	9.63E-05	7.99E-03	1.75E-03	9.62E-05	0.00E+00	2.60E-05	1.23E-05	3.59E-08	1.35E-06	14.9	4.32E-04	7.09E-05
S12	60	8	15	5	1.07E-01	1.94E-03	9.99E-05	8.27E-03	1.81E-03	9.97E-05	0.00E+00	2.70E-05	1.27E-05	3.71E-08	1.40E-06	15.4	4.48E-04	7.34E-05
S12	60	8	16	5	1.16E-01	2.10E-03	1.08E-04	8.97E-03	1.97E-03	1.08E-04	0.00E+00	2.93E-05	1.38E-05	4.03E-08	1.51E-06	16.7	4.86E-04	7.96E-05
S12	60	8	17	5	1.43E-01	2.60E-03	1.34E-04	1.11E-02	2.43E-03	1.33E-04	0.00E+00	3.61E-05	1.70E-05	4.97E-08	1.87E-06	20.6	6.00E-04	9.83E-05
S12	60	8	18	5	1.52E-01	2.79E-03	1.43E-04	1.19E-02	2.61E-03	1.43E-04	0.00E+00	3.88E-05	1.83E-05	5.35E-08	2.01E-06	22.1	6.44E-04	1.06E-04
S12	60	8	19	5	1.04E-01	1.94E-03	9.91E-05	8.27E-03	1.81E-03	9.93E-05	0.00E+00	2.69E-05	1.27E-05	3.71E-08	1.39E-06	15.3	4.46E-04	7.34E-05
S12	60	8	20	5	6.56E-02	1.28E-03	6.47E-05	5.47E-03	1.20E-03	6.53E-05	0.00E+00	1.77E-05	8.35E-06	2.45E-08	9.15E-07	10.0	2.92E-04	4.85E-05
S12	60	8	21	5	5.36E-02	1.08E-03	5.43E-05	4.63E-03	1.01E-03	5.51E-05	0.00E+00	1.49E-05	7.04E-06	2.08E-08	7.72E-07	8.4	2.46E-04	4.10E-05
S12	60	8	22	5	4.40E-02	9.20E-04	4.57E-05	3.92E-03	8.60E-04	4.66E-05	0.00E+00	1.26E-05	5.95E-06	1.76E-08	6.53E-07	7.1	2.08E-04	3.48E-05
S12	60	8	23	5	3.51E-02	7.56E-04	3.73E-05	3.22E-03	7.06E-04	3.82E-05	0.00E+00	1.04E-05	4.88E-06	1.45E-08	5.35E-07	5.8	1.70E-04	2.86E-05
S12	60	8	24	5	2.52E-02	5.59E-04	2.74E-05	2.38E-03	5.22E-04	2.81E-05	0.00E+00	7.64E-06	3.60E-06	1.07E-08	3.94E-07	4.2	1.25E-04	2.11E-05
S13	60	8	1	5	1.49E-02	3.39E-04	1.65E-05	1.45E-03	3.17E-04	1.71E-05	0.00E+00	4.63E-06	2.18E-06	6.50E-09	2.39E-07	2.6	7.57E-05	1.28E-05
S13	60	8	2	5	9.71E-03	2.26E-04	1.10E-05	9.65E-04	2.11E-04	1.14E-05	0.00E+00	3.08E-06	1.45E-06	4.33E-09	1.59E-07	1.7	5.03E-05	8.56E-06
S13	60	8	3	5	8.28E-03	1.98E-04	9.54E-06	8.44E-04	1.85E-04	9.92E-06	0.00E+00	2.69E-06	1.27E-06	3.79E-09	1.39E-07	1.5	4.38E-05	7.49E-06
S13	60	8	4	5	5.83E-03	1.41E-04	6.79E-06	6.03E-04	1.32E-04	7.08E-06	0.00E+00	1.92E-06	9.03E-07	2.71E-09	9.91E-08	1.0	3.13E-05	5.35E-06
S13	60	8	5	5	8.12E-03	1.98E-04	9.50E-06	8.44E-04	1.85E-04	9.90E-06	0.00E+00	2.69E-06	1.26E-06	3.79E-09	1.39E-07	1.5	4.37E-05	7.49E-06
S13	60	8	6	5	1.97E-02	4.81E-04	2.31E-05	2.05E-03	4.49E-04	2.41E-05	0.00E+00	6.53E-06	3.07E-06	9.20E-09	3.37E-07	3.6	1.06E-04	1.82E-05
S13	60	8	7	5	5.99E-02	1.44E-03	6.94E-05	6.15E-03	1.35E-03	7.22E-05	0.00E+00	1.96E-05	9.22E-06	2.76E-08	1.01E-06	10.7	3.19E-04	5.46E-05
S13	60	8	8	5	9.65E-02	2.21E-03	1.07E-04	9.41E-03	2.06E-03	1.11E-04	0.00E+00	3.01E-05	1.42E-05	4.22E-08	1.55E-06	16.6	4.92E-04	8.35E-05
S13	60	8	9	5	8.35E-02	1.78E-03	8.81E-05	7.60E-03	1.67E-03	9.00E-05	0.00E+00	2.44E-05	1.15E-05	3.41E-08	1.26E-06	13.6	4.01E-04	6.74E-05
S13	60	8	10	5	7.19E-02	1.47E-03	7.34E-05	6.27E-03	1.37E-03	7.46E-05	0.00E+00	2.02E-05	9.54E-06	2.82E-08	1.05E-06	11.3	3.33E-04	5.57E-05
S13	60	8	11	5	6.72E-02	1.33E-03	6.69E-05	5.67E-03	1.24E-03	6.77E-05	0.00E+00	1.83E-05	8.65E-06	2.54E-08	9.48E-07	10.3	3.03E-04	5.03E-05
S13	60	8	12	5	8.04E-02	1.50E-03	7.66E-05	6.39E-03	1.40E-03	7.67E-05	0.00E+00	2.08E-05	9.81E-06	2.87E-08	1.08E-06	11.8	3.45E-04	5.67E-05
S13	60	8	13	5	8.62E-02	1.58E-03	8.12E-05	6.76E-03	1.48E-03	8.12E-05	0.00E+00	2.20E-05	1.04E-05	3.03E-08	1.14E-06	12.6	3.65E-04	5.99E-05
S13	60	8	14	5	8.85E-02	1.61E-03	8.29E-05	6.88E-03	1.51E-03	8.28E-05	0.00E+00	2.24E-05	1.06E-05	3.09E-08	1.16E-06	12.8	3.72E-04	6.10E-05
S13	60	8	15	5	9.24E-02	1.67E-03	8.60E-05	7.12E-03	1.56E-03	8.58E-05	0.00E+00	2.32E-05	1.10E-05	3.19E-08	1.20E-06	13.3	3.86E-04	6.32E-05
S13	60	8	16	5	9.99E-02	1.81E-03	9.32E-05	7.72E-03	1.69E-03	9.31E-05	0.00E+00	2.52E-05	1.19E-05	3.47E-08	1.30E-06	14.4	4.18E-04	6.85E-05
S13	60	8	17	5	1.23E-01	2.23E-03	1.15E-04	9.53E-03	2.09E-03	1.15E-04	0.00E+00	3.11E-05	1.47E-05	4.28E-08	1.61E-06	17.8	5.16E-04	8.46E-05
S13	60	8	18	5	1.31E-01	2.40E-03	1.23E-04	1.03E-02	2.25E-03	1.23E-04	0.00E+00	3.34E-05	1.58E-05	4.60E-08	1.73E-06	19.1	5.54E-04	9.10E-05
S13	60	8	19	5	8.97E-02	1.67E-03	8.53E-05	7.12E-03	1.56E-03	8.55E-05	0.00E+00	2.32E-05	1.09E-05	3.19E-08	1.20E-06	13.2	3.84E-04	6.32E-05
S13	60	8	20	5	5.65E-02	1.10E-03	5.57E-05	4.70E-03	1.03E-03	5.62E-05	0.00E+00	1.52E-05	7.18E-06	2.11E-08	7.88E-07	8.6	2.52E-04	4.17E-05
S13	60	8	21	5	4.62E-02	9.33E-04	4.67E-05	3.98E-03	8.72E-04	4.74E-05	0.00E+00	1.29E-05	6.06E-06	1.79E-08	6.64E-07	7.2	2.12E-04	3.53E-05
S13	60	8	22	5	3.79E-02	7.92E-04	3.93E-05	3.38E-03	7.40E-04	4.01E-05	0.00E+00	1.09E-05	5.12E-06	1.52E-08	5.62E-07	6.1	1.79E-04	3.00E-05
S13	60	8	23	5	3.02E-02	6.50E-04	3.21E-05	2.77E-03	6.08E-04	3.28E-05	0.00E+00	8.91E-06	4.20E-06	1.25E-08	4.60E-07	5.0	1.46E-04	2.46E-05
S13	60	8	24	5	2.17E-02	4.81E-04	2.36E-05	2.05E-03	4.49E-04	2.42E-05	0.00E+00	6.57E-06	3.09E-06	9.20E-09	3.39E-07	3.6	1.08E-04	1.82E-05
S14	60	8	1	5	9.00E-03	2.05E-04	9.98E-06	8.74E-04	1.92E-04	1.03E-05	0.00E+00	2.80E-06	1.32E-06	3.92E-09	1.44E-07	1.5	4.57E-05	7.76E-06
S14	60	8	2	5	5.87E-03	1.37E-04	6.62E-06	5.83E-04	1.28E-04	6.86E-06	0.00E+00	1.86E-06	8.76E-07	2.62E-09	9.61E-08	1.0	3.04E-05	5.17E-06
S14	60	8	3	5	5.00E-03	1.20E-04	5.76E-06	5.10E-04	1.12E-04	5.99E-06	0.00E+00	1.63E-06	7.65E-07	2.29E-09	8.39E-08	0.9	2.65E-05	4.53E-06
S14	60	8	4	5	3.52E-03	8.54E-05	4.10E-06	3.64E-04	7.98E-05	4.27E-06	0.00E+00	1.16E-06	5.45E-07	1.63E-09	5.99E-08	0.6	1.89E-05	3.23E-06
S14	60	8	5	5	4.90E-03	1.20E-04	5.74E-06	5.10E-04	1.12E-04	5.98E-06	0.00E+00	1.62E-06	7.63E-07	2.29E-09	8.38E-08	0.9	2.64E-05	4.53E-06
S14	60	8	6	5	1.19E-02	2.90E-04	1.39E-05	1.24E-03	2.71E-04	1.45E-05	0.00E+00	3.94E-06	1.85E-06	5.56E-09	2.03E-07	2.2	6.41E-05	1.10E-05
S14	60	8	7	5	3.62E-02	8.71E-04	4.19E-05	3.72E-03	8.14E-04	4.36E-05	0.00E+00	1.18E-05	5.57E-06	1.67E-08	6.11E-07	6.5	1.93E-04	3.30E-05
S14	60	8	8	5	5.83E-02	1.33E-03	6.48E-05	5.68E-03	1.25E-03	6.70E-05	0.00E+00	1.82E-05	8.55E-06	2.55E-08	9.38E-07	10.0	2.97E-04	5.04E-05
S14	60	8	9	5	5.05E-02	1.08E-03	5.32E-05	4.59E-03	1.01E-03	5.44E-05	0.00E+00	1.48E-05	6.95E-06	2.06E-08	7.62E-07	8.2	2.42E-04	4.07E-05
S14	60	8	10	5	4.35E-02	8.88E-04	4.43E-05	3.79E-03	8.30E-04	4.51E-05	0.00E+00	1.22E-05	5.76E-06	1.70E-08	6.32E-07	6.9	2.01E-04	3.36E-05
S14	60	8	11	5	4.06E-02	8.03E-04	4.04E-05	3.42E-03	7.50E-04	4.09E-05	0.00E+00	1.11E-05	5.22E-06	1.54E-08	5.73E-07	6.2	1.83E-04	3.04E-05
S14	60	8	12	5	4.85E-02	9.05E-04	4.63E-05	3.86E-03	8.46E-04	4.64E-05	0.00E+00	1.26E-05	5.92E-06	1.73E-08	6.50E-07	7.1	2.08E-04	3.43E-05
S14	60	8	13	5	5.21E-02	9.57E-04	4.91E-05	4.08E-03	8.94E-04	4.91E-05	0.00E+00	1.33E-05	6.27E-06	1.83E-08	6.87E-07	7.6	2.21E-04	3.62E-05
S14	60	8	14	5	5.34E-02	9.74E-04	5.01E-05	4.15E-03	9.10E-04	5.00E-05	0.00E+00	1.35E-05	6.39E-06	1.86E-08	7.00E-07	7.7	2.25E-04	3.69E-05
S14	60	8	15	5	5.58E-02	1.01E-03	5.19E-05	4.30E-03	9.42E-04	5.18E-05	0.00E+00	1.40E-05	6.62E-06	1.93E-08	7.25E-07	8.0	2.33E-04	3.81E-05
S14	60	8	16	5	6.03E-02	1.09E-03	5.63E-05	4.66E-03	1.02E-03	5.62E-05	0.00E+00	1.52E-05	7.18E-06	2.09E-08	7.87E-07	8.7	2.53E-04	4.14E-05
S14	60	8	17	5	7.43E-02	1.35E-03	6.94E-05	5.76E-03	1.26E-03	6.94E-05	0.00E+00	1.88E-05	8.86E-06	2.58E-08	9.71E-07	10.7	3.12E-04	5.11E-05
S14	60	8	18	5	7.91E-02	1.45E-03	7.45E-05	6.19E-03	1.36E-03	7.45E-05	0.00E+00	2.02E-05	9.52E-06	2.78E-08	1.04E-06	11.5	3.35E-04	5.50E-05
S14	60	8	19	5	5.42E-02	1.01E-03	5.15E-05	4.30E-03	9.42E-04	5.16E-05	0.00E+00	1.40E-05	6.60E-06	1.93E-08	7.23E-07	8.0	2.32E-04	3.81E-05
S14	60	8	20	5	3.41E-02	6.66E-04	3.36E-05	2.84E-03	6.23E-04	3.40E-05	0.00E+00	9.21E-06	4.34E-06	1.28E-08	4.76E-07	5.2	1.52E-04	2.52E-05
S14	60	8	21	5	2.79E-02	5.64E-04	2.82E-05	2.40E-03	5.27E-04	2.86E-05	0.00E+00	7.77E-06	3.66E-06	1.08E-08	4.01E-07	4.4	1.28E-04	2.13E-05
S14	60	8	22	5	2.29E-02	4.78E-04	2.38E-05	2.04E-03	4.47E-04	2.42E-05	0.00E+00	6.57E-06	3.10E-06	9.16E-09	3.39E-07	3.7	1.08E-04	1.81E-05
S14	60	8	23	5	1.83E-02	3.93E-04	1.94E-05	1.68E-03	3.67E-04	1.98E-05	0.00E+00	5.38E-06	2.54E-06	7.52E-09	2.78E-07	3.0	8.83E-05	1.49E-05
S14	60	8	24	5	1.31E-02	2.90E-04	1.42E-05	1.24E-03	2.71E-04	1.46E-05	0.00E+00	3.97E-06	1.87E-06	5.56E-09	2.05E-07	2.2	6.50E-05	1.10E-05
S15	60	8	1	5	9.29E-03	2.11E-04	1.03E-05	9.02E-04	1.98E-04	1.06E-05	0.00E+00	2.89E-06	1.36E-06	4.05E-09	1.49E-07	1.6	4.71E-05	8.00E-06
S15	60	8	2	5	6.05E-03	1.41E-04	6.83E-06	6.01E-04	1.32E-04	7.07E-06	0.00E+00	1.92E-06	9.03E-07	2.70E-09	9.91E-08	1.1	3.13E-05	5.34E-06
S15	60	8	3	5	5.16E-03	1.23E-04	5.94E-06	5.26E-04	1.15E-04	6.18E-06	0.00E+00	1.68E-06	7.89E-07	2.36E-09	8.65E-08	0.9	2.73E-05	4.67E-06
S15	60	8	4	5	3.63E-03	8.81E-05	4.23E-06	3.76E-04	8.23E-05	4.41E-06	0.00E+00	1.20E-06	5.63E-07	1.69E-09	6.17E-08	0.7	1.95E-05	3.33E-06
S15	60	8	5	5	5.06E-03	1.23E-04	5.92E-06	5.26E-04	1.15E-04	6.17E-06	0.00E+00	1.67E-06	7.87E-07	2.36E-09	8.64E-08	0.9	2.72E-05	4.67E-06
S15	60	8	6	5	1.23E-02	3.00E-04	1.44E-05	1.28E-03	2.80E-04	1.50E-05	0.00E+00	4.07E-06	1.91E-06	5.73E-09	2.10E-07	2.2	6.62E-05	1.13E-05
S15	60	8	7	5	3.73E-02	8.99E-04	4.32E-05	3.83E-03	8.40E-04	4.50E-05	0.00E+00	1.22E-05	5.74E-06	1.72E-08	6.30E-07	6.7	1.99E-04	3.40E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	8	5	6.01E-02	1.37E-03	6.69E-05	5.86E-03	1.28E-03	6.91E-05	0.00E+00	1.87E-05	8.82E-06	2.63E-08	9.68E-07	10.3	3.06E-04	5.20E-05
S15	60	8	9	5	5.20E-02	1.11E-03	5.49E-05	4.74E-03	1.04E-03	5.61E-05	0.00E+00	1.52E-05	7.17E-06	2.12E-08	7.86E-07	8.5	2.50E-04	4.20E-05
S15	60	8	10	5	4.48E-02	9.16E-04	4.57E-05	3.91E-03	8.56E-04	4.65E-05	0.00E+00	1.26E-05	5.94E-06	1.75E-08	6.52E-07	7.1	2.08E-04	3.47E-05
S15	60	8	11	5	4.19E-02	8.28E-04	4.17E-05	3.53E-03	7.74E-04	4.22E-05	0.00E+00	1.14E-05	5.39E-06	1.59E-08	5.91E-07	6.4	1.89E-04	3.13E-05
S15	60	8	12	5	5.01E-02	9.34E-04	4.77E-05	3.98E-03	8.73E-04	4.78E-05	0.00E+00	1.30E-05	6.11E-06	1.79E-08	6.70E-07	7.4	2.15E-04	3.53E-05
S15	60	8	13	5	5.37E-02	9.87E-04	5.06E-05	4.21E-03	9.22E-04	5.06E-05	0.00E+00	1.37E-05	6.47E-06	1.89E-08	7.09E-07	7.8	2.27E-04	3.73E-05
S15	60	8	14	5	5.51E-02	1.00E-03	5.16E-05	4.28E-03	9.39E-04	5.16E-05	0.00E+00	1.40E-05	6.59E-06	1.92E-08	7.22E-07	8.0	2.32E-04	3.80E-05
S15	60	8	15	5	5.76E-02	1.04E-03	5.36E-05	4.43E-03	9.72E-04	5.35E-05	0.00E+00	1.45E-05	6.83E-06	1.99E-08	7.48E-07	8.3	2.40E-04	3.93E-05
S15	60	8	16	5	6.22E-02	1.13E-03	5.80E-05	4.81E-03	1.05E-03	5.80E-05	0.00E+00	1.57E-05	7.40E-06	2.16E-08	8.11E-07	9.0	2.61E-04	4.27E-05
S15	60	8	17	5	7.67E-02	1.39E-03	7.16E-05	5.94E-03	1.30E-03	7.16E-05	0.00E+00	1.94E-05	9.14E-06	2.67E-08	1.00E-06	11.1	3.22E-04	5.27E-05
S15	60	8	18	5	8.16E-02	1.50E-03	7.68E-05	6.39E-03	1.40E-03	7.69E-05	0.00E+00	2.08E-05	9.82E-06	2.87E-08	1.08E-06	11.9	3.45E-04	5.67E-05
S15	60	8	19	5	5.59E-02	1.04E-03	5.31E-05	4.43E-03	9.72E-04	5.33E-05	0.00E+00	1.44E-05	6.80E-06	1.99E-08	7.46E-07	8.2	2.39E-04	3.93E-05
S15	60	8	20	5	3.52E-02	6.87E-04	3.47E-05	2.93E-03	6.42E-04	3.50E-05	0.00E+00	9.49E-06	4.48E-06	1.32E-08	4.91E-07	5.4	1.57E-04	2.60E-05
S15	60	8	21	5	2.88E-02	5.81E-04	2.91E-05	2.48E-03	5.43E-04	2.95E-05	0.00E+00	8.01E-06	3.77E-06	1.11E-08	4.14E-07	4.5	1.32E-04	2.20E-05
S15	60	8	22	5	2.36E-02	4.93E-04	2.45E-05	2.10E-03	4.61E-04	2.50E-05	0.00E+00	6.78E-06	3.19E-06	9.44E-09	3.50E-07	3.8	1.11E-04	1.87E-05
S15	60	8	23	5	1.88E-02	4.05E-04	2.00E-05	1.73E-03	3.79E-04	2.05E-05	0.00E+00	5.55E-06	2.61E-06	7.76E-09	2.87E-07	3.1	9.11E-05	1.53E-05
S15	60	8	24	5	1.35E-02	3.00E-04	1.47E-05	1.28E-03	2.80E-04	1.51E-05	0.00E+00	4.10E-06	1.93E-06	5.73E-09	2.12E-07	2.3	6.71E-05	1.13E-05
S16	60	8	1	5	6.10E-03	1.39E-04	6.77E-06	5.93E-04	1.30E-04	6.99E-06	0.00E+00	1.90E-06	8.92E-07	2.66E-09	9.79E-08	1.0	3.10E-05	5.26E-06
S16	60	8	2	5	3.98E-03	9.26E-05	4.49E-06	3.95E-04	8.66E-05	4.65E-06	0.00E+00	1.26E-06	5.94E-07	1.77E-09	6.51E-08	0.7	2.06E-05	3.51E-06
S16	60	8	3	5	3.39E-03	8.11E-05	3.91E-06	3.46E-04	7.58E-05	4.06E-06	0.00E+00	1.10E-06	5.18E-07	1.55E-09	5.69E-08	0.6	1.80E-05	3.07E-06
S16	60	8	4	5	2.39E-03	5.79E-05	2.78E-06	2.47E-04	5.41E-05	2.90E-06	0.00E+00	7.87E-07	3.70E-07	1.11E-09	4.06E-08	0.4	1.28E-05	2.19E-06
S16	60	8	5	5	3.33E-03	8.11E-05	3.89E-06	3.46E-04	7.58E-05	4.06E-06	0.00E+00	1.10E-06	5.17E-07	1.55E-09	5.68E-08	0.6	1.79E-05	3.07E-06
S16	60	8	6	5	8.08E-03	1.97E-04	9.44E-06	8.40E-04	1.84E-04	9.85E-06	0.00E+00	2.67E-06	1.26E-06	3.77E-09	1.38E-07	1.5	4.35E-05	7.45E-06
S16	60	8	7	5	2.45E-02	5.91E-04	2.84E-05	2.52E-03	5.52E-04	2.96E-05	0.00E+00	8.03E-06	3.77E-06	1.13E-08	4.14E-07	4.4	1.31E-04	2.24E-05
S16	60	8	8	5	3.95E-02	9.03E-04	4.39E-05	3.85E-03	8.44E-04	4.54E-05	0.00E+00	1.23E-05	5.80E-06	1.73E-08	6.36E-07	6.8	2.01E-04	3.42E-05
S16	60	8	9	5	3.42E-02	7.30E-04	3.61E-05	3.11E-03	6.82E-04	3.69E-05	0.00E+00	1.00E-05	4.71E-06	1.40E-08	5.17E-07	5.6	1.64E-04	2.76E-05
S16	60	8	10	5	2.95E-02	6.02E-04	3.01E-05	2.57E-03	5.63E-04	3.06E-05	0.00E+00	8.29E-06	3.91E-06	1.15E-08	4.28E-07	4.6	1.36E-04	2.28E-05
S16	60	8	11	5	2.75E-02	5.44E-04	2.74E-05	2.32E-03	5.09E-04	2.77E-05	0.00E+00	7.51E-06	3.54E-06	1.04E-08	3.88E-07	4.2	1.24E-04	2.06E-05
S16	60	8	12	5	3.29E-02	6.14E-04	3.14E-05	2.62E-03	5.74E-04	3.14E-05	0.00E+00	8.52E-06	4.02E-06	1.18E-08	4.40E-07	4.8	1.41E-04	2.32E-05
S16	60	8	13	5	3.53E-02	6.48E-04	3.33E-05	2.77E-03	6.06E-04	3.33E-05	0.00E+00	9.01E-06	4.25E-06	1.24E-08	4.66E-07	5.1	1.50E-04	2.45E-05
S16	60	8	14	5	3.62E-02	6.60E-04	3.39E-05	2.82E-03	6.17E-04	3.39E-05	0.00E+00	9.18E-06	4.33E-06	1.26E-08	4.75E-07	5.2	1.52E-04	2.50E-05
S16	60	8	15	5	3.78E-02	6.83E-04	3.52E-05	2.91E-03	6.39E-04	3.51E-05	0.00E+00	9.51E-06	4.49E-06	1.31E-08	4.92E-07	5.4	1.58E-04	2.59E-05
S16	60	8	16	5	4.09E-02	7.41E-04	3.82E-05	3.16E-03	6.93E-04	3.81E-05	0.00E+00	1.03E-05	4.87E-06	1.42E-08	5.33E-07	5.9	1.71E-04	2.81E-05
S16	60	8	17	5	5.04E-02	9.15E-04	4.71E-05	3.90E-03	8.55E-04	4.70E-05	0.00E+00	1.27E-05	6.00E-06	1.75E-08	6.58E-07	7.3	2.11E-04	3.46E-05
S16	60	8	18	5	5.36E-02	9.84E-04	5.05E-05	4.20E-03	9.20E-04	5.05E-05	0.00E+00	1.37E-05	6.45E-06	1.88E-08	7.07E-07	7.8	2.27E-04	3.73E-05
S16	60	8	19	5	3.67E-02	6.83E-04	3.49E-05	2.91E-03	6.39E-04	3.50E-05	0.00E+00	9.48E-06	4.47E-06	1.31E-08	4.90E-07	5.4	1.57E-04	2.59E-05
S16	60	8	20	5	2.31E-02	4.52E-04	2.28E-05	1.93E-03	4.22E-04	2.30E-05	0.00E+00	6.24E-06	2.94E-06	8.65E-09	3.23E-07	3.5	1.03E-04	1.71E-05
S16	60	8	21	5	1.89E-02	3.82E-04	1.91E-05	1.63E-03	3.57E-04	1.94E-05	0.00E+00	5.27E-06	2.48E-06	7.32E-09	2.72E-07	3.0	8.67E-05	1.45E-05
S16	60	8	22	5	1.55E-02	3.24E-04	1.61E-05	1.38E-03	3.03E-04	1.64E-05	0.00E+00	4.46E-06	2.10E-06	6.21E-09	2.30E-07	2.5	7.32E-05	1.23E-05
S16	60	8	23	5	1.24E-02	2.66E-04	1.31E-05	1.14E-03	2.49E-04	1.35E-05	0.00E+00	3.65E-06	1.72E-06	5.10E-09	1.89E-07	2.0	5.99E-05	1.01E-05
S16	60	8	24	5	8.90E-03	1.97E-04	9.65E-06	8.40E-04	1.84E-04	9.92E-06	0.00E+00	2.69E-06	1.27E-06	3.77E-09	1.39E-07	1.5	4.41E-05	7.45E-06
S17	60	8	1	5	1.06E-02	2.41E-04	1.17E-05	1.03E-03	2.25E-04	1.21E-05	0.00E+00	3.28E-06	1.54E-06	4.61E-09	1.69E-07	1.8	5.37E-05	9.11E-06
S17	60	8	2	5	6.89E-03	1.60E-04	7.77E-06	6.84E-04	1.50E-04	8.05E-06	0.00E+00	2.19E-06	1.03E-06	3.07E-09	1.13E-07	1.2	3.57E-05	6.07E-06
S17	60	8	3	5	5.87E-03	1.40E-04	6.76E-06	5.99E-04	1.31E-04	7.03E-06	0.00E+00	1.91E-06	8.97E-07	2.69E-09	9.85E-08	1.0	3.11E-05	5.31E-06
S17	60	8	4	5	4.13E-03	1.00E-04	4.81E-06	4.28E-04	9.37E-05	5.02E-06	0.00E+00	1.36E-06	6.40E-07	1.92E-09	7.03E-08	0.7	2.22E-05	3.79E-06
S17	60	8	5	5	5.76E-03	1.40E-04	6.73E-06	5.99E-04	1.31E-04	7.02E-06	0.00E+00	1.91E-06	8.96E-07	2.69E-09	9.83E-08	1.0	3.10E-05	5.31E-06
S17	60	8	6	5	1.40E-02	3.41E-04	1.64E-05	1.45E-03	3.19E-04	1.71E-05	0.00E+00	4.63E-06	2.18E-06	6.52E-09	2.39E-07	2.5	7.53E-05	1.29E-05
S17	60	8	7	5	4.25E-02	1.02E-03	4.92E-05	4.36E-03	9.56E-04	5.12E-05	0.00E+00	1.39E-05	6.53E-06	1.96E-08	7.17E-07	7.6	2.26E-04	3.87E-05
S17	60	8	8	5	6.85E-02	1.56E-03	7.61E-05	6.67E-03	1.46E-03	7.86E-05	0.00E+00	2.13E-05	1.00E-05	2.99E-08	1.10E-06	11.8	3.49E-04	5.92E-05
S17	60	8	9	5	5.92E-02	1.26E-03	6.24E-05	5.39E-03	1.18E-03	6.38E-05	0.00E+00	1.73E-05	8.16E-06	2.42E-08	8.95E-07	9.6	2.84E-04	4.78E-05
S17	60	8	10	5	5.10E-02	1.04E-03	5.21E-05	4.45E-03	9.74E-04	5.29E-05	0.00E+00	1.44E-05	6.76E-06	2.00E-08	7.41E-07	8.0	2.36E-04	3.95E-05
S17	60	8	11	5	4.77E-02	9.42E-04	4.74E-05	4.02E-03	8.81E-04	4.80E-05	0.00E+00	1.30E-05	6.13E-06	1.80E-08	6.72E-07	7.3	2.15E-04	3.57E-05
S17	60	8	12	5	5.70E-02	1.06E-03	5.43E-05	4.53E-03	9.93E-04	5.44E-05	0.00E+00	1.47E-05	6.95E-06	2.03E-08	7.62E-07	8.4	2.44E-04	4.02E-05
S17	60	8	13	5	6.11E-02	1.12E-03	5.76E-05	4.79E-03	1.05E-03	5.76E-05	0.00E+00	1.56E-05	7.36E-06	2.15E-08	8.07E-07	8.9	2.59E-04	4.25E-05
S17	60	8	14	5	6.27E-02	1.14E-03	5.88E-05	4.88E-03	1.07E-03	5.87E-05	0.00E+00	1.59E-05	7.50E-06	2.19E-08	8.22E-07	9.1	2.64E-04	4.33E-05
S17	60	8	15	5	6.55E-02	1.18E-03	6.10E-05	5.05E-03	1.11E-03	6.09E-05	0.00E+00	1.65E-05	7.77E-06	2.27E-08	8.52E-07	9.4	2.74E-04	4.48E-05
S17	60	8	16	5	7.08E-02	1.28E-03	6.61E-05	5.47E-03	1.20E-03	6.60E-05	0.00E+00	1.79E-05	8.42E-06	2.46E-08	9.23E-07	10.2	2.97E-04	4.86E-05
S17	60	8	17	5	8.73E-02	1.58E-03	8.15E-05	6.76E-03	1.48E-03	8.14E-05	0.00E+00	2.20E-05	1.04E-05	3.03E-08	1.14E-06	12.6	3.66E-04	6.00E-05
S17	60	8	18	5	9.28E-02	1.70E-03	8.74E-05	7.27E-03	1.59E-03	8.75E-05	0.00E+00	2.37E-05	1.12E-05	3.26E-08	1.22E-06	13.5	3.93E-04	6.45E-05
S17	60	8	19	5	6.36E-02	1.18E-03	6.05E-05	5.05E-03	1.11E-03	6.06E-05	0.00E+00	1.64E-05	7.74E-06	2.27E-08	8.49E-07	9.3	2.72E-04	4.48E-05
S17	60	8	20	5	4.00E-02	7.82E-04	3.95E-05	3.34E-03	7.31E-04	3.99E-05	0.00E+00	1.08E-05	5.09E-06	1.50E-08	5.59E-07	6.1	1.78E-04	2.96E-05
S17	60	8	21	5	3.27E-02	6.62E-04	3.31E-05	2.82E-03	6.18E-04	3.36E-05	0.00E+00	9.12E-06	4.30E-06	1.27E-08	4.71E-07	5.1	1.50E-04	2.50E-05
S17	60	8	22	5	2.69E-02	5.61E-04	2.79E-05	2.40E-03	5.25E-04	2.84E-05	0.00E+00	7.71E-06	3.63E-06	1.07E-08	3.98E-07	4.3	1.27E-04	2.13E-05
S17	60	8	23	5	2.14E-02	4.61E-04	2.27E-05	1.97E-03	4.31E-04	2.33E-05	0.00E+00	6.32E-06	2.98E-06	8.83E-09	3.26E-07	3.5	1.04E-04	1.75E-05
S17	60	8	24	5	1.54E-02	3.41E-04	1.67E-05	1.45E-03	3.19E-04	1.72E-05	0.00E+00	4.66E-06	2.19E-06	6.53E-09	2.41E-07	2.6	7.63E-05	1.29E-05
S18	65	9	1	5	1.32E-02	3.45E-04	1.51E-05	1.28E-03	2.87E-04	1.49E-05	0.00E+00	4.07E-06	1.90E-06	6.06E-09	2.09E-07	2.3	6.54E-05	1.06E-05
S18	65	9	2	5	8.63E-03	2.30E-04	1.00E-05	8.52E-04	1.92E-04	9.93E-06	0.00E+00	2.71E-06	1.27E-06	4.04E-09	1.39E-07	1.5	4.34E-05	7.05E-06
S18	65	9	3	5	7.36E-03	2.01E-04	8.70E-06	7.45E-04	1.68E-04	8.67E-06	0.00E+00	2.36E-06	1.11E-06	3.53E-09	1.22E-07	1.3	3.79E-05	6.16E-06
S18	65	9	4	5	5.19E-03	1.44E-04	6.20E-06	5.32E-04	1.20E-04	6.19E-06	0.00E+00	1.69E-06	7.89E-07	2.52E-09	8.67E-08	1.0	2.70E-05	4.40E-06

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	5	5	7.23E-03	2.01E-04	8.67E-06	7.45E-04	1.68E-04	8.66E-06	0.00E+00	2.36E-06	1.10E-06	3.53E-09	1.21E-07	1.3	3.78E-05	6.16E-06
S18	65	9	6	5	1.76E-02	4.88E-04	2.10E-05	1.81E-03	4.07E-04	2.10E-05	0.00E+00	5.73E-06	2.68E-06	8.58E-09	2.95E-07	3.3	9.17E-05	1.50E-05
S18	65	9	7	5	5.33E-02	1.47E-03	6.33E-05	5.43E-03	1.22E-03	6.32E-05	0.00E+00	1.72E-05	8.05E-06	2.57E-08	8.85E-07	9.8	2.76E-04	4.49E-05
S18	65	9	8	5	8.57E-02	2.24E-03	9.79E-05	8.31E-03	1.87E-03	9.70E-05	0.00E+00	2.64E-05	1.24E-05	3.94E-08	1.36E-06	15.1	4.25E-04	6.87E-05
S18	65	9	9	5	9.12E-02	1.68E-03	8.59E-05	7.15E-03	1.57E-03	8.59E-05	0.00E+00	2.33E-05	1.10E-05	3.21E-08	1.20E-06	13.3	3.86E-04	6.34E-05
S18	65	9	10	5	7.59E-02	1.38E-03	7.11E-05	5.90E-03	1.29E-03	7.10E-05	0.00E+00	1.92E-05	9.07E-06	2.65E-08	9.94E-07	11.0	3.19E-04	5.23E-05
S18	65	9	11	5	6.92E-02	1.25E-03	6.44E-05	5.33E-03	1.17E-03	6.43E-05	0.00E+00	1.74E-05	8.21E-06	2.39E-08	9.00E-07	10.0	2.89E-04	4.73E-05
S18	65	9	12	5	7.78E-02	1.41E-03	7.26E-05	6.01E-03	1.32E-03	7.25E-05	0.00E+00	1.96E-05	9.25E-06	2.70E-08	1.01E-06	11.2	3.26E-04	5.33E-05
S18	65	9	13	5	8.20E-02	1.49E-03	7.66E-05	6.35E-03	1.39E-03	7.66E-05	0.00E+00	2.07E-05	9.77E-06	2.85E-08	1.07E-06	11.8	3.44E-04	5.64E-05
S18	65	9	14	5	8.26E-02	1.52E-03	7.78E-05	6.47E-03	1.42E-03	7.78E-05	0.00E+00	2.11E-05	9.94E-06	2.90E-08	1.09E-06	12.0	3.50E-04	5.74E-05
S18	65	9	15	5	8.43E-02	1.57E-03	8.02E-05	6.69E-03	1.47E-03	8.04E-05	0.00E+00	2.18E-05	1.03E-05	3.00E-08	1.13E-06	12.4	3.61E-04	5.94E-05
S18	65	9	16	5	8.72E-02	1.70E-03	8.59E-05	7.26E-03	1.59E-03	8.68E-05	0.00E+00	2.35E-05	1.11E-05	3.26E-08	1.22E-06	13.3	3.88E-04	6.44E-05
S18	65	9	17	5	1.04E-01	2.10E-03	1.05E-04	8.96E-03	1.96E-03	1.07E-04	0.00E+00	2.89E-05	1.36E-05	4.02E-08	1.50E-06	16.3	4.77E-04	7.95E-05
S18	65	9	18	5	1.08E-01	2.26E-03	1.12E-04	9.64E-03	2.11E-03	1.14E-04	0.00E+00	3.11E-05	1.46E-05	4.33E-08	1.60E-06	17.3	5.10E-04	8.56E-05
S18	65	9	19	5	7.90E-02	1.69E-03	7.76E-05	6.28E-03	1.41E-03	7.47E-05	0.00E+00	2.03E-05	9.53E-06	2.98E-08	1.05E-06	12.0	3.31E-04	5.20E-05
S18	65	9	20	5	4.98E-02	1.12E-03	5.07E-05	4.15E-03	9.34E-04	4.92E-05	0.00E+00	1.34E-05	6.27E-06	1.97E-08	6.89E-07	7.8	2.17E-04	3.43E-05
S18	65	9	21	5	4.08E-02	9.48E-04	4.26E-05	3.51E-03	7.90E-04	4.15E-05	0.00E+00	1.13E-05	5.29E-06	1.67E-08	5.81E-07	6.6	1.83E-04	2.91E-05
S18	65	9	22	5	3.35E-02	8.04E-04	3.58E-05	2.98E-03	6.70E-04	3.51E-05	0.00E+00	9.55E-06	4.47E-06	1.41E-08	4.91E-07	5.5	1.54E-04	2.47E-05
S18	65	9	23	5	2.68E-02	6.61E-04	2.92E-05	2.45E-03	5.51E-04	2.87E-05	0.00E+00	7.83E-06	3.66E-06	1.16E-08	4.03E-07	4.5	1.26E-04	2.03E-05
S18	65	9	24	5	1.93E-02	4.88E-04	2.15E-05	1.81E-03	4.07E-04	2.12E-05	0.00E+00	5.77E-06	2.70E-06	8.58E-09	2.97E-07	3.3	9.30E-05	1.50E-05
S19	65	9	1	5	1.97E-02	5.14E-04	2.24E-05	1.90E-03	4.28E-04	2.22E-05	0.00E+00	6.06E-06	2.83E-06	9.02E-09	3.12E-07	3.5	9.74E-05	1.57E-05
S19	65	9	2	5	1.29E-02	3.42E-04	1.49E-05	1.27E-03	2.85E-04	1.48E-05	0.00E+00	4.03E-06	1.89E-06	6.01E-09	2.07E-07	2.3	6.47E-05	1.05E-05
S19	65	9	3	5	1.10E-02	3.00E-04	1.30E-05	1.11E-03	2.50E-04	1.29E-05	0.00E+00	3.52E-06	1.65E-06	5.26E-09	1.81E-07	2.0	5.64E-05	9.18E-06
S19	65	9	4	5	7.73E-03	2.14E-04	9.23E-06	7.93E-04	1.78E-04	9.22E-06	0.00E+00	2.51E-06	1.17E-06	3.76E-09	1.29E-07	1.4	4.02E-05	6.56E-06
S19	65	9	5	5	1.08E-02	3.00E-04	1.29E-05	1.11E-03	2.50E-04	1.29E-05	0.00E+00	3.52E-06	1.64E-06	5.26E-09	1.81E-07	2.0	5.63E-05	9.18E-06
S19	65	9	6	5	2.62E-02	7.28E-04	3.14E-05	2.70E-03	6.06E-04	3.13E-05	0.00E+00	8.54E-06	3.99E-06	1.28E-08	4.39E-07	4.8	1.37E-04	2.23E-05
S19	65	9	7	5	7.94E-02	2.18E-03	9.43E-05	8.09E-03	1.82E-03	9.41E-05	0.00E+00	2.56E-05	1.20E-05	3.83E-08	1.32E-06	14.6	4.11E-04	6.69E-05
S19	65	9	8	5	1.28E-01	3.34E-03	1.46E-04	1.24E-02	2.78E-03	1.44E-04	0.00E+00	3.94E-05	1.84E-05	5.86E-08	2.02E-06	22.5	6.33E-04	1.02E-04
S19	65	9	9	5	1.36E-01	2.50E-03	1.28E-04	1.06E-02	2.33E-03	1.28E-04	0.00E+00	3.47E-05	1.64E-05	4.78E-08	1.79E-06	19.8	5.75E-04	9.45E-05
S19	65	9	10	5	1.13E-01	2.06E-03	1.06E-04	8.79E-03	1.93E-03	1.06E-04	0.00E+00	2.86E-05	1.35E-05	3.94E-08	1.48E-06	16.4	4.76E-04	7.80E-05
S19	65	9	11	5	1.03E-01	1.86E-03	9.59E-05	7.94E-03	1.74E-03	9.58E-05	0.00E+00	2.59E-05	1.22E-05	3.57E-08	1.34E-06	14.8	4.31E-04	7.05E-05
S19	65	9	12	5	1.16E-01	2.10E-03	1.08E-04	8.96E-03	1.96E-03	1.08E-04	0.00E+00	2.92E-05	1.38E-05	4.02E-08	1.51E-06	16.7	4.85E-04	7.95E-05
S19	65	9	13	5	1.22E-01	2.22E-03	1.14E-04	9.46E-03	2.07E-03	1.14E-04	0.00E+00	3.09E-05	1.46E-05	4.25E-08	1.60E-06	17.6	5.13E-04	8.40E-05
S19	65	9	14	5	1.23E-01	2.26E-03	1.16E-04	9.63E-03	2.11E-03	1.16E-04	0.00E+00	3.14E-05	1.48E-05	4.32E-08	1.62E-06	17.9	5.21E-04	8.55E-05
S19	65	9	15	5	1.26E-01	2.34E-03	1.19E-04	9.97E-03	2.18E-03	1.20E-04	0.00E+00	3.24E-05	1.53E-05	4.48E-08	1.68E-06	18.5	5.38E-04	8.85E-05
S19	65	9	16	5	1.30E-01	2.54E-03	1.28E-04	1.08E-02	2.37E-03	1.29E-04	0.00E+00	3.50E-05	1.65E-05	4.85E-08	1.81E-06	19.8	5.79E-04	9.60E-05
S19	65	9	17	5	1.55E-01	3.13E-03	1.57E-04	1.34E-02	2.92E-03	1.59E-04	0.00E+00	4.31E-05	2.03E-05	5.99E-08	2.23E-06	24.2	7.10E-04	1.18E-04
S19	65	9	18	5	1.61E-01	3.37E-03	1.67E-04	1.44E-02	3.15E-03	1.71E-04	0.00E+00	4.63E-05	2.18E-05	6.45E-08	2.39E-06	25.8	7.60E-04	1.27E-04
S19	65	9	19	5	1.18E-01	2.52E-03	1.16E-04	9.36E-03	2.10E-03	1.11E-04	0.00E+00	3.03E-05	1.42E-05	4.44E-08	1.56E-06	17.9	4.94E-04	7.74E-05
S19	65	9	20	5	7.42E-02	1.67E-03	7.56E-05	6.19E-03	1.39E-03	7.33E-05	0.00E+00	1.99E-05	9.34E-06	2.93E-08	1.03E-06	11.7	3.24E-04	5.12E-05
S19	65	9	21	5	6.08E-02	1.41E-03	6.34E-05	5.23E-03	1.18E-03	6.18E-05	0.00E+00	1.68E-05	7.88E-06	2.48E-08	8.65E-07	9.8	2.73E-04	4.33E-05
S19	65	9	22	5	4.99E-02	1.20E-03	5.34E-05	4.44E-03	9.99E-04	5.22E-05	0.00E+00	1.42E-05	6.66E-06	2.11E-08	7.32E-07	8.3	2.30E-04	3.67E-05
S19	65	9	23	5	3.99E-02	9.84E-04	4.36E-05	3.65E-03	8.20E-04	4.28E-05	0.00E+00	1.17E-05	5.46E-06	1.73E-08	6.00E-07	6.7	1.88E-04	3.02E-05
S19	65	9	24	5	2.87E-02	7.28E-04	3.20E-05	2.70E-03	6.06E-04	3.16E-05	0.00E+00	8.60E-06	4.03E-06	1.28E-08	4.42E-07	4.9	1.39E-04	2.23E-05
S20	60	8	1	5	1.46E-02	3.33E-04	1.62E-05	1.42E-03	3.11E-04	1.67E-05	0.00E+00	4.54E-06	2.14E-06	6.37E-09	2.35E-07	2.5	7.42E-05	1.26E-05
S20	60	8	2	5	9.53E-03	2.22E-04	1.08E-05	9.47E-04	2.07E-04	1.11E-05	0.00E+00	3.02E-06	1.42E-06	4.25E-09	1.56E-07	1.7	4.93E-05	8.40E-06
S20	60	8	3	5	8.12E-03	1.94E-04	9.36E-06	8.29E-04	1.82E-04	9.73E-06	0.00E+00	2.64E-06	1.24E-06	3.72E-09	1.36E-07	1.4	4.30E-05	7.35E-06
S20	60	8	4	5	5.72E-03	1.39E-04	6.66E-06	5.92E-04	1.30E-04	6.94E-06	0.00E+00	1.88E-06	8.86E-07	2.66E-09	9.72E-08	1.0	3.07E-05	5.25E-06
S20	60	8	5	5	7.97E-03	1.94E-04	9.32E-06	8.29E-04	1.82E-04	9.72E-06	0.00E+00	2.64E-06	1.24E-06	3.72E-09	1.36E-07	1.4	4.29E-05	7.35E-06
S20	60	8	6	5	1.93E-02	4.72E-04	2.26E-05	2.01E-03	4.41E-04	2.36E-05	0.00E+00	6.40E-06	3.01E-06	9.03E-09	3.30E-07	3.5	1.04E-04	1.79E-05
S20	60	8	7	5	5.88E-02	1.41E-03	6.81E-05	6.04E-03	1.32E-03	7.09E-05	0.00E+00	1.92E-05	9.04E-06	2.71E-08	9.92E-07	10.5	3.13E-04	5.36E-05
S20	60	8	8	5	9.47E-02	2.16E-03	1.05E-04	9.23E-03	2.02E-03	1.09E-04	0.00E+00	2.95E-05	1.39E-05	4.14E-08	1.52E-06	16.3	4.82E-04	8.19E-05
S20	60	8	9	5	8.20E-02	1.75E-03	8.64E-05	7.46E-03	1.63E-03	8.83E-05	0.00E+00	2.40E-05	1.13E-05	3.35E-08	1.24E-06	13.4	3.94E-04	6.62E-05
S20	60	8	10	5	7.06E-02	1.44E-03	7.20E-05	6.15E-03	1.35E-03	7.32E-05	0.00E+00	1.99E-05	9.36E-06	2.76E-08	1.03E-06	11.1	3.27E-04	5.46E-05
S20	60	8	11	5	6.60E-02	1.30E-03	6.56E-05	5.56E-03	1.22E-03	6.64E-05	0.00E+00	1.80E-05	8.48E-06	2.50E-08	9.30E-07	10.1	2.97E-04	4.94E-05
S20	60	8	12	5	7.88E-02	1.47E-03	7.51E-05	6.27E-03	1.37E-03	7.53E-05	0.00E+00	2.04E-05	9.62E-06	2.82E-08	1.06E-06	11.6	3.38E-04	5.57E-05
S20	60	8	13	5	8.46E-02	1.55E-03	7.97E-05	6.63E-03	1.45E-03	7.97E-05	0.00E+00	2.16E-05	1.02E-05	2.97E-08	1.12E-06	12.3	3.58E-04	5.88E-05
S20	60	8	14	5	8.68E-02	1.58E-03	8.13E-05	6.75E-03	1.48E-03	8.12E-05	0.00E+00	2.20E-05	1.04E-05	3.03E-08	1.14E-06	12.6	3.65E-04	5.99E-05
S20	60	8	15	5	9.07E-02	1.64E-03	8.44E-05	6.98E-03	1.53E-03	8.42E-05	0.00E+00	2.28E-05	1.07E-05	3.13E-08	1.18E-06	13.0	3.79E-04	6.20E-05
S20	60	8	16	5	9.80E-02	1.78E-03	9.14E-05	7.57E-03	1.66E-03	9.13E-05	0.00E+00	2.47E-05	1.17E-05	3.40E-08	1.28E-06	14.1	4.10E-04	6.72E-05
S20	60	8	17	5	1.21E-01	2.19E-03	1.13E-04	9.35E-03	2.05E-03	1.13E-04	0.00E+00	3.05E-05	1.44E-05	4.20E-08	1.58E-06	17.4	5.06E-04	8.30E-05
S20	60	8	18	5	1.28E-01	2.36E-03	1.21E-04	1.01E-02	2.20E-03	1.21E-04	0.00E+00	3.28E-05	1.55E-05	4.52E-08	1.69E-06	18.7	5.44E-04	8.93E-05
S20	60	8	19	5	8.80E-02	1.64E-03	8.37E-05	6.98E-03	1.53E-03	8.39E-05	0.00E+00	2.27E-05	1.07E-05	3.13E-08	1.17E-06	12.9	3.77E-04	6.20E-05
S20	60	8	20	5	5.54E-02	1.08E-03	5.46E-05	4.62E-03	1.01E-03	5.52E-05	0.00E+00	1.50E-05	7.05E-06	2.07E-08	7.73E-07	8.4	2.47E-04	4.10E-05
S20	60	8	21	5	4.53E-02	9.16E-04	4.58E-05	3.91E-03	8.56E-04	4.65E-05	0.00E+00	1.26E-05	5.94E-06	1.75E-08	6.52E-07	7.1	2.08E-04	3.47E-05
S20	60	8	22	5	3.72E-02	7.77E-04	3.86E-05	3.31E-03	7.26E-04	3.93E-05	0.00E+00	1.07E-05	5.03E-06	1.49E-08	5.51E-07	6.0	1.75E-04	2.94E-05
S20	60	8	23	5	2.96E-02	6.38E-04	3.15E-05	2.72E-03	5.96E-04	3.22E-05	0.00E+00	8.75E-06	4.12E-06	1.22E-08	4.52E-07	4.9	1.43E-04	2.42E-05
S20	60	8	24	5	2.13E-02	4.72E-04	2.31E-05	2.01E-03	4.41E-04	2.38E-05	0.00E+00	6.45E-06	3.04E-06	9.03E-09	3.33E-07	3.6	1.06E-04	1.79E-05
S21	60	8	1	5	3.43E-02	7.80E-04	3.80E-05	3.33E-03	7.29E-04	3.92E-05	0.00E+00	1.06E-05	5.01E-06	1.49E-08	5.50E-07	5.9	1.74E-04	2.95E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	2	5	2.23E-02	5.20E-04	2.52E-05	2.22E-03	4.86E-04	2.61E-05	0.00E+00	7.08E-06	3.33E-06	9.95E-09	3.66E-07	3.9	1.16E-04	1.97E-05
S21	60	8	3	5	1.90E-02	4.55E-04	2.19E-05	1.94E-03	4.25E-04	2.28E-05	0.00E+00	6.19E-06	2.91E-06	8.71E-09	3.19E-07	3.4	1.01E-04	1.72E-05
S21	60	8	4	5	1.34E-02	3.25E-04	1.56E-05	1.39E-03	3.04E-04	1.63E-05	0.00E+00	4.42E-06	2.08E-06	6.22E-09	2.28E-07	2.4	7.19E-05	1.23E-05
S21	60	8	5	5	1.87E-02	4.55E-04	2.18E-05	1.94E-03	4.25E-04	2.28E-05	0.00E+00	6.18E-06	2.90E-06	8.71E-09	3.19E-07	3.4	1.01E-04	1.72E-05
S21	60	8	6	5	4.53E-02	1.11E-03	5.30E-05	4.71E-03	1.03E-03	5.53E-05	0.00E+00	1.50E-05	7.05E-06	2.12E-08	7.74E-07	8.2	2.44E-04	4.18E-05
S21	60	8	7	5	1.38E-01	3.32E-03	1.59E-04	1.41E-02	3.10E-03	1.66E-04	0.00E+00	4.51E-05	2.12E-05	6.35E-08	2.32E-06	24.6	7.34E-04	1.25E-04
S21	60	8	8	5	2.22E-01	5.07E-03	2.47E-04	2.16E-02	4.74E-03	2.55E-04	0.00E+00	6.92E-05	3.25E-05	9.71E-08	3.57E-06	38.1	1.13E-03	1.92E-04
S21	60	8	9	5	1.92E-01	4.10E-03	2.02E-04	1.75E-02	3.83E-03	2.07E-04	0.00E+00	5.62E-05	2.65E-05	7.84E-08	2.90E-06	31.3	9.22E-04	1.55E-04
S21	60	8	10	5	1.65E-01	3.38E-03	1.69E-04	1.44E-02	3.16E-03	1.72E-04	0.00E+00	4.65E-05	2.19E-05	6.47E-08	2.40E-06	26.1	7.66E-04	1.28E-04
S21	60	8	11	5	1.55E-01	3.06E-03	1.54E-04	1.30E-02	2.86E-03	1.56E-04	0.00E+00	4.22E-05	1.99E-05	5.85E-08	2.18E-06	23.8	6.96E-04	1.16E-04
S21	60	8	12	5	1.85E-01	3.45E-03	1.76E-04	1.47E-02	3.22E-03	1.76E-04	0.00E+00	4.78E-05	2.25E-05	6.60E-08	2.47E-06	27.2	7.92E-04	1.30E-04
S21	60	8	13	5	1.98E-01	3.64E-03	1.87E-04	1.55E-02	3.40E-03	1.87E-04	0.00E+00	5.06E-05	2.39E-05	6.97E-08	2.62E-06	28.9	8.39E-04	1.38E-04
S21	60	8	14	5	2.03E-01	3.71E-03	1.90E-04	1.58E-02	3.46E-03	1.90E-04	0.00E+00	5.15E-05	2.43E-05	7.09E-08	2.66E-06	29.4	8.56E-04	1.40E-04
S21	60	8	15	5	2.12E-01	3.84E-03	1.98E-04	1.64E-02	3.58E-03	1.97E-04	0.00E+00	5.34E-05	2.52E-05	7.34E-08	2.76E-06	30.5	8.87E-04	1.45E-04
S21	60	8	16	5	2.30E-01	4.16E-03	2.14E-04	1.77E-02	3.89E-03	2.14E-04	0.00E+00	5.79E-05	2.73E-05	7.97E-08	2.99E-06	33.1	9.61E-04	1.57E-04
S21	60	8	17	5	2.83E-01	5.14E-03	2.64E-04	2.19E-02	4.80E-03	2.64E-04	0.00E+00	7.14E-05	3.37E-05	9.83E-08	3.69E-06	40.8	1.19E-03	1.94E-04
S21	60	8	18	5	3.01E-01	5.53E-03	2.83E-04	2.36E-02	5.16E-03	2.84E-04	0.00E+00	7.68E-05	3.62E-05	1.06E-07	3.97E-06	43.8	1.27E-03	2.09E-04
S21	60	8	19	5	2.06E-01	3.84E-03	1.96E-04	1.64E-02	3.58E-03	1.97E-04	0.00E+00	5.32E-05	2.51E-05	7.34E-08	2.75E-06	30.3	8.82E-04	1.45E-04
S21	60	8	20	5	1.30E-01	2.54E-03	1.28E-04	1.08E-02	2.37E-03	1.29E-04	0.00E+00	3.50E-05	1.65E-05	4.85E-08	1.81E-06	19.8	5.79E-04	9.60E-05
S21	60	8	21	5	1.06E-01	2.15E-03	1.07E-04	9.15E-03	2.00E-03	1.09E-04	0.00E+00	2.96E-05	1.39E-05	4.11E-08	1.53E-06	16.6	4.87E-04	8.12E-05
S21	60	8	22	5	8.71E-02	1.82E-03	9.04E-05	7.76E-03	1.70E-03	9.22E-05	0.00E+00	2.50E-05	1.18E-05	3.48E-08	1.29E-06	14.0	4.11E-04	6.89E-05
S21	60	8	23	5	6.95E-02	1.50E-03	7.37E-05	6.38E-03	1.40E-03	7.55E-05	0.00E+00	2.05E-05	9.65E-06	2.86E-08	1.06E-06	11.4	3.36E-04	5.66E-05
S21	60	8	24	5	5.00E-02	1.11E-03	5.42E-05	4.71E-03	1.03E-03	5.57E-05	0.00E+00	1.51E-05	7.11E-06	2.12E-08	7.80E-07	8.4	2.47E-04	4.18E-05
S22	60	8	1	5	2.40E-02	5.48E-04	2.67E-05	2.34E-03	5.12E-04	2.75E-05	0.00E+00	7.47E-06	3.52E-06	1.05E-08	3.86E-07	4.1	1.22E-04	2.07E-05
S22	60	8	2	5	1.57E-02	3.65E-04	1.77E-05	1.56E-03	3.41E-04	1.83E-05	0.00E+00	4.97E-06	2.34E-06	6.99E-09	2.57E-07	2.7	8.11E-05	1.38E-05
S22	60	8	3	5	1.34E-02	3.19E-04	1.54E-05	1.36E-03	2.99E-04	1.60E-05	0.00E+00	4.34E-06	2.04E-06	6.11E-09	2.24E-07	2.4	7.07E-05	1.21E-05
S22	60	8	4	5	9.41E-03	2.28E-04	1.10E-05	9.73E-04	2.13E-04	1.14E-05	0.00E+00	3.10E-06	1.46E-06	4.37E-09	1.60E-07	1.7	5.04E-05	8.64E-06
S22	60	8	5	5	1.31E-02	3.19E-04	1.53E-05	1.36E-03	2.99E-04	1.60E-05	0.00E+00	4.34E-06	2.04E-06	6.11E-09	2.24E-07	2.4	7.06E-05	1.21E-05
S22	60	8	6	5	3.18E-02	7.76E-04	3.72E-05	3.31E-03	7.25E-04	3.88E-05	0.00E+00	1.05E-05	4.95E-06	1.48E-08	5.43E-07	5.8	1.71E-04	2.94E-05
S22	60	8	7	5	9.67E-02	2.33E-03	1.12E-04	9.93E-03	2.18E-03	1.17E-04	0.00E+00	3.16E-05	1.49E-05	4.45E-08	1.63E-06	17.3	5.15E-04	8.81E-05
S22	60	8	8	5	1.56E-01	3.56E-03	1.73E-04	1.52E-02	3.33E-03	1.79E-04	0.00E+00	4.86E-05	2.28E-05	6.81E-08	2.51E-06	26.8	7.93E-04	1.35E-04
S22	60	8	9	5	1.35E-01	2.87E-03	1.42E-04	1.23E-02	2.69E-03	1.45E-04	0.00E+00	3.94E-05	1.86E-05	5.50E-08	2.04E-06	22.0	6.47E-04	1.09E-04
S22	60	8	10	5	1.16E-01	2.37E-03	1.18E-04	1.01E-02	2.22E-03	1.20E-04	0.00E+00	3.27E-05	1.54E-05	4.54E-08	1.69E-06	18.3	5.38E-04	8.98E-05
S22	60	8	11	5	1.08E-01	2.14E-03	1.08E-04	9.15E-03	2.00E-03	1.09E-04	0.00E+00	2.96E-05	1.40E-05	4.11E-08	1.53E-06	16.7	4.89E-04	8.12E-05
S22	60	8	12	5	1.30E-01	2.42E-03	1.24E-04	1.03E-02	2.26E-03	1.24E-04	0.00E+00	3.36E-05	1.58E-05	4.63E-08	1.74E-06	19.1	5.56E-04	9.15E-05
S22	60	8	13	5	1.39E-01	2.56E-03	1.31E-04	1.09E-02	2.39E-03	1.31E-04	0.00E+00	3.55E-05	1.68E-05	4.89E-08	1.84E-06	20.3	5.89E-04	9.67E-05
S22	60	8	14	5	1.43E-01	2.60E-03	1.34E-04	1.11E-02	2.43E-03	1.34E-04	0.00E+00	3.62E-05	1.71E-05	4.98E-08	1.87E-06	20.7	6.01E-04	9.85E-05
S22	60	8	15	5	1.49E-01	2.69E-03	1.39E-04	1.15E-02	2.52E-03	1.38E-04	0.00E+00	3.75E-05	1.77E-05	5.16E-08	1.94E-06	21.4	6.23E-04	1.02E-04
S22	60	8	16	5	1.61E-01	2.92E-03	1.50E-04	1.25E-02	2.73E-03	1.50E-04	0.00E+00	4.06E-05	1.92E-05	5.59E-08	2.10E-06	23.2	6.75E-04	1.11E-04
S22	60	8	17	5	1.99E-01	3.60E-03	1.86E-04	1.54E-02	3.37E-03	1.85E-04	0.00E+00	5.01E-05	2.37E-05	6.90E-08	2.59E-06	28.7	8.33E-04	1.36E-04
S22	60	8	18	5	2.11E-01	3.88E-03	1.99E-04	1.65E-02	3.63E-03	1.99E-04	0.00E+00	5.39E-05	2.54E-05	7.43E-08	2.79E-06	30.8	8.94E-04	1.47E-04
S22	60	8	19	5	1.45E-01	2.69E-03	1.38E-04	1.15E-02	2.52E-03	1.38E-04	0.00E+00	3.74E-05	1.76E-05	5.15E-08	1.93E-06	21.3	6.19E-04	1.02E-04
S22	60	8	20	5	9.11E-02	1.78E-03	8.99E-05	7.59E-03	1.66E-03	9.08E-05	0.00E+00	2.46E-05	1.16E-05	3.41E-08	1.27E-06	13.9	4.06E-04	6.74E-05
S22	60	8	21	5	7.45E-02	1.51E-03	7.54E-05	6.42E-03	1.41E-03	7.65E-05	0.00E+00	2.07E-05	9.78E-06	2.88E-08	1.07E-06	11.7	3.42E-04	5.70E-05
S22	60	8	22	5	6.12E-02	1.28E-03	6.35E-05	5.45E-03	1.19E-03	6.47E-05	0.00E+00	1.76E-05	8.27E-06	2.45E-08	9.07E-07	9.8	2.89E-04	4.84E-05
S22	60	8	23	5	4.88E-02	1.05E-03	5.18E-05	4.48E-03	9.81E-04	5.30E-05	0.00E+00	1.44E-05	6.77E-06	2.01E-08	7.43E-07	8.0	2.36E-04	3.97E-05
S22	60	8	24	5	3.51E-02	7.76E-04	3.80E-05	3.31E-03	7.25E-04	3.91E-05	0.00E+00	1.06E-05	4.99E-06	1.49E-08	5.48E-07	5.9	1.74E-04	2.94E-05
S23	60	8	1	5	1.55E-02	3.53E-04	1.72E-05	1.50E-03	3.29E-04	1.77E-05	0.00E+00	4.81E-06	2.26E-06	6.75E-09	2.48E-07	2.7	7.86E-05	1.33E-05
S23	60	8	2	5	1.01E-02	2.35E-04	1.14E-05	1.00E-03	2.20E-04	1.18E-05	0.00E+00	3.20E-06	1.51E-06	4.50E-09	1.65E-07	1.8	5.22E-05	8.90E-06
S23	60	8	3	5	8.60E-03	2.06E-04	9.91E-06	8.77E-04	1.92E-04	1.03E-05	0.00E+00	2.80E-06	1.31E-06	3.94E-09	1.44E-07	1.5	4.55E-05	7.78E-06
S23	60	8	4	5	6.06E-03	1.47E-04	7.05E-06	6.27E-04	1.37E-04	7.35E-06	0.00E+00	2.00E-06	9.38E-07	2.81E-09	1.03E-07	1.1	3.25E-05	5.56E-06
S23	60	8	5	5	8.44E-03	2.06E-04	9.86E-06	8.77E-04	1.92E-04	1.03E-05	0.00E+00	2.79E-06	1.31E-06	3.94E-09	1.44E-07	1.5	4.54E-05	7.78E-06
S23	60	8	6	5	2.05E-02	4.99E-04	2.40E-05	2.13E-03	4.67E-04	2.50E-05	0.00E+00	6.78E-06	3.19E-06	9.56E-09	3.50E-07	3.7	1.10E-04	1.89E-05
S23	60	8	7	5	6.23E-02	1.50E-03	7.21E-05	6.39E-03	1.40E-03	7.50E-05	0.00E+00	2.04E-05	9.57E-06	2.87E-08	1.05E-06	11.1	3.32E-04	5.67E-05
S23	60	8	8	5	1.00E-01	2.29E-03	1.11E-04	9.78E-03	2.14E-03	1.15E-04	0.00E+00	3.13E-05	1.47E-05	4.39E-08	1.61E-06	17.2	5.11E-04	8.67E-05
S23	60	8	9	5	8.68E-02	1.85E-03	9.15E-05	7.90E-03	1.73E-03	9.35E-05	0.00E+00	2.54E-05	1.20E-05	3.54E-08	1.31E-06	14.1	4.17E-04	7.01E-05
S23	60	8	10	5	7.47E-02	1.53E-03	7.63E-05	6.52E-03	1.43E-03	7.75E-05	0.00E+00	2.10E-05	9.91E-06	2.92E-08	1.09E-06	11.8	3.46E-04	5.78E-05
S23	60	8	11	5	6.98E-02	1.38E-03	6.95E-05	5.89E-03	1.29E-03	7.03E-05	0.00E+00	1.91E-05	8.98E-06	2.64E-08	9.85E-07	10.7	3.15E-04	5.23E-05
S23	60	8	12	5	8.35E-02	1.56E-03	7.96E-05	6.64E-03	1.46E-03	7.97E-05	0.00E+00	2.16E-05	1.02E-05	2.98E-08	1.12E-06	12.3	3.58E-04	5.89E-05
S23	60	8	13	5	8.95E-02	1.65E-03	8.44E-05	7.02E-03	1.54E-03	8.44E-05	0.00E+00	2.29E-05	1.08E-05	3.15E-08	1.18E-06	13.0	3.79E-04	6.23E-05
S23	60	8	14	5	9.19E-02	1.67E-03	8.61E-05	7.14E-03	1.57E-03	8.60E-05	0.00E+00	2.33E-05	1.10E-05	3.21E-08	1.20E-06	13.3	3.87E-04	6.34E-05
S23	60	8	15	5	9.60E-02	1.73E-03	8.93E-05	7.39E-03	1.62E-03	8.92E-05	0.00E+00	2.41E-05	1.14E-05	3.32E-08	1.25E-06	13.8	4.01E-04	6.56E-05
S23	60	8	16	5	1.04E-01	1.88E-03	9.68E-05	8.02E-03	1.76E-03	9.67E-05	0.00E+00	2.62E-05	1.23E-05	3.60E-08	1.35E-06	15.0	4.35E-04	7.12E-05
S23	60	8	17	5	1.28E-01	2.32E-03	1.19E-04	9.90E-03	2.17E-03	1.19E-04	0.00E+00	3.23E-05	1.52E-05	4.44E-08	1.67E-06	18.5	5.36E-04	8.78E-05
S23	60	8	18	5	1.36E-01	2.50E-03	1.28E-04	1.07E-02	2.33E-03	1.28E-04	0.00E+00	3.47E-05	1.64E-05	4.78E-08	1.79E-06	19.8	5.76E-04	9.45E-05
S23	60	8	19	5	9.32E-02	1.73E-03	8.86E-05	7.39E-03	1.62E-03	8.88E-05	0.00E+00	2.41E-05	1.13E-05	3.32E-08	1.24E-06	13.7	3.99E-04	6.56E-05
S23	60	8	20	5	5.87E-02	1.15E-03	5.79E-05	4.89E-03	1.07E-03	5.84E-05	0.00E+00	1.58E-05	7.46E-06	2.19E-08	8.18E-07	8.9	2.62E-04	4.34E-05
S23	60	8	21	5	4.80E-02	9.69E-04	4.85E-05	4.14E-03	9.06E-04	4.93E-05	0.00E+00	1.34E-05	6.29E-06	1.86E-08	6.90E-07	7.5	2.20E-04	3.67E-05
S23	60	8	22	5	3.94E-02	8.23E-04	4.09E-05	3.51E-03	7.69E-04	4.17E-05	0.00E+00	1.13E-05	5.32E-06	1.57E-08	5.84E-07	6.3	1.86E-04	3.11E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	23	5	3.14E-02	6.76E-04	3.33E-05	2.88E-03	6.31E-04	3.41E-05	0.00E+00	9.26E-06	4.36E-06	1.29E-08	4.78E-07	5.1	1.52E-04	2.56E-05
S23	60	8	24	5	2.26E-02	4.99E-04	2.45E-05	2.13E-03	4.67E-04	2.52E-05	0.00E+00	6.83E-06	3.21E-06	9.56E-09	3.53E-07	3.8	1.12E-04	1.89E-05
S24	60	8	1	5	1.01E-02	2.30E-04	1.12E-05	2.71E-03	6.32E-04	1.15E-05	0.00E+00	3.13E-06	1.47E-06	4.39E-09	1.62E-07	1.7	5.12E-05	8.69E-06
S24	60	8	2	5	6.57E-03	1.53E-04	7.41E-06	1.80E-03	4.21E-04	7.68E-06	0.00E+00	2.09E-06	9.81E-07	2.93E-09	1.08E-07	1.1	3.40E-05	5.79E-06
S24	60	8	3	5	5.60E-03	1.34E-04	6.45E-06	1.58E-03	3.69E-04	6.71E-06	0.00E+00	1.82E-06	8.56E-07	2.56E-09	9.40E-08	1.0	2.97E-05	5.07E-06
S24	60	8	4	5	3.94E-03	9.57E-05	4.59E-06	1.13E-03	2.63E-04	4.79E-06	0.00E+00	1.30E-06	6.11E-07	1.83E-09	6.70E-08	0.7	2.11E-05	3.62E-06
S24	60	8	5	5	5.49E-03	1.34E-04	6.42E-06	1.58E-03	3.69E-04	6.70E-06	0.00E+00	1.82E-06	8.55E-07	2.56E-09	9.38E-08	1.0	2.96E-05	5.07E-06
S24	60	8	6	5	1.33E-02	3.25E-04	1.56E-05	3.83E-03	8.96E-04	1.63E-05	0.00E+00	4.42E-06	2.08E-06	6.23E-09	2.28E-07	2.4	7.18E-05	1.23E-05
S24	60	8	7	5	4.05E-02	9.76E-04	4.69E-05	1.15E-02	2.69E-03	4.89E-05	0.00E+00	1.33E-05	6.24E-06	1.87E-08	6.84E-07	7.3	2.16E-04	3.69E-05
S24	60	8	8	5	6.53E-02	1.49E-03	7.26E-05	1.76E-02	4.11E-03	7.50E-05	0.00E+00	2.04E-05	9.58E-06	2.86E-08	1.05E-06	11.2	3.33E-04	5.65E-05
S24	60	8	9	5	5.65E-02	1.21E-03	5.96E-05	1.42E-02	3.32E-03	6.09E-05	0.00E+00	1.65E-05	7.78E-06	2.31E-08	8.54E-07	9.2	2.71E-04	4.56E-05
S24	60	8	10	5	4.87E-02	9.95E-04	4.97E-05	1.17E-02	2.74E-03	5.05E-05	0.00E+00	1.37E-05	6.45E-06	1.90E-08	7.07E-07	7.7	2.25E-04	3.77E-05
S24	60	8	11	5	4.55E-02	8.99E-04	4.53E-05	1.06E-02	2.48E-03	4.58E-05	0.00E+00	1.24E-05	5.85E-06	1.72E-08	6.41E-07	7.0	2.05E-04	3.40E-05
S24	60	8	12	5	5.44E-02	1.01E-03	5.18E-05	1.19E-02	2.79E-03	5.19E-05	0.00E+00	1.41E-05	6.64E-06	1.94E-08	7.28E-07	8.0	2.33E-04	3.84E-05
S24	60	8	13	5	5.83E-02	1.07E-03	5.50E-05	1.26E-02	2.95E-03	5.50E-05	0.00E+00	1.49E-05	7.02E-06	2.05E-08	7.70E-07	8.5	2.47E-04	4.06E-05
S24	60	8	14	5	5.99E-02	1.09E-03	5.61E-05	1.29E-02	3.00E-03	5.60E-05	0.00E+00	1.52E-05	7.15E-06	2.09E-08	7.84E-07	8.7	2.52E-04	4.13E-05
S24	60	8	15	5	6.25E-02	1.13E-03	5.82E-05	1.33E-02	3.11E-03	5.81E-05	0.00E+00	1.57E-05	7.41E-06	2.16E-08	8.13E-07	9.0	2.61E-04	4.27E-05
S24	60	8	16	5	6.76E-02	1.22E-03	6.30E-05	1.44E-02	3.37E-03	6.30E-05	0.00E+00	1.70E-05	8.04E-06	2.34E-08	8.81E-07	9.7	2.83E-04	4.63E-05
S24	60	8	17	5	8.33E-02	1.51E-03	7.78E-05	1.78E-02	4.16E-03	7.77E-05	0.00E+00	2.10E-05	9.92E-06	2.89E-08	1.09E-06	12.0	3.49E-04	5.72E-05
S24	60	8	18	5	8.86E-02	1.63E-03	8.34E-05	1.92E-02	4.48E-03	8.35E-05	0.00E+00	2.26E-05	1.07E-05	3.11E-08	1.17E-06	12.9	3.75E-04	6.16E-05
S24	60	8	19	5	6.07E-02	1.13E-03	5.77E-05	1.33E-02	3.11E-03	5.78E-05	0.00E+00	1.57E-05	7.39E-06	2.16E-08	8.10E-07	8.9	2.60E-04	4.27E-05
S24	60	8	20	5	3.82E-02	7.46E-04	3.77E-05	8.79E-03	2.05E-03	3.81E-05	0.00E+00	1.03E-05	4.86E-06	1.43E-08	5.33E-07	5.8	1.70E-04	2.82E-05
S24	60	8	21	5	3.12E-02	6.31E-04	3.16E-05	7.44E-03	1.74E-03	3.21E-05	0.00E+00	8.70E-06	4.10E-06	1.21E-08	4.49E-07	4.9	1.43E-04	2.39E-05
S24	60	8	22	5	2.56E-02	5.36E-04	2.66E-05	6.31E-03	1.48E-03	2.71E-05	0.00E+00	7.36E-06	3.47E-06	1.03E-08	3.80E-07	4.1	1.21E-04	2.03E-05
S24	60	8	23	5	2.04E-02	4.40E-04	2.17E-05	5.19E-03	1.21E-03	2.22E-05	0.00E+00	6.03E-06	2.84E-06	8.42E-09	3.11E-07	3.4	9.89E-05	1.67E-05
S24	60	8	24	5	1.47E-02	3.25E-04	1.59E-05	3.83E-03	8.96E-04	1.64E-05	0.00E+00	4.45E-06	2.09E-06	6.23E-09	2.30E-07	2.5	7.28E-05	1.23E-05
S25	60	8	1	5	8.23E-03	1.87E-04	9.13E-06	2.21E-03	5.16E-04	9.43E-06	0.00E+00	2.56E-06	1.20E-06	3.59E-09	1.32E-07	1.4	4.18E-05	7.10E-06
S25	60	8	2	5	5.37E-03	1.25E-04	6.05E-06	1.47E-03	3.44E-04	6.27E-06	0.00E+00	1.70E-06	8.01E-07	2.39E-09	8.79E-08	0.9	2.78E-05	4.73E-06
S25	60	8	3	5	4.57E-03	1.09E-04	5.27E-06	1.29E-03	3.01E-04	5.48E-06	0.00E+00	1.49E-06	6.99E-07	2.09E-09	7.67E-08	0.8	2.42E-05	4.14E-06
S25	60	8	4	5	3.22E-03	7.81E-05	3.75E-06	9.21E-04	2.15E-04	3.91E-06	0.00E+00	1.06E-06	4.99E-07	1.50E-09	5.47E-08	0.6	1.73E-05	2.96E-06
S25	60	8	5	5	4.49E-03	1.09E-04	5.25E-06	1.29E-03	3.01E-04	5.47E-06	0.00E+00	1.49E-06	6.98E-07	2.09E-09	7.66E-08	0.8	2.42E-05	4.14E-06
S25	60	8	6	5	1.09E-02	2.66E-04	1.27E-05	3.13E-03	7.31E-04	1.33E-05	0.00E+00	3.61E-06	1.70E-06	5.08E-09	1.86E-07	2.0	5.87E-05	1.01E-05
S25	60	8	7	5	3.31E-02	7.97E-04	3.83E-05	9.39E-03	2.19E-03	3.99E-05	0.00E+00	1.08E-05	5.09E-06	1.53E-08	5.59E-07	5.9	1.76E-04	3.02E-05
S25	60	8	8	5	5.33E-02	1.22E-03	5.93E-05	1.44E-02	3.36E-03	6.12E-05	0.00E+00	1.66E-05	7.82E-06	2.33E-08	8.58E-07	9.2	2.72E-04	4.61E-05
S25	60	8	9	5	4.61E-02	9.84E-04	4.86E-05	1.16E-02	2.71E-03	4.97E-05	0.00E+00	1.35E-05	6.36E-06	1.88E-08	6.97E-07	7.5	2.22E-04	3.73E-05
S25	60	8	10	5	3.97E-02	8.12E-04	4.06E-05	9.57E-03	2.24E-03	4.12E-05	0.00E+00	1.12E-05	5.27E-06	1.56E-08	5.78E-07	6.3	1.84E-04	3.08E-05
S25	60	8	11	5	3.71E-02	7.34E-04	3.70E-05	8.65E-03	2.02E-03	3.74E-05	0.00E+00	1.01E-05	4.78E-06	1.41E-08	5.24E-07	5.7	1.67E-04	2.78E-05
S25	60	8	12	5	4.44E-02	8.28E-04	4.23E-05	9.76E-03	2.28E-03	4.24E-05	0.00E+00	1.15E-05	5.42E-06	1.59E-08	5.94E-07	6.5	1.90E-04	3.13E-05
S25	60	8	13	5	4.76E-02	8.75E-04	4.49E-05	1.03E-02	2.41E-03	4.49E-05	0.00E+00	1.22E-05	5.73E-06	1.68E-08	6.29E-07	6.9	2.02E-04	3.31E-05
S25	60	8	14	5	4.89E-02	8.90E-04	4.58E-05	1.05E-02	2.45E-03	4.57E-05	0.00E+00	1.24E-05	5.84E-06	1.71E-08	6.40E-07	7.1	2.06E-04	3.37E-05
S25	60	8	15	5	5.11E-02	9.22E-04	4.75E-05	1.09E-02	2.54E-03	4.74E-05	0.00E+00	1.28E-05	6.05E-06	1.76E-08	6.64E-07	7.3	2.13E-04	3.49E-05
S25	60	8	16	5	5.52E-02	1.00E-03	5.15E-05	1.18E-02	2.75E-03	5.14E-05	0.00E+00	1.39E-05	6.56E-06	1.91E-08	7.19E-07	8.0	2.31E-04	3.78E-05
S25	60	8	17	5	6.80E-02	1.23E-03	6.35E-05	1.45E-02	3.40E-03	6.35E-05	0.00E+00	1.72E-05	8.10E-06	2.36E-08	8.88E-07	9.8	2.85E-04	4.67E-05
S25	60	8	18	5	7.23E-02	1.33E-03	6.81E-05	1.57E-02	3.66E-03	6.82E-05	0.00E+00	1.85E-05	8.71E-06	2.54E-08	9.54E-07	10.5	3.06E-04	5.03E-05
S25	60	8	19	5	4.95E-02	9.22E-04	4.71E-05	1.09E-02	2.54E-03	4.72E-05	0.00E+00	1.28E-05	6.03E-06	1.76E-08	6.62E-07	7.3	2.12E-04	3.49E-05
S25	60	8	20	5	3.12E-02	6.09E-04	3.08E-05	7.18E-03	1.68E-03	3.11E-05	0.00E+00	8.42E-06	3.97E-06	1.17E-08	4.35E-07	4.8	1.39E-04	2.31E-05
S25	60	8	21	5	2.55E-02	5.16E-04	2.58E-05	6.08E-03	1.42E-03	2.62E-05	0.00E+00	7.10E-06	3.35E-06	9.87E-09	3.67E-07	4.0	1.17E-04	1.95E-05
S25	60	8	22	5	2.09E-02	4.37E-04	2.17E-05	5.16E-03	1.20E-03	2.22E-05	0.00E+00	6.01E-06	2.83E-06	8.37E-09	3.10E-07	3.4	9.88E-05	1.66E-05
S25	60	8	23	5	1.67E-02	3.59E-04	1.77E-05	4.23E-03	9.90E-04	1.81E-05	0.00E+00	4.93E-06	2.32E-06	6.88E-09	2.54E-07	2.7	8.08E-05	1.36E-05
S25	60	8	24	5	1.20E-02	2.66E-04	1.30E-05	3.13E-03	7.31E-04	1.34E-05	0.00E+00	3.63E-06	1.71E-06	5.08E-09	1.88E-07	2.0	5.95E-05	1.01E-05
S26	60	8	1	5	2.85E-02	6.49E-04	3.16E-05	2.77E-03	6.07E-04	3.27E-05	0.00E+00	8.86E-06	4.17E-06	1.24E-08	4.58E-07	4.9	1.45E-04	2.46E-05
S26	60	8	2	5	1.86E-02	4.33E-04	2.10E-05	1.85E-03	4.05E-04	2.17E-05	0.00E+00	5.90E-06	2.77E-06	8.29E-09	3.04E-07	3.2	9.63E-05	1.64E-05
S26	60	8	3	5	1.58E-02	3.79E-04	1.83E-05	1.62E-03	3.54E-04	1.90E-05	0.00E+00	5.15E-06	2.42E-06	7.25E-09	2.66E-07	2.8	8.39E-05	1.43E-05
S26	60	8	4	5	1.12E-02	2.71E-04	1.30E-05	1.15E-03	2.53E-04	1.35E-05	0.00E+00	3.68E-06	1.73E-06	5.18E-09	1.90E-07	2.0	5.98E-05	1.02E-05
S26	60	8	5	5	1.55E-02	3.79E-04	1.82E-05	1.62E-03	3.54E-04	1.90E-05	0.00E+00	5.14E-06	2.42E-06	7.25E-09	2.65E-07	2.8	8.37E-05	1.43E-05
S26	60	8	6	5	3.77E-02	9.20E-04	4.41E-05	3.93E-03	8.60E-04	4.60E-05	0.00E+00	1.25E-05	5.87E-06	1.76E-08	6.45E-07	6.8	2.03E-04	3.48E-05
S26	60	8	7	5	1.15E-01	2.76E-03	1.33E-04	1.18E-02	2.58E-03	1.38E-04	0.00E+00	3.75E-05	1.76E-05	5.28E-08	1.94E-06	20.5	6.11E-04	1.04E-04
S26	60	8	8	5	1.85E-01	4.22E-03	2.05E-04	1.80E-02	3.95E-03	2.12E-04	0.00E+00	5.76E-05	2.71E-05	8.08E-08	2.97E-06	31.7	9.41E-04	1.60E-04
S26	60	8	9	5	1.60E-01	3.41E-03	1.69E-04	1.45E-02	3.19E-03	1.72E-04	0.00E+00	4.68E-05	2.20E-05	6.53E-08	2.42E-06	26.0	7.68E-04	1.29E-04
S26	60	8	10	5	1.38E-01	2.81E-03	1.41E-04	1.20E-02	2.63E-03	1.43E-04	0.00E+00	3.87E-05	1.83E-05	5.39E-08	2.00E-06	21.7	6.38E-04	1.07E-04
S26	60	8	11	5	1.29E-01	2.54E-03	1.28E-04	1.09E-02	2.38E-03	1.30E-04	0.00E+00	3.51E-05	1.66E-05	4.87E-08	1.81E-06	19.8	5.80E-04	9.63E-05
S26	60	8	12	5	1.54E-01	2.87E-03	1.47E-04	1.22E-02	2.68E-03	1.47E-04	0.00E+00	3.98E-05	1.88E-05	5.49E-08	2.06E-06	22.7	6.60E-04	1.09E-04
S26	60	8	13	5	1.65E-01	3.03E-03	1.55E-04	1.29E-02	2.83E-03	1.56E-04	0.00E+00	4.21E-05	1.99E-05	5.80E-08	2.18E-06	24.0	6.99E-04	1.15E-04
S26	60	8	14	5	1.69E-01	3.09E-03	1.59E-04	1.32E-02	2.88E-03	1.58E-04	0.00E+00	4.29E-05	2.02E-05	5.91E-08	2.22E-06	24.5	7.12E-04	1.17E-04
S26	60	8	15	5	1.77E-01	3.19E-03	1.65E-04	1.36E-02	2.98E-03	1.64E-04	0.00E+00	4.44E-05	2.10E-05	6.11E-08	2.30E-06	25.4	7.38E-04	1.21E-04
S26	60	8	16	5	1.91E-01	3.46E-03	1.78E-04	1.48E-02	3.24E-03	1.78E-04	0.00E+00	4.82E-05	2.27E-05	6.63E-08	2.49E-06	27.6	8.01E-04	1.31E-04
S26	60	8	17	5	2.36E-01	4.28E-03	2.20E-04	1.82E-02	4.00E-03	2.20E-04	0.00E+00	5.95E-05	2.81E-05	8.19E-08	3.08E-06	34.0	9.88E-04	1.62E-04
S26	60	8	18	5	2.51E-01	4.60E-03	2.36E-04	1.96E-02	4.30E-03	2.36E-04	0.00E+00	6.39E-05	3.02E-05	8.81E-08	3.31E-06	36.5	1.06E-03	1.74E-04
S26	60	8	19	5	1.72E-01	3.19E-03	1.63E-04	1.36E-02	2.98E-03	1.64E-04	0.00E+00	4.43E-05	2.09E-05	6.11E-08	2.29E-06	25.2	7.35E-04	1.21E-04

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	20	5	1.08E-01	2.11E-03	1.07E-04	9.01E-03	1.97E-03	1.08E-04	0.00E+00	2.92E-05	1.38E-05	4.04E-08	1.51E-06	16.5	4.82E-04	7.99E-05
S26	60	8	21	5	8.83E-02	1.79E-03	8.94E-05	7.62E-03	1.67E-03	9.07E-05	0.00E+00	2.46E-05	1.16E-05	3.42E-08	1.27E-06	13.8	4.05E-04	6.76E-05
S26	60	8	22	5	7.25E-02	1.52E-03	7.53E-05	6.47E-03	1.42E-03	7.67E-05	0.00E+00	2.08E-05	9.81E-06	2.90E-08	1.08E-06	11.6	3.42E-04	5.74E-05
S26	60	8	23	5	5.78E-02	1.24E-03	6.14E-05	5.31E-03	1.16E-03	6.29E-05	0.00E+00	1.71E-05	8.03E-06	2.38E-08	8.81E-07	9.5	2.80E-04	4.71E-05
S26	60	8	24	5	4.16E-02	9.20E-04	4.51E-05	3.93E-03	8.60E-04	4.64E-05	0.00E+00	1.26E-05	5.92E-06	1.76E-08	6.50E-07	7.0	2.06E-04	3.48E-05
S27	50	7	1	5	2.03E-02	4.00E-04	2.22E-05	2.00E-03	4.24E-04	2.38E-05	0.00E+00	6.44E-06	3.05E-06	8.51E-09	3.34E-07	3.4	1.07E-04	1.91E-05
S27	50	7	2	5	1.32E-02	2.67E-04	1.47E-05	1.33E-03	2.83E-04	1.59E-05	0.00E+00	4.29E-06	2.03E-06	5.68E-09	2.22E-07	2.3	7.10E-05	1.27E-05
S27	50	7	3	5	1.12E-02	2.34E-04	1.28E-05	1.16E-03	2.48E-04	1.39E-05	0.00E+00	3.74E-06	1.77E-06	4.97E-09	1.94E-07	2.0	6.19E-05	1.12E-05
S27	50	7	4	5	7.91E-03	1.67E-04	9.11E-06	8.32E-04	1.77E-04	9.89E-06	0.00E+00	2.67E-06	1.26E-06	3.55E-09	1.38E-07	1.4	4.42E-05	7.97E-06
S27	50	7	5	5	1.10E-02	2.34E-04	1.27E-05	1.16E-03	2.48E-04	1.38E-05	0.00E+00	3.74E-06	1.77E-06	4.97E-09	1.94E-07	2.0	6.18E-05	1.12E-05
S27	50	7	6	5	2.68E-02	5.67E-04	3.09E-05	2.83E-03	6.01E-04	3.36E-05	0.00E+00	9.08E-06	4.29E-06	1.21E-08	4.70E-07	4.8	1.50E-04	2.71E-05
S27	50	7	7	5	8.13E-02	1.70E-03	9.30E-05	8.48E-03	1.80E-03	1.01E-04	0.00E+00	2.73E-05	1.29E-05	3.62E-08	1.41E-06	14.4	4.51E-04	8.13E-05
S27	50	7	8	5	1.31E-01	2.60E-03	1.44E-04	1.30E-02	2.76E-03	1.55E-04	0.00E+00	4.18E-05	1.98E-05	5.53E-08	2.17E-06	22.3	6.94E-04	1.24E-04
S27	50	7	9	5	1.14E-01	2.10E-03	1.18E-04	1.05E-02	2.23E-03	1.26E-04	0.00E+00	3.40E-05	1.61E-05	4.47E-08	1.76E-06	18.3	5.67E-04	1.00E-04
S27	50	7	10	5	9.82E-02	1.73E-03	9.86E-05	8.65E-03	1.84E-03	1.04E-04	0.00E+00	2.81E-05	1.33E-05	3.69E-08	1.46E-06	15.2	4.71E-04	8.29E-05
S27	50	7	11	5	9.19E-02	1.57E-03	8.99E-05	7.82E-03	1.66E-03	9.46E-05	0.00E+00	2.55E-05	1.21E-05	3.33E-08	1.32E-06	13.9	4.28E-04	7.49E-05
S27	50	7	12	5	1.10E-01	1.77E-03	1.03E-04	8.81E-03	1.87E-03	1.07E-04	0.00E+00	2.89E-05	1.37E-05	3.76E-08	1.50E-06	15.9	4.87E-04	8.45E-05
S27	50	7	13	5	1.18E-01	1.87E-03	1.09E-04	9.31E-03	1.98E-03	1.14E-04	0.00E+00	3.06E-05	1.45E-05	3.97E-08	1.59E-06	16.9	5.16E-04	8.92E-05
S27	50	7	14	5	1.21E-01	1.90E-03	1.11E-04	9.48E-03	2.02E-03	1.16E-04	0.00E+00	3.12E-05	1.48E-05	4.04E-08	1.62E-06	17.2	5.26E-04	9.08E-05
S27	50	7	15	5	1.27E-01	1.97E-03	1.16E-04	9.81E-03	2.09E-03	1.20E-04	0.00E+00	3.23E-05	1.53E-05	4.19E-08	1.68E-06	17.9	5.45E-04	9.40E-05
S27	50	7	16	5	1.37E-01	2.14E-03	1.25E-04	1.06E-02	2.26E-03	1.30E-04	0.00E+00	3.50E-05	1.66E-05	4.54E-08	1.82E-06	19.4	5.91E-04	1.02E-04
S27	50	7	17	5	1.69E-01	2.64E-03	1.55E-04	1.31E-02	2.79E-03	1.61E-04	0.00E+00	4.32E-05	2.05E-05	5.61E-08	2.24E-06	23.9	7.29E-04	1.26E-04
S27	50	7	18	5	1.79E-01	2.84E-03	1.66E-04	1.41E-02	3.01E-03	1.73E-04	0.00E+00	4.65E-05	2.20E-05	6.03E-08	2.41E-06	25.6	7.83E-04	1.35E-04
S27	50	7	19	5	1.23E-01	1.97E-03	1.15E-04	9.81E-03	2.09E-03	1.20E-04	0.00E+00	3.22E-05	1.53E-05	4.19E-08	1.67E-06	17.7	5.42E-04	9.40E-05
S27	50	7	20	5	7.72E-02	1.30E-03	7.48E-05	6.49E-03	1.38E-03	7.86E-05	0.00E+00	2.12E-05	1.00E-05	2.77E-08	1.10E-06	11.6	3.56E-04	6.21E-05
S27	50	7	21	5	6.30E-02	1.10E-03	6.28E-05	5.49E-03	1.17E-03	6.63E-05	0.00E+00	1.79E-05	8.47E-06	2.34E-08	9.28E-07	9.7	2.99E-04	5.26E-05
S27	50	7	22	5	5.17E-02	9.34E-04	5.28E-05	4.66E-03	9.90E-04	5.60E-05	0.00E+00	1.51E-05	7.17E-06	1.99E-08	7.85E-07	8.2	2.53E-04	4.46E-05
S27	50	7	23	5	4.12E-02	7.67E-04	4.31E-05	3.83E-03	8.13E-04	4.59E-05	0.00E+00	1.24E-05	5.87E-06	1.63E-08	6.43E-07	6.7	2.07E-04	3.66E-05
S27	50	7	24	5	2.96E-02	5.67E-04	3.16E-05	2.83E-03	6.01E-04	3.39E-05	0.00E+00	9.14E-06	4.33E-06	1.21E-08	4.74E-07	4.9	1.52E-04	2.71E-05
S28	50	7	1	5	1.46E-02	2.89E-04	1.60E-05	1.44E-03	3.06E-04	1.72E-05	0.00E+00	4.65E-06	2.20E-06	6.14E-09	2.41E-07	2.5	7.71E-05	1.38E-05
S28	50	7	2	5	9.53E-03	1.93E-04	1.06E-05	9.60E-04	2.04E-04	1.14E-05	0.00E+00	3.09E-06	1.46E-06	4.10E-09	1.60E-07	1.6	5.13E-05	9.20E-06
S28	50	7	3	5	8.11E-03	1.69E-04	9.23E-06	8.40E-04	1.79E-04	1.00E-05	0.00E+00	2.70E-06	1.28E-06	3.58E-09	1.40E-07	1.4	4.47E-05	8.05E-06
S28	50	7	4	5	5.71E-03	1.20E-04	6.57E-06	6.00E-04	1.28E-04	7.14E-06	0.00E+00	1.93E-06	9.11E-07	2.56E-09	9.98E-08	1.0	3.19E-05	5.75E-06
S28	50	7	5	5	7.95E-03	1.69E-04	9.19E-06	8.40E-04	1.79E-04	9.99E-06	0.00E+00	2.70E-06	1.28E-06	3.58E-09	1.40E-07	1.4	4.46E-05	8.05E-06
S28	50	7	6	5	1.93E-02	4.09E-04	2.23E-05	2.04E-03	4.34E-04	2.43E-05	0.00E+00	6.55E-06	3.10E-06	8.70E-09	3.39E-07	3.4	1.08E-04	1.95E-05
S28	50	7	7	5	5.87E-02	1.23E-03	6.71E-05	6.12E-03	1.30E-03	7.28E-05	0.00E+00	1.97E-05	9.30E-06	2.61E-08	1.02E-06	10.4	3.25E-04	5.86E-05
S28	50	7	8	5	9.47E-02	1.88E-03	1.04E-04	9.36E-03	1.99E-03	1.12E-04	0.00E+00	3.02E-05	1.43E-05	3.99E-08	1.56E-06	16.1	5.01E-04	8.97E-05
S28	50	7	9	5	8.22E-02	1.52E-03	8.53E-05	7.56E-03	1.61E-03	9.08E-05	0.00E+00	2.45E-05	1.16E-05	3.23E-08	1.27E-06	13.2	4.09E-04	7.24E-05
S28	50	7	10	5	7.09E-02	1.25E-03	7.12E-05	6.24E-03	1.33E-03	7.53E-05	0.00E+00	2.03E-05	9.63E-06	2.66E-08	1.05E-06	11.0	3.40E-04	5.98E-05
S28	50	7	11	5	6.63E-02	1.13E-03	6.49E-05	5.64E-03	1.20E-03	6.83E-05	0.00E+00	1.84E-05	8.73E-06	2.41E-08	9.56E-07	10.0	3.09E-04	5.40E-05
S28	50	7	12	5	7.94E-02	1.28E-03	7.43E-05	6.36E-03	1.35E-03	7.74E-05	0.00E+00	2.09E-05	9.90E-06	2.71E-08	1.08E-06	11.5	3.51E-04	6.09E-05
S28	50	7	13	5	8.52E-02	1.35E-03	7.88E-05	6.72E-03	1.43E-03	8.20E-05	0.00E+00	2.21E-05	1.05E-05	2.87E-08	1.15E-06	12.2	3.72E-04	6.44E-05
S28	50	7	14	5	8.75E-02	1.37E-03	8.04E-05	6.84E-03	1.45E-03	8.35E-05	0.00E+00	2.25E-05	1.07E-05	2.92E-08	1.17E-06	12.4	3.79E-04	6.55E-05
S28	50	7	15	5	9.14E-02	1.42E-03	8.35E-05	7.08E-03	1.51E-03	8.66E-05	0.00E+00	2.33E-05	1.11E-05	3.02E-08	1.21E-06	12.9	3.93E-04	6.78E-05
S28	50	7	16	5	9.87E-02	1.54E-03	9.04E-05	7.68E-03	1.63E-03	9.39E-05	0.00E+00	2.53E-05	1.20E-05	3.28E-08	1.31E-06	14.0	4.26E-04	7.36E-05
S28	50	7	17	5	1.22E-01	1.90E-03	1.12E-04	9.48E-03	2.02E-03	1.16E-04	0.00E+00	3.12E-05	1.48E-05	4.05E-08	1.62E-06	17.2	5.26E-04	9.08E-05
S28	50	7	18	5	1.29E-01	2.05E-03	1.20E-04	1.02E-02	2.17E-03	1.24E-04	0.00E+00	3.35E-05	1.59E-05	4.35E-08	1.74E-06	18.5	5.65E-04	9.77E-05
S28	50	7	19	5	8.86E-02	1.42E-03	8.28E-05	7.08E-03	1.51E-03	8.62E-05	0.00E+00	2.32E-05	1.10E-05	3.02E-08	1.21E-06	12.8	3.91E-04	6.78E-05
S28	50	7	20	5	5.57E-02	9.39E-04	5.40E-05	4.68E-03	9.95E-04	5.67E-05	0.00E+00	1.53E-05	7.25E-06	2.00E-08	7.94E-07	8.3	2.57E-04	4.48E-05
S28	50	7	21	5	4.55E-02	7.95E-04	4.53E-05	3.96E-03	8.42E-04	4.78E-05	0.00E+00	1.29E-05	6.12E-06	1.69E-08	6.69E-07	7.0	2.16E-04	3.79E-05
S28	50	7	22	5	3.73E-02	6.74E-04	3.81E-05	3.36E-03	7.15E-04	4.04E-05	0.00E+00	1.09E-05	5.17E-06	1.43E-08	5.66E-07	5.9	1.82E-04	3.22E-05
S28	50	7	23	5	2.97E-02	5.54E-04	3.11E-05	2.76E-03	5.87E-04	3.31E-05	0.00E+00	8.95E-06	4.24E-06	1.18E-08	4.64E-07	4.8	1.49E-04	2.64E-05
S28	50	7	24	5	2.14E-02	4.09E-04	2.28E-05	2.04E-03	4.34E-04	2.44E-05	0.00E+00	6.60E-06	3.12E-06	8.70E-09	3.42E-07	3.5	1.10E-04	1.95E-05
S29	60	8	1	5	3.19E-02	7.27E-04	3.54E-05	3.10E-03	6.79E-04	3.65E-05	0.00E+00	9.92E-06	4.67E-06	1.39E-08	5.12E-07	5.5	1.62E-04	2.75E-05
S29	60	8	2	5	2.08E-02	4.85E-04	2.35E-05	2.07E-03	4.53E-04	2.43E-05	0.00E+00	6.60E-06	3.11E-06	9.28E-09	3.41E-07	3.6	1.08E-04	1.83E-05
S29	60	8	3	5	1.77E-02	4.24E-04	2.04E-05	1.81E-03	3.96E-04	2.12E-05	0.00E+00	5.77E-06	2.71E-06	8.12E-09	2.98E-07	3.2	9.39E-05	1.60E-05
S29	60	8	4	5	1.25E-02	3.03E-04	1.45E-05	1.29E-03	2.83E-04	1.52E-05	0.00E+00	4.11E-06	1.93E-06	5.80E-09	2.12E-07	2.2	6.70E-05	1.15E-05
S29	60	8	5	5	1.74E-02	4.24E-04	2.03E-05	1.81E-03	3.96E-04	2.12E-05	0.00E+00	5.76E-06	2.71E-06	8.12E-09	2.97E-07	3.1	9.37E-05	1.60E-05
S29	60	8	6	5	4.22E-02	1.03E-03	4.94E-05	4.39E-03	9.62E-04	5.15E-05	0.00E+00	1.40E-05	6.57E-06	1.97E-08	7.21E-07	7.6	2.27E-04	3.90E-05
S29	60	8	7	5	1.28E-01	3.09E-03	1.49E-04	1.32E-02	2.89E-03	1.55E-04	0.00E+00	4.20E-05	1.97E-05	5.91E-08	2.17E-06	23.0	6.84E-04	1.17E-04
S29	60	8	8	5	2.07E-01	4.72E-03	2.30E-04	2.02E-02	4.42E-03	2.37E-04	0.00E+00	6.45E-05	3.03E-05	9.04E-08	3.33E-06	35.5	1.05E-03	1.79E-04
S29	60	8	9	5	1.79E-01	3.82E-03	1.89E-04	1.63E-02	3.57E-03	1.93E-04	0.00E+00	5.23E-05	2.46E-05	7.31E-08	2.70E-06	29.1	8.59E-04	1.44E-04
S29	60	8	10	5	1.54E-01	3.15E-03	1.57E-04	1.34E-02	2.94E-03	1.60E-04	0.00E+00	4.34E-05	2.04E-05	6.03E-08	2.24E-06	24.3	7.14E-04	1.19E-04
S29	60	8	11	5	1.44E-01	2.85E-03	1.43E-04	1.21E-02	2.66E-03	1.45E-04	0.00E+00	3.93E-05	1.85E-05	5.45E-08	2.03E-06	22.2	6.49E-04	1.08E-04
S29	60	8	12	5	1.72E-01	3.21E-03	1.64E-04	1.37E-02	3.00E-03	1.64E-04	0.00E+00	4.45E-05	2.10E-05	6.15E-08	2.30E-06	25.4	7.38E-04	1.22E-04
S29	60	8	13	5	1.85E-01	3.39E-03	1.74E-04	1.45E-02	3.17E-03	1.74E-04	0.00E+00	4.71E-05	2.22E-05	6.49E-08	2.44E-06	26.9	7.82E-04	1.28E-04
S29	60	8	14	5	1.90E-01	3.45E-03	1.77E-04	1.47E-02	3.23E-03	1.77E-04	0.00E+00	4.80E-05	2.27E-05	6.61E-08	2.48E-06	27.4	7.97E-04	1.31E-04
S29	60	8	15	5	1.98E-01	3.57E-03	1.84E-04	1.52E-02	3.34E-03	1.84E-04	0.00E+00	4.97E-05	2.35E-05	6.84E-08	2.57E-06	28.5	8.26E-04	1.35E-04
S29	60	8	16	5	2.14E-01	3.88E-03	2.00E-04	1.65E-02	3.62E-03	1.99E-04	0.00E+00	5.39E-05	2.54E-05	7.42E-08	2.79E-06	30.8	8.96E-04	1.47E-04

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	17	5	2.64E-01	4.79E-03	2.46E-04	2.04E-02	4.47E-03	2.46E-04	0.00E+00	6.66E-05	3.14E-05	9.16E-08	3.44E-06	38.1	1.11E-03	1.81E-04
S29	60	8	18	5	2.80E-01	5.15E-03	2.64E-04	2.20E-02	4.81E-03	2.64E-04	0.00E+00	7.15E-05	3.38E-05	9.86E-08	3.70E-06	40.8	1.19E-03	1.95E-04
S29	60	8	19	5	1.92E-01	3.57E-03	1.83E-04	1.52E-02	3.34E-03	1.83E-04	0.00E+00	4.96E-05	2.34E-05	6.84E-08	2.56E-06	28.2	8.22E-04	1.35E-04
S29	60	8	20	5	1.21E-01	2.36E-03	1.19E-04	1.01E-02	2.21E-03	1.20E-04	0.00E+00	3.26E-05	1.54E-05	4.52E-08	1.69E-06	18.4	5.39E-04	8.94E-05
S29	60	8	21	5	9.89E-02	2.00E-03	1.00E-04	8.53E-03	1.87E-03	1.02E-04	0.00E+00	2.75E-05	1.30E-05	3.83E-08	1.42E-06	15.5	4.54E-04	7.57E-05
S29	60	8	22	5	8.12E-02	1.70E-03	8.42E-05	7.24E-03	1.59E-03	8.59E-05	0.00E+00	2.33E-05	1.10E-05	3.25E-08	1.20E-06	13.0	3.83E-04	6.42E-05
S29	60	8	23	5	6.47E-02	1.39E-03	6.87E-05	5.94E-03	1.30E-03	7.04E-05	0.00E+00	1.91E-05	8.99E-06	2.67E-08	9.86E-07	10.6	3.13E-04	5.27E-05
S29	60	8	24	5	4.66E-02	1.03E-03	5.05E-05	4.39E-03	9.62E-04	5.19E-05	0.00E+00	1.41E-05	6.63E-06	1.97E-08	7.27E-07	7.8	2.31E-04	3.90E-05
S30	60	8	1	5	3.19E-02	7.25E-04	3.53E-05	3.09E-03	6.78E-04	3.65E-05	0.00E+00	9.90E-06	4.66E-06	1.39E-08	5.11E-07	5.5	1.62E-04	2.75E-05
S30	60	8	2	5	2.08E-02	4.84E-04	2.34E-05	2.06E-03	4.52E-04	2.43E-05	0.00E+00	6.59E-06	3.10E-06	9.26E-09	3.40E-07	3.6	1.07E-04	1.83E-05
S30	60	8	3	5	1.77E-02	4.23E-04	2.04E-05	1.80E-03	3.95E-04	2.12E-05	0.00E+00	5.75E-06	2.71E-06	8.10E-09	2.97E-07	3.1	9.37E-05	1.60E-05
S30	60	8	4	5	1.25E-02	3.02E-04	1.45E-05	1.29E-03	2.82E-04	1.51E-05	0.00E+00	4.11E-06	1.93E-06	5.78E-09	2.12E-07	2.2	6.68E-05	1.14E-05
S30	60	8	5	5	1.74E-02	4.23E-04	2.03E-05	1.80E-03	3.95E-04	2.12E-05	0.00E+00	5.75E-06	2.70E-06	8.10E-09	2.96E-07	3.1	9.35E-05	1.60E-05
S30	60	8	6	5	4.21E-02	1.03E-03	4.93E-05	4.38E-03	9.60E-04	5.14E-05	0.00E+00	1.40E-05	6.56E-06	1.97E-08	7.20E-07	7.6	2.27E-04	3.89E-05
S30	60	8	7	5	1.28E-01	3.08E-03	1.48E-04	1.32E-02	2.88E-03	1.54E-04	0.00E+00	4.19E-05	1.97E-05	5.90E-08	2.16E-06	22.9	6.82E-04	1.17E-04
S30	60	8	8	5	2.06E-01	4.71E-03	2.29E-04	2.01E-02	4.41E-03	2.37E-04	0.00E+00	6.43E-05	3.03E-05	9.02E-08	3.32E-06	35.4	1.05E-03	1.78E-04
S30	60	8	9	5	1.79E-01	3.81E-03	1.88E-04	1.62E-02	3.56E-03	1.92E-04	0.00E+00	5.22E-05	2.46E-05	7.29E-08	2.70E-06	29.1	8.57E-04	1.44E-04
S30	60	8	10	5	1.54E-01	3.14E-03	1.57E-04	1.34E-02	2.94E-03	1.59E-04	0.00E+00	4.33E-05	2.04E-05	6.02E-08	2.24E-06	24.3	7.12E-04	1.19E-04
S30	60	8	11	5	1.44E-01	2.84E-03	1.43E-04	1.21E-02	2.66E-03	1.45E-04	0.00E+00	3.92E-05	1.85E-05	5.44E-08	2.03E-06	22.1	6.47E-04	1.08E-04
S30	60	8	12	5	1.72E-01	3.20E-03	1.64E-04	1.37E-02	2.99E-03	1.64E-04	0.00E+00	4.44E-05	2.10E-05	6.13E-08	2.30E-06	25.3	7.37E-04	1.21E-04
S30	60	8	13	5	1.84E-01	3.38E-03	1.74E-04	1.44E-02	3.16E-03	1.74E-04	0.00E+00	4.70E-05	2.22E-05	6.48E-08	2.43E-06	26.8	7.80E-04	1.28E-04
S30	60	8	14	5	1.89E-01	3.45E-03	1.77E-04	1.47E-02	3.22E-03	1.77E-04	0.00E+00	4.79E-05	2.26E-05	6.60E-08	2.48E-06	27.4	7.96E-04	1.30E-04
S30	60	8	15	5	1.98E-01	3.57E-03	1.84E-04	1.52E-02	3.33E-03	1.83E-04	0.00E+00	4.96E-05	2.34E-05	6.83E-08	2.57E-06	28.4	8.25E-04	1.35E-04
S30	60	8	16	5	2.13E-01	3.87E-03	1.99E-04	1.65E-02	3.62E-03	1.99E-04	0.00E+00	5.38E-05	2.54E-05	7.41E-08	2.78E-06	30.8	8.94E-04	1.46E-04
S30	60	8	17	5	2.63E-01	4.77E-03	2.46E-04	2.04E-02	4.46E-03	2.45E-04	0.00E+00	6.64E-05	3.13E-05	9.14E-08	3.44E-06	38.0	1.10E-03	1.81E-04
S30	60	8	18	5	2.80E-01	5.14E-03	2.64E-04	2.19E-02	4.80E-03	2.64E-04	0.00E+00	7.14E-05	3.37E-05	9.84E-08	3.69E-06	40.7	1.18E-03	1.94E-04
S30	60	8	19	5	1.92E-01	3.57E-03	1.82E-04	1.52E-02	3.33E-03	1.83E-04	0.00E+00	4.95E-05	2.33E-05	6.83E-08	2.56E-06	28.2	8.21E-04	1.35E-04
S30	60	8	20	5	1.21E-01	2.36E-03	1.19E-04	1.01E-02	2.20E-03	1.20E-04	0.00E+00	3.26E-05	1.54E-05	4.51E-08	1.68E-06	18.4	5.38E-04	8.92E-05
S30	60	8	21	5	9.87E-02	1.99E-03	9.99E-05	8.51E-03	1.86E-03	1.01E-04	0.00E+00	2.75E-05	1.29E-05	3.82E-08	1.42E-06	15.4	4.53E-04	7.55E-05
S30	60	8	22	5	8.10E-02	1.69E-03	8.41E-05	7.22E-03	1.58E-03	8.57E-05	0.00E+00	2.33E-05	1.10E-05	3.24E-08	1.20E-06	13.0	3.82E-04	6.41E-05
S30	60	8	23	5	6.46E-02	1.39E-03	6.86E-05	5.93E-03	1.30E-03	7.02E-05	0.00E+00	1.91E-05	8.97E-06	2.66E-08	9.84E-07	10.6	3.13E-04	5.26E-05
S30	60	8	24	5	4.65E-02	1.03E-03	5.04E-05	4.38E-03	9.60E-04	5.18E-05	0.00E+00	1.41E-05	6.61E-06	1.97E-08	7.26E-07	7.8	2.30E-04	3.89E-05
S31	60	8	1	5	6.02E-02	1.37E-03	6.67E-05	5.85E-03	1.28E-03	6.89E-05	0.00E+00	1.87E-05	8.80E-06	2.62E-08	9.65E-07	10.3	3.06E-04	5.19E-05
S31	60	8	2	5	3.92E-02	9.14E-04	4.43E-05	3.90E-03	8.54E-04	4.59E-05	0.00E+00	1.24E-05	5.85E-06	1.75E-08	6.42E-07	6.8	2.03E-04	3.46E-05
S31	60	8	3	5	3.34E-02	7.99E-04	3.85E-05	3.41E-03	7.47E-04	4.00E-05	0.00E+00	1.09E-05	5.11E-06	1.53E-08	5.61E-07	6.0	1.77E-04	3.03E-05
S31	60	8	4	5	2.35E-02	5.71E-04	2.74E-05	2.44E-03	5.34E-04	2.86E-05	0.00E+00	7.76E-06	3.65E-06	1.09E-08	4.00E-07	4.2	1.26E-04	2.16E-05
S31	60	8	5	5	3.28E-02	7.99E-04	3.83E-05	3.41E-03	7.47E-04	4.00E-05	0.00E+00	1.09E-05	5.10E-06	1.53E-08	5.60E-07	5.9	1.77E-04	3.03E-05
S31	60	8	6	5	7.96E-02	1.94E-03	9.31E-05	8.28E-03	1.81E-03	9.71E-05	0.00E+00	2.64E-05	1.24E-05	3.72E-08	1.36E-06	14.4	4.29E-04	7.35E-05
S31	60	8	7	5	2.42E-01	5.82E-03	2.80E-04	2.48E-02	5.44E-03	2.92E-04	0.00E+00	7.92E-05	3.72E-05	1.11E-07	4.08E-06	43.3	1.29E-03	2.20E-04
S31	60	8	8	5	3.90E-01	8.91E-03	4.33E-04	3.80E-02	8.33E-03	4.48E-04	0.00E+00	1.22E-04	5.72E-05	1.71E-07	6.27E-06	67.0	1.99E-03	3.37E-04
S31	60	8	9	5	3.37E-01	7.19E-03	3.56E-04	3.07E-02	6.72E-03	3.64E-04	0.00E+00	9.87E-05	4.65E-05	1.38E-07	5.10E-06	55.0	1.62E-03	2.72E-04
S31	60	8	10	5	2.91E-01	5.94E-03	2.96E-04	2.53E-02	5.55E-03	3.01E-04	0.00E+00	8.17E-05	3.85E-05	1.14E-07	4.22E-06	45.8	1.35E-03	2.25E-04
S31	60	8	11	5	2.72E-01	5.37E-03	2.70E-04	2.29E-02	5.02E-03	2.73E-04	0.00E+00	7.41E-05	3.49E-05	1.03E-07	3.83E-06	41.8	1.22E-03	2.03E-04
S31	60	8	12	5	3.25E-01	6.05E-03	3.09E-04	2.58E-02	5.66E-03	3.10E-04	0.00E+00	8.40E-05	3.96E-05	1.16E-07	4.34E-06	47.8	1.39E-03	2.29E-04
S31	60	8	13	5	3.48E-01	6.39E-03	3.28E-04	2.73E-02	5.98E-03	3.28E-04	0.00E+00	8.88E-05	4.19E-05	1.22E-07	4.60E-06	50.7	1.47E-03	2.42E-04
S31	60	8	14	5	3.57E-01	6.51E-03	3.35E-04	2.78E-02	6.08E-03	3.34E-04	0.00E+00	9.05E-05	4.27E-05	1.25E-07	4.68E-06	51.7	1.50E-03	2.46E-04
S31	60	8	15	5	3.73E-01	6.74E-03	3.47E-04	2.87E-02	6.30E-03	3.47E-04	0.00E+00	9.38E-05	4.42E-05	1.29E-07	4.85E-06	53.7	1.56E-03	2.55E-04
S31	60	8	16	5	4.03E-01	7.31E-03	3.76E-04	3.12E-02	6.83E-03	3.76E-04	0.00E+00	1.02E-04	4.80E-05	1.40E-07	5.26E-06	58.2	1.69E-03	2.77E-04
S31	60	8	17	5	4.97E-01	9.02E-03	4.64E-04	3.85E-02	8.43E-03	4.64E-04	0.00E+00	1.25E-04	5.92E-05	1.73E-07	6.49E-06	71.8	2.08E-03	3.41E-04
S31	60	8	18	5	5.29E-01	9.71E-03	4.98E-04	4.14E-02	9.07E-03	4.98E-04	0.00E+00	1.35E-04	6.36E-05	1.86E-07	6.98E-06	77.0	2.24E-03	3.67E-04
S31	60	8	19	5	3.62E-01	6.74E-03	3.44E-04	2.87E-02	6.30E-03	3.45E-04	0.00E+00	9.35E-05	4.41E-05	1.29E-07	4.84E-06	53.2	1.55E-03	2.55E-04
S31	60	8	20	5	2.28E-01	4.45E-03	2.25E-04	1.90E-02	4.16E-03	2.27E-04	0.00E+00	6.15E-05	2.90E-05	8.53E-08	3.18E-06	34.8	1.02E-03	1.69E-04
S31	60	8	21	5	1.86E-01	3.77E-03	1.89E-04	1.61E-02	3.52E-03	1.91E-04	0.00E+00	5.19E-05	2.45E-05	7.21E-08	2.68E-06	29.2	8.55E-04	1.43E-04
S31	60	8	22	5	1.53E-01	3.20E-03	1.59E-04	1.36E-02	2.99E-03	1.62E-04	0.00E+00	4.39E-05	2.07E-05	6.12E-08	2.27E-06	24.5	7.22E-04	1.21E-04
S31	60	8	23	5	1.22E-01	2.63E-03	1.30E-04	1.12E-02	2.45E-03	1.33E-04	0.00E+00	3.60E-05	1.69E-05	5.03E-08	1.86E-06	20.0	5.91E-04	9.94E-05
S31	60	8	24	5	8.78E-02	1.94E-03	9.51E-05	8.28E-03	1.81E-03	9.78E-05	0.00E+00	2.66E-05	1.25E-05	3.72E-08	1.37E-06	14.7	4.35E-04	7.35E-05
S32	50	7	1	5	3.45E-02	6.81E-04	3.77E-05	3.39E-03	7.21E-04	4.05E-05	0.00E+00	1.09E-05	5.18E-06	1.45E-08	5.67E-07	5.8	1.82E-04	3.25E-05
S32	50	7	2	5	2.24E-02	4.54E-04	2.50E-05	2.26E-03	4.81E-04	2.70E-05	0.00E+00	7.29E-06	3.45E-06	9.65E-09	3.78E-07	3.9	1.21E-04	2.17E-05
S32	50	7	3	5	1.91E-02	3.97E-04	2.17E-05	1.98E-03	4.21E-04	2.36E-05	0.00E+00	6.36E-06	3.01E-06	8.44E-09	3.30E-07	3.4	1.05E-04	1.90E-05
S32	50	7	4	5	1.34E-02	2.84E-04	1.55E-05	1.41E-03	3.01E-04	1.68E-05	0.00E+00	4.54E-06	2.15E-06	6.03E-09	2.35E-07	2.4	7.51E-05	1.35E-05
S32	50	7	5	5	1.87E-02	3.97E-04	2.16E-05	1.98E-03	4.21E-04	2.35E-05	0.00E+00	6.35E-06	3.00E-06	8.44E-09	3.29E-07	3.3	1.05E-04	1.90E-05
S32	50	7	6	5	4.55E-02	9.64E-04	5.26E-05	4.81E-03	1.02E-03	5.71E-05	0.00E+00	1.54E-05	7.30E-06	2.05E-08	7.99E-07	8.1	2.55E-04	4.61E-05
S32	50	7	7	5	1.38E-01	2.89E-03	1.58E-04	1.44E-02	3.07E-03	1.72E-04	0.00E+00	4.63E-05	2.19E-05	6.15E-08	2.40E-06	24.4	7.66E-04	1.38E-04
S32	50	7	8	5	2.23E-01	4.42E-03	2.45E-04	2.21E-02	4.69E-03	2.63E-04	0.00E+00	7.11E-05	3.37E-05	9.41E-08	3.69E-06	37.8	1.18E-03	2.11E-04
S32	50	7	9	5	1.94E-01	3.57E-03	2.01E-04	1.78E-02	3.79E-03	2.14E-04	0.00E+00	5.78E-05	2.74E-05	7.60E-08	3.00E-06	31.1	9.63E-04	1.71E-04
S32	50	7	10	5	1.67E-01	2.95E-03	1.68E-04	1.47E-02	3.13E-03	1.77E-04	0.00E+00	4.79E-05	2.27E-05	6.27E-08	2.48E-06	25.9	8.00E-04	1.41E-04
S32	50	7	11	5	1.56E-01	2.67E-03	1.53E-04	1.33E-02	2.83E-03	1.61E-04	0.00E+00	4.34E-05	2.06E-05	5.67E-08	2.25E-06	23.6	7.27E-04	1.27E-04
S32	50	7	12	5	1.87E-01	3.01E-03	1.75E-04	1.50E-02	3.19E-03	1.82E-04	0.00E+00	4.92E-05	2.33E-05	6.39E-08	2.55E-06	27.1	8.28E-04	1.44E-04
S32	50	7	13	5	2.01E-01	3.18E-03	1.86E-04	1.58E-02	3.37E-03	1.93E-04	0.00E+00	5.20E-05	2.47E-05	6.76E-08	2.70E-06	28.7	8.77E-04	1.52E-04

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	50	7	14	5	2.06E-01	3.23E-03	1.89E-04	1.61E-02	3.43E-03	1.97E-04	0.00E+00	5.30E-05	2.52E-05	6.88E-08	2.75E-06	29.3	8.94E-04	1.54E-04
S32	50	7	15	5	2.15E-01	3.35E-03	1.97E-04	1.67E-02	3.55E-03	2.04E-04	0.00E+00	5.49E-05	2.61E-05	7.12E-08	2.85E-06	30.4	9.27E-04	1.60E-04
S32	50	7	16	5	2.33E-01	3.63E-03	2.13E-04	1.81E-02	3.85E-03	2.21E-04	0.00E+00	5.95E-05	2.83E-05	7.72E-08	3.09E-06	32.9	1.00E-03	1.73E-04
S32	50	7	17	5	2.87E-01	4.48E-03	2.63E-04	2.23E-02	4.75E-03	2.73E-04	0.00E+00	7.35E-05	3.49E-05	9.53E-08	3.82E-06	40.6	1.24E-03	2.14E-04
S32	50	7	18	5	3.05E-01	4.82E-03	2.82E-04	2.40E-02	5.11E-03	2.93E-04	0.00E+00	7.90E-05	3.75E-05	1.03E-07	4.10E-06	43.6	1.33E-03	2.30E-04
S32	50	7	19	5	2.09E-01	3.35E-03	1.95E-04	1.67E-02	3.55E-03	2.03E-04	0.00E+00	5.48E-05	2.60E-05	7.12E-08	2.84E-06	30.1	9.22E-04	1.60E-04
S32	50	7	20	5	1.31E-01	2.21E-03	1.27E-04	1.10E-02	2.34E-03	1.34E-04	0.00E+00	3.60E-05	1.71E-05	4.70E-08	1.87E-06	19.7	6.05E-04	1.06E-04
S32	50	7	21	5	1.07E-01	1.87E-03	1.07E-04	9.33E-03	1.98E-03	1.13E-04	0.00E+00	3.04E-05	1.44E-05	3.98E-08	1.58E-06	16.5	5.09E-04	8.94E-05
S32	50	7	22	5	8.79E-02	1.59E-03	8.98E-05	7.92E-03	1.68E-03	9.53E-05	0.00E+00	2.57E-05	1.22E-05	3.38E-08	1.33E-06	13.9	4.29E-04	7.58E-05
S32	50	7	23	5	7.00E-02	1.30E-03	7.32E-05	6.50E-03	1.38E-03	7.80E-05	0.00E+00	2.11E-05	9.98E-06	2.77E-08	1.09E-06	11.3	3.51E-04	6.23E-05
S32	50	7	24	5	5.03E-02	9.64E-04	5.38E-05	4.81E-03	1.02E-03	5.75E-05	0.00E+00	1.55E-05	7.36E-06	2.05E-08	8.06E-07	8.3	2.59E-04	4.61E-05
S33	50	7	1	5	3.05E-02	6.03E-04	3.34E-05	3.00E-03	6.39E-04	3.59E-05	0.00E+00	9.69E-06	4.59E-06	1.28E-08	5.02E-07	5.2	1.61E-04	2.88E-05
S33	50	7	2	5	1.99E-02	4.02E-04	2.21E-05	2.00E-03	4.26E-04	2.39E-05	0.00E+00	6.45E-06	3.05E-06	8.54E-09	3.34E-07	3.4	1.07E-04	1.92E-05
S33	50	7	3	5	1.69E-02	3.51E-04	1.92E-05	1.75E-03	3.73E-04	2.09E-05	0.00E+00	5.63E-06	2.66E-06	7.47E-09	2.92E-07	3.0	9.32E-05	1.68E-05
S33	50	7	4	5	1.19E-02	2.51E-04	1.37E-05	1.25E-03	2.66E-04	1.49E-05	0.00E+00	4.02E-06	1.90E-06	5.34E-09	2.08E-07	2.1	6.64E-05	1.20E-05
S33	50	7	5	5	1.66E-02	3.51E-04	1.92E-05	1.75E-03	3.73E-04	2.08E-05	0.00E+00	5.62E-06	2.66E-06	7.47E-09	2.91E-07	3.0	9.30E-05	1.68E-05
S33	50	7	6	5	4.03E-02	8.54E-04	4.65E-05	4.25E-03	9.05E-04	5.06E-05	0.00E+00	1.37E-05	6.46E-06	1.81E-08	7.07E-07	7.2	2.26E-04	4.08E-05
S33	50	7	7	5	1.22E-01	2.56E-03	1.40E-04	1.28E-02	2.71E-03	1.52E-04	0.00E+00	4.10E-05	1.94E-05	5.44E-08	2.12E-06	21.6	6.78E-04	1.22E-04
S33	50	7	8	5	1.98E-01	3.92E-03	2.17E-04	1.95E-02	4.15E-03	2.33E-04	0.00E+00	6.30E-05	2.98E-05	8.33E-08	3.26E-06	33.5	1.05E-03	1.87E-04
S33	50	7	9	5	1.71E-01	3.16E-03	1.78E-04	1.58E-02	3.35E-03	1.89E-04	0.00E+00	5.11E-05	2.42E-05	6.73E-08	2.65E-06	27.5	8.53E-04	1.51E-04
S33	50	7	10	5	1.48E-01	2.61E-03	1.48E-04	1.30E-02	2.77E-03	1.57E-04	0.00E+00	4.24E-05	2.01E-05	5.55E-08	2.20E-06	22.9	7.08E-04	1.25E-04
S33	50	7	11	5	1.38E-01	2.36E-03	1.35E-04	1.18E-02	2.50E-03	1.42E-04	0.00E+00	3.84E-05	1.82E-05	5.02E-08	1.99E-06	20.9	6.44E-04	1.13E-04
S33	50	7	12	5	1.66E-01	2.66E-03	1.55E-04	1.33E-02	2.82E-03	1.61E-04	0.00E+00	4.35E-05	2.07E-05	5.66E-08	2.26E-06	23.9	7.33E-04	1.27E-04
S33	50	7	13	5	1.78E-01	2.81E-03	1.64E-04	1.40E-02	2.98E-03	1.71E-04	0.00E+00	4.61E-05	2.19E-05	5.98E-08	2.39E-06	25.4	7.76E-04	1.34E-04
S33	50	7	14	5	1.82E-01	2.86E-03	1.68E-04	1.43E-02	3.03E-03	1.74E-04	0.00E+00	4.69E-05	2.23E-05	6.09E-08	2.44E-06	25.9	7.91E-04	1.37E-04
S33	50	7	15	5	1.91E-01	2.96E-03	1.74E-04	1.48E-02	3.14E-03	1.81E-04	0.00E+00	4.86E-05	2.31E-05	6.30E-08	2.52E-06	26.9	8.20E-04	1.41E-04
S33	50	7	16	5	2.06E-01	3.21E-03	1.89E-04	1.60E-02	3.41E-03	1.96E-04	0.00E+00	5.27E-05	2.50E-05	6.83E-08	2.74E-06	29.1	8.89E-04	1.53E-04
S33	50	7	17	5	2.54E-01	3.97E-03	2.33E-04	1.98E-02	4.20E-03	2.42E-04	0.00E+00	6.50E-05	3.09E-05	8.44E-08	3.38E-06	36.0	1.10E-03	1.89E-04
S33	50	7	18	5	2.70E-01	4.27E-03	2.50E-04	2.13E-02	4.52E-03	2.60E-04	0.00E+00	6.99E-05	3.32E-05	9.08E-08	3.63E-06	38.6	1.18E-03	2.04E-04
S33	50	7	19	5	1.85E-01	2.96E-03	1.73E-04	1.48E-02	3.14E-03	1.80E-04	0.00E+00	4.85E-05	2.30E-05	6.30E-08	2.52E-06	26.7	8.16E-04	1.41E-04
S33	50	7	20	5	1.16E-01	1.96E-03	1.13E-04	9.76E-03	2.08E-03	1.18E-04	0.00E+00	3.19E-05	1.51E-05	4.16E-08	1.66E-06	17.4	5.35E-04	9.35E-05
S33	50	7	21	5	9.49E-02	1.66E-03	9.45E-05	8.26E-03	1.76E-03	9.97E-05	0.00E+00	2.69E-05	1.28E-05	3.52E-08	1.40E-06	14.6	4.50E-04	7.91E-05
S33	50	7	22	5	7.78E-02	1.41E-03	7.95E-05	7.01E-03	1.49E-03	8.43E-05	0.00E+00	2.28E-05	1.08E-05	2.99E-08	1.18E-06	12.3	3.80E-04	6.71E-05
S33	50	7	23	5	6.20E-02	1.15E-03	6.48E-05	5.76E-03	1.22E-03	6.91E-05	0.00E+00	1.87E-05	8.83E-06	2.46E-08	9.67E-07	10.0	3.11E-04	5.52E-05
S33	50	7	24	5	4.45E-02	8.54E-04	4.76E-05	4.25E-03	9.05E-04	5.09E-05	0.00E+00	1.38E-05	6.51E-06	1.81E-08	7.13E-07	7.4	2.29E-04	4.08E-05
S34	60	8	1	5	1.67E-02	3.80E-04	1.85E-05	1.62E-03	3.55E-04	1.91E-05	0.00E+00	5.19E-06	2.44E-06	7.28E-09	2.68E-07	2.9	8.48E-05	1.44E-05
S34	60	8	2	5	1.09E-02	2.53E-04	1.23E-05	1.08E-03	2.37E-04	1.27E-05	0.00E+00	3.45E-06	1.62E-06	4.85E-09	1.78E-07	1.9	5.63E-05	9.59E-06
S34	60	8	3	5	9.28E-03	2.22E-04	1.07E-05	9.46E-04	2.07E-04	1.11E-05	0.00E+00	3.02E-06	1.42E-06	4.24E-09	1.56E-07	1.7	4.91E-05	8.39E-06
S34	60	8	4	5	6.53E-03	1.58E-04	7.61E-06	6.76E-04	1.48E-04	7.93E-06	0.00E+00	2.15E-06	1.01E-06	3.03E-09	1.11E-07	1.2	3.50E-05	6.00E-06
S34	60	8	5	5	9.10E-03	2.22E-04	1.06E-05	9.46E-04	2.07E-04	1.11E-05	0.00E+00	3.01E-06	1.42E-06	4.24E-09	1.55E-07	1.6	4.90E-05	8.39E-06
S34	60	8	6	5	2.21E-02	5.38E-04	2.58E-05	2.30E-03	5.03E-04	2.69E-05	0.00E+00	7.31E-06	3.44E-06	1.03E-08	3.77E-07	4.0	1.19E-04	2.04E-05
S34	60	8	7	5	6.71E-02	1.62E-03	7.77E-05	6.89E-03	1.51E-03	8.09E-05	0.00E+00	2.20E-05	1.03E-05	3.09E-08	1.13E-06	12.0	3.58E-04	6.12E-05
S34	60	8	8	5	1.08E-01	2.47E-03	1.20E-04	1.05E-02	2.31E-03	1.24E-04	0.00E+00	3.37E-05	1.59E-05	4.73E-08	1.74E-06	18.6	5.51E-04	9.35E-05
S34	60	8	9	5	9.36E-02	2.00E-03	9.86E-05	8.51E-03	1.87E-03	1.01E-04	0.00E+00	2.74E-05	1.29E-05	3.82E-08	1.41E-06	15.2	4.49E-04	7.55E-05
S34	60	8	10	5	8.06E-02	1.65E-03	8.22E-05	7.03E-03	1.54E-03	8.36E-05	0.00E+00	2.27E-05	1.07E-05	3.15E-08	1.17E-06	12.7	3.73E-04	6.24E-05
S34	60	8	11	5	7.53E-02	1.49E-03	7.49E-05	6.35E-03	1.39E-03	7.58E-05	0.00E+00	2.06E-05	9.69E-06	2.85E-08	1.06E-06	11.6	3.39E-04	5.64E-05
S34	60	8	12	5	9.00E-02	1.68E-03	8.58E-05	7.16E-03	1.57E-03	8.60E-05	0.00E+00	2.33E-05	1.10E-05	3.21E-08	1.20E-06	13.3	3.86E-04	6.35E-05
S34	60	8	13	5	9.65E-02	1.77E-03	9.10E-05	7.57E-03	1.66E-03	9.10E-05	0.00E+00	2.46E-05	1.16E-05	3.40E-08	1.27E-06	14.1	4.09E-04	6.71E-05
S34	60	8	14	5	9.91E-02	1.81E-03	9.28E-05	7.70E-03	1.69E-03	9.28E-05	0.00E+00	2.51E-05	1.18E-05	3.46E-08	1.30E-06	14.3	4.17E-04	6.83E-05
S34	60	8	15	5	1.04E-01	1.87E-03	9.63E-05	7.97E-03	1.75E-03	9.61E-05	0.00E+00	2.60E-05	1.23E-05	3.58E-08	1.35E-06	14.9	4.32E-04	7.07E-05
S34	60	8	16	5	1.12E-01	2.03E-03	1.04E-04	8.65E-03	1.89E-03	1.04E-04	0.00E+00	2.82E-05	1.33E-05	3.88E-08	1.46E-06	16.1	4.69E-04	7.67E-05
S34	60	8	17	5	1.38E-01	2.50E-03	1.29E-04	1.07E-02	2.34E-03	1.29E-04	0.00E+00	3.48E-05	1.64E-05	4.79E-08	1.80E-06	19.9	5.78E-04	9.47E-05
S34	60	8	18	5	1.47E-01	2.69E-03	1.38E-04	1.15E-02	2.52E-03	1.38E-04	0.00E+00	3.74E-05	1.77E-05	5.16E-08	1.93E-06	21.4	6.21E-04	1.02E-04
S34	60	8	19	5	1.00E-01	1.87E-03	9.56E-05	7.97E-03	1.75E-03	9.58E-05	0.00E+00	2.59E-05	1.22E-05	3.58E-08	1.34E-06	14.8	4.30E-04	7.07E-05
S34	60	8	20	5	6.33E-02	1.24E-03	6.24E-05	5.27E-03	1.15E-03	6.30E-05	0.00E+00	1.71E-05	8.05E-06	2.37E-08	8.82E-07	9.6	2.82E-04	4.68E-05
S34	60	8	21	5	5.17E-02	1.05E-03	5.23E-05	4.46E-03	9.77E-04	5.31E-05	0.00E+00	1.44E-05	6.79E-06	2.00E-08	7.44E-07	8.1	2.37E-04	3.96E-05
S34	60	8	22	5	4.25E-02	8.87E-04	4.41E-05	3.78E-03	8.29E-04	4.49E-05	0.00E+00	1.22E-05	5.74E-06	1.70E-08	6.30E-07	6.8	2.00E-04	3.36E-05
S34	60	8	23	5	3.38E-02	7.29E-04	3.59E-05	3.11E-03	6.81E-04	3.68E-05	0.00E+00	9.99E-06	4.70E-06	1.39E-08	5.16E-07	5.6	1.64E-04	2.76E-05
S34	60	8	24	5	2.43E-02	5.38E-04	2.64E-05	2.30E-03	5.03E-04	2.71E-05	0.00E+00	7.37E-06	3.47E-06	1.03E-08	3.80E-07	4.1	1.21E-04	2.04E-05
S35	60	8	1	5	1.93E-02	4.39E-04	2.14E-05	1.87E-03	4.11E-04	2.21E-05	0.00E+00	6.00E-06	2.82E-06	8.41E-09	3.10E-07	3.3	9.80E-05	1.66E-05
S35	60	8	2	5	1.26E-02	2.93E-04	1.42E-05	1.25E-03	2.74E-04	1.47E-05	0.00E+00	3.99E-06	1.88E-06	5.61E-09	2.06E-07	2.2	6.51E-05	1.11E-05
S35	60	8	3	5	1.07E-02	2.56E-04	1.23E-05	1.09E-03	2.40E-04	1.28E-05	0.00E+00	3.49E-06	1.64E-06	4.91E-09	1.80E-07	1.9	5.68E-05	9.70E-06
S35	60	8	4	5	7.55E-03	1.83E-04	8.79E-06	7.81E-04	1.71E-04	9.16E-06	0.00E+00	2.49E-06	1.17E-06	3.50E-09	1.28E-07	1.4	4.05E-05	6.93E-06
S35	60	8	5	5	1.05E-02	2.56E-04	1.23E-05	1.09E-03	2.40E-04	1.28E-05	0.00E+00	3.48E-06	1.64E-06	4.91E-09	1.80E-07	1.9	5.66E-05	9.70E-06
S35	60	8	6	5	2.55E-02	6.22E-04	2.99E-05	2.66E-03	5.82E-04	3.11E-05	0.00E+00	8.45E-06	3.97E-06	1.19E-08	4.36E-07	4.6	1.38E-04	2.36E-05
S35	60	8	7	5	7.76E-02	1.87E-03	8.98E-05	7.97E-03	1.75E-03	9.35E-05	0.00E+00	2.54E-05	1.19E-05	3.57E-08	1.31E-06	13.9	4.13E-04	7.07E-05
S35	60	8	8	5	1.25E-01	2.86E-03	1.39E-04	1.22E-02	2.67E-03	1.44E-04	0.00E+00	3.90E-05	1.83E-05	5.47E-08	2.01E-06	21.5	6.37E-04	1.08E-04
S35	60	8	9	5	1.08E-01	2.31E-03	1.14E-04	9.84E-03	2.16E-03	1.17E-04	0.00E+00	3.16E-05	1.49E-05	4.42E-08	1.63E-06	17.6	5.19E-04	8.73E-05
S35	60	8	10	5	9.31E-02	1.90E-03	9.51E-05	8.12E-03	1.78E-03	9.66E-05	0.00E+00	2.62E-05	1.23E-05	3.65E-08	1.35E-06	14.7	4.31E-04	7.21E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	11	5	8.71E-02	1.72E-03	8.66E-05	7.34E-03	1.61E-03	8.76E-05	0.00E+00	2.38E-05	1.12E-05	3.29E-08	1.23E-06	13.4	3.92E-04	6.51E-05
S35	60	8	12	5	1.04E-01	1.94E-03	9.92E-05	8.28E-03	1.81E-03	9.94E-05	0.00E+00	2.69E-05	1.27E-05	3.72E-08	1.39E-06	15.3	4.46E-04	7.35E-05
S35	60	8	13	5	1.12E-01	2.05E-03	1.05E-04	8.75E-03	1.92E-03	1.05E-04	0.00E+00	2.85E-05	1.34E-05	3.93E-08	1.47E-06	16.3	4.73E-04	7.76E-05
S35	60	8	14	5	1.15E-01	2.09E-03	1.07E-04	8.90E-03	1.95E-03	1.07E-04	0.00E+00	2.90E-05	1.37E-05	4.00E-08	1.50E-06	16.6	4.82E-04	7.90E-05
S35	60	8	15	5	1.20E-01	2.16E-03	1.11E-04	9.22E-03	2.02E-03	1.11E-04	0.00E+00	3.01E-05	1.42E-05	4.14E-08	1.56E-06	17.2	5.00E-04	8.18E-05
S35	60	8	16	5	1.29E-01	2.34E-03	1.21E-04	1.00E-02	2.19E-03	1.20E-04	0.00E+00	3.26E-05	1.54E-05	4.49E-08	1.69E-06	18.6	5.42E-04	8.87E-05
S35	60	8	17	5	1.59E-01	2.89E-03	1.49E-04	1.23E-02	2.70E-03	1.49E-04	0.00E+00	4.02E-05	1.90E-05	5.54E-08	2.08E-06	23.0	6.68E-04	1.09E-04
S35	60	8	18	5	1.70E-01	3.11E-03	1.60E-04	1.33E-02	2.91E-03	1.60E-04	0.00E+00	4.32E-05	2.04E-05	5.96E-08	2.24E-06	24.7	7.18E-04	1.18E-04
S35	60	8	19	5	1.16E-01	2.16E-03	1.10E-04	9.22E-03	2.02E-03	1.11E-04	0.00E+00	3.00E-05	1.41E-05	4.14E-08	1.55E-06	17.1	4.97E-04	8.18E-05
S35	60	8	20	5	7.31E-02	1.43E-03	7.21E-05	6.09E-03	1.33E-03	7.28E-05	0.00E+00	1.97E-05	9.30E-06	2.73E-08	1.02E-06	11.1	3.26E-04	5.41E-05
S35	60	8	21	5	5.98E-02	1.21E-03	6.05E-05	5.15E-03	1.13E-03	6.14E-05	0.00E+00	1.66E-05	7.84E-06	2.31E-08	8.60E-07	9.3	2.74E-04	4.57E-05
S35	60	8	22	5	4.91E-02	1.03E-03	5.09E-05	4.37E-03	9.58E-04	5.19E-05	0.00E+00	1.41E-05	6.63E-06	1.96E-08	7.28E-07	7.9	2.32E-04	3.88E-05
S35	60	8	23	5	3.91E-02	8.42E-04	4.15E-05	3.59E-03	7.87E-04	4.25E-05	0.00E+00	1.15E-05	5.43E-06	1.61E-08	5.96E-07	6.4	1.89E-04	3.19E-05
S35	60	8	24	5	2.81E-02	6.22E-04	3.05E-05	2.66E-03	5.82E-04	3.14E-05	0.00E+00	8.51E-06	4.01E-06	1.19E-08	4.40E-07	4.7	1.39E-04	2.36E-05
S36	60	8	1	5	2.40E-02	5.45E-04	2.66E-05	2.33E-03	5.10E-04	2.74E-05	0.00E+00	7.44E-06	3.50E-06	1.04E-08	3.84E-07	4.1	1.22E-04	2.06E-05
S36	60	8	2	5	1.56E-02	3.64E-04	1.76E-05	1.55E-03	3.40E-04	1.83E-05	0.00E+00	4.95E-06	2.33E-06	6.96E-09	2.56E-07	2.7	8.08E-05	1.38E-05
S36	60	8	3	5	1.33E-02	3.18E-04	1.53E-05	1.36E-03	2.97E-04	1.59E-05	0.00E+00	4.33E-06	2.03E-06	6.09E-09	2.23E-07	2.4	7.05E-05	1.20E-05
S36	60	8	4	5	9.37E-03	2.27E-04	1.09E-05	9.69E-04	2.12E-04	1.14E-05	0.00E+00	3.09E-06	1.45E-06	4.35E-09	1.59E-07	1.7	5.02E-05	8.60E-06
S36	60	8	5	5	1.31E-02	3.18E-04	1.53E-05	1.36E-03	2.97E-04	1.59E-05	0.00E+00	4.32E-06	2.03E-06	6.09E-09	2.23E-07	2.4	7.03E-05	1.20E-05
S36	60	8	6	5	3.17E-02	7.73E-04	3.71E-05	3.30E-03	7.22E-04	3.87E-05	0.00E+00	1.05E-05	4.93E-06	1.48E-08	5.41E-07	5.7	1.71E-04	2.92E-05
S36	60	8	7	5	9.63E-02	2.32E-03	1.12E-04	9.89E-03	2.17E-03	1.16E-04	0.00E+00	3.15E-05	1.48E-05	4.44E-08	1.63E-06	17.2	5.13E-04	8.77E-05
S36	60	8	8	5	1.55E-01	3.55E-03	1.72E-04	1.51E-02	3.31E-03	1.78E-04	0.00E+00	4.84E-05	2.28E-05	6.79E-08	2.50E-06	26.7	7.90E-04	1.34E-04
S36	60	8	9	5	1.34E-01	2.86E-03	1.42E-04	1.22E-02	2.68E-03	1.45E-04	0.00E+00	3.93E-05	1.85E-05	5.48E-08	2.03E-06	21.9	6.45E-04	1.08E-04
S36	60	8	10	5	1.16E-01	2.36E-03	1.18E-04	1.01E-02	2.21E-03	1.20E-04	0.00E+00	3.25E-05	1.53E-05	4.52E-08	1.68E-06	18.2	5.36E-04	8.95E-05
S36	60	8	11	5	1.08E-01	2.14E-03	1.08E-04	9.11E-03	2.00E-03	1.09E-04	0.00E+00	2.95E-05	1.39E-05	4.09E-08	1.52E-06	16.6	4.87E-04	8.09E-05
S36	60	8	12	5	1.29E-01	2.41E-03	1.23E-04	1.03E-02	2.25E-03	1.23E-04	0.00E+00	3.34E-05	1.58E-05	4.61E-08	1.73E-06	19.0	5.54E-04	9.12E-05
S36	60	8	13	5	1.39E-01	2.55E-03	1.31E-04	1.09E-02	2.38E-03	1.31E-04	0.00E+00	3.54E-05	1.67E-05	4.87E-08	1.83E-06	20.2	5.87E-04	9.63E-05
S36	60	8	14	5	1.42E-01	2.59E-03	1.33E-04	1.11E-02	2.42E-03	1.33E-04	0.00E+00	3.60E-05	1.70E-05	4.96E-08	1.86E-06	20.6	5.98E-04	9.81E-05
S36	60	8	15	5	1.49E-01	2.68E-03	1.38E-04	1.14E-02	2.51E-03	1.38E-04	0.00E+00	3.73E-05	1.76E-05	5.13E-08	1.93E-06	21.4	6.20E-04	1.02E-04
S36	60	8	16	5	1.61E-01	2.91E-03	1.50E-04	1.24E-02	2.72E-03	1.50E-04	0.00E+00	4.05E-05	1.91E-05	5.57E-08	2.09E-06	23.1	6.72E-04	1.10E-04
S36	60	8	17	5	1.98E-01	3.59E-03	1.85E-04	1.53E-02	3.36E-03	1.85E-04	0.00E+00	4.99E-05	2.36E-05	6.88E-08	2.58E-06	28.6	8.30E-04	1.36E-04
S36	60	8	18	5	2.10E-01	3.86E-03	1.98E-04	1.65E-02	3.61E-03	1.98E-04	0.00E+00	5.37E-05	2.53E-05	7.40E-08	2.78E-06	30.6	8.91E-04	1.46E-04
S36	60	8	19	5	1.44E-01	2.68E-03	1.37E-04	1.14E-02	2.51E-03	1.37E-04	0.00E+00	3.72E-05	1.76E-05	5.13E-08	1.92E-06	21.2	6.17E-04	1.02E-04
S36	60	8	20	5	9.08E-02	1.77E-03	8.95E-05	7.56E-03	1.66E-03	9.04E-05	0.00E+00	2.45E-05	1.15E-05	3.39E-08	1.27E-06	13.8	4.05E-04	6.71E-05
S36	60	8	21	5	7.42E-02	1.50E-03	7.51E-05	6.40E-03	1.40E-03	7.62E-05	0.00E+00	2.07E-05	9.74E-06	2.87E-08	1.07E-06	11.6	3.40E-04	5.68E-05
S36	60	8	22	5	6.09E-02	1.27E-03	6.32E-05	5.43E-03	1.19E-03	6.44E-05	0.00E+00	1.75E-05	8.24E-06	2.44E-08	9.03E-07	9.8	2.87E-04	4.82E-05
S36	60	8	23	5	4.86E-02	1.05E-03	5.16E-05	4.46E-03	9.77E-04	5.28E-05	0.00E+00	1.43E-05	6.75E-06	2.00E-08	7.40E-07	8.0	2.35E-04	3.96E-05
S36	60	8	24	5	3.49E-02	7.73E-04	3.79E-05	3.30E-03	7.22E-04	3.89E-05	0.00E+00	1.06E-05	4.97E-06	1.48E-08	5.46E-07	5.9	1.73E-04	2.92E-05
S37	60	8	1	5	1.02E-02	2.32E-04	1.13E-05	9.91E-04	2.17E-04	1.17E-05	0.00E+00	3.17E-06	1.49E-06	4.45E-09	1.64E-07	1.7	5.18E-05	8.79E-06
S37	60	8	2	5	6.65E-03	1.55E-04	7.50E-06	6.60E-04	1.45E-04	7.77E-06	0.00E+00	2.11E-06	9.92E-07	2.96E-09	1.09E-07	1.2	3.44E-05	5.86E-06
S37	60	8	3	5	5.67E-03	1.35E-04	6.53E-06	5.78E-04	1.27E-04	6.79E-06	0.00E+00	1.84E-06	8.66E-07	2.59E-09	9.50E-08	1.0	3.00E-05	5.13E-06
S37	60	8	4	5	3.99E-03	9.68E-05	4.65E-06	4.13E-04	9.04E-05	4.84E-06	0.00E+00	1.31E-06	6.18E-07	1.85E-09	6.78E-08	0.7	2.14E-05	3.66E-06
S37	60	8	5	5	5.56E-03	1.35E-04	6.50E-06	5.78E-04	1.27E-04	6.78E-06	0.00E+00	1.84E-06	8.65E-07	2.59E-09	9.49E-08	1.0	2.99E-05	5.13E-06
S37	60	8	6	5	1.35E-02	3.29E-04	1.58E-05	1.40E-03	3.07E-04	1.65E-05	0.00E+00	4.47E-06	2.10E-06	6.30E-09	2.30E-07	2.4	7.27E-05	1.25E-05
S37	60	8	7	5	4.10E-02	9.87E-04	4.75E-05	4.21E-03	9.22E-04	4.94E-05	0.00E+00	1.34E-05	6.31E-06	1.89E-08	6.92E-07	7.3	2.18E-04	3.74E-05
S37	60	8	8	5	6.61E-02	1.51E-03	7.34E-05	6.44E-03	1.41E-03	7.59E-05	0.00E+00	2.06E-05	9.69E-06	2.89E-08	1.06E-06	11.3	3.36E-04	5.71E-05
S37	60	8	9	5	5.72E-02	1.22E-03	6.03E-05	5.20E-03	1.14E-03	6.16E-05	0.00E+00	1.67E-05	7.87E-06	2.33E-08	8.64E-07	9.3	2.74E-04	4.61E-05
S37	60	8	10	5	4.92E-02	1.01E-03	5.02E-05	4.29E-03	9.40E-04	5.11E-05	0.00E+00	1.39E-05	6.53E-06	1.93E-08	7.16E-07	7.8	2.28E-04	3.81E-05
S37	60	8	11	5	4.60E-02	9.09E-04	4.58E-05	3.88E-03	8.50E-04	4.63E-05	0.00E+00	1.26E-05	5.92E-06	1.74E-08	6.49E-07	7.1	2.07E-04	3.44E-05
S37	60	8	12	5	5.50E-02	1.03E-03	5.24E-05	4.38E-03	9.59E-04	5.25E-05	0.00E+00	1.42E-05	6.71E-06	1.96E-08	7.36E-07	8.1	2.36E-04	3.88E-05
S37	60	8	13	5	5.90E-02	1.08E-03	5.56E-05	4.62E-03	1.01E-03	5.56E-05	0.00E+00	1.51E-05	7.10E-06	2.07E-08	7.79E-07	8.6	2.50E-04	4.10E-05
S37	60	8	14	5	6.05E-02	1.10E-03	5.67E-05	4.71E-03	1.03E-03	5.67E-05	0.00E+00	1.53E-05	7.24E-06	2.11E-08	7.93E-07	8.8	2.55E-04	4.18E-05
S37	60	8	15	5	6.32E-02	1.14E-03	5.88E-05	4.87E-03	1.07E-03	5.87E-05	0.00E+00	1.59E-05	7.50E-06	2.19E-08	8.22E-07	9.1	2.64E-04	4.32E-05
S37	60	8	16	5	6.83E-02	1.24E-03	6.38E-05	5.28E-03	1.16E-03	6.37E-05	0.00E+00	1.72E-05	8.13E-06	2.37E-08	8.91E-07	9.9	2.86E-04	4.69E-05
S37	60	8	17	5	8.42E-02	1.53E-03	7.87E-05	6.52E-03	1.43E-03	7.86E-05	0.00E+00	2.13E-05	1.00E-05	2.93E-08	1.10E-06	12.2	3.53E-04	5.79E-05
S37	60	8	18	5	8.96E-02	1.64E-03	8.44E-05	7.02E-03	1.54E-03	8.44E-05	0.00E+00	2.29E-05	1.08E-05	3.15E-08	1.18E-06	13.0	3.79E-04	6.23E-05
S37	60	8	19	5	6.14E-02	1.14E-03	5.84E-05	4.87E-03	1.07E-03	5.85E-05	0.00E+00	1.58E-05	7.47E-06	2.19E-08	8.19E-07	9.0	2.63E-04	4.32E-05
S37	60	8	20	5	3.86E-02	7.55E-04	3.81E-05	3.22E-03	7.05E-04	3.85E-05	0.00E+00	1.04E-05	4.92E-06	1.44E-08	5.39E-07	5.9	1.72E-04	2.86E-05
S37	60	8	21	5	3.16E-02	6.39E-04	3.20E-05	2.72E-03	5.97E-04	3.24E-05	0.00E+00	8.80E-06	4.15E-06	1.22E-08	4.55E-07	4.9	1.45E-04	2.42E-05
S37	60	8	22	5	2.59E-02	5.42E-04	2.69E-05	2.31E-03	5.06E-04	2.74E-05	0.00E+00	7.44E-06	3.51E-06	1.04E-08	3.85E-07	4.2	1.22E-04	2.05E-05
S37	60	8	23	5	2.07E-02	4.45E-04	2.20E-05	1.90E-03	4.16E-04	2.25E-05	0.00E+00	6.10E-06	2.87E-06	8.52E-09	3.15E-07	3.4	1.00E-04	1.68E-05
S37	60	8	24	5	1.49E-02	3.29E-04	1.61E-05	1.40E-03	3.07E-04	1.66E-05	0.00E+00	4.50E-06	2.12E-06	6.30E-09	2.32E-07	2.5	7.37E-05	1.25E-05
S38	60	8	1	5	1.26E-02	2.87E-04	1.40E-05	1.22E-03	2.68E-04	1.44E-05	0.00E+00	3.91E-06	1.84E-06	5.49E-09	2.02E-07	2.2	6.40E-05	1.09E-05
S38	60	8	2	5	8.21E-03	1.91E-04	9.26E-06	8.16E-04	1.79E-04	9.60E-06	0.00E+00	2.61E-06	1.23E-06	3.66E-09	1.34E-07	1.4	4.25E-05	7.24E-06
S38	60	8	3	5	7.00E-03	1.67E-04	8.06E-06	7.14E-04	1.56E-04	8.38E-06	0.00E+00	2.28E-06	1.07E-06	3.20E-09	1.17E-07	1.2	3.71E-05	6.33E-06
S38	60	8	4	5	4.93E-03	1.20E-04	5.74E-06	5.10E-04	1.12E-04	5.98E-06	0.00E+00	1.62E-06	7.63E-07	2.29E-09	8.38E-08	0.9	2.64E-05	4.52E-06
S38	60	8	5	5	6.86E-03	1.67E-04	8.03E-06	7.14E-04	1.56E-04	8.37E-06	0.00E+00	2.27E-06	1.07E-06	3.20E-09	1.17E-07	1.2	3.70E-05	6.33E-06
S38	60	8	6	5	1.67E-02	4.06E-04	1.95E-05	1.73E-03	3.80E-04	2.03E-05	0.00E+00	5.52E-06	2.59E-06	7.78E-09	2.85E-07	3.0	8.98E-05	1.54E-05
S38	60	8	7	5	5.07E-02	1.22E-03	5.86E-05	5.20E-03	1.14E-03	6.10E-05	0.00E+00	1.66E-05	7.79E-06	2.33E-08	8.55E-07	9.1	2.70E-04	4.61E-05

Table F-11: Dundas BRT - Dundas Street West Vehicle (CAR) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	8	5	8.16E-02	1.86E-03	9.07E-05	7.95E-03	1.74E-03	9.37E-05	0.00E+00	2.54E-05	1.20E-05	3.57E-08	1.31E-06	14.0	4.16E-04	7.06E-05
S38	60	8	9	5	7.06E-02	1.51E-03	7.44E-05	6.42E-03	1.41E-03	7.61E-05	0.00E+00	2.07E-05	9.73E-06	2.88E-08	1.07E-06	11.5	3.39E-04	5.70E-05
S38	60	8	10	5	6.08E-02	1.24E-03	6.21E-05	5.30E-03	1.16E-03	6.31E-05	0.00E+00	1.71E-05	8.06E-06	2.38E-08	8.84E-07	9.6	2.82E-04	4.70E-05
S38	60	8	11	5	5.68E-02	1.12E-03	5.66E-05	4.79E-03	1.05E-03	5.72E-05	0.00E+00	1.55E-05	7.31E-06	2.15E-08	8.01E-07	8.7	2.56E-04	4.25E-05
S38	60	8	12	5	6.79E-02	1.27E-03	6.47E-05	5.40E-03	1.18E-03	6.49E-05	0.00E+00	1.76E-05	8.29E-06	2.43E-08	9.09E-07	10.0	2.91E-04	4.79E-05
S38	60	8	13	5	7.28E-02	1.34E-03	6.87E-05	5.71E-03	1.25E-03	6.87E-05	0.00E+00	1.86E-05	8.77E-06	2.56E-08	9.62E-07	10.6	3.09E-04	5.07E-05
S38	60	8	14	5	7.48E-02	1.36E-03	7.00E-05	5.81E-03	1.27E-03	7.00E-05	0.00E+00	1.89E-05	8.94E-06	2.61E-08	9.80E-07	10.8	3.15E-04	5.16E-05
S38	60	8	15	5	7.81E-02	1.41E-03	7.27E-05	6.02E-03	1.32E-03	7.25E-05	0.00E+00	1.96E-05	9.26E-06	2.70E-08	1.02E-06	11.2	3.26E-04	5.34E-05
S38	60	8	16	5	8.44E-02	1.53E-03	7.87E-05	6.53E-03	1.43E-03	7.87E-05	0.00E+00	2.13E-05	1.00E-05	2.93E-08	1.10E-06	12.2	3.54E-04	5.79E-05
S38	60	8	17	5	1.04E-01	1.89E-03	9.72E-05	8.06E-03	1.76E-03	9.71E-05	0.00E+00	2.63E-05	1.24E-05	3.62E-08	1.36E-06	15.0	4.36E-04	7.15E-05
S38	60	8	18	5	1.11E-01	2.03E-03	1.04E-04	8.67E-03	1.90E-03	1.04E-04	0.00E+00	2.82E-05	1.33E-05	3.89E-08	1.46E-06	16.1	4.68E-04	7.69E-05
S38	60	8	19	5	7.58E-02	1.41E-03	7.21E-05	6.02E-03	1.32E-03	7.23E-05	0.00E+00	1.96E-05	9.23E-06	2.70E-08	1.01E-06	11.1	3.24E-04	5.34E-05
S38	60	8	20	5	4.77E-02	9.32E-04	4.71E-05	3.98E-03	8.71E-04	4.75E-05	0.00E+00	1.29E-05	6.07E-06	1.78E-08	6.66E-07	7.3	2.13E-04	3.53E-05
S38	60	8	21	5	3.90E-02	7.89E-04	3.95E-05	3.36E-03	7.37E-04	4.01E-05	0.00E+00	1.09E-05	5.12E-06	1.51E-08	5.62E-07	6.1	1.79E-04	2.99E-05
S38	60	8	22	5	3.20E-02	6.69E-04	3.32E-05	2.85E-03	6.25E-04	3.39E-05	0.00E+00	9.19E-06	4.33E-06	1.28E-08	4.75E-07	5.1	1.51E-04	2.53E-05
S38	60	8	23	5	2.55E-02	5.50E-04	2.71E-05	2.35E-03	5.14E-04	2.78E-05	0.00E+00	7.53E-06	3.55E-06	1.05E-08	3.89E-07	4.2	1.24E-04	2.08E-05
S38	60	8	24	5	1.84E-02	4.06E-04	1.99E-05	1.73E-03	3.80E-04	2.05E-05	0.00E+00	5.56E-06	2.62E-06	7.78E-09	2.87E-07	3.1	9.10E-05	1.54E-05
S39	60	8	1	5	1.27E-02	2.90E-04	1.41E-05	1.24E-03	2.71E-04	1.46E-05	0.00E+00	3.95E-06	1.86E-06	5.54E-09	2.04E-07	2.2	6.46E-05	1.10E-05
S39	60	8	2	5	8.29E-03	1.93E-04	9.35E-06	8.24E-04	1.80E-04	9.69E-06	0.00E+00	2.63E-06	1.24E-06	3.70E-09	1.36E-07	1.4	4.29E-05	7.31E-06
S39	60	8	3	5	7.07E-03	1.69E-04	8.14E-06	7.21E-04	1.58E-04	8.46E-06	0.00E+00	2.30E-06	1.08E-06	3.23E-09	1.19E-07	1.3	3.74E-05	6.39E-06
S39	60	8	4	5	4.98E-03	1.21E-04	5.79E-06	5.15E-04	1.13E-04	6.04E-06	0.00E+00	1.64E-06	7.71E-07	2.31E-09	8.46E-08	0.9	2.67E-05	4.57E-06
S39	60	8	5	5	6.93E-03	1.69E-04	8.10E-06	7.21E-04	1.58E-04	8.45E-06	0.00E+00	2.29E-06	1.08E-06	3.23E-09	1.18E-07	1.3	3.73E-05	6.39E-06
S39	60	8	6	5	1.68E-02	4.10E-04	1.97E-05	1.75E-03	3.83E-04	2.05E-05	0.00E+00	5.57E-06	2.62E-06	7.85E-09	2.87E-07	3.0	9.06E-05	1.55E-05
S39	60	8	7	5	5.11E-02	1.23E-03	5.92E-05	5.25E-03	1.15E-03	6.16E-05	0.00E+00	1.67E-05	7.86E-06	2.36E-08	8.63E-07	9.1	2.72E-04	4.66E-05
S39	60	8	8	5	8.24E-02	1.88E-03	9.16E-05	8.03E-03	1.76E-03	9.46E-05	0.00E+00	2.57E-05	1.21E-05	3.60E-08	1.33E-06	14.2	4.20E-04	7.12E-05
S39	60	8	9	5	7.13E-02	1.52E-03	7.51E-05	6.49E-03	1.42E-03	7.68E-05	0.00E+00	2.09E-05	9.82E-06	2.91E-08	1.08E-06	11.6	3.42E-04	5.75E-05
S39	60	8	10	5	6.14E-02	1.25E-03	6.27E-05	5.35E-03	1.17E-03	6.37E-05	0.00E+00	1.73E-05	8.14E-06	2.40E-08	8.92E-07	9.7	2.84E-04	4.75E-05
S39	60	8	11	5	5.74E-02	1.13E-03	5.71E-05	4.84E-03	1.06E-03	5.77E-05	0.00E+00	1.57E-05	7.38E-06	2.17E-08	8.09E-07	8.8	2.58E-04	4.29E-05
S39	60	8	12	5	6.86E-02	1.28E-03	6.53E-05	5.46E-03	1.20E-03	6.55E-05	0.00E+00	1.77E-05	8.37E-06	2.45E-08	9.18E-07	10.1	2.94E-04	4.84E-05
S39	60	8	13	5	7.35E-02	1.35E-03	6.93E-05	5.76E-03	1.26E-03	6.93E-05	0.00E+00	1.88E-05	8.86E-06	2.59E-08	9.71E-07	10.7	3.12E-04	5.12E-05
S39	60	8	14	5	7.55E-02	1.38E-03	7.07E-05	5.87E-03	1.29E-03	7.07E-05	0.00E+00	1.91E-05	9.02E-06	2.63E-08	9.89E-07	10.9	3.18E-04	5.21E-05
S39	60	8	15	5	7.89E-02	1.42E-03	7.34E-05	6.07E-03	1.33E-03	7.32E-05	0.00E+00	1.98E-05	9.35E-06	2.73E-08	1.02E-06	11.3	3.29E-04	5.39E-05
S39	60	8	16	5	8.52E-02	1.54E-03	7.95E-05	6.59E-03	1.44E-03	7.94E-05	0.00E+00	2.15E-05	1.01E-05	2.96E-08	1.11E-06	12.3	3.57E-04	5.85E-05
S39	60	8	17	5	1.05E-01	1.91E-03	9.81E-05	8.13E-03	1.78E-03	9.80E-05	0.00E+00	2.65E-05	1.25E-05	3.65E-08	1.37E-06	15.2	4.40E-04	7.22E-05
S39	60	8	18	5	1.12E-01	2.05E-03	1.05E-04	8.75E-03	1.92E-03	1.05E-04	0.00E+00	2.85E-05	1.34E-05	3.93E-08	1.47E-06	16.3	4.73E-04	7.76E-05
S39	60	8	19	5	7.65E-02	1.42E-03	7.28E-05	6.07E-03	1.33E-03	7.30E-05	0.00E+00	1.98E-05	9.32E-06	2.73E-08	1.02E-06	11.3	3.28E-04	5.39E-05
S39	60	8	20	5	4.82E-02	9.41E-04	4.75E-05	4.01E-03	8.80E-04	4.80E-05	0.00E+00	1.30E-05	6.13E-06	1.80E-08	6.72E-07	7.3	2.15E-04	3.56E-05
S39	60	8	21	5	3.94E-02	7.96E-04	3.99E-05	3.40E-03	7.44E-04	4.05E-05	0.00E+00	1.10E-05	5.17E-06	1.52E-08	5.67E-07	6.2	1.81E-04	3.01E-05
S39	60	8	22	5	3.23E-02	6.76E-04	3.36E-05	2.88E-03	6.32E-04	3.42E-05	0.00E+00	9.28E-06	4.37E-06	1.29E-08	4.80E-07	5.2	1.53E-04	2.56E-05
S39	60	8	23	5	2.58E-02	5.55E-04	2.74E-05	2.37E-03	5.19E-04	2.80E-05	0.00E+00	7.61E-06	3.58E-06	1.06E-08	3.93E-07	4.2	1.25E-04	2.10E-05
S39	60	8	24	5	1.85E-02	4.10E-04	2.01E-05	1.75E-03	3.83E-04	2.07E-05	0.00E+00	5.61E-06	2.64E-06	7.85E-09	2.90E-07	3.1	9.19E-05	1.55E-05
S40	80	11	1	5	1.26E-02	3.79E-04	1.45E-05	1.15E-03	2.72E-04	1.35E-05	0.00E+00	3.70E-06	1.72E-06	6.09E-09	1.89E-07	2.2	5.85E-05	8.49E-06
S40	80	11	2	5	8.22E-03	2.53E-04	9.64E-06	7.67E-04	1.81E-04	8.97E-06	0.00E+00	2.46E-06	1.14E-06	4.06E-09	1.26E-07	1.5	3.89E-05	5.66E-06
S40	80	11	3	5	7.02E-03	2.21E-04	8.39E-06	6.72E-04	1.58E-04	7.83E-06	0.00E+00	2.15E-06	9.98E-07	3.55E-09	1.10E-07	1.3	3.39E-05	4.95E-06
S40	80	11	4	5	4.95E-03	1.58E-04	5.98E-06	4.80E-04	1.13E-04	5.59E-06	0.00E+00	1.54E-06	7.12E-07	2.54E-09	7.85E-08	0.9	2.42E-05	3.54E-06
S40	80	11	5	5	6.90E-03	2.21E-04	8.36E-06	6.72E-04	1.58E-04	7.82E-06	0.00E+00	2.15E-06	9.96E-07	3.55E-09	1.10E-07	1.3	3.38E-05	4.95E-06
S40	80	11	6	5	1.68E-02	5.37E-04	2.03E-05	1.63E-03	3.85E-04	1.90E-05	0.00E+00	5.22E-06	2.42E-06	8.63E-09	2.67E-07	3.1	8.21E-05	1.20E-05
S40	80	11	7	5	5.09E-02	1.61E-03	6.10E-05	4.89E-03	1.15E-03	5.70E-05	0.00E+00	1.57E-05	7.27E-06	2.59E-08	8.01E-07	9.4	2.47E-04	3.61E-05
S40	80	11	8	5	8.15E-02	2.47E-03	9.43E-05	7.48E-03	1.76E-03	8.76E-05	0.00E+00	2.40E-05	1.12E-05	3.96E-08	1.23E-06	14.6	3.80E-04	5.52E-05
S40	80	11	9	5	7.01E-02	1.99E-03	7.73E-05	6.04E-03	1.43E-03	7.11E-05	0.00E+00	1.95E-05	9.06E-06	3.20E-08	9.99E-07	11.9	3.10E-04	4.45E-05
S40	80	11	10	5	6.02E-02	1.64E-03	6.43E-05	4.99E-03	1.18E-03	5.89E-05	0.00E+00	1.62E-05	7.51E-06	2.64E-08	8.27E-07	9.9	2.57E-04	3.68E-05
S40	80	11	11	5	5.61E-02	1.49E-03	5.86E-05	4.51E-03	1.06E-03	5.34E-05	0.00E+00	1.47E-05	6.81E-06	2.39E-08	7.50E-07	9.1	2.34E-04	3.32E-05
S40	80	11	12	5	6.67E-02	1.68E-03	6.69E-05	5.08E-03	1.20E-03	6.05E-05	0.00E+00	1.66E-05	7.72E-06	2.69E-08	8.50E-07	10.3	2.66E-04	3.75E-05
S40	80	11	13	5	7.15E-02	1.77E-03	7.10E-05	5.37E-03	1.27E-03	6.41E-05	0.00E+00	1.76E-05	8.17E-06	2.84E-08	8.99E-07	11.0	2.82E-04	3.96E-05
S40	80	11	14	5	7.33E-02	1.80E-03	7.24E-05	5.47E-03	1.29E-03	6.53E-05	0.00E+00	1.79E-05	8.32E-06	2.89E-08	9.16E-07	11.2	2.88E-04	4.03E-05
S40	80	11	15	5	7.66E-02	1.86E-03	7.51E-05	5.66E-03	1.33E-03	6.77E-05	0.00E+00	1.85E-05	8.62E-06	3.00E-08	9.49E-07	11.6	2.98E-04	4.17E-05
S40	80	11	16	5	8.28E-02	2.02E-03	8.14E-05	6.14E-03	1.45E-03	7.34E-05	0.00E+00	2.01E-05	9.35E-06	3.25E-08	1.03E-06	12.6	3.23E-04	4.53E-05
S40	80	11	17	5	1.02E-01	2.50E-03	1.00E-04	7.58E-03	1.79E-03	9.06E-05	0.00E+00	2.48E-05	1.15E-05	4.01E-08	1.27E-06	15.5	3.99E-04	5.59E-05
S40	80	11	18	5	1.09E-01	2.69E-03	1.08E-04	8.15E-03	1.92E-03	9.73E-05	0.00E+00	2.67E-05	1.24E-05	4.32E-08	1.37E-06	16.7	4.28E-04	6.01E-05
S40	80	11	19	5	7.45E-02	1.86E-03	7.46E-05	5.66E-03	1.33E-03	6.74E-05	0.00E+00	1.85E-05	8.60E-06	3.00E-08	9.46E-07	11.5	2.97E-04	4.17E-05
S40	80	11	20	5	4.71E-02	1.23E-03	4.87E-05	3.74E-03	8.82E-04	4.44E-05	0.00E+00	1.22E-05	5.66E-06	1.98E-08	6.23E-07	7.5	1.94E-04	2.76E-05
S40	80	11	21	5	3.86E-02	1.04E-03	4.09E-05	3.17E-03	7.47E-04	3.74E-05	0.00E+00	1.03E-05	4.77E-06	1.68E-08	5.25E-07	6.3	1.64E-04	2.33E-05
S40	80	11	22	5	3.18E-02	8.85E-04	3.45E-05	2.69E-03	6.34E-04	3.17E-05	0.00E+00	8.69E-06	4.04E-06	1.42E-08	4.45E-07	5.3	1.38E-04	1.98E-05
S40	80	11	23	5	2.54E-02	7.27E-04	2.81E-05	2.21E-03	5.20E-04	2.59E-05	0.00E+00	7.12E-06	3.31E-06	1.17E-08	3.64E-07	4.3	1.13E-04	1.63E-05
S40	80	11	24	5	1.83E-02	5.37E-04	2.07E-05	1.63E-03	3.85E-04	1.91E-05	0.00E+00	5.25E-06	2.44E-06	8.63E-09	2.69E-07	3.2	8.32E-05	1.20E-05

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	112	0	1	1.70E-02	2.09E-03	2.89E-04	2.17E-04	1.92E-04	3.94E-05	0.00E+00	1.59E-05	1.13E-05	4.32E-08	1.11E-06	44.6	4.65E-04	7.91E-04
SI1_E	0.59	74	0	1	1.13E-02	1.25E-03	1.91E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.51E-06	2.88E-08	7.39E-07	29.4	3.09E-04	5.28E-04
SI1_E	0.59	65	0	1	9.84E-03	9.73E-04	1.65E-04	1.26E-04	1.12E-04	2.29E-05	0.00E+00	9.25E-06	6.55E-06	2.52E-08	6.45E-07	25.4	2.70E-04	4.62E-04
SI1_E	0.59	47	0	1	7.01E-03	6.95E-04	1.17E-04	9.03E-05	8.00E-05	1.63E-05	0.00E+00	6.60E-06	4.67E-06	1.80E-08	4.60E-07	18.1	1.92E-04	3.30E-04
SI1_E	0.59	65	0	1	9.81E-03	9.73E-04	1.63E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.23E-06	6.54E-06	2.52E-08	6.44E-07	25.2	2.69E-04	4.62E-04
SI1_E	0.59	158	0	1	2.38E-02	2.36E-03	3.96E-04	3.07E-04	2.72E-04	5.55E-05	0.00E+00	2.24E-05	1.59E-05	6.12E-08	1.56E-06	61.2	6.54E-04	1.12E-03
SI1_E	0.59	475	0	1	7.16E-02	7.09E-03	1.20E-03	9.21E-04	8.16E-04	1.67E-04	0.00E+00	6.73E-05	4.77E-05	1.83E-07	4.70E-06	184.8	1.96E-03	3.36E-03
SI1_E	0.59	726	0	1	1.11E-01	1.32E-02	1.88E-03	1.41E-03	1.25E-03	2.56E-04	0.00E+00	1.04E-04	7.34E-05	2.81E-07	7.22E-06	289.5	3.02E-03	5.14E-03
SI1_E	0.59	586	0	1	9.04E-02	1.43E-02	1.57E-03	1.14E-03	1.01E-03	2.08E-04	0.00E+00	8.42E-05	5.97E-05	2.27E-07	5.88E-06	241.8	2.46E-03	4.15E-03
SI1_E	0.59	484	0	1	7.52E-02	1.37E-02	1.32E-03	9.39E-04	8.32E-04	1.73E-04	0.00E+00	6.99E-05	4.95E-05	1.87E-07	4.88E-06	203.8	2.04E-03	3.43E-03
SI1_E	0.59	437	0	1	6.84E-02	1.38E-02	1.21E-03	8.49E-04	7.52E-04	1.57E-04	0.00E+00	6.34E-05	4.49E-05	1.69E-07	4.42E-06	187.4	1.85E-03	3.10E-03
SI1_E	0.59	493	0	1	7.81E-02	1.85E-02	1.41E-03	9.57E-04	8.48E-04	1.78E-04	0.00E+00	7.20E-05	5.10E-05	1.91E-07	5.03E-06	217.7	2.10E-03	3.49E-03
SI1_E	0.59	521	0	1	8.27E-02	2.03E-02	1.50E-03	1.01E-03	8.96E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.01E-07	5.32E-06	231.9	2.22E-03	3.69E-03
SI1_E	0.59	530	0	1	8.44E-02	2.12E-02	1.54E-03	1.03E-03	9.12E-04	1.92E-04	0.00E+00	7.77E-05	5.50E-05	2.05E-07	5.42E-06	237.1	2.27E-03	3.76E-03
SI1_E	0.59	549	0	1	8.75E-02	2.26E-02	1.60E-03	1.07E-03	9.44E-04	1.99E-04	0.00E+00	8.05E-05	5.70E-05	2.12E-07	5.62E-06	246.6	2.35E-03	3.89E-03
SI1_E	0.59	596	0	1	9.48E-02	2.43E-02	1.73E-03	1.16E-03	1.02E-03	2.16E-04	0.00E+00	8.73E-05	6.18E-05	2.30E-07	6.09E-06	266.9	2.55E-03	4.22E-03
SI1_E	0.59	735	0	1	1.17E-01	2.99E-02	2.13E-03	1.43E-03	1.26E-03	2.67E-04	0.00E+00	1.08E-04	7.63E-05	2.84E-07	7.52E-06	329.2	3.14E-03	5.21E-03
SI1_E	0.59	791	0	1	1.26E-01	3.13E-02	2.28E-03	1.54E-03	1.36E-03	2.86E-04	0.00E+00	1.16E-04	8.20E-05	3.06E-07	8.07E-06	352.1	3.38E-03	5.60E-03
SI1_E	0.59	549	0	1	8.70E-02	2.10E-02	1.57E-03	1.07E-03	9.44E-04	1.98E-04	0.00E+00	8.02E-05	5.68E-05	2.12E-07	5.60E-06	242.7	2.34E-03	3.89E-03
SI1_E	0.59	363	0	1	5.69E-02	1.21E-02	1.01E-03	7.04E-04	6.24E-04	1.30E-04	0.00E+00	5.27E-05	3.73E-05	1.40E-07	3.68E-06	156.4	1.54E-03	2.57E-03
SI1_E	0.59	307	0	1	4.78E-02	9.16E-03	8.42E-04	5.96E-04	5.28E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	130.1	1.30E-03	2.18E-03
SI1_E	0.59	261	0	1	4.03E-02	6.95E-03	7.03E-04	5.06E-04	4.48E-04	9.29E-05	0.00E+00	3.75E-05	2.66E-05	1.01E-07	2.62E-06	108.6	1.09E-03	1.85E-03
SI1_E	0.59	214	0	1	3.29E-02	5.11E-03	5.69E-04	4.15E-04	3.68E-04	7.60E-05	0.00E+00	3.07E-05	2.18E-05	8.27E-08	2.14E-06	87.9	8.96E-04	1.52E-03
SI1_E	0.59	158	0	1	2.42E-02	3.37E-03	4.15E-04	3.07E-04	2.72E-04	5.60E-05	0.00E+00	2.26E-05	1.60E-05	6.12E-08	1.58E-06	64.1	6.61E-04	1.12E-03
SI1_W	0.59	114	0	1	1.73E-02	2.13E-03	2.94E-04	2.21E-04	1.95E-04	4.01E-05	0.00E+00	1.62E-05	1.15E-05	4.39E-08	1.13E-06	45.4	4.73E-04	8.05E-04
SI1_W	0.59	76	0	1	1.15E-02	1.27E-03	1.94E-04	1.47E-04	1.30E-04	2.67E-05	0.00E+00	1.08E-05	7.64E-06	2.93E-08	7.53E-07	29.9	3.15E-04	5.37E-04
SI1_W	0.59	66	0	1	1.00E-02	9.90E-04	1.68E-04	1.29E-04	1.14E-04	2.33E-05	0.00E+00	9.41E-06	6.67E-06	2.56E-08	6.57E-07	25.9	2.75E-04	4.70E-04
SI1_W	0.59	47	0	1	7.14E-03	7.07E-04	1.19E-04	9.19E-05	8.14E-05	1.66E-05	0.00E+00	6.71E-06	4.76E-06	1.83E-08	4.68E-07	18.4	1.96E-04	3.36E-04
SI1_W	0.59	66	0	1	9.98E-03	9.90E-04	1.66E-04	1.29E-04	1.14E-04	2.32E-05	0.00E+00	9.39E-06	6.65E-06	2.56E-08	6.55E-07	25.7	2.74E-04	4.70E-04
SI1_W	0.59	161	0	1	2.42E-02	2.40E-03	4.03E-04	3.12E-04	2.77E-04	5.64E-05	0.00E+00	2.28E-05	1.62E-05	6.22E-08	1.59E-06	62.3	6.65E-04	1.14E-03
SI1_W	0.59	483	0	1	7.29E-02	7.21E-03	1.22E-03	9.37E-04	8.30E-04	1.70E-04	0.00E+00	6.85E-05	4.85E-05	1.87E-07	4.78E-06	188.0	2.00E-03	3.42E-03
SI1_W	0.59	739	0	1	1.12E-01	1.35E-02	1.91E-03	1.43E-03	1.27E-03	2.61E-04	0.00E+00	1.05E-04	7.46E-05	2.86E-07	7.35E-06	294.6	3.07E-03	5.23E-03
SI1_W	0.59	597	0	1	9.20E-02	1.45E-02	1.59E-03	1.16E-03	1.03E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.31E-07	5.98E-06	246.0	2.50E-03	4.23E-03
SI1_W	0.59	492	0	1	7.65E-02	1.39E-02	1.34E-03	9.56E-04	8.47E-04	1.76E-04	0.00E+00	7.11E-05	5.04E-05	1.90E-07	4.96E-06	207.4	2.07E-03	3.49E-03
SI1_W	0.59	445	0	1	6.96E-02	1.40E-02	1.23E-03	8.64E-04	7.65E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.72E-07	4.50E-06	190.7	1.88E-03	3.15E-03
SI1_W	0.59	502	0	1	7.94E-02	1.88E-02	1.44E-03	9.74E-04	8.63E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	1.94E-07	5.11E-06	221.6	2.14E-03	3.56E-03
SI1_W	0.59	530	0	1	8.42E-02	2.07E-02	1.53E-03	1.03E-03	9.12E-04	1.92E-04	0.00E+00	7.76E-05	5.50E-05	2.05E-07	5.41E-06	236.0	2.26E-03	3.76E-03
SI1_W	0.59	540	0	1	8.59E-02	2.16E-02	1.56E-03	1.05E-03	9.28E-04	1.96E-04	0.00E+00	7.90E-05	5.60E-05	2.09E-07	5.52E-06	241.3	2.31E-03	3.82E-03
SI1_W	0.59	559	0	1	8.90E-02	2.30E-02	1.62E-03	1.08E-03	9.60E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.16E-07	5.72E-06	250.9	2.39E-03	3.96E-03
SI1_W	0.59	606	0	1	9.65E-02	2.47E-02	1.76E-03	1.18E-03	1.04E-03	2.20E-04	0.00E+00	8.88E-05	6.29E-05	2.34E-07	6.20E-06	271.6	2.59E-03	4.29E-03
SI1_W	0.59	748	0	1	1.19E-01	3.04E-02	2.17E-03	1.45E-03	1.29E-03	2.71E-04	0.00E+00	1.10E-04	7.77E-05	2.89E-07	7.65E-06	335.0	3.20E-03	5.30E-03
SI1_W	0.59	805	0	1	1.28E-01	3.19E-02	2.32E-03	1.56E-03	1.38E-03	2.91E-04	0.00E+00	1.18E-04	8.34E-05	3.11E-07	8.22E-06	358.3	3.44E-03	5.70E-03
SI1_W	0.59	559	0	1	8.85E-02	2.14E-02	1.60E-03	1.08E-03	9.60E-04	2.02E-04	0.00E+00	8.16E-05	5.78E-05	2.16E-07	5.69E-06	247.0	2.38E-03	3.96E-03
SI1_W	0.59	369	0	1	5.79E-02	1.23E-02	1.03E-03	7.17E-04	6.35E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.43E-07	3.74E-06	159.2	1.56E-03	2.62E-03
SI1_W	0.59	312	0	1	4.87E-02	9.32E-03	8.57E-04	6.07E-04	5.37E-04	1.12E-04	0.00E+00	4.52E-05	3.20E-05	1.21E-07	3.15E-06	132.3	1.32E-03	2.21E-03
SI1_W	0.59	265	0	1	4.10E-02	7.08E-03	7.15E-04	5.15E-04	4.56E-04	9.45E-05	0.00E+00	3.82E-05	2.71E-05	1.03E-07	2.67E-06	110.5	1.11E-03	1.88E-03
SI1_W	0.59	218	0	1	3.35E-02	5.20E-03	5.79E-04	4.23E-04	3.74E-04	7.74E-05	0.00E+00	3.13E-05	2.22E-05	8.42E-08	2.18E-06	89.4	9.12E-04	1.54E-03
SI1_W	0.59	161	0	1	2.47E-02	3.43E-03	4.22E-04	3.12E-04	2.77E-04	5.70E-05	0.00E+00	2.30E-05	1.63E-05	6.22E-08	1.61E-06	65.2	6.72E-04	1.14E-03
SI2_E	0.51	60	0	1	9.11E-03	1.12E-03	1.55E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.53E-06	6.05E-06	2.31E-08	5.96E-07	23.9	2.49E-04	4.24E-04
SI2_E	0.51	40	0	1	6.05E-03	6.69E-04	1.02E-04	7.74E-05	6.85E-05	1.40E-05	0.00E+00	5.68E-06	4.02E-06	1.54E-08	3.96E-07	15.8	1.66E-04	2.83E-04
SI2_E	0.51	35	0	1	5.27E-03	5.21E-04	8.82E-05	6.77E-05	6.00E-05	1.23E-05	0.00E+00	4.95E-06	3.51E-06	1.35E-08	3.46E-07	13.6	1.44E-04	2.47E-04
SI2_E	0.51	25	0	1	3.76E-03	3.72E-04	6.26E-05	4.84E-05	4.28E-05	8.74E-06	0.00E+00	3.53E-06	2.50E-06	9.63E-09	2.47E-07	9.7	1.03E-04	1.77E-04
SI2_E	0.51	35	0	1	5.25E-03	5.21E-04	8.74E-05	6.77E-05	6.00E-05	1.22E-05	0.00E+00	4.94E-06	3.50E-06	1.35E-08	3.45E-07	13.5	1.44E-04	2.47E-04
SI2_E	0.51	85	0	1	1.28E-02	1.27E-03	2.12E-04	1.64E-04	1.46E-04	2.97E-05	0.00E+00	1.20E-05	8.51E-06	3.28E-08	8.38E-07	32.8	3.50E-04	6.00E-04
SI2_E	0.51	254	0	1	3.84E-02	3.80E-03	6.41E-04	4.93E-04	4.37E-04	8.92E-05	0.00E+00	3.61E-05	2.56E-05	9.83E-08	2.52E-06	99.0	1.05E-03	1.80E-03
SI2_E	0.51	389	0	1	5.92E-02	7.10E-03	1.00E-03	7.55E-04	6.68E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.50E-07	3.87E-06	155.1	1.62E-03	2.75E-03
SI2_E	0.51	314	0	1	4.84E-02	7.65E-03	8.39E-04	6.10E-04	5.40E-04	1.12E-04	0.00E+00	4.51E-05	3.20E-05	1.21E-07	3.15E-06	129.5	1.32E-03	2.23E-03
SI2_E	0.51	259	0	1	4.03E-02	7.33E-03	7.07E-04	5.03E-04	4.46E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	1.00E-07	2.61E-06	109.2	1.09E-03	1.84E-03
SI2_E	0.51	234	0	1	3.66E-02	7.38E-03	6.50E-04	4.55E-04	4.03E-04	8.40E-05	0.00E+00	3.40E-05	2.41E-05	9.06E-08	2.37E-06	100.3	9.91E-04	1.66E-03
SI2_E	0.51	264	0	1	4.18E-02	9.91E-03	7.55E-04	5.13E-04	4.54E-04	9.55E-05	0.00E+00	3.86E-05	2.73E-05	1.02E-07	2.69E-06	116.6	1.13E-03	1.87E-03
SI2_E	0.51	279	0	1	4.43E-02	1.09E-02	8.04E-04	5.42E-04	4.80E-04	1.01E-04	0.00E+00	4.08E-05	2.89E-05	1.08E-07	2.85E-06	124.2	1.19E-03	1.98E-03
SI2_E	0.51	284	0	1	4.52E-02	1.14E-02	8.22E-04	5.51E-04	4.88E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.10E-07	2.90E-06	127.0	1.21E-03	2.01E-03
SI2_E	0.51	294	0	1	4.69E-02	1.21E-02	8.55E-04	5.71E-04	5.06E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.14E-07	3.01E-06	132.1	1.26E-03	2.08E-03
SI2_E	0.51	319	0	1	5.08E-02	1.30E-02	9.26E-04	6.19E-04	5.48E-04	1.16E-04	0.00E+00	4.67E-05	3.31E-05	1.23E-07	3.26E-06	143.0	1.36E-03	2.26E-03
SI2_E	0.51	394	0	1	6.27E-02	1.60E-02	1.14E-03	7.64E-04	6.77E-04	1.43E-04	0.00E+00	5.77E-05	4.09E-05	1.52E-07	4.03E-06	176.3	1.68E-03	2.79E-03
SI2_E	0.51	424	0	1	6.73E-02	1.68E-02	1.22E-03	8.22E-04	7.28E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.64E-07	4.33E-06	188.6	1.81E-03	3.00E-03
SI2_E	0.51	294	0	1	4.66E-02	1.13E-02	8.42E-04	5.71E-04	5.06E-04	1.06E-04	0.00E+00	4.29E-05	3.04E-05	1.14E-07	3.00E-06	130.0	1.25E-03	2.08E-03
SI2_E	0.51	194	0	1	3.05E-02	6.48E-03	5.43E-04	3.77E-04	3.34E-04	6.98E-05	0.00E+00	2.82E-05	2.00E-05	7.52E-08	1.97E-06	83.8	8.23E-04	1.38E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	164	0	1	2.56E-02	4.90E-03	4.51E-04	3.19E-04	2.83E-04	5.89E-05	0.00E+00	2.38E-05	1.68E-05	6.36E-08	1.66E-06	69.7	6.94E-04	1.17E-03
SI2_E	0.51	140	0	1	2.16E-02	3.73E-03	3.77E-04	2.71E-04	2.40E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.40E-08	1.40E-06	58.1	5.86E-04	9.89E-04
SI2_E	0.51	115	0	1	1.76E-02	2.74E-03	3.05E-04	2.23E-04	1.97E-04	4.07E-05	0.00E+00	1.65E-05	1.17E-05	4.43E-08	1.15E-06	47.1	4.80E-04	8.12E-04
SI2_E	0.51	85	0	1	1.30E-02	1.80E-03	2.22E-04	1.64E-04	1.46E-04	3.00E-05	0.00E+00	1.21E-05	8.59E-06	3.28E-08	8.46E-07	34.3	3.54E-04	6.00E-04
SI2_W	0.42	58	0	1	8.89E-03	1.09E-03	1.51E-04	1.13E-04	1.00E-04	2.06E-05	0.00E+00	8.32E-06	5.90E-06	2.25E-08	5.81E-07	23.3	2.43E-04	4.13E-04
SI2_W	0.42	39	0	1	5.90E-03	6.52E-04	9.95E-05	7.55E-05	6.68E-05	1.37E-05	0.00E+00	5.53E-06	3.92E-06	1.50E-08	3.86E-07	15.4	1.61E-04	2.75E-04
SI2_W	0.42	34	0	1	5.14E-03	5.08E-04	8.60E-05	6.60E-05	5.85E-05	1.20E-05	0.00E+00	4.83E-06	3.42E-06	1.32E-08	3.37E-07	13.3	1.41E-04	2.41E-04
SI2_W	0.42	24	0	1	3.66E-03	3.63E-04	6.10E-05	4.72E-05	4.18E-05	8.52E-06	0.00E+00	3.44E-06	2.44E-06	9.39E-09	2.40E-07	9.4	1.00E-04	1.72E-04
SI2_W	0.42	34	0	1	5.12E-03	5.08E-04	8.53E-05	6.60E-05	5.85E-05	1.19E-05	0.00E+00	4.82E-06	3.42E-06	1.32E-08	3.36E-07	13.2	1.41E-04	2.41E-04
SI2_W	0.42	83	0	1	1.24E-02	1.23E-03	2.07E-04	1.60E-04	1.42E-04	2.90E-05	0.00E+00	1.17E-05	8.29E-06	3.19E-08	8.17E-07	32.0	3.41E-04	5.85E-04
SI2_W	0.42	248	0	1	3.74E-02	3.70E-03	6.25E-04	4.81E-04	4.26E-04	8.70E-05	0.00E+00	3.52E-05	2.49E-05	9.58E-08	2.45E-06	96.5	1.03E-03	1.76E-03
SI2_W	0.42	379	0	1	5.77E-02	6.92E-03	9.79E-04	7.36E-04	6.52E-04	1.34E-04	0.00E+00	5.41E-05	3.83E-05	1.47E-07	3.77E-06	151.2	1.58E-03	2.69E-03
SI2_W	0.42	306	0	1	4.72E-02	7.45E-03	8.18E-04	5.94E-04	5.26E-04	1.09E-04	0.00E+00	4.40E-05	3.12E-05	1.18E-07	3.07E-06	126.3	1.28E-03	2.17E-03
SI2_W	0.42	253	0	1	3.93E-02	7.14E-03	6.89E-04	4.91E-04	4.34E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.77E-08	2.55E-06	106.4	1.06E-03	1.79E-03
SI2_W	0.42	228	0	1	3.57E-02	7.19E-03	6.34E-04	4.43E-04	3.93E-04	8.19E-05	0.00E+00	3.31E-05	2.35E-05	8.83E-08	2.31E-06	97.8	9.66E-04	1.62E-03
SI2_W	0.42	258	0	1	4.08E-02	9.66E-03	7.36E-04	5.00E-04	4.43E-04	9.31E-05	0.00E+00	3.76E-05	2.66E-05	9.96E-08	2.62E-06	113.7	1.10E-03	1.83E-03
SI2_W	0.42	272	0	1	4.32E-02	1.06E-02	7.84E-04	5.28E-04	4.68E-04	9.85E-05	0.00E+00	3.98E-05	2.82E-05	1.05E-07	2.78E-06	121.1	1.16E-03	1.93E-03
SI2_W	0.42	277	0	1	4.41E-02	1.11E-02	8.02E-04	5.38E-04	4.76E-04	1.00E-04	0.00E+00	4.06E-05	2.87E-05	1.07E-07	2.83E-06	123.8	1.18E-03	1.96E-03
SI2_W	0.42	287	0	1	4.57E-02	1.18E-02	8.34E-04	5.57E-04	4.93E-04	1.04E-04	0.00E+00	4.20E-05	2.98E-05	1.11E-07	2.93E-06	128.8	1.23E-03	2.03E-03
SI2_W	0.42	311	0	1	4.95E-02	1.27E-02	9.03E-04	6.04E-04	5.35E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.20E-07	3.18E-06	139.4	1.33E-03	2.20E-03
SI2_W	0.42	384	0	1	6.11E-02	1.56E-02	1.11E-03	7.45E-04	6.60E-04	1.39E-04	0.00E+00	5.62E-05	3.99E-05	1.48E-07	3.92E-06	171.9	1.64E-03	2.72E-03
SI2_W	0.42	413	0	1	6.56E-02	1.64E-02	1.19E-03	8.02E-04	7.10E-04	1.50E-04	0.00E+00	6.04E-05	4.28E-05	1.60E-07	4.22E-06	183.9	1.76E-03	2.93E-03
SI2_W	0.42	287	0	1	4.54E-02	1.10E-02	8.21E-04	5.57E-04	4.93E-04	1.04E-04	0.00E+00	4.19E-05	2.97E-05	1.11E-07	2.92E-06	126.7	1.22E-03	2.03E-03
SI2_W	0.42	190	0	1	2.97E-02	6.32E-03	5.29E-04	3.68E-04	3.26E-04	6.81E-05	0.00E+00	2.75E-05	1.95E-05	7.33E-08	1.92E-06	81.7	8.03E-04	1.34E-03
SI2_W	0.42	160	0	1	2.50E-02	4.78E-03	4.40E-04	3.11E-04	2.76E-04	5.74E-05	0.00E+00	2.32E-05	1.64E-05	6.20E-08	1.62E-06	67.9	6.76E-04	1.14E-03
SI2_W	0.42	136	0	1	2.11E-02	3.63E-03	3.67E-04	2.64E-04	2.34E-04	4.85E-05	0.00E+00	1.96E-05	1.39E-05	5.26E-08	1.37E-06	56.7	5.72E-04	9.64E-04
SI2_W	0.42	112	0	1	1.72E-02	2.67E-03	2.97E-04	2.17E-04	1.92E-04	3.97E-05	0.00E+00	1.60E-05	1.14E-05	4.32E-08	1.12E-06	45.9	4.68E-04	7.92E-04
SI2_W	0.42	83	0	1	1.27E-02	1.76E-03	2.17E-04	1.60E-04	1.42E-04	2.93E-05	0.00E+00	1.18E-05	8.38E-06	3.19E-08	8.25E-07	33.5	3.45E-04	5.85E-04
SI3_E	0.50	70	0	1	1.07E-02	1.31E-03	1.81E-04	1.36E-04	1.20E-04	2.47E-05	0.00E+00	9.98E-06	7.07E-06	2.71E-08	6.97E-07	28.0	2.91E-04	4.96E-04
SI3_E	0.50	47	0	1	7.08E-03	7.83E-04	1.19E-04	9.06E-05	8.02E-05	1.64E-05	0.00E+00	6.64E-06	4.71E-06	1.80E-08	4.63E-07	18.4	1.94E-04	3.31E-04
SI3_E	0.50	41	0	1	6.17E-03	6.10E-04	1.03E-04	7.92E-05	7.02E-05	1.43E-05	0.00E+00	5.80E-06	4.11E-06	1.58E-08	4.04E-07	15.9	1.69E-04	2.89E-04
SI3_E	0.50	29	0	1	4.40E-03	4.36E-04	7.33E-05	5.66E-05	5.01E-05	1.02E-05	0.00E+00	4.13E-06	2.93E-06	1.13E-08	2.88E-07	11.3	1.21E-04	2.07E-04
SI3_E	0.50	41	0	1	6.15E-03	6.10E-04	1.02E-04	7.92E-05	7.02E-05	1.43E-05	0.00E+00	5.78E-06	4.10E-06	1.58E-08	4.04E-07	15.8	1.69E-04	2.89E-04
SI3_E	0.50	99	0	1	1.49E-02	1.48E-03	2.48E-04	1.92E-04	1.70E-04	3.48E-05	0.00E+00	1.40E-05	9.95E-06	3.83E-08	9.80E-07	38.4	4.10E-04	7.02E-04
SI3_E	0.50	297	0	1	4.49E-02	4.44E-03	7.50E-04	5.77E-04	5.11E-04	1.04E-04	0.00E+00	4.22E-05	2.99E-05	1.15E-07	2.94E-06	115.8	1.23E-03	2.11E-03
SI3_E	0.50	455	0	1	6.93E-02	8.30E-03	1.18E-03	8.83E-04	7.82E-04	1.61E-04	0.00E+00	6.49E-05	4.60E-05	1.76E-07	4.53E-06	181.4	1.89E-03	3.22E-03
SI3_E	0.50	367	0	1	5.66E-02	8.95E-03	9.81E-04	7.13E-04	6.32E-04	1.31E-04	0.00E+00	5.28E-05	3.74E-05	1.42E-07	3.68E-06	151.5	1.54E-03	2.60E-03
SI3_E	0.50	303	0	1	4.71E-02	8.57E-03	8.27E-04	5.89E-04	5.21E-04	1.08E-04	0.00E+00	4.38E-05	3.10E-05	1.17E-07	3.06E-06	127.7	1.28E-03	2.15E-03
SI3_E	0.50	274	0	1	4.29E-02	8.63E-03	7.60E-04	5.32E-04	4.71E-04	9.83E-05	0.00E+00	3.97E-05	2.82E-05	1.06E-07	2.77E-06	117.4	1.16E-03	1.94E-03
SI3_E	0.50	309	0	1	4.89E-02	1.16E-02	8.84E-04	6.00E-04	5.31E-04	1.12E-04	0.00E+00	4.51E-05	3.20E-05	1.19E-07	3.15E-06	136.5	1.32E-03	2.19E-03
SI3_E	0.50	327	0	1	5.19E-02	1.27E-02	9.41E-04	6.34E-04	5.61E-04	1.18E-04	0.00E+00	4.78E-05	3.38E-05	1.26E-07	3.33E-06	145.3	1.39E-03	2.31E-03
SI3_E	0.50	332	0	1	5.29E-02	1.33E-02	9.62E-04	6.45E-04	5.71E-04	1.20E-04	0.00E+00	4.87E-05	3.45E-05	1.29E-07	3.40E-06	148.6	1.42E-03	2.36E-03
SI3_E	0.50	344	0	1	5.48E-02	1.42E-02	1.00E-03	6.68E-04	5.91E-04	1.25E-04	0.00E+00	5.04E-05	3.57E-05	1.33E-07	3.52E-06	154.5	1.47E-03	2.44E-03
SI3_E	0.50	373	0	1	5.94E-02	1.52E-02	1.08E-03	7.24E-04	6.42E-04	1.35E-04	0.00E+00	5.47E-05	3.87E-05	1.44E-07	3.82E-06	167.3	1.60E-03	2.64E-03
SI3_E	0.50	461	0	1	7.33E-02	1.87E-02	1.34E-03	8.94E-04	7.92E-04	1.67E-04	0.00E+00	6.75E-05	4.78E-05	1.78E-07	4.71E-06	206.3	1.97E-03	3.26E-03
SI3_E	0.50	496	0	1	7.87E-02	1.96E-02	1.43E-03	9.62E-04	8.52E-04	1.79E-04	0.00E+00	7.25E-05	5.14E-05	1.92E-07	5.06E-06	220.6	2.12E-03	3.51E-03
SI3_E	0.50	344	0	1	5.45E-02	1.32E-02	9.85E-04	6.68E-04	5.91E-04	1.24E-04	0.00E+00	5.03E-05	3.56E-05	1.33E-07	3.51E-06	152.1	1.47E-03	2.44E-03
SI3_E	0.50	227	0	1	3.57E-02	7.59E-03	6.35E-04	4.41E-04	3.91E-04	8.17E-05	0.00E+00	3.30E-05	2.34E-05	8.79E-08	2.30E-06	98.0	9.63E-04	1.61E-03
SI3_E	0.50	192	0	1	3.00E-02	5.74E-03	5.28E-04	3.74E-04	3.31E-04	6.89E-05	0.00E+00	2.78E-05	1.97E-05	7.44E-08	1.94E-06	81.5	8.12E-04	1.36E-03
SI3_E	0.50	163	0	1	2.53E-02	4.36E-03	4.41E-04	3.17E-04	2.81E-04	5.82E-05	0.00E+00	2.35E-05	1.67E-05	6.31E-08	1.64E-06	68.0	6.86E-04	1.16E-03
SI3_E	0.50	134	0	1	2.06E-02	3.20E-03	3.57E-04	2.60E-04	2.31E-04	4.76E-05	0.00E+00	1.93E-05	1.36E-05	5.19E-08	1.34E-06	55.1	5.62E-04	9.50E-04
SI3_E	0.50	99	0	1	1.52E-02	2.11E-03	2.60E-04	1.92E-04	1.70E-04	3.51E-05	0.00E+00	1.42E-05	1.01E-05	3.83E-08	9.90E-07	40.2	4.14E-04	7.02E-04
SI3_W	0.38	48	0	1	7.29E-03	8.97E-04	1.24E-04	9.29E-05	8.23E-05	1.69E-05	0.00E+00	6.83E-06	4.84E-06	1.85E-08	4.77E-07	19.1	1.99E-04	3.39E-04
SI3_W	0.38	32	0	1	4.84E-03	5.35E-04	8.17E-05	6.19E-05	5.49E-05	1.12E-05	0.00E+00	4.54E-06	3.22E-06	1.23E-08	3.17E-07	12.6	1.32E-04	2.26E-04
SI3_W	0.38	28	0	1	4.22E-03	4.17E-04	7.06E-05	5.42E-05	4.80E-05	9.81E-06	0.00E+00	3.96E-06	2.81E-06	1.08E-08	2.77E-07	10.9	1.16E-04	1.98E-04
SI3_W	0.38	20	0	1	3.01E-03	2.98E-04	5.01E-05	3.87E-05	3.43E-05	7.00E-06	0.00E+00	2.83E-06	2.00E-06	7.71E-09	1.97E-07	7.7	8.25E-05	1.41E-04
SI3_W	0.38	28	0	1	4.20E-03	4.17E-04	7.00E-05	5.42E-05	4.80E-05	9.79E-06	0.00E+00	3.96E-06	2.80E-06	1.08E-08	2.76E-07	10.8	1.15E-04	1.98E-04
SI3_W	0.38	68	0	1	1.02E-02	1.01E-03	1.70E-04	1.32E-04	1.17E-04	2.38E-05	0.00E+00	9.61E-06	6.81E-06	2.62E-08	6.70E-07	26.2	2.80E-04	4.80E-04
SI3_W	0.38	203	0	1	3.07E-02	3.04E-03	5.13E-04	3.95E-04	3.50E-04	7.14E-05	0.00E+00	2.89E-05	2.04E-05	7.86E-08	2.01E-06	79.2	8.42E-04	1.44E-03
SI3_W	0.38	311	0	1	4.74E-02	5.68E-03	8.04E-04	6.04E-04	5.35E-04	1.10E-04	0.00E+00	4.44E-05	3.14E-05	1.20E-07	3.10E-06	124.1	1.29E-03	2.20E-03
SI3_W	0.38	251	0	1	3.87E-02	6.12E-03	6.71E-04	4.88E-04	4.32E-04	8.94E-05	0.00E+00	3.61E-05	2.56E-05	9.71E-08	2.52E-06	103.6	1.05E-03	1.78E-03
SI3_W	0.38	207	0	1	3.22E-02	5.86E-03	5.66E-04	4.03E-04	3.57E-04	7.41E-05	0.00E+00	2.99E-05	2.12E-05	8.02E-08	2.09E-06	87.4	8.74E-04	1.47E-03
SI3_W	0.38	187	0	1	2.93E-02	5.90E-03	5.20E-04	3.64E-04	3.22E-04	6.73E-05	0.00E+00	2.72E-05	1.93E-05	7.25E-08	1.90E-06	80.3	7.93E-04	1.33E-03
SI3_W	0.38	211	0	1	3.35E-02	7.93E-03	6.04E-04	4.10E-04	3.63E-04	7.64E-05	0.00E+00	3.09E-05	2.19E-05	8.17E-08	2.15E-06	93.3	9.00E-04	1.50E-03
SI3_W	0.38	223	0	1	3.55E-02	8.71E-03	6.44E-04	4.34E-04	3.84E-04	8.09E-05	0.00E+00	3.27E-05	2.31E-05	8.64E-08	2.28E-06	99.4	9.53E-04	1.58E-03
SI3_W	0.38	227	0	1	3.62E-02	9.11E-03	6.58E-04	4.41E-04	3.91E-04	8.24E-05	0.00E+00	3.33E-05	2.36E-05	8.79E-08	2.32E-06	101.6	9.71E-04	1.61E-03
SI3_W	0.38	235	0	1	3.75E-02	9.68E-03	6.84E-04	4.57E-04	4.05E-04	8.54E-05	0.00E+00	3.45E-05	2.44E-05	9.10E-08	2.41E-06	105.7	1.01E-03	1.67E-03
SI3_W	0.38	255	0	1	4.06E-02	1.04E-02	7.41E-04	4.95E-04	4.39E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	9.87E-08	2.61E-06	114.4	1.09E-03	1.81E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	315	0	1	5.02E-02	1.28E-02	9.14E-04	6.12E-04	5.42E-04	1.14E-04	0.00E+00	4.62E-05	3.27E-05	1.22E-07	3.22E-06	141.1	1.35E-03	2.23E-03
SI3_W	0.38	339	0	1	5.38E-02	1.34E-02	9.77E-04	6.58E-04	5.83E-04	1.23E-04	0.00E+00	4.96E-05	3.51E-05	1.31E-07	3.46E-06	150.9	1.45E-03	2.40E-03
SI3_W	0.38	235	0	1	3.73E-02	9.02E-03	6.74E-04	4.57E-04	4.05E-04	8.51E-05	0.00E+00	3.44E-05	2.44E-05	9.10E-08	2.40E-06	104.0	1.00E-03	1.67E-03
SI3_W	0.38	156	0	1	2.44E-02	5.19E-03	4.34E-04	3.02E-04	2.67E-04	5.59E-05	0.00E+00	2.26E-05	1.60E-05	6.01E-08	1.58E-06	67.1	6.59E-04	1.10E-03
SI3_W	0.38	132	0	1	2.05E-02	3.92E-03	3.61E-04	2.55E-04	2.26E-04	4.71E-05	0.00E+00	1.90E-05	1.35E-05	5.09E-08	1.33E-06	55.7	5.55E-04	9.33E-04
SI3_W	0.38	112	0	1	1.73E-02	2.98E-03	3.01E-04	2.17E-04	1.92E-04	3.98E-05	0.00E+00	1.61E-05	1.14E-05	4.32E-08	1.12E-06	46.5	4.69E-04	7.91E-04
SI3_W	0.38	92	0	1	1.41E-02	2.19E-03	2.44E-04	1.78E-04	1.58E-04	3.26E-05	0.00E+00	1.32E-05	9.33E-06	3.55E-08	9.19E-07	37.7	3.84E-04	6.50E-04
SI3_W	0.38	68	0	1	1.04E-02	1.44E-03	1.78E-04	1.32E-04	1.17E-04	2.40E-05	0.00E+00	9.70E-06	6.88E-06	2.62E-08	6.77E-07	27.5	2.83E-04	4.80E-04
SI4_E	0.32	40	0	1	6.16E-03	7.58E-04	1.05E-04	7.85E-05	6.95E-05	1.43E-05	0.00E+00	5.77E-06	4.09E-06	1.56E-08	4.02E-07	16.1	1.68E-04	2.86E-04
SI4_E	0.32	27	0	1	4.09E-03	4.52E-04	6.90E-05	5.23E-05	4.63E-05	9.49E-06	0.00E+00	3.84E-06	2.72E-06	1.04E-08	2.68E-07	10.7	1.12E-04	1.91E-04
SI4_E	0.32	24	0	1	3.56E-03	3.52E-04	5.96E-05	4.58E-05	4.05E-05	8.28E-06	0.00E+00	3.35E-06	2.37E-06	9.11E-09	2.34E-07	9.2	9.76E-05	1.67E-04
SI4_E	0.32	17	0	1	2.54E-03	2.52E-04	4.23E-05	3.27E-05	2.89E-05	5.91E-06	0.00E+00	2.39E-06	1.69E-06	6.51E-09	1.67E-07	6.5	6.96E-05	1.19E-04
SI4_E	0.32	24	0	1	3.55E-03	3.52E-04	5.91E-05	4.58E-05	4.05E-05	8.27E-06	0.00E+00	3.34E-06	2.37E-06	9.11E-09	2.33E-07	9.1	9.74E-05	1.67E-04
SI4_E	0.32	57	0	1	8.62E-03	8.55E-04	1.44E-04	1.11E-04	9.84E-05	2.01E-05	0.00E+00	8.11E-06	5.75E-06	2.21E-08	5.66E-07	22.2	2.37E-04	4.06E-04
SI4_E	0.32	172	0	1	2.59E-02	2.57E-03	4.33E-04	3.33E-04	2.95E-04	6.03E-05	0.00E+00	2.44E-05	1.73E-05	6.64E-08	1.70E-06	66.9	7.11E-04	1.22E-03
SI4_E	0.32	263	0	1	4.00E-02	4.80E-03	6.79E-04	5.10E-04	4.52E-04	9.27E-05	0.00E+00	3.75E-05	2.65E-05	1.02E-07	2.61E-06	104.8	1.09E-03	1.86E-03
SI4_E	0.32	212	0	1	3.27E-02	5.17E-03	5.67E-04	4.12E-04	3.65E-04	7.55E-05	0.00E+00	3.05E-05	2.16E-05	8.20E-08	2.13E-06	87.5	8.90E-04	1.50E-03
SI4_E	0.32	175	0	1	2.72E-02	4.95E-03	4.78E-04	3.40E-04	3.01E-04	6.26E-05	0.00E+00	2.53E-05	1.79E-05	6.77E-08	1.76E-06	73.8	7.38E-04	1.24E-03
SI4_E	0.32	158	0	1	2.48E-02	4.98E-03	4.39E-04	3.07E-04	2.72E-04	5.68E-05	0.00E+00	2.29E-05	1.63E-05	6.12E-08	1.60E-06	67.8	6.69E-04	1.12E-03
SI4_E	0.32	178	0	1	2.83E-02	6.70E-03	5.10E-04	3.47E-04	3.07E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	6.90E-08	1.82E-06	78.8	7.60E-04	1.26E-03
SI4_E	0.32	189	0	1	2.99E-02	7.36E-03	5.44E-04	3.66E-04	3.24E-04	6.83E-05	0.00E+00	2.76E-05	1.95E-05	7.29E-08	1.93E-06	83.9	8.05E-04	1.34E-03
SI4_E	0.32	192	0	1	3.05E-02	7.69E-03	5.56E-04	3.73E-04	3.30E-04	6.96E-05	0.00E+00	2.81E-05	1.99E-05	7.42E-08	1.96E-06	85.8	8.20E-04	1.36E-03
SI4_E	0.32	199	0	1	3.17E-02	8.18E-03	5.78E-04	3.86E-04	3.42E-04	7.21E-05	0.00E+00	2.91E-05	2.06E-05	7.68E-08	2.03E-06	89.2	8.50E-04	1.41E-03
SI4_E	0.32	216	0	1	3.43E-02	8.79E-03	6.26E-04	4.18E-04	3.71E-04	7.82E-05	0.00E+00	3.16E-05	2.24E-05	8.33E-08	2.20E-06	96.6	9.21E-04	1.53E-03
SI4_E	0.32	266	0	1	4.24E-02	1.08E-02	7.72E-04	5.16E-04	4.57E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.03E-07	2.72E-06	119.2	1.14E-03	1.89E-03
SI4_E	0.32	286	0	1	4.55E-02	1.13E-02	8.25E-04	5.56E-04	4.92E-04	1.04E-04	0.00E+00	4.19E-05	2.97E-05	1.11E-07	2.92E-06	127.4	1.22E-03	2.03E-03
SI4_E	0.32	199	0	1	3.15E-02	7.62E-03	5.69E-04	3.86E-04	3.42E-04	7.18E-05	0.00E+00	2.90E-05	2.06E-05	7.68E-08	2.03E-06	87.8	8.47E-04	1.41E-03
SI4_E	0.32	131	0	1	2.06E-02	4.38E-03	3.67E-04	2.55E-04	2.26E-04	4.72E-05	0.00E+00	1.91E-05	1.35E-05	5.08E-08	1.33E-06	56.6	5.56E-04	9.31E-04
SI4_E	0.32	111	0	1	1.73E-02	3.31E-03	3.05E-04	2.16E-04	1.91E-04	3.98E-05	0.00E+00	1.61E-05	1.14E-05	4.30E-08	1.12E-06	47.1	4.69E-04	7.88E-04
SI4_E	0.32	94	0	1	1.46E-02	2.52E-03	2.54E-04	1.83E-04	1.62E-04	3.36E-05	0.00E+00	1.36E-05	9.62E-06	3.65E-08	9.48E-07	39.3	3.96E-04	6.68E-04
SI4_E	0.32	77	0	1	1.19E-02	1.85E-03	2.06E-04	1.50E-04	1.33E-04	2.75E-05	0.00E+00	1.11E-05	7.88E-06	2.99E-08	7.76E-07	31.8	3.24E-04	5.49E-04
SI4_E	0.32	57	0	1	8.77E-03	1.22E-03	1.50E-04	1.11E-04	9.84E-05	2.03E-05	0.00E+00	8.19E-06	5.81E-06	2.21E-08	5.72E-07	23.2	2.39E-04	4.06E-04
SI4_W	0.32	38	0	1	5.85E-03	7.20E-04	9.94E-05	7.45E-05	6.60E-05	1.36E-05	0.00E+00	5.48E-06	3.88E-06	1.48E-08	3.82E-07	15.3	1.60E-04	2.72E-04
SI4_W	0.32	26	0	1	3.89E-03	4.29E-04	6.55E-05	4.97E-05	4.40E-05	9.02E-06	0.00E+00	3.64E-06	2.58E-06	9.90E-09	2.54E-07	10.1	1.06E-04	1.81E-04
SI4_W	0.32	22	0	1	3.38E-03	3.35E-04	5.67E-05	4.35E-05	3.85E-05	7.87E-06	0.00E+00	3.18E-06	2.25E-06	8.66E-09	2.22E-07	8.7	9.28E-05	1.59E-04
SI4_W	0.32	16	0	1	2.41E-03	2.39E-04	4.02E-05	3.11E-05	2.75E-05	5.61E-06	0.00E+00	2.27E-06	1.61E-06	6.19E-09	1.58E-07	6.2	6.62E-05	1.13E-04
SI4_W	0.32	22	0	1	3.37E-03	3.35E-04	5.61E-05	4.35E-05	3.85E-05	7.85E-06	0.00E+00	3.17E-06	2.25E-06	8.66E-09	2.22E-07	8.7	9.26E-05	1.59E-04
SI4_W	0.32	54	0	1	8.19E-03	8.13E-04	1.36E-04	1.06E-04	9.35E-05	1.91E-05	0.00E+00	7.71E-06	5.46E-06	2.10E-08	5.38E-07	21.1	2.25E-04	3.86E-04
SI4_W	0.32	163	0	1	2.46E-02	2.44E-03	4.12E-04	3.17E-04	2.81E-04	5.73E-05	0.00E+00	2.32E-05	1.64E-05	6.31E-08	1.62E-06	63.5	6.75E-04	1.16E-03
SI4_W	0.32	250	0	1	3.80E-02	4.56E-03	6.45E-04	4.85E-04	4.29E-04	8.81E-05	0.00E+00	3.56E-05	2.52E-05	9.65E-08	2.48E-06	99.6	1.04E-03	1.77E-03
SI4_W	0.32	202	0	1	3.11E-02	4.91E-03	5.38E-04	3.91E-04	3.47E-04	7.17E-05	0.00E+00	2.90E-05	2.05E-05	7.79E-08	2.02E-06	83.1	8.45E-04	1.43E-03
SI4_W	0.32	166	0	1	2.59E-02	4.70E-03	4.54E-04	3.23E-04	2.86E-04	5.95E-05	0.00E+00	2.40E-05	1.70E-05	6.43E-08	1.68E-06	70.1	7.01E-04	1.18E-03
SI4_W	0.32	150	0	1	2.35E-02	4.74E-03	4.17E-04	2.92E-04	2.59E-04	5.40E-05	0.00E+00	2.18E-05	1.54E-05	5.82E-08	1.52E-06	64.4	6.36E-04	1.07E-03
SI4_W	0.32	170	0	1	2.68E-02	6.36E-03	4.85E-04	3.29E-04	2.92E-04	6.13E-05	0.00E+00	2.48E-05	1.75E-05	6.56E-08	1.73E-06	74.9	7.22E-04	1.20E-03
SI4_W	0.32	179	0	1	2.85E-02	6.99E-03	5.16E-04	3.48E-04	3.08E-04	6.49E-05	0.00E+00	2.62E-05	1.86E-05	6.93E-08	1.83E-06	79.7	7.65E-04	1.27E-03
SI4_W	0.32	182	0	1	2.90E-02	7.31E-03	5.28E-04	3.54E-04	3.14E-04	6.61E-05	0.00E+00	2.67E-05	1.89E-05	7.05E-08	1.86E-06	81.5	7.79E-04	1.29E-03
SI4_W	0.32	189	0	1	3.01E-02	7.77E-03	5.49E-04	3.67E-04	3.25E-04	6.85E-05	0.00E+00	2.77E-05	1.96E-05	7.30E-08	1.93E-06	84.8	8.08E-04	1.34E-03
SI4_W	0.32	205	0	1	3.26E-02	8.35E-03	5.95E-04	3.98E-04	3.52E-04	7.43E-05	0.00E+00	3.00E-05	2.13E-05	7.92E-08	2.09E-06	91.8	8.76E-04	1.45E-03
SI4_W	0.32	253	0	1	4.02E-02	1.03E-02	7.33E-04	4.91E-04	4.35E-04	9.17E-05	0.00E+00	3.70E-05	2.62E-05	9.77E-08	2.58E-06	113.2	1.08E-03	1.79E-03
SI4_W	0.32	272	0	1	4.32E-02	1.08E-02	7.84E-04	5.28E-04	4.68E-04	9.85E-05	0.00E+00	3.98E-05	2.82E-05	1.05E-07	2.78E-06	121.1	1.16E-03	1.93E-03
SI4_W	0.32	189	0	1	2.99E-02	7.24E-03	5.41E-04	3.67E-04	3.25E-04	6.82E-05	0.00E+00	2.76E-05	1.95E-05	7.30E-08	1.92E-06	83.5	8.04E-04	1.34E-03
SI4_W	0.32	125	0	1	1.96E-02	4.16E-03	3.48E-04	2.42E-04	2.15E-04	4.48E-05	0.00E+00	1.81E-05	1.28E-05	4.83E-08	1.26E-06	53.8	5.29E-04	8.84E-04
SI4_W	0.32	106	0	1	1.64E-02	3.15E-03	2.90E-04	2.05E-04	1.82E-04	3.78E-05	0.00E+00	1.53E-05	1.08E-05	4.08E-08	1.07E-06	44.7	4.45E-04	7.48E-04
SI4_W	0.32	90	0	1	1.39E-02	2.39E-03	2.42E-04	1.74E-04	1.54E-04	3.19E-05	0.00E+00	1.29E-05	9.14E-06	3.46E-08	9.01E-07	37.3	3.77E-04	6.35E-04
SI4_W	0.32	74	0	1	1.13E-02	1.76E-03	1.96E-04	1.43E-04	1.27E-04	2.61E-05	0.00E+00	1.06E-05	7.49E-06	2.85E-08	7.37E-07	30.2	3.08E-04	5.22E-04
SI4_W	0.32	54	0	1	8.33E-03	1.16E-03	1.43E-04	1.06E-04	9.35E-05	1.93E-05	0.00E+00	7.79E-06	5.52E-06	2.10E-08	5.43E-07	22.0	2.27E-04	3.86E-04
SI5_E	0.58	71	0	1	1.08E-02	1.33E-03	1.83E-04	1.37E-04	1.22E-04	2.50E-05	0.00E+00	1.01E-05	7.15E-06	2.73E-08	7.04E-07	28.3	2.94E-04	5.01E-04
SI5_E	0.58	47	0	1	7.16E-03	7.91E-04	1.21E-04	9.15E-05	8.11E-05	1.66E-05	0.00E+00	6.71E-06	4.76E-06	1.82E-08	4.68E-07	18.6	1.96E-04	3.34E-04
SI5_E	0.58	41	0	1	6.24E-03	6.16E-04	1.04E-04	8.01E-05	7.09E-05	1.45E-05	0.00E+00	5.86E-06	4.15E-06	1.60E-08	4.09E-07	16.1	1.71E-04	2.92E-04
SI5_E	0.58	29	0	1	4.44E-03	4.40E-04	7.41E-05	5.72E-05	5.07E-05	1.03E-05	0.00E+00	4.18E-06	2.96E-06	1.14E-08	2.92E-07	11.4	1.22E-04	2.09E-04
SI5_E	0.58	41	0	1	6.21E-03	6.16E-04	1.03E-04	8.01E-05	7.09E-05	1.45E-05	0.00E+00	5.85E-06	4.14E-06	1.60E-08	4.08E-07	16.0	1.71E-04	2.92E-04
SI5_E	0.58	100	0	1	1.51E-02	1.50E-03	2.51E-04	1.95E-04	1.72E-04	3.51E-05	0.00E+00	1.42E-05	1.01E-05	3.87E-08	9.91E-07	38.8	4.14E-04	7.10E-04
SI5_E	0.58	301	0	1	4.54E-02	4.49E-03	7.58E-04	5.84E-04	5.17E-04	1.06E-04	0.00E+00	4.27E-05	3.02E-05	1.16E-07	2.98E-06	117.1	1.24E-03	2.13E-03
SI5_E	0.58	460	0	1	7.00E-02	8.39E-03	1.19E-03	8.93E-04	7.90E-04	1.62E-04	0.00E+00	6.56E-05	4.65E-05	1.78E-07	4.58E-06	183.4	1.91E-03	3.26E-03
SI5_E	0.58	371	0	1	5.73E-02	9.04E-03	9.92E-04	7.21E-04	6.38E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.44E-07	3.72E-06	153.2	1.56E-03	2.63E-03
SI5_E	0.58	307	0	1	4.76E-02	8.67E-03	8.36E-04	5.95E-04	5.27E-04	1.10E-04	0.00E+00	4.43E-05	3.14E-05	1.19E-07	3.09E-06	129.1	1.29E-03	2.17E-03
SI5_E	0.58	277	0	1	4.33E-02	8.73E-03	7.69E-04	5.38E-04	4.76E-04	9.94E-05	0.00E+00	4.02E-05	2.85E-05	1.07E-07	2.80E-06	118.7	1.17E-03	1.96E-03
SI5_E	0.58	312	0	1	4.95E-02	1.17E-02	8.93E-04	6.06E-04	5.37E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.21E-07	3.18E-06	137.9	1.33E-03	2.21E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	330	0	1	5.24E-02	1.29E-02	9.51E-04	6.41E-04	5.68E-04	1.20E-04	0.00E+00	4.83E-05	3.42E-05	1.28E-07	3.37E-06	146.9	1.41E-03	2.34E-03
SI5_E	0.58	336	0	1	5.35E-02	1.35E-02	9.73E-04	6.52E-04	5.78E-04	1.22E-04	0.00E+00	4.92E-05	3.49E-05	1.30E-07	3.43E-06	150.2	1.44E-03	2.38E-03
SI5_E	0.58	348	0	1	5.54E-02	1.43E-02	1.01E-03	6.75E-04	5.98E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.34E-07	3.56E-06	156.2	1.49E-03	2.46E-03
SI5_E	0.58	377	0	1	6.01E-02	1.54E-02	1.10E-03	7.32E-04	6.49E-04	1.37E-04	0.00E+00	5.53E-05	3.92E-05	1.46E-07	3.86E-06	169.1	1.61E-03	2.67E-03
SI5_E	0.58	466	0	1	7.41E-02	1.90E-02	1.35E-03	9.04E-04	8.01E-04	1.69E-04	0.00E+00	6.82E-05	4.83E-05	1.80E-07	4.76E-06	208.6	1.99E-03	3.30E-03
SI5_E	0.58	501	0	1	7.96E-02	1.98E-02	1.44E-03	9.73E-04	8.61E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	1.94E-07	5.12E-06	223.1	2.14E-03	3.55E-03
SI5_E	0.58	348	0	1	5.51E-02	1.33E-02	9.96E-04	6.75E-04	5.98E-04	1.26E-04	0.00E+00	5.08E-05	3.60E-05	1.34E-07	3.54E-06	153.8	1.48E-03	2.46E-03
SI5_E	0.58	230	0	1	3.61E-02	7.67E-03	6.42E-04	4.46E-04	3.95E-04	8.26E-05	0.00E+00	3.34E-05	2.36E-05	8.89E-08	2.33E-06	99.1	9.74E-04	1.63E-03
SI5_E	0.58	195	0	1	3.03E-02	5.80E-03	5.34E-04	3.78E-04	3.34E-04	6.96E-05	0.00E+00	2.81E-05	1.99E-05	7.52E-08	1.96E-06	82.4	8.21E-04	1.38E-03
SI5_E	0.58	165	0	1	2.55E-02	4.41E-03	4.45E-04	3.20E-04	2.84E-04	5.88E-05	0.00E+00	2.38E-05	1.68E-05	6.38E-08	1.66E-06	68.8	6.94E-04	1.17E-03
SI5_E	0.58	136	0	1	2.09E-02	3.24E-03	3.60E-04	2.63E-04	2.33E-04	4.82E-05	0.00E+00	1.95E-05	1.38E-05	5.24E-08	1.36E-06	55.7	5.68E-04	9.61E-04
SI5_E	0.58	100	0	1	1.53E-02	2.13E-03	2.63E-04	1.95E-04	1.72E-04	3.55E-05	0.00E+00	1.43E-05	1.02E-05	3.87E-08	1.00E-06	40.6	4.18E-04	7.10E-04
SI5_W	0.59	63	0	1	9.53E-03	1.17E-03	1.62E-04	1.21E-04	1.08E-04	2.21E-05	0.00E+00	8.92E-06	6.32E-06	2.42E-08	6.23E-07	25.0	2.60E-04	4.43E-04
SI5_W	0.59	42	0	1	6.33E-03	6.99E-04	1.07E-04	8.09E-05	7.17E-05	1.47E-05	0.00E+00	5.94E-06	4.21E-06	1.61E-08	4.14E-07	16.5	1.73E-04	2.95E-04
SI5_W	0.59	36	0	1	5.51E-03	5.45E-04	9.23E-05	7.08E-05	6.27E-05	1.28E-05	0.00E+00	5.18E-06	3.67E-06	1.41E-08	3.61E-07	14.2	1.51E-04	2.59E-04
SI5_W	0.59	26	0	1	3.93E-03	3.89E-04	6.55E-05	5.06E-05	4.48E-05	9.14E-06	0.00E+00	3.69E-06	2.62E-06	1.01E-08	2.58E-07	10.1	1.08E-04	1.85E-04
SI5_W	0.59	36	0	1	5.49E-03	5.45E-04	9.14E-05	7.08E-05	6.27E-05	1.28E-05	0.00E+00	5.17E-06	3.66E-06	1.41E-08	3.61E-07	14.1	1.51E-04	2.59E-04
SI5_W	0.59	89	0	1	1.33E-02	1.32E-03	2.22E-04	1.72E-04	1.52E-04	3.11E-05	0.00E+00	1.26E-05	8.90E-06	3.43E-08	8.76E-07	34.3	3.66E-04	6.28E-04
SI5_W	0.59	266	0	1	4.01E-02	3.97E-03	6.70E-04	5.16E-04	4.57E-04	9.33E-05	0.00E+00	3.77E-05	2.67E-05	1.03E-07	2.63E-06	103.5	1.10E-03	1.88E-03
SI5_W	0.59	407	0	1	6.19E-02	7.42E-03	1.05E-03	7.89E-04	6.99E-04	1.43E-04	0.00E+00	5.80E-05	4.11E-05	1.57E-07	4.05E-06	162.2	1.69E-03	2.88E-03
SI5_W	0.59	328	0	1	5.06E-02	8.00E-03	8.77E-04	6.37E-04	5.64E-04	1.17E-04	0.00E+00	4.72E-05	3.34E-05	1.27E-07	3.29E-06	135.4	1.38E-03	2.33E-03
SI5_W	0.59	271	0	1	4.21E-02	7.66E-03	7.39E-04	5.26E-04	4.66E-04	9.68E-05	0.00E+00	3.91E-05	2.77E-05	1.05E-07	2.73E-06	114.1	1.14E-03	1.92E-03
SI5_W	0.59	245	0	1	3.83E-02	7.71E-03	6.80E-04	4.76E-04	4.21E-04	8.79E-05	0.00E+00	3.55E-05	2.52E-05	9.47E-08	2.48E-06	104.9	1.04E-03	1.74E-03
SI5_W	0.59	276	0	1	4.37E-02	1.04E-02	7.90E-04	5.36E-04	4.75E-04	9.98E-05	0.00E+00	4.03E-05	2.86E-05	1.07E-07	2.81E-06	122.0	1.18E-03	1.96E-03
SI5_W	0.59	292	0	1	4.63E-02	1.14E-02	8.41E-04	5.67E-04	5.02E-04	1.06E-04	0.00E+00	4.27E-05	3.03E-05	1.13E-07	2.98E-06	129.9	1.25E-03	2.07E-03
SI5_W	0.59	297	0	1	4.73E-02	1.19E-02	8.60E-04	5.77E-04	5.11E-04	1.08E-04	0.00E+00	4.35E-05	3.08E-05	1.15E-07	3.04E-06	132.8	1.27E-03	2.11E-03
SI5_W	0.59	307	0	1	4.90E-02	1.27E-02	8.94E-04	5.97E-04	5.29E-04	1.12E-04	0.00E+00	4.51E-05	3.19E-05	1.19E-07	3.15E-06	138.1	1.32E-03	2.18E-03
SI5_W	0.59	334	0	1	5.31E-02	1.36E-02	9.68E-04	6.47E-04	5.73E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.29E-07	3.41E-06	149.5	1.43E-03	2.36E-03
SI5_W	0.59	412	0	1	6.55E-02	1.68E-02	1.19E-03	7.99E-04	7.08E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.59E-07	4.21E-06	184.4	1.76E-03	2.92E-03
SI5_W	0.59	443	0	1	7.04E-02	1.75E-02	1.28E-03	8.60E-04	7.62E-04	1.60E-04	0.00E+00	6.48E-05	4.59E-05	1.71E-07	4.52E-06	197.2	1.89E-03	3.14E-03
SI5_W	0.59	307	0	1	4.87E-02	1.18E-02	8.80E-04	5.97E-04	5.29E-04	1.11E-04	0.00E+00	4.49E-05	3.18E-05	1.19E-07	3.13E-06	135.9	1.31E-03	2.18E-03
SI5_W	0.59	203	0	1	3.19E-02	6.78E-03	5.67E-04	3.95E-04	3.49E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.86E-08	2.06E-06	87.6	8.61E-04	1.44E-03
SI5_W	0.59	172	0	1	2.68E-02	5.13E-03	4.72E-04	3.34E-04	2.96E-04	6.15E-05	0.00E+00	2.49E-05	1.76E-05	6.65E-08	1.74E-06	72.8	7.25E-04	1.22E-03
SI5_W	0.59	146	0	1	2.26E-02	3.90E-03	3.94E-04	2.83E-04	2.51E-04	5.20E-05	0.00E+00	2.10E-05	1.49E-05	5.64E-08	1.47E-06	60.8	6.13E-04	1.03E-03
SI5_W	0.59	120	0	1	1.85E-02	2.86E-03	3.19E-04	2.33E-04	2.06E-04	4.26E-05	0.00E+00	1.72E-05	1.22E-05	4.63E-08	1.20E-06	49.2	5.02E-04	8.49E-04
SI5_W	0.59	89	0	1	1.36E-02	1.89E-03	2.32E-04	1.72E-04	1.52E-04	3.14E-05	0.00E+00	1.27E-05	8.99E-06	3.43E-08	8.85E-07	35.9	3.70E-04	6.28E-04
SI6_E	0.43	46	0	1	6.98E-03	8.59E-04	1.19E-04	8.89E-05	7.87E-05	1.62E-05	0.00E+00	6.54E-06	4.63E-06	1.77E-08	4.56E-07	18.3	1.91E-04	3.25E-04
SI6_E	0.43	31	0	1	4.63E-03	5.12E-04	7.82E-05	5.93E-05	5.25E-05	1.08E-05	0.00E+00	4.35E-06	3.08E-06	1.18E-08	3.03E-07	12.1	1.27E-04	2.16E-04
SI6_E	0.43	27	0	1	4.04E-03	3.99E-04	6.76E-05	5.19E-05	4.59E-05	9.39E-06	0.00E+00	3.79E-06	2.69E-06	1.03E-08	2.65E-07	10.4	1.11E-04	1.89E-04
SI6_E	0.43	19	0	1	2.88E-03	2.85E-04	4.80E-05	3.70E-05	3.28E-05	6.70E-06	0.00E+00	2.71E-06	1.92E-06	7.38E-09	1.89E-07	7.4	7.89E-05	1.35E-04
SI6_E	0.43	27	0	1	4.02E-03	3.99E-04	6.70E-05	5.19E-05	4.59E-05	9.37E-06	0.00E+00	3.79E-06	2.68E-06	1.03E-08	2.64E-07	10.3	1.10E-04	1.89E-04
SI6_E	0.43	65	0	1	9.77E-03	9.69E-04	1.63E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.19E-06	6.51E-06	2.51E-08	6.42E-07	25.1	2.68E-04	4.60E-04
SI6_E	0.43	195	0	1	2.94E-02	2.91E-03	4.91E-04	3.78E-04	3.35E-04	6.83E-05	0.00E+00	2.76E-05	1.96E-05	7.53E-08	1.93E-06	75.8	8.06E-04	1.38E-03
SI6_E	0.43	298	0	1	4.53E-02	5.43E-03	7.69E-04	5.78E-04	5.12E-04	1.05E-04	0.00E+00	4.25E-05	3.01E-05	1.15E-07	2.96E-06	118.8	1.24E-03	2.11E-03
SI6_E	0.43	240	0	1	3.71E-02	5.86E-03	6.42E-04	4.67E-04	4.13E-04	8.55E-05	0.00E+00	3.46E-05	2.45E-05	9.30E-08	2.41E-06	99.2	1.01E-03	1.70E-03
SI6_E	0.43	198	0	1	3.09E-02	5.61E-03	5.41E-04	3.85E-04	3.41E-04	7.09E-05	0.00E+00	2.87E-05	2.03E-05	7.67E-08	2.00E-06	83.6	8.36E-04	1.41E-03
SI6_E	0.43	179	0	1	2.81E-02	5.65E-03	4.98E-04	3.48E-04	3.08E-04	6.44E-05	0.00E+00	2.60E-05	1.84E-05	6.94E-08	1.81E-06	76.9	7.59E-04	1.27E-03
SI6_E	0.43	202	0	1	3.20E-02	7.59E-03	5.78E-04	3.93E-04	3.48E-04	7.31E-05	0.00E+00	2.95E-05	2.09E-05	7.82E-08	2.06E-06	89.3	8.62E-04	1.43E-03
SI6_E	0.43	214	0	1	3.39E-02	8.34E-03	6.16E-04	4.15E-04	3.67E-04	7.74E-05	0.00E+00	3.13E-05	2.22E-05	8.26E-08	2.18E-06	95.1	9.12E-04	1.51E-03
SI6_E	0.43	218	0	1	3.46E-02	8.72E-03	6.30E-04	4.22E-04	3.74E-04	7.89E-05	0.00E+00	3.19E-05	2.26E-05	8.41E-08	2.22E-06	97.3	9.30E-04	1.54E-03
SI6_E	0.43	225	0	1	3.59E-02	9.27E-03	6.55E-04	4.37E-04	3.87E-04	8.17E-05	0.00E+00	3.30E-05	2.34E-05	8.71E-08	2.30E-06	101.1	9.63E-04	1.60E-03
SI6_E	0.43	244	0	1	3.89E-02	9.96E-03	7.09E-04	4.74E-04	4.20E-04	8.86E-05	0.00E+00	3.58E-05	2.54E-05	9.45E-08	2.50E-06	109.5	1.04E-03	1.73E-03
SI6_E	0.43	302	0	1	4.80E-02	1.23E-02	8.75E-04	5.85E-04	5.18E-04	1.09E-04	0.00E+00	4.42E-05	3.13E-05	1.17E-07	3.08E-06	135.0	1.29E-03	2.14E-03
SI6_E	0.43	324	0	1	5.15E-02	1.28E-02	9.35E-04	6.30E-04	5.58E-04	1.17E-04	0.00E+00	4.75E-05	3.36E-05	1.25E-07	3.31E-06	144.4	1.38E-03	2.30E-03
SI6_E	0.43	225	0	1	3.57E-02	8.63E-03	6.45E-04	4.37E-04	3.87E-04	8.14E-05	0.00E+00	3.29E-05	2.33E-05	8.71E-08	2.30E-06	99.6	9.60E-04	1.60E-03
SI6_E	0.43	149	0	1	2.33E-02	4.97E-03	4.16E-04	2.89E-04	2.56E-04	5.35E-05	0.00E+00	2.16E-05	1.53E-05	5.76E-08	1.51E-06	64.2	6.31E-04	1.05E-03
SI6_E	0.43	126	0	1	1.96E-02	3.76E-03	3.45E-04	2.45E-04	2.17E-04	4.51E-05	0.00E+00	1.82E-05	1.29E-05	4.87E-08	1.27E-06	53.3	5.31E-04	8.93E-04
SI6_E	0.43	107	0	1	1.65E-02	2.85E-03	2.88E-04	2.07E-04	1.84E-04	3.81E-05	0.00E+00	1.54E-05	1.09E-05	4.13E-08	1.07E-06	44.5	4.49E-04	7.57E-04
SI6_E	0.43	88	0	1	1.35E-02	2.10E-03	2.33E-04	1.70E-04	1.51E-04	3.12E-05	0.00E+00	1.26E-05	8.93E-06	3.39E-08	8.80E-07	36.0	3.68E-04	6.22E-04
SI6_E	0.43	65	0	1	9.94E-03	1.38E-03	1.70E-04	1.26E-04	1.12E-04	2.30E-05	0.00E+00	9.29E-06	6.58E-06	2.51E-08	6.48E-07	26.3	2.71E-04	4.60E-04
SI6_W	0.43	53	0	1	8.14E-03	1.00E-03	1.38E-04	1.04E-04	9.18E-05	1.89E-05	0.00E+00	7.62E-06	5.40E-06	2.06E-08	5.32E-07	21.3	2.22E-04	3.78E-04
SI6_W	0.43	36	0	1	5.40E-03	5.97E-04	9.11E-05	6.91E-05	6.12E-05	1.25E-05	0.00E+00	5.07E-06	3.59E-06	1.38E-08	3.54E-07	14.1	1.48E-04	2.52E-04
SI6_W	0.43	31	0	1	4.71E-03	4.65E-04	7.88E-05	6.05E-05	5.35E-05	1.09E-05	0.00E+00	4.42E-06	3.13E-06	1.20E-08	3.09E-07	12.2	1.29E-04	2.21E-04
SI6_W	0.43	22	0	1	3.35E-03	3.32E-04	5.59E-05	4.32E-05	3.82E-05	7.80E-06	0.00E+00	3.15E-06	2.23E-06	8.60E-09	2.20E-07	8.6	9.20E-05	1.58E-04
SI6_W	0.43	31	0	1	4.69E-03	4.65E-04	7.81E-05	6.05E-05	5.35E-05	1.09E-05	0.00E+00	4.41E-06	3.13E-06	1.20E-08	3.08E-07	12.1	1.29E-04	2.21E-04
SI6_W	0.43	76	0	1	1.14E-02	1.13E-03	1.90E-04	1.47E-04	1.30E-04	2.65E-05	0.00E+00	1.07E-05	7.59E-06	2.92E-08	7.48E-07	29.3	3.13E-04	5.36E-04
SI6_W	0.43	227	0	1	3.42E-02	3.39E-03	5.72E-04	4.40E-04	3.90E-04	7.97E-05	0.00E+00	3.22E-05	2.28E-05	8.77E-08	2.25E-06	88.3	9.39E-04	1.61E-03
SI6_W	0.43	347	0	1	5.28E-02	6.33E-03	8.96E-04	6.74E-04	5.97E-04	1.22E-04	0.00E+00	4.95E-05	3.51E-05	1.34E-07	3.45E-06	138.4	1.44E-03	2.46E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	280	0	1	4.32E-02	6.82E-03	7.49E-04	5.44E-04	4.82E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.08E-07	2.81E-06	115.6	1.17E-03	1.99E-03
SI6_W	0.43	231	0	1	3.60E-02	6.54E-03	6.31E-04	4.49E-04	3.98E-04	8.27E-05	0.00E+00	3.34E-05	2.37E-05	8.94E-08	2.33E-06	97.4	9.75E-04	1.64E-03
SI6_W	0.43	209	0	1	3.27E-02	6.58E-03	5.80E-04	4.06E-04	3.59E-04	7.50E-05	0.00E+00	3.03E-05	2.15E-05	8.08E-08	2.12E-06	89.6	8.84E-04	1.48E-03
SI6_W	0.43	236	0	1	3.73E-02	8.84E-03	6.74E-04	4.58E-04	4.05E-04	8.52E-05	0.00E+00	3.44E-05	2.44E-05	9.12E-08	2.40E-06	104.1	1.00E-03	1.67E-03
SI6_W	0.43	249	0	1	3.96E-02	9.72E-03	7.18E-04	4.84E-04	4.28E-04	9.02E-05	0.00E+00	3.64E-05	2.58E-05	9.63E-08	2.54E-06	110.9	1.06E-03	1.77E-03
SI6_W	0.43	254	0	1	4.03E-02	1.02E-02	7.34E-04	4.92E-04	4.36E-04	9.19E-05	0.00E+00	3.71E-05	2.63E-05	9.80E-08	2.59E-06	113.3	1.08E-03	1.80E-03
SI6_W	0.43	262	0	1	4.18E-02	1.08E-02	7.63E-04	5.10E-04	4.51E-04	9.52E-05	0.00E+00	3.85E-05	2.73E-05	1.01E-07	2.69E-06	117.9	1.12E-03	1.86E-03
SI6_W	0.43	285	0	1	4.53E-02	1.16E-02	8.27E-04	5.53E-04	4.89E-04	1.03E-04	0.00E+00	4.17E-05	2.96E-05	1.10E-07	2.91E-06	127.6	1.22E-03	2.02E-03
SI6_W	0.43	351	0	1	5.60E-02	1.43E-02	1.02E-03	6.82E-04	6.04E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.36E-07	3.59E-06	157.4	1.50E-03	2.49E-03
SI6_W	0.43	378	0	1	6.01E-02	1.50E-02	1.09E-03	7.34E-04	6.50E-04	1.37E-04	0.00E+00	5.53E-05	3.92E-05	1.46E-07	3.86E-06	168.3	1.61E-03	2.68E-03
SI6_W	0.43	262	0	1	4.16E-02	1.01E-02	7.51E-04	5.10E-04	4.51E-04	9.49E-05	0.00E+00	3.83E-05	2.72E-05	1.01E-07	2.68E-06	116.0	1.12E-03	1.86E-03
SI6_W	0.43	174	0	1	2.72E-02	5.79E-03	4.84E-04	3.37E-04	2.98E-04	6.23E-05	0.00E+00	2.52E-05	1.78E-05	6.71E-08	1.76E-06	74.8	7.35E-04	1.23E-03
SI6_W	0.43	147	0	1	2.29E-02	4.38E-03	4.03E-04	2.85E-04	2.52E-04	5.25E-05	0.00E+00	2.12E-05	1.50E-05	5.68E-08	1.48E-06	62.2	6.19E-04	1.04E-03
SI6_W	0.43	125	0	1	1.93E-02	3.33E-03	3.36E-04	2.42E-04	2.14E-04	4.44E-05	0.00E+00	1.79E-05	1.27E-05	4.82E-08	1.25E-06	51.9	5.23E-04	8.83E-04
SI6_W	0.43	102	0	1	1.58E-02	2.44E-03	2.72E-04	1.99E-04	1.76E-04	3.64E-05	0.00E+00	1.47E-05	1.04E-05	3.96E-08	1.03E-06	42.0	4.29E-04	7.25E-04
SI6_W	0.43	76	0	1	1.16E-02	1.61E-03	1.98E-04	1.47E-04	1.30E-04	2.68E-05	0.00E+00	1.08E-05	7.67E-06	2.92E-08	7.55E-07	30.6	3.16E-04	5.36E-04
SI7_E	0.47	57	0	1	8.76E-03	1.08E-03	1.49E-04	1.12E-04	9.88E-05	2.03E-05	0.00E+00	8.20E-06	5.81E-06	2.22E-08	5.72E-07	23.0	2.39E-04	4.07E-04
SI7_E	0.47	38	0	1	5.82E-03	6.43E-04	9.81E-05	7.44E-05	6.59E-05	1.35E-05	0.00E+00	5.46E-06	3.87E-06	1.48E-08	3.81E-07	15.2	1.59E-04	2.72E-04
SI7_E	0.47	34	0	1	5.07E-03	5.01E-04	8.48E-05	6.51E-05	5.77E-05	1.18E-05	0.00E+00	4.76E-06	3.37E-06	1.30E-08	3.32E-07	13.1	1.39E-04	2.38E-04
SI7_E	0.47	24	0	1	3.61E-03	3.58E-04	6.02E-05	4.65E-05	4.12E-05	8.40E-06	0.00E+00	3.40E-06	2.41E-06	9.26E-09	2.37E-07	9.3	9.91E-05	1.70E-04
SI7_E	0.47	34	0	1	5.05E-03	5.01E-04	8.41E-05	6.51E-05	5.77E-05	1.18E-05	0.00E+00	4.75E-06	3.37E-06	1.30E-08	3.32E-07	13.0	1.39E-04	2.38E-04
SI7_E	0.47	81	0	1	1.23E-02	1.22E-03	2.04E-04	1.58E-04	1.40E-04	2.86E-05	0.00E+00	1.15E-05	8.18E-06	3.15E-08	8.05E-07	31.5	3.37E-04	5.77E-04
SI7_E	0.47	244	0	1	3.69E-02	3.65E-03	6.16E-04	4.74E-04	4.20E-04	8.58E-05	0.00E+00	3.47E-05	2.46E-05	9.45E-08	2.42E-06	95.1	1.01E-03	1.73E-03
SI7_E	0.47	374	0	1	5.69E-02	6.82E-03	9.65E-04	7.25E-04	6.42E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.44E-07	3.72E-06	149.1	1.55E-03	2.65E-03
SI7_E	0.47	302	0	1	4.65E-02	7.35E-03	8.06E-04	5.86E-04	5.19E-04	1.07E-04	0.00E+00	4.34E-05	3.07E-05	1.17E-07	3.03E-06	124.5	1.27E-03	2.14E-03
SI7_E	0.47	249	0	1	3.87E-02	7.04E-03	6.80E-04	4.84E-04	4.28E-04	8.90E-05	0.00E+00	3.60E-05	2.55E-05	9.63E-08	2.51E-06	104.9	1.05E-03	1.77E-03
SI7_E	0.47	225	0	1	3.52E-02	7.09E-03	6.25E-04	4.37E-04	3.87E-04	8.08E-05	0.00E+00	3.26E-05	2.31E-05	8.71E-08	2.28E-06	96.5	9.52E-04	1.60E-03
SI7_E	0.47	254	0	1	4.02E-02	9.52E-03	7.26E-04	4.93E-04	4.37E-04	9.18E-05	0.00E+00	3.71E-05	2.63E-05	9.82E-08	2.59E-06	112.1	1.08E-03	1.80E-03
SI7_E	0.47	268	0	1	4.26E-02	1.05E-02	7.73E-04	5.21E-04	4.61E-04	9.71E-05	0.00E+00	3.92E-05	2.78E-05	1.04E-07	2.74E-06	119.4	1.15E-03	1.90E-03
SI7_E	0.47	273	0	1	4.34E-02	1.09E-02	7.91E-04	5.30E-04	4.69E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.06E-07	2.79E-06	122.1	1.17E-03	1.94E-03
SI7_E	0.47	283	0	1	4.51E-02	1.16E-02	8.22E-04	5.49E-04	4.86E-04	1.03E-04	0.00E+00	4.14E-05	2.94E-05	1.09E-07	2.89E-06	127.0	1.21E-03	2.00E-03
SI7_E	0.47	307	0	1	4.88E-02	1.25E-02	8.90E-04	5.95E-04	5.27E-04	1.11E-04	0.00E+00	4.49E-05	3.18E-05	1.19E-07	3.14E-06	137.4	1.31E-03	2.17E-03
SI7_E	0.47	378	0	1	6.03E-02	1.54E-02	1.10E-03	7.35E-04	6.51E-04	1.37E-04	0.00E+00	5.55E-05	3.93E-05	1.46E-07	3.87E-06	169.5	1.62E-03	2.68E-03
SI7_E	0.47	407	0	1	6.47E-02	1.61E-02	1.17E-03	7.91E-04	7.00E-04	1.47E-04	0.00E+00	5.96E-05	4.22E-05	1.57E-07	4.16E-06	181.3	1.74E-03	2.89E-03
SI7_E	0.47	283	0	1	4.48E-02	1.08E-02	8.09E-04	5.49E-04	4.86E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.09E-07	2.88E-06	125.0	1.20E-03	2.00E-03
SI7_E	0.47	187	0	1	2.93E-02	6.23E-03	5.22E-04	3.63E-04	3.21E-04	6.71E-05	0.00E+00	2.71E-05	1.92E-05	7.22E-08	1.89E-06	80.5	7.91E-04	1.32E-03
SI7_E	0.47	158	0	1	2.46E-02	4.71E-03	4.34E-04	3.07E-04	2.72E-04	5.66E-05	0.00E+00	2.29E-05	1.62E-05	6.11E-08	1.60E-06	67.0	6.67E-04	1.12E-03
SI7_E	0.47	134	0	1	2.08E-02	3.58E-03	3.62E-04	2.60E-04	2.31E-04	4.78E-05	0.00E+00	1.93E-05	1.37E-05	5.19E-08	1.35E-06	55.9	5.64E-04	9.51E-04
SI7_E	0.47	110	0	1	1.70E-02	2.63E-03	2.93E-04	2.14E-04	1.89E-04	3.91E-05	0.00E+00	1.58E-05	1.12E-05	4.26E-08	1.10E-06	45.2	4.61E-04	7.81E-04
SI7_E	0.47	81	0	1	1.25E-02	1.73E-03	2.14E-04	1.58E-04	1.40E-04	2.88E-05	0.00E+00	1.17E-05	8.26E-06	3.15E-08	8.14E-07	33.0	3.40E-04	5.77E-04
SI7_W	0.47	80	0	1	1.23E-02	1.51E-03	2.08E-04	1.56E-04	1.38E-04	2.84E-05	0.00E+00	1.15E-05	8.13E-06	3.11E-08	8.01E-07	32.1	3.35E-04	5.70E-04
SI7_W	0.47	54	0	1	8.14E-03	9.00E-04	1.37E-04	1.04E-04	9.22E-05	1.89E-05	0.00E+00	7.63E-06	5.41E-06	2.07E-08	5.33E-07	21.2	2.23E-04	3.80E-04
SI7_W	0.47	47	0	1	7.09E-03	7.01E-04	1.19E-04	9.11E-05	8.07E-05	1.65E-05	0.00E+00	6.66E-06	4.72E-06	1.81E-08	4.65E-07	18.3	1.94E-04	3.33E-04
SI7_W	0.47	34	0	1	5.05E-03	5.01E-04	8.42E-05	6.51E-05	5.76E-05	1.18E-05	0.00E+00	4.75E-06	3.37E-06	1.30E-08	3.32E-07	13.0	1.39E-04	2.38E-04
SI7_W	0.47	47	0	1	7.07E-03	7.01E-04	1.18E-04	9.11E-05	8.07E-05	1.65E-05	0.00E+00	6.65E-06	4.71E-06	1.81E-08	4.64E-07	18.2	1.94E-04	3.33E-04
SI7_W	0.47	114	0	1	1.72E-02	1.70E-03	2.86E-04	2.21E-04	1.96E-04	4.00E-05	0.00E+00	1.61E-05	1.14E-05	4.41E-08	1.13E-06	44.1	4.71E-04	8.08E-04
SI7_W	0.47	342	0	1	5.16E-02	5.11E-03	8.62E-04	6.64E-04	5.88E-04	1.20E-04	0.00E+00	4.85E-05	3.44E-05	1.32E-07	3.39E-06	133.1	1.42E-03	2.42E-03
SI7_W	0.47	523	0	1	7.96E-02	9.55E-03	1.35E-03	1.02E-03	8.99E-04	1.85E-04	0.00E+00	7.46E-05	5.28E-05	2.02E-07	5.20E-06	208.6	2.18E-03	3.71E-03
SI7_W	0.47	422	0	1	6.51E-02	1.03E-02	1.13E-03	8.20E-04	7.26E-04	1.50E-04	0.00E+00	6.07E-05	4.30E-05	1.63E-07	4.24E-06	174.2	1.77E-03	2.99E-03
SI7_W	0.47	349	0	1	5.42E-02	9.85E-03	9.51E-04	6.77E-04	5.99E-04	1.25E-04	0.00E+00	5.03E-05	3.57E-05	1.35E-07	3.51E-06	146.8	1.47E-03	2.47E-03
SI7_W	0.47	315	0	1	4.93E-02	9.92E-03	8.74E-04	6.12E-04	5.42E-04	1.13E-04	0.00E+00	4.57E-05	3.24E-05	1.22E-07	3.19E-06	135.0	1.33E-03	2.23E-03
SI7_W	0.47	355	0	1	5.62E-02	1.33E-02	1.02E-03	6.90E-04	6.11E-04	1.28E-04	0.00E+00	5.19E-05	3.68E-05	1.37E-07	3.62E-06	156.9	1.51E-03	2.52E-03
SI7_W	0.47	375	0	1	5.96E-02	1.46E-02	1.08E-03	7.29E-04	6.45E-04	1.36E-04	0.00E+00	5.49E-05	3.89E-05	1.45E-07	3.83E-06	167.0	1.60E-03	2.66E-03
SI7_W	0.47	382	0	1	6.08E-02	1.53E-02	1.11E-03	7.42E-04	6.57E-04	1.38E-04	0.00E+00	5.60E-05	3.96E-05	1.48E-07	3.90E-06	170.8	1.63E-03	2.71E-03
SI7_W	0.47	396	0	1	6.30E-02	1.63E-02	1.15E-03	7.68E-04	6.80E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.53E-07	4.05E-06	177.6	1.69E-03	2.80E-03
SI7_W	0.47	429	0	1	6.83E-02	1.75E-02	1.25E-03	8.33E-04	7.38E-04	1.56E-04	0.00E+00	6.29E-05	4.45E-05	1.66E-07	4.39E-06	192.3	1.83E-03	3.04E-03
SI7_W	0.47	530	0	1	8.43E-02	2.16E-02	1.54E-03	1.03E-03	9.10E-04	1.92E-04	0.00E+00	7.76E-05	5.50E-05	2.05E-07	5.41E-06	237.2	2.26E-03	3.75E-03
SI7_W	0.47	570	0	1	9.05E-02	2.26E-02	1.64E-03	1.11E-03	9.80E-04	2.06E-04	0.00E+00	8.34E-05	5.91E-05	2.20E-07	5.82E-06	253.7	2.43E-03	4.04E-03
SI7_W	0.47	396	0	1	6.26E-02	1.52E-02	1.13E-03	7.68E-04	6.80E-04	1.43E-04	0.00E+00	5.78E-05	4.09E-05	1.53E-07	4.03E-06	174.8	1.69E-03	2.80E-03
SI7_W	0.47	261	0	1	4.10E-02	8.72E-03	7.30E-04	5.08E-04	4.49E-04	9.39E-05	0.00E+00	3.80E-05	2.69E-05	1.01E-07	2.65E-06	112.7	1.11E-03	1.85E-03
SI7_W	0.47	221	0	1	3.45E-02	6.60E-03	6.07E-04	4.29E-04	3.80E-04	7.92E-05	0.00E+00	3.20E-05	2.27E-05	8.55E-08	2.23E-06	93.7	9.33E-04	1.57E-03
SI7_W	0.47	188	0	1	2.91E-02	5.01E-03	5.06E-04	3.64E-04	3.23E-04	6.69E-05	0.00E+00	2.70E-05	1.92E-05	7.26E-08	1.89E-06	78.2	7.89E-04	1.33E-03
SI7_W	0.47	154	0	1	2.37E-02	3.68E-03	4.10E-04	2.99E-04	2.65E-04	5.48E-05	0.00E+00	2.21E-05	1.57E-05	5.96E-08	1.54E-06	63.3	6.46E-04	1.09E-03
SI7_W	0.47	114	0	1	1.75E-02	2.43E-03	2.99E-04	2.21E-04	1.96E-04	4.04E-05	0.00E+00	1.63E-05	1.16E-05	4.41E-08	1.14E-06	46.2	4.76E-04	8.08E-04
SI8_E	0.55	95	0	1	1.44E-02	1.78E-03	2.45E-04	1.84E-04	1.63E-04	3.35E-05	0.00E+00	1.35E-05	9.59E-06	3.67E-08	9.44E-07	37.9	3.95E-04	6.72E-04
SI8_E	0.55	63	0	1	9.59E-03	1.06E-03	1.62E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	9.00E-06	6.38E-06	2.44E-08	6.28E-07	25.0	2.62E-04	4.48E-04
SI8_E	0.55	55	0	1	8.36E-03	8.26E-04	1.40E-04	1.07E-04	9.51E-05	1.94E-05	0.00E+00	7.85E-06	5.56E-06	2.14E-08	5.48E-07	21.6	2.29E-04	3.92E-04
SI8_E	0.55	40	0	1	5.95E-03	5.90E-04	9.93E-05	7.67E-05	6.79E-05	1.39E-05	0.00E+00	5.60E-06	3.97E-06	1.53E-08	3.91E-07	15.3	1.63E-04	2.80E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	55	0	1	8.33E-03	8.26E-04	1.39E-04	1.07E-04	9.51E-05	1.94E-05	0.00E+00	7.84E-06	5.55E-06	2.14E-08	5.47E-07	21.4	2.29E-04	3.92E-04
SI8_E	0.55	134	0	1	2.02E-02	2.01E-03	3.37E-04	2.61E-04	2.31E-04	4.71E-05	0.00E+00	1.90E-05	1.35E-05	5.19E-08	1.33E-06	52.0	5.55E-04	9.52E-04
SI8_E	0.55	403	0	1	6.08E-02	6.02E-03	1.02E-03	7.82E-04	6.93E-04	1.41E-04	0.00E+00	5.72E-05	4.05E-05	1.56E-07	3.99E-06	156.9	1.67E-03	2.86E-03
SI8_E	0.55	616	0	1	9.38E-02	1.12E-02	1.59E-03	1.20E-03	1.06E-03	2.18E-04	0.00E+00	8.79E-05	6.23E-05	2.38E-07	6.13E-06	245.8	2.56E-03	4.37E-03
SI8_E	0.55	498	0	1	7.67E-02	1.21E-02	1.33E-03	9.66E-04	8.56E-04	1.77E-04	0.00E+00	7.15E-05	5.07E-05	1.92E-07	4.99E-06	205.3	2.09E-03	3.53E-03
SI8_E	0.55	411	0	1	6.39E-02	1.16E-02	1.12E-03	7.98E-04	7.06E-04	1.47E-04	0.00E+00	5.93E-05	4.20E-05	1.59E-07	4.14E-06	173.0	1.73E-03	2.91E-03
SI8_E	0.55	371	0	1	5.81E-02	1.17E-02	1.03E-03	7.21E-04	6.38E-04	1.33E-04	0.00E+00	5.38E-05	3.81E-05	1.44E-07	3.76E-06	159.1	1.57E-03	2.63E-03
SI8_E	0.55	419	0	1	6.63E-02	1.57E-02	1.20E-03	8.13E-04	7.20E-04	1.51E-04	0.00E+00	6.11E-05	4.33E-05	1.62E-07	4.27E-06	184.9	1.78E-03	2.97E-03
SI8_E	0.55	442	0	1	7.03E-02	1.73E-02	1.28E-03	8.59E-04	7.61E-04	1.60E-04	0.00E+00	6.47E-05	4.59E-05	1.71E-07	4.52E-06	196.9	1.89E-03	3.14E-03
SI8_E	0.55	450	0	1	7.16E-02	1.80E-02	1.30E-03	8.74E-04	7.74E-04	1.63E-04	0.00E+00	6.60E-05	4.67E-05	1.74E-07	4.60E-06	201.3	1.92E-03	3.19E-03
SI8_E	0.55	466	0	1	7.43E-02	1.92E-02	1.36E-03	9.05E-04	8.01E-04	1.69E-04	0.00E+00	6.83E-05	4.84E-05	1.80E-07	4.77E-06	209.4	1.99E-03	3.30E-03
SI8_E	0.55	506	0	1	8.05E-02	2.06E-02	1.47E-03	9.82E-04	8.69E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	226.6	2.16E-03	3.58E-03
SI8_E	0.55	624	0	1	9.94E-02	2.54E-02	1.81E-03	1.21E-03	1.07E-03	2.26E-04	0.00E+00	9.14E-05	6.48E-05	2.41E-07	6.38E-06	279.5	2.67E-03	4.42E-03
SI8_E	0.55	672	0	1	1.07E-01	2.66E-02	1.94E-03	1.30E-03	1.15E-03	2.43E-04	0.00E+00	9.83E-05	6.96E-05	2.60E-07	6.86E-06	299.0	2.87E-03	4.76E-03
SI8_E	0.55	466	0	1	7.38E-02	1.79E-02	1.33E-03	9.05E-04	8.01E-04	1.68E-04	0.00E+00	6.81E-05	4.82E-05	1.80E-07	4.75E-06	206.1	1.99E-03	3.30E-03
SI8_E	0.55	308	0	1	4.83E-02	1.03E-02	8.60E-04	5.98E-04	5.30E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.19E-07	3.12E-06	132.8	1.31E-03	2.18E-03
SI8_E	0.55	261	0	1	4.06E-02	7.78E-03	7.15E-04	5.06E-04	4.48E-04	9.33E-05	0.00E+00	3.77E-05	2.67E-05	1.01E-07	2.63E-06	110.4	1.10E-03	1.85E-03
SI8_E	0.55	221	0	1	3.42E-02	5.90E-03	5.97E-04	4.29E-04	3.80E-04	7.89E-05	0.00E+00	3.19E-05	2.26E-05	8.55E-08	2.22E-06	92.2	9.30E-04	1.57E-03
SI8_E	0.55	182	0	1	2.80E-02	4.34E-03	4.83E-04	3.53E-04	3.12E-04	6.46E-05	0.00E+00	2.61E-05	1.85E-05	7.03E-08	1.82E-06	74.6	7.61E-04	1.29E-03
SI8_E	0.55	134	0	1	2.06E-02	2.86E-03	3.52E-04	2.61E-04	2.31E-04	4.76E-05	0.00E+00	1.92E-05	1.36E-05	5.19E-08	1.34E-06	54.4	5.61E-04	9.52E-04
SI8_W	0.48	78	0	1	1.20E-02	1.47E-03	2.03E-04	1.52E-04	1.35E-04	2.77E-05	0.00E+00	1.12E-05	7.93E-06	3.03E-08	7.81E-07	31.4	3.27E-04	5.56E-04
SI8_W	0.48	52	0	1	7.94E-03	8.77E-04	1.34E-04	1.02E-04	8.99E-05	1.84E-05	0.00E+00	7.45E-06	5.28E-06	2.02E-08	5.20E-07	20.7	2.17E-04	3.71E-04
SI8_W	0.48	46	0	1	6.92E-03	6.84E-04	1.16E-04	8.88E-05	7.87E-05	1.61E-05	0.00E+00	6.50E-06	4.60E-06	1.77E-08	4.53E-07	17.9	1.90E-04	3.24E-04
SI8_W	0.48	33	0	1	4.93E-03	4.88E-04	8.21E-05	6.35E-05	5.62E-05	1.15E-05	0.00E+00	4.63E-06	3.28E-06	1.26E-08	3.23E-07	12.7	1.35E-04	2.32E-04
SI8_W	0.48	46	0	1	6.89E-03	6.84E-04	1.15E-04	8.88E-05	7.87E-05	1.60E-05	0.00E+00	6.49E-06	4.60E-06	1.77E-08	4.53E-07	17.7	1.89E-04	3.24E-04
SI8_W	0.48	111	0	1	1.67E-02	1.66E-03	2.79E-04	2.16E-04	1.91E-04	3.90E-05	0.00E+00	1.58E-05	1.12E-05	4.30E-08	1.10E-06	43.0	4.59E-04	7.88E-04
SI8_W	0.48	333	0	1	5.03E-02	4.98E-03	8.41E-04	6.47E-04	5.73E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.29E-07	3.30E-06	129.8	1.38E-03	2.36E-03
SI8_W	0.48	510	0	1	7.77E-02	9.31E-03	1.32E-03	9.90E-04	8.77E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.97E-07	5.08E-06	203.4	2.12E-03	3.61E-03
SI8_W	0.48	412	0	1	6.35E-02	1.00E-02	1.10E-03	8.00E-04	7.08E-04	1.46E-04	0.00E+00	5.92E-05	4.19E-05	1.59E-07	4.13E-06	169.9	1.73E-03	2.92E-03
SI8_W	0.48	340	0	1	5.28E-02	9.61E-03	9.27E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.91E-05	3.48E-05	1.31E-07	3.43E-06	143.2	1.43E-03	2.41E-03
SI8_W	0.48	307	0	1	4.81E-02	9.68E-03	8.53E-04	5.97E-04	5.28E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.19E-07	3.11E-06	131.6	1.30E-03	2.18E-03
SI8_W	0.48	347	0	1	5.49E-02	1.30E-02	9.91E-04	6.73E-04	5.96E-04	1.25E-04	0.00E+00	5.06E-05	3.59E-05	1.34E-07	3.53E-06	153.0	1.48E-03	2.46E-03
SI8_W	0.48	366	0	1	5.81E-02	1.43E-02	1.06E-03	7.11E-04	6.29E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.42E-07	3.74E-06	162.9	1.56E-03	2.59E-03
SI8_W	0.48	373	0	1	5.93E-02	1.49E-02	1.08E-03	7.23E-04	6.41E-04	1.35E-04	0.00E+00	5.46E-05	3.87E-05	1.44E-07	3.81E-06	166.6	1.59E-03	2.64E-03
SI8_W	0.48	386	0	1	6.15E-02	1.59E-02	1.12E-03	7.49E-04	6.63E-04	1.40E-04	0.00E+00	5.66E-05	4.01E-05	1.49E-07	3.95E-06	173.3	1.65E-03	2.73E-03
SI8_W	0.48	418	0	1	6.66E-02	1.71E-02	1.21E-03	8.12E-04	7.19E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	187.6	1.79E-03	2.97E-03
SI8_W	0.48	517	0	1	8.22E-02	2.10E-02	1.50E-03	1.00E-03	8.88E-04	1.87E-04	0.00E+00	7.57E-05	5.36E-05	2.00E-07	5.28E-06	231.3	2.21E-03	3.66E-03
SI8_W	0.48	556	0	1	8.83E-02	2.20E-02	1.60E-03	1.08E-03	9.55E-04	2.01E-04	0.00E+00	8.13E-05	5.76E-05	2.15E-07	5.67E-06	247.4	2.37E-03	3.94E-03
SI8_W	0.48	386	0	1	6.11E-02	1.48E-02	1.10E-03	7.49E-04	6.63E-04	1.39E-04	0.00E+00	5.63E-05	3.99E-05	1.49E-07	3.93E-06	170.5	1.64E-03	2.73E-03
SI8_W	0.48	255	0	1	4.00E-02	8.51E-03	7.12E-04	4.95E-04	4.38E-04	9.16E-05	0.00E+00	3.70E-05	2.62E-05	9.86E-08	2.58E-06	109.9	1.08E-03	1.81E-03
SI8_W	0.48	216	0	1	3.36E-02	6.43E-03	5.92E-04	4.19E-04	3.71E-04	7.72E-05	0.00E+00	3.12E-05	2.21E-05	8.34E-08	2.18E-06	91.4	9.10E-04	1.53E-03
SI8_W	0.48	183	0	1	2.83E-02	4.89E-03	4.94E-04	3.55E-04	3.15E-04	6.53E-05	0.00E+00	2.64E-05	1.87E-05	7.08E-08	1.84E-06	76.3	7.69E-04	1.30E-03
SI8_W	0.48	150	0	1	2.31E-02	3.59E-03	4.00E-04	2.92E-04	2.59E-04	5.34E-05	0.00E+00	2.16E-05	1.53E-05	5.81E-08	1.51E-06	61.7	6.30E-04	1.07E-03
SI8_W	0.48	111	0	1	1.70E-02	2.37E-03	2.92E-04	2.16E-04	1.91E-04	3.94E-05	0.00E+00	1.59E-05	1.13E-05	4.30E-08	1.11E-06	45.0	4.64E-04	7.88E-04
SI9_E	0.75	122	0	1	1.86E-02	2.28E-03	3.15E-04	2.36E-04	2.09E-04	4.30E-05	0.00E+00	1.74E-05	1.23E-05	4.71E-08	1.21E-06	48.6	5.07E-04	8.63E-04
SI9_E	0.75	81	0	1	1.23E-02	1.36E-03	2.08E-04	1.58E-04	1.40E-04	2.86E-05	0.00E+00	1.16E-05	8.19E-06	3.14E-08	8.06E-07	32.1	3.37E-04	5.75E-04
SI9_E	0.75	71	0	1	1.07E-02	1.06E-03	1.80E-04	1.38E-04	1.22E-04	2.50E-05	0.00E+00	1.01E-05	7.14E-06	2.75E-08	7.04E-07	27.7	2.94E-04	5.03E-04
SI9_E	0.75	51	0	1	7.65E-03	7.58E-04	1.27E-04	9.85E-05	8.72E-05	1.78E-05	0.00E+00	7.19E-06	5.10E-06	1.96E-08	5.02E-07	19.7	2.10E-04	3.59E-04
SI9_E	0.75	71	0	1	1.07E-02	1.06E-03	1.78E-04	1.38E-04	1.22E-04	2.49E-05	0.00E+00	1.01E-05	7.13E-06	2.75E-08	7.02E-07	27.5	2.94E-04	5.03E-04
SI9_E	0.75	172	0	1	2.60E-02	2.58E-03	4.32E-04	3.35E-04	2.97E-04	6.05E-05	0.00E+00	2.44E-05	1.73E-05	6.67E-08	1.71E-06	66.8	7.13E-04	1.22E-03
SI9_E	0.75	517	0	1	7.81E-02	7.73E-03	1.30E-03	1.00E-03	8.90E-04	1.82E-04	0.00E+00	7.34E-05	5.20E-05	2.00E-07	5.12E-06	201.5	2.14E-03	3.67E-03
SI9_E	0.75	791	0	1	1.21E-01	1.44E-02	2.04E-03	1.54E-03	1.36E-03	2.79E-04	0.00E+00	1.13E-04	8.00E-05	3.06E-07	7.88E-06	315.7	3.29E-03	5.61E-03
SI9_E	0.75	639	0	1	9.86E-02	1.56E-02	1.71E-03	1.24E-03	1.10E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.47E-07	6.41E-06	263.6	2.68E-03	4.53E-03
SI9_E	0.75	528	0	1	8.20E-02	1.49E-02	1.44E-03	1.02E-03	9.07E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.04E-07	5.32E-06	222.2	2.22E-03	3.74E-03
SI9_E	0.75	477	0	1	7.46E-02	1.50E-02	1.32E-03	9.26E-04	8.20E-04	1.71E-04	0.00E+00	6.91E-05	4.90E-05	1.84E-07	4.82E-06	204.3	2.02E-03	3.38E-03
SI9_E	0.75	538	0	1	8.51E-02	2.02E-02	1.54E-03	1.04E-03	9.24E-04	1.94E-04	0.00E+00	7.85E-05	5.56E-05	2.08E-07	5.48E-06	237.4	2.29E-03	3.81E-03
SI9_E	0.75	568	0	1	9.02E-02	2.22E-02	1.64E-03	1.10E-03	9.77E-04	2.06E-04	0.00E+00	8.31E-05	5.89E-05	2.20E-07	5.80E-06	252.8	2.42E-03	4.03E-03
SI9_E	0.75	578	0	1	9.20E-02	2.32E-02	1.67E-03	1.12E-03	9.94E-04	2.10E-04	0.00E+00	8.47E-05	6.00E-05	2.24E-07	5.91E-06	258.5	2.47E-03	4.10E-03
SI9_E	0.75	599	0	1	9.54E-02	2.46E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.78E-05	6.22E-05	2.31E-07	6.12E-06	268.8	2.56E-03	4.24E-03
SI9_E	0.75	649	0	1	1.03E-01	2.65E-02	1.88E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.52E-05	6.74E-05	2.51E-07	6.64E-06	291.1	2.78E-03	4.60E-03
SI9_E	0.75	802	0	1	1.28E-01	3.26E-02	2.32E-03	1.56E-03	1.38E-03	2.91E-04	0.00E+00	1.17E-04	8.32E-05	3.10E-07	8.19E-06	359.0	3.43E-03	5.68E-03
SI9_E	0.75	862	0	1	1.37E-01	3.41E-02	2.49E-03	1.67E-03	1.48E-03	3.12E-04	0.00E+00	1.26E-04	8.94E-05	3.33E-07	8.80E-06	383.9	3.68E-03	6.11E-03
SI9_E	0.75	599	0	1	9.48E-02	2.29E-02	1.71E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.74E-05	6.19E-05	2.31E-07	6.10E-06	264.6	2.55E-03	4.24E-03
SI9_E	0.75	396	0	1	6.21E-02	1.32E-02	1.10E-03	7.68E-04	6.80E-04	1.42E-04	0.00E+00	5.74E-05	4.07E-05	1.53E-07	4.01E-06	170.6	1.68E-03	2.80E-03
SI9_E	0.75	335	0	1	5.22E-02	9.98E-03	9.18E-04	6.50E-04	5.76E-04	1.20E-04	0.00E+00	4.84E-05	3.43E-05	1.29E-07	3.38E-06	141.8	1.41E-03	2.37E-03
SI9_E	0.75	284	0	1	4.40E-02	7.58E-03	7.67E-04	5.51E-04	4.88E-04	1.01E-04	0.00E+00	4.09E-05	2.90E-05	1.10E-07	2.86E-06	118.4	1.19E-03	2.01E-03
SI9_E	0.75	233	0	1	3.59E-02	5.57E-03	6.20E-04	4.53E-04	4.01E-04	8.29E-05	0.00E+00	3.35E-05	2.37E-05	9.02E-08	2.34E-06	95.8	9.77E-04	1.65E-03
SI9_E	0.75	172	0	1	2.64E-02	3.67E-03	4.53E-04	3.35E-04	2.97E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.67E-08	1.72E-06	69.9	7.20E-04	1.22E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI9_W	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI9_W	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI9_W	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI9_W	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI9_W	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI9_W	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI9_W	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI9_W	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI9_W	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI9_W	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI9_W	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI9_W	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI9_W	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI9_W	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI9_W	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03
SI9_W	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI9_W	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI9_W	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI9_W	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03
SI9_W	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI9_W	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI9_W	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI9_W	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI10_E	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI10_E	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI10_E	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI10_E	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI10_E	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI10_E	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI10_E	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI10_E	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI10_E	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI10_E	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI10_E	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI10_E	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI10_E	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI10_E	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI10_E	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI10_E	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03
SI10_E	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI10_E	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI10_E	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI10_E	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03
SI10_E	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI10_E	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI10_E	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI10_E	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI10_W	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI10_W	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI10_W	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI10_W	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI10_W	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI10_W	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI10_W	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI10_W	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI10_W	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI10_W	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI10_W	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI10_W	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI10_W	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI10_W	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI10_W	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI10_W	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03
SI10_W	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI10_W	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI10_W	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI10_W	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI10_W	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI10_W	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI10_W	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI11_E	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI11_E	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI11_E	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI11_E	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI11_E	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI11_E	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI11_E	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI11_E	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI11_E	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI11_E	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI11_E	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI11_E	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI11_E	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI11_E	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI11_E	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI11_E	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03
SI11_E	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI11_E	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI11_E	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI11_E	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03
SI11_E	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI11_E	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI11_E	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI11_E	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI11_W	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI11_W	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI11_W	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI11_W	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI11_W	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI11_W	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI11_W	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI11_W	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI11_W	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI11_W	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI11_W	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI11_W	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI11_W	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI11_W	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI11_W	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI11_W	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03
SI11_W	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI11_W	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI11_W	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI11_W	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03
SI11_W	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI11_W	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI11_W	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI11_W	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI12_E	0.75	123	0	1	1.87E-02	2.31E-03	3.18E-04	2.39E-04	2.11E-04	4.34E-05	0.00E+00	1.75E-05	1.24E-05	4.75E-08	1.22E-06	49.1	5.12E-04	8.71E-04
SI12_E	0.75	82	0	1	1.24E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.27E-06	3.17E-08	8.14E-07	32.4	3.40E-04	5.81E-04
SI12_E	0.75	72	0	1	1.08E-02	1.07E-03	1.81E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.22E-06	2.77E-08	7.11E-07	28.0	2.97E-04	5.08E-04
SI12_E	0.75	51	0	1	7.72E-03	7.65E-04	1.29E-04	9.95E-05	8.81E-05	1.80E-05	0.00E+00	7.26E-06	5.15E-06	1.98E-08	5.07E-07	19.9	2.12E-04	3.63E-04
SI12_E	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.23E-04	2.52E-05	0.00E+00	1.02E-05	7.20E-06	2.77E-08	7.09E-07	27.8	2.97E-04	5.08E-04
SI12_E	0.75	174	0	1	2.62E-02	2.60E-03	4.37E-04	3.38E-04	3.00E-04	6.11E-05	0.00E+00	2.47E-05	1.75E-05	6.74E-08	1.72E-06	67.4	7.20E-04	1.23E-03
SI12_E	0.75	523	0	1	7.89E-02	7.81E-03	1.32E-03	1.01E-03	8.99E-04	1.84E-04	0.00E+00	7.42E-05	5.25E-05	2.02E-07	5.17E-06	203.5	2.16E-03	3.70E-03
SI12_E	0.75	799	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.37E-03	2.82E-04	0.00E+00	1.14E-04	8.08E-05	3.09E-07	7.96E-06	318.9	3.33E-03	5.66E-03
SI12_E	0.75	646	0	1	9.96E-02	1.57E-02	1.72E-03	1.25E-03	1.11E-03	2.30E-04	0.00E+00	9.28E-05	6.57E-05	2.50E-07	6.47E-06	266.3	2.71E-03	4.58E-03
SI12_E	0.75	533	0	1	8.28E-02	1.51E-02	1.45E-03	1.03E-03	9.16E-04	1.90E-04	0.00E+00	7.70E-05	5.45E-05	2.06E-07	5.37E-06	224.5	2.24E-03	3.78E-03
SI12_E	0.75	482	0	1	7.54E-02	1.52E-02	1.34E-03	9.35E-04	8.28E-04	1.73E-04	0.00E+00	6.98E-05	4.95E-05	1.86E-07	4.87E-06	206.3	2.04E-03	3.41E-03
SI12_E	0.75	543	0	1	8.60E-02	2.04E-02	1.55E-03	1.05E-03	9.34E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.53E-06	239.8	2.31E-03	3.85E-03
SI12_E	0.75	574	0	1	9.11E-02	2.24E-02	1.65E-03	1.11E-03	9.87E-04	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.22E-07	5.86E-06	255.4	2.45E-03	4.07E-03
SI12_E	0.75	584	0	1	9.29E-02	2.34E-02	1.69E-03	1.13E-03	1.00E-03	2.12E-04	0.00E+00	8.55E-05	6.06E-05	2.26E-07	5.97E-06	261.1	2.50E-03	4.14E-03
SI12_E	0.75	605	0	1	9.64E-02	2.49E-02	1.76E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.87E-05	6.28E-05	2.34E-07	6.19E-06	271.6	2.59E-03	4.28E-03
SI12_E	0.75	656	0	1	1.04E-01	2.68E-02	1.90E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.54E-07	6.71E-06	294.0	2.80E-03	4.65E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	810	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.40E-05	3.13E-07	8.28E-06	362.6	3.46E-03	5.74E-03
SI12_E	0.75	871	0	1	1.38E-01	3.45E-02	2.51E-03	1.69E-03	1.50E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.37E-07	8.89E-06	387.8	3.72E-03	6.17E-03
SI12_E	0.75	605	0	1	9.58E-02	2.32E-02	1.73E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.83E-05	6.26E-05	2.34E-07	6.16E-06	267.3	2.58E-03	4.28E-03
SI12_E	0.75	400	0	1	6.27E-02	1.33E-02	1.12E-03	7.76E-04	6.87E-04	1.44E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	172.3	1.69E-03	2.83E-03
SI12_E	0.75	338	0	1	5.27E-02	1.01E-02	9.28E-04	6.57E-04	5.81E-04	1.21E-04	0.00E+00	4.89E-05	3.46E-05	1.31E-07	3.41E-06	143.2	1.43E-03	2.40E-03
SI12_E	0.75	287	0	1	4.44E-02	7.66E-03	7.74E-04	5.57E-04	4.93E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.11E-07	2.88E-06	119.6	1.21E-03	2.03E-03
SI12_E	0.75	236	0	1	3.63E-02	5.63E-03	6.27E-04	4.58E-04	4.05E-04	8.37E-05	0.00E+00	3.38E-05	2.40E-05	9.11E-08	2.36E-06	96.8	9.87E-04	1.67E-03
SI12_E	0.75	174	0	1	2.67E-02	3.71E-03	4.57E-04	3.38E-04	3.00E-04	6.17E-05	0.00E+00	2.49E-05	1.77E-05	6.74E-08	1.74E-06	70.6	7.27E-04	1.23E-03
SI12_W	0.75	119	0	1	1.82E-02	2.23E-03	3.08E-04	2.31E-04	2.05E-04	4.21E-05	0.00E+00	1.70E-05	1.21E-05	4.61E-08	1.19E-06	47.6	4.96E-04	8.45E-04
SI12_W	0.75	79	0	1	1.21E-02	1.33E-03	2.03E-04	1.54E-04	1.37E-04	2.80E-05	0.00E+00	1.13E-05	8.01E-06	3.07E-08	7.89E-07	31.4	3.30E-04	5.63E-04
SI12_W	0.75	70	0	1	1.05E-02	1.04E-03	1.76E-04	1.35E-04	1.20E-04	2.44E-05	0.00E+00	9.87E-06	6.99E-06	2.69E-08	6.89E-07	27.2	2.88E-04	4.93E-04
SI12_W	0.75	50	0	1	7.49E-03	7.42E-04	1.25E-04	9.64E-05	8.54E-05	1.74E-05	0.00E+00	7.04E-06	4.99E-06	1.92E-08	4.91E-07	19.3	2.05E-04	3.52E-04
SI12_W	0.75	70	0	1	1.05E-02	1.04E-03	1.74E-04	1.35E-04	1.20E-04	2.44E-05	0.00E+00	9.85E-06	6.98E-06	2.69E-08	6.88E-07	26.9	2.87E-04	4.93E-04
SI12_W	0.75	169	0	1	2.54E-02	2.52E-03	4.23E-04	3.28E-04	2.90E-04	5.92E-05	0.00E+00	2.39E-05	1.70E-05	6.53E-08	1.67E-06	65.4	6.98E-04	1.20E-03
SI12_W	0.75	507	0	1	7.65E-02	7.57E-03	1.28E-03	9.83E-04	8.71E-04	1.78E-04	0.00E+00	7.19E-05	5.09E-05	1.96E-07	5.02E-06	197.2	2.10E-03	3.59E-03
SI12_W	0.75	775	0	1	1.18E-01	1.41E-02	2.00E-03	1.50E-03	1.33E-03	2.73E-04	0.00E+00	1.11E-04	7.83E-05	3.00E-07	7.71E-06	309.1	3.22E-03	5.49E-03
SI12_W	0.75	626	0	1	9.65E-02	1.52E-02	1.67E-03	1.21E-03	1.08E-03	2.23E-04	0.00E+00	8.99E-05	6.37E-05	2.42E-07	6.28E-06	258.1	2.62E-03	4.43E-03
SI12_W	0.75	516	0	1	8.03E-02	1.46E-02	1.41E-03	1.00E-03	8.88E-04	1.85E-04	0.00E+00	7.46E-05	5.28E-05	2.00E-07	5.20E-06	217.5	2.18E-03	3.66E-03
SI12_W	0.75	467	0	1	7.30E-02	1.47E-02	1.30E-03	9.06E-04	8.03E-04	1.67E-04	0.00E+00	6.77E-05	4.80E-05	1.80E-07	4.72E-06	200.0	1.97E-03	3.31E-03
SI12_W	0.75	526	0	1	8.33E-02	1.97E-02	1.51E-03	1.02E-03	9.05E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.04E-07	5.36E-06	232.4	2.24E-03	3.73E-03
SI12_W	0.75	556	0	1	8.83E-02	2.17E-02	1.60E-03	1.08E-03	9.56E-04	2.01E-04	0.00E+00	8.14E-05	5.77E-05	2.15E-07	5.68E-06	247.5	2.37E-03	3.94E-03
SI12_W	0.75	566	0	1	9.01E-02	2.27E-02	1.64E-03	1.10E-03	9.73E-04	2.05E-04	0.00E+00	8.29E-05	5.87E-05	2.19E-07	5.79E-06	253.1	2.42E-03	4.01E-03
SI12_W	0.75	586	0	1	9.34E-02	2.41E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.59E-05	6.09E-05	2.27E-07	6.00E-06	263.2	2.51E-03	4.15E-03
SI12_W	0.75	636	0	1	1.01E-01	2.59E-02	1.85E-03	1.23E-03	1.09E-03	2.31E-04	0.00E+00	9.32E-05	6.60E-05	2.46E-07	6.50E-06	284.9	2.72E-03	4.50E-03
SI12_W	0.75	785	0	1	1.25E-01	3.19E-02	2.28E-03	1.52E-03	1.35E-03	2.85E-04	0.00E+00	1.15E-04	8.15E-05	3.03E-07	8.02E-06	351.4	3.35E-03	5.56E-03
SI12_W	0.75	844	0	1	1.34E-01	3.34E-02	2.43E-03	1.64E-03	1.45E-03	3.06E-04	0.00E+00	1.24E-04	8.75E-05	3.26E-07	8.62E-06	375.8	3.60E-03	5.98E-03
SI12_W	0.75	586	0	1	9.28E-02	2.25E-02	1.68E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.56E-05	6.06E-05	2.27E-07	5.97E-06	259.1	2.50E-03	4.15E-03
SI12_W	0.75	387	0	1	6.08E-02	1.29E-02	1.08E-03	7.52E-04	6.66E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	167.0	1.64E-03	2.75E-03
SI12_W	0.75	328	0	1	5.11E-02	9.77E-03	8.99E-04	6.36E-04	5.63E-04	1.17E-04	0.00E+00	4.74E-05	3.36E-05	1.27E-07	3.31E-06	138.8	1.38E-03	2.32E-03
SI12_W	0.75	278	0	1	4.30E-02	7.42E-03	7.50E-04	5.40E-04	4.78E-04	9.91E-05	0.00E+00	4.01E-05	2.84E-05	1.08E-07	2.80E-06	115.9	1.17E-03	1.97E-03
SI12_W	0.75	228	0	1	3.52E-02	5.45E-03	6.07E-04	4.43E-04	3.93E-04	8.12E-05	0.00E+00	3.28E-05	2.32E-05	8.83E-08	2.29E-06	93.8	9.57E-04	1.62E-03
SI12_W	0.75	169	0	1	2.59E-02	3.59E-03	4.43E-04	3.28E-04	2.90E-04	5.98E-05	0.00E+00	2.42E-05	1.71E-05	6.53E-08	1.69E-06	68.4	7.05E-04	1.20E-03
SI13_E	0.75	126	0	1	1.92E-02	2.36E-03	3.25E-04	2.44E-04	2.16E-04	4.44E-05	0.00E+00	1.79E-05	1.27E-05	4.86E-08	1.25E-06	50.2	5.23E-04	8.91E-04
SI13_E	0.75	84	0	1	1.27E-02	1.41E-03	2.15E-04	1.63E-04	1.44E-04	2.95E-05	0.00E+00	1.19E-05	8.46E-06	3.24E-08	8.33E-07	33.1	3.48E-04	5.94E-04
SI13_E	0.75	73	0	1	1.11E-02	1.10E-03	1.86E-04	1.42E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.84E-08	7.27E-07	28.6	3.04E-04	5.20E-04
SI13_E	0.75	52	0	1	7.90E-03	7.83E-04	1.32E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.43E-06	5.26E-06	2.03E-08	5.18E-07	20.3	2.17E-04	3.71E-04
SI13_E	0.75	73	0	1	1.10E-02	1.10E-03	1.84E-04	1.42E-04	1.26E-04	2.57E-05	0.00E+00	1.04E-05	7.36E-06	2.84E-08	7.25E-07	28.4	3.03E-04	5.20E-04
SI13_E	0.75	178	0	1	2.68E-02	2.66E-03	4.46E-04	3.46E-04	3.06E-04	6.25E-05	0.00E+00	2.52E-05	1.79E-05	6.89E-08	1.76E-06	68.9	7.36E-04	1.26E-03
SI13_E	0.75	534	0	1	8.07E-02	7.98E-03	1.35E-03	1.04E-03	9.19E-04	1.88E-04	0.00E+00	7.58E-05	5.37E-05	2.07E-07	5.29E-06	208.1	2.21E-03	3.79E-03
SI13_E	0.75	817	0	1	1.24E-01	1.49E-02	2.11E-03	1.59E-03	1.41E-03	2.89E-04	0.00E+00	1.17E-04	8.26E-05	3.16E-07	8.14E-06	326.0	3.40E-03	5.79E-03
SI13_E	0.75	660	0	1	1.02E-01	1.61E-02	1.76E-03	1.28E-03	1.13E-03	2.35E-04	0.00E+00	9.49E-05	6.72E-05	2.55E-07	6.62E-06	272.2	2.77E-03	4.68E-03
SI13_E	0.75	545	0	1	8.47E-02	1.54E-02	1.49E-03	1.06E-03	9.37E-04	1.95E-04	0.00E+00	7.87E-05	5.57E-05	2.11E-07	5.49E-06	229.5	2.30E-03	3.86E-03
SI13_E	0.75	493	0	1	7.71E-02	1.55E-02	1.37E-03	9.56E-04	8.47E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.90E-07	4.98E-06	211.0	2.08E-03	3.49E-03
SI13_E	0.75	555	0	1	8.79E-02	2.08E-02	1.59E-03	1.08E-03	9.55E-04	2.01E-04	0.00E+00	8.11E-05	5.75E-05	2.15E-07	5.66E-06	245.2	2.37E-03	3.94E-03
SI13_E	0.75	587	0	1	9.32E-02	2.29E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.27E-07	5.99E-06	261.1	2.50E-03	4.16E-03
SI13_E	0.75	597	0	1	9.50E-02	2.39E-02	1.73E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.75E-05	6.20E-05	2.31E-07	6.10E-06	267.0	2.55E-03	4.23E-03
SI13_E	0.75	618	0	1	9.85E-02	2.54E-02	1.80E-03	1.20E-03	1.06E-03	2.24E-04	0.00E+00	9.06E-05	6.42E-05	2.39E-07	6.33E-06	277.7	2.64E-03	4.38E-03
SI13_E	0.75	671	0	1	1.07E-01	2.74E-02	1.95E-03	1.30E-03	1.15E-03	2.43E-04	0.00E+00	9.83E-05	6.96E-05	2.59E-07	6.86E-06	300.6	2.87E-03	4.75E-03
SI13_E	0.75	828	0	1	1.32E-01	3.37E-02	2.40E-03	1.61E-03	1.42E-03	3.00E-04	0.00E+00	1.21E-04	8.59E-05	3.20E-07	8.46E-06	370.7	3.54E-03	5.87E-03
SI13_E	0.75	891	0	1	1.41E-01	3.53E-02	2.57E-03	1.73E-03	1.53E-03	3.22E-04	0.00E+00	1.30E-04	9.23E-05	3.44E-07	9.09E-06	396.5	3.80E-03	6.31E-03
SI13_E	0.75	618	0	1	9.79E-02	2.37E-02	1.77E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.03E-05	6.40E-05	2.39E-07	6.30E-06	273.3	2.63E-03	4.38E-03
SI13_E	0.75	409	0	1	6.41E-02	1.36E-02	1.14E-03	7.93E-04	7.03E-04	1.47E-04	0.00E+00	5.93E-05	4.20E-05	1.58E-07	4.14E-06	176.2	1.73E-03	2.90E-03
SI13_E	0.75	346	0	1	5.39E-02	1.03E-02	9.48E-04	6.71E-04	5.94E-04	1.24E-04	0.00E+00	5.00E-05	3.54E-05	1.34E-07	3.49E-06	146.5	1.46E-03	2.45E-03
SI13_E	0.75	293	0	1	4.54E-02	7.83E-03	7.92E-04	5.70E-04	5.04E-04	1.05E-04	0.00E+00	4.23E-05	2.99E-05	1.13E-07	2.95E-06	122.2	1.23E-03	2.08E-03
SI13_E	0.75	241	0	1	3.71E-02	5.75E-03	6.41E-04	4.68E-04	4.14E-04	8.56E-05	0.00E+00	3.46E-05	2.45E-05	9.32E-08	2.41E-06	98.9	1.01E-03	1.71E-03
SI13_E	0.75	178	0	1	2.73E-02	3.79E-03	4.67E-04	3.46E-04	3.06E-04	6.31E-05	0.00E+00	2.55E-05	1.81E-05	6.89E-08	1.78E-06	72.2	7.44E-04	1.26E-03
SI13_W	0.75	124	0	1	1.89E-02	2.32E-03	3.20E-04	2.40E-04	2.13E-04	4.37E-05	0.00E+00	1.77E-05	1.25E-05	4.79E-08	1.23E-06	49.5	5.16E-04	8.78E-04
SI13_W	0.75	83	0	1	1.25E-02	1.38E-03	2.11E-04	1.60E-04	1.42E-04	2.91E-05	0.00E+00	1.18E-05	8.33E-06	3.19E-08	8.20E-07	32.6	3.43E-04	5.85E-04
SI13_W	0.75	72	0	1	1.09E-02	1.08E-03	1.83E-04	1.40E-04	1.24E-04	2.54E-05	0.00E+00	1.03E-05	7.27E-06	2.79E-08	7.16E-07	28.2	2.99E-04	5.12E-04
SI13_W	0.75	52	0	1	7.78E-03	7.71E-04	1.30E-04	1.00E-04	8.87E-05	1.81E-05	0.00E+00	7.32E-06	5.18E-06	1.99E-08	5.11E-07	20.0	2.13E-04	3.66E-04
SI13_W	0.75	72	0	1	1.09E-02	1.08E-03	1.81E-04	1.40E-04	1.24E-04	2.53E-05	0.00E+00	1.02E-05	7.25E-06	2.79E-08	7.14E-07	28.0	2.99E-04	5.12E-04
SI13_W	0.75	175	0	1	2.64E-02	2.62E-03	4.40E-04	3.41E-04	3.02E-04	6.15E-05	0.00E+00	2.49E-05	1.76E-05	6.78E-08	1.73E-06	67.9	7.25E-04	1.24E-03
SI13_W	0.75	526	0	1	7.94E-02	7.86E-03	1.33E-03	1.02E-03	9.05E-04	1.85E-04	0.00E+00	7.47E-05	5.29E-05	2.03E-07	5.21E-06	204.9	2.18E-03	3.73E-03
SI13_W	0.75	805	0	1	1.23E-01	1.47E-02	2.08E-03	1.56E-03	1.38E-03	2.84E-04	0.00E+00	1.15E-04	8.14E-05	3.11E-07	8.01E-06	321.1	3.35E-03	5.70E-03
SI13_W	0.75	650	0	1	1.00E-01	1.58E-02	1.74E-03	1.26E-03	1.12E-03	2.31E-04	0.00E+00	9.34E-05	6.62E-05	2.51E-07	6.52E-06	268.1	2.73E-03	4.61E-03
SI13_W	0.75	537	0	1	8.34E-02	1.52E-02	1.46E-03	1.04E-03	9.23E-04	1.92E-04	0.00E+00	7.75E-05	5.49E-05	2.07E-07	5.41E-06	226.0	2.26E-03	3.80E-03
SI13_W	0.75	485	0	1	7.59E-02	1.53E-02	1.35E-03	9.42E-04	8.34E-04	1.74E-04	0.00E+00	7.03E-05	4.98E-05	1.88E-07	4.91E-06	207.8	2.05E-03	3.44E-03
SI13_W	0.75	547	0	1	8.66E-02	2.05E-02	1.56E-03	1.06E-03	9.40E-04	1.98E-04	0.00E+00	7.99E-05	5.66E-05	2.11E-07	5.57E-06	241.5	2.33E-03	3.88E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	578	0	1	9.18E-02	2.25E-02	1.67E-03	1.12E-03	9.94E-04	2.09E-04	0.00E+00	8.45E-05	5.99E-05	2.23E-07	5.90E-06	257.2	2.47E-03	4.10E-03
SI13_W	0.75	588	0	1	9.36E-02	2.36E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.62E-05	6.10E-05	2.27E-07	6.01E-06	263.0	2.51E-03	4.17E-03
SI13_W	0.75	609	0	1	9.70E-02	2.51E-02	1.77E-03	1.18E-03	1.05E-03	2.21E-04	0.00E+00	8.93E-05	6.33E-05	2.35E-07	6.23E-06	273.5	2.60E-03	4.32E-03
SI13_W	0.75	661	0	1	1.05E-01	2.69E-02	1.92E-03	1.28E-03	1.14E-03	2.40E-04	0.00E+00	9.68E-05	6.86E-05	2.55E-07	6.75E-06	296.1	2.82E-03	4.68E-03
SI13_W	0.75	815	0	1	1.30E-01	3.32E-02	2.36E-03	1.58E-03	1.40E-03	2.96E-04	0.00E+00	1.19E-04	8.46E-05	3.15E-07	8.34E-06	365.2	3.49E-03	5.78E-03
SI13_W	0.75	877	0	1	1.39E-01	3.47E-02	2.53E-03	1.70E-03	1.51E-03	3.18E-04	0.00E+00	1.28E-04	9.09E-05	3.39E-07	8.96E-06	390.5	3.74E-03	6.22E-03
SI13_W	0.75	609	0	1	9.64E-02	2.33E-02	1.74E-03	1.18E-03	1.05E-03	2.20E-04	0.00E+00	8.89E-05	6.30E-05	2.35E-07	6.21E-06	269.2	2.59E-03	4.32E-03
SI13_W	0.75	403	0	1	6.31E-02	1.34E-02	1.12E-03	7.81E-04	6.92E-04	1.45E-04	0.00E+00	5.84E-05	4.14E-05	1.56E-07	4.08E-06	173.5	1.70E-03	2.85E-03
SI13_W	0.75	341	0	1	5.31E-02	1.02E-02	9.34E-04	6.61E-04	5.86E-04	1.22E-04	0.00E+00	4.92E-05	3.49E-05	1.32E-07	3.44E-06	144.2	1.44E-03	2.41E-03
SI13_W	0.75	289	0	1	4.47E-02	7.71E-03	7.80E-04	5.61E-04	4.97E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.12E-07	2.90E-06	120.4	1.21E-03	2.05E-03
SI13_W	0.75	237	0	1	3.65E-02	5.67E-03	6.31E-04	4.61E-04	4.08E-04	8.43E-05	0.00E+00	3.41E-05	2.41E-05	9.18E-08	2.38E-06	97.5	9.94E-04	1.68E-03
SI13_W	0.75	175	0	1	2.69E-02	3.73E-03	4.60E-04	3.41E-04	3.02E-04	6.21E-05	0.00E+00	2.51E-05	1.78E-05	6.78E-08	1.75E-06	71.1	7.33E-04	1.24E-03
SI14_E	0.75	129	0	1	1.96E-02	2.41E-03	3.33E-04	2.49E-04	2.21E-04	4.54E-05	0.00E+00	1.83E-05	1.30E-05	4.97E-08	1.28E-06	51.3	5.35E-04	9.11E-04
SI14_E	0.75	86	0	1	1.30E-02	1.44E-03	2.19E-04	1.66E-04	1.47E-04	3.02E-05	0.00E+00	1.22E-05	8.64E-06	3.31E-08	8.51E-07	33.9	3.56E-04	6.07E-04
SI14_E	0.75	75	0	1	1.13E-02	1.12E-03	1.90E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.54E-06	2.90E-08	7.43E-07	29.3	3.10E-04	5.31E-04
SI14_E	0.75	54	0	1	8.07E-03	8.00E-04	1.35E-04	1.04E-04	9.21E-05	1.88E-05	0.00E+00	7.59E-06	5.38E-06	2.07E-08	5.30E-07	20.8	2.21E-04	3.79E-04
SI14_E	0.75	75	0	1	1.13E-02	1.12E-03	1.88E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.53E-06	2.90E-08	7.41E-07	29.0	3.10E-04	5.31E-04
SI14_E	0.75	182	0	1	2.74E-02	2.72E-03	4.56E-04	3.53E-04	3.13E-04	6.38E-05	0.00E+00	2.58E-05	1.83E-05	7.04E-08	1.80E-06	70.5	7.53E-04	1.29E-03
SI14_E	0.75	546	0	1	8.24E-02	8.16E-03	1.38E-03	1.06E-03	9.39E-04	1.92E-04	0.00E+00	7.75E-05	5.49E-05	2.11E-07	5.41E-06	212.6	2.26E-03	3.87E-03
SI14_E	0.75	835	0	1	1.27E-01	1.52E-02	2.16E-03	1.62E-03	1.44E-03	2.95E-04	0.00E+00	1.19E-04	8.44E-05	3.23E-07	8.31E-06	333.2	3.48E-03	5.92E-03
SI14_E	0.75	675	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.61E-07	6.77E-06	278.2	2.83E-03	4.78E-03
SI14_E	0.75	557	0	1	8.66E-02	1.57E-02	1.52E-03	1.08E-03	9.57E-04	1.99E-04	0.00E+00	8.04E-05	5.70E-05	2.15E-07	5.61E-06	234.5	2.35E-03	3.95E-03
SI14_E	0.75	503	0	1	7.87E-02	1.59E-02	1.40E-03	9.77E-04	8.65E-04	1.81E-04	0.00E+00	7.30E-05	5.17E-05	1.95E-07	5.09E-06	215.6	2.13E-03	3.57E-03
SI14_E	0.75	568	0	1	8.98E-02	2.13E-02	1.62E-03	1.10E-03	9.76E-04	2.05E-04	0.00E+00	8.29E-05	5.87E-05	2.19E-07	5.78E-06	250.6	2.42E-03	4.02E-03
SI14_E	0.75	600	0	1	9.52E-02	2.34E-02	1.73E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.77E-05	6.22E-05	2.32E-07	6.12E-06	266.9	2.56E-03	4.25E-03
SI14_E	0.75	610	0	1	9.71E-02	2.45E-02	1.77E-03	1.18E-03	1.05E-03	2.21E-04	0.00E+00	8.94E-05	6.33E-05	2.36E-07	6.24E-06	272.8	2.61E-03	4.33E-03
SI14_E	0.75	632	0	1	1.01E-01	2.60E-02	1.84E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.26E-05	6.56E-05	2.44E-07	6.46E-06	283.8	2.70E-03	4.48E-03
SI14_E	0.75	685	0	1	1.09E-01	2.80E-02	1.99E-03	1.33E-03	1.18E-03	2.49E-04	0.00E+00	1.00E-04	7.12E-05	2.65E-07	7.01E-06	307.2	2.93E-03	4.86E-03
SI14_E	0.75	846	0	1	1.35E-01	3.44E-02	2.45E-03	1.64E-03	1.45E-03	3.07E-04	0.00E+00	1.24E-04	8.78E-05	3.27E-07	8.65E-06	378.9	3.62E-03	6.00E-03
SI14_E	0.75	910	0	1	1.45E-01	3.60E-02	2.62E-03	1.77E-03	1.56E-03	3.30E-04	0.00E+00	1.33E-04	9.44E-05	3.52E-07	9.29E-06	405.2	3.89E-03	6.45E-03
SI14_E	0.75	632	0	1	1.00E-01	2.42E-02	1.81E-03	1.23E-03	1.09E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	279.3	2.69E-03	4.48E-03
SI14_E	0.75	418	0	1	6.55E-02	1.39E-02	1.17E-03	8.11E-04	7.18E-04	1.50E-04	0.00E+00	6.06E-05	4.30E-05	1.61E-07	4.23E-06	180.0	1.77E-03	2.96E-03
SI14_E	0.75	353	0	1	5.50E-02	1.05E-02	9.69E-04	6.86E-04	6.08E-04	1.26E-04	0.00E+00	5.11E-05	3.62E-05	1.37E-07	3.57E-06	149.7	1.49E-03	2.50E-03
SI14_E	0.75	300	0	1	4.64E-02	8.00E-03	8.09E-04	5.82E-04	5.15E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.16E-07	3.01E-06	124.9	1.26E-03	2.12E-03
SI14_E	0.75	246	0	1	3.79E-02	5.88E-03	6.55E-04	4.78E-04	4.23E-04	8.75E-05	0.00E+00	3.54E-05	2.51E-05	9.52E-08	2.47E-06	101.1	1.03E-03	1.75E-03
SI14_E	0.75	182	0	1	2.79E-02	3.88E-03	4.78E-04	3.53E-04	3.13E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	7.04E-08	1.82E-06	73.8	7.60E-04	1.29E-03
SI14_W	0.75	129	0	1	1.96E-02	2.41E-03	3.33E-04	2.49E-04	2.21E-04	4.54E-05	0.00E+00	1.83E-05	1.30E-05	4.97E-08	1.28E-06	51.3	5.35E-04	9.11E-04
SI14_W	0.75	86	0	1	1.30E-02	1.44E-03	2.19E-04	1.66E-04	1.47E-04	3.02E-05	0.00E+00	1.22E-05	8.64E-06	3.31E-08	8.51E-07	33.9	3.56E-04	6.07E-04
SI14_W	0.75	75	0	1	1.13E-02	1.12E-03	1.90E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.54E-06	2.90E-08	7.43E-07	29.3	3.10E-04	5.31E-04
SI14_W	0.75	54	0	1	8.07E-03	8.00E-04	1.35E-04	1.04E-04	9.21E-05	1.88E-05	0.00E+00	7.59E-06	5.38E-06	2.07E-08	5.30E-07	20.8	2.21E-04	3.79E-04
SI14_W	0.75	75	0	1	1.13E-02	1.12E-03	1.88E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.53E-06	2.90E-08	7.41E-07	29.0	3.10E-04	5.31E-04
SI14_W	0.75	182	0	1	2.74E-02	2.72E-03	4.56E-04	3.53E-04	3.13E-04	6.38E-05	0.00E+00	2.58E-05	1.83E-05	7.04E-08	1.80E-06	70.5	7.53E-04	1.29E-03
SI14_W	0.75	546	0	1	8.24E-02	8.16E-03	1.38E-03	1.06E-03	9.39E-04	1.92E-04	0.00E+00	7.75E-05	5.49E-05	2.11E-07	5.41E-06	212.6	2.26E-03	3.87E-03
SI14_W	0.75	835	0	1	1.27E-01	1.52E-02	2.16E-03	1.62E-03	1.44E-03	2.95E-04	0.00E+00	1.19E-04	8.44E-05	3.23E-07	8.31E-06	333.2	3.48E-03	5.92E-03
SI14_W	0.75	675	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.61E-07	6.77E-06	278.2	2.83E-03	4.78E-03
SI14_W	0.75	557	0	1	8.66E-02	1.57E-02	1.52E-03	1.08E-03	9.57E-04	1.99E-04	0.00E+00	8.04E-05	5.70E-05	2.15E-07	5.61E-06	234.5	2.35E-03	3.95E-03
SI14_W	0.75	503	0	1	7.87E-02	1.59E-02	1.40E-03	9.77E-04	8.65E-04	1.81E-04	0.00E+00	7.30E-05	5.17E-05	1.95E-07	5.09E-06	215.6	2.13E-03	3.57E-03
SI14_W	0.75	568	0	1	8.98E-02	2.13E-02	1.62E-03	1.10E-03	9.76E-04	2.05E-04	0.00E+00	8.29E-05	5.87E-05	2.19E-07	5.78E-06	250.6	2.42E-03	4.02E-03
SI14_W	0.75	600	0	1	9.52E-02	2.34E-02	1.73E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.77E-05	6.22E-05	2.32E-07	6.12E-06	266.9	2.56E-03	4.25E-03
SI14_W	0.75	610	0	1	9.71E-02	2.45E-02	1.77E-03	1.18E-03	1.05E-03	2.21E-04	0.00E+00	8.94E-05	6.33E-05	2.36E-07	6.24E-06	272.8	2.61E-03	4.33E-03
SI14_W	0.75	632	0	1	1.01E-01	2.60E-02	1.84E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.26E-05	6.56E-05	2.44E-07	6.46E-06	283.8	2.70E-03	4.48E-03
SI14_W	0.75	685	0	1	1.09E-01	2.80E-02	1.99E-03	1.33E-03	1.18E-03	2.49E-04	0.00E+00	1.00E-04	7.12E-05	2.65E-07	7.01E-06	307.2	2.93E-03	4.86E-03
SI14_W	0.75	846	0	1	1.35E-01	3.44E-02	2.45E-03	1.64E-03	1.45E-03	3.07E-04	0.00E+00	1.24E-04	8.78E-05	3.27E-07	8.65E-06	378.9	3.62E-03	6.00E-03
SI14_W	0.75	910	0	1	1.45E-01	3.60E-02	2.62E-03	1.77E-03	1.56E-03	3.30E-04	0.00E+00	1.33E-04	9.44E-05	3.52E-07	9.29E-06	405.2	3.89E-03	6.45E-03
SI14_W	0.75	632	0	1	1.00E-01	2.42E-02	1.81E-03	1.23E-03	1.09E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	279.3	2.69E-03	4.48E-03
SI14_W	0.75	418	0	1	6.55E-02	1.39E-02	1.17E-03	8.11E-04	7.18E-04	1.50E-04	0.00E+00	6.06E-05	4.30E-05	1.61E-07	4.23E-06	180.0	1.77E-03	2.96E-03
SI14_W	0.75	353	0	1	5.50E-02	1.05E-02	9.69E-04	6.86E-04	6.08E-04	1.26E-04	0.00E+00	5.11E-05	3.62E-05	1.37E-07	3.57E-06	149.7	1.49E-03	2.50E-03
SI14_W	0.75	300	0	1	4.64E-02	8.00E-03	8.09E-04	5.82E-04	5.15E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.16E-07	3.01E-06	124.9	1.26E-03	2.12E-03
SI14_W	0.75	246	0	1	3.79E-02	5.88E-03	6.55E-04	4.78E-04	4.23E-04	8.75E-05	0.00E+00	3.54E-05	2.51E-05	9.52E-08	2.47E-06	101.1	1.03E-03	1.75E-03
SI14_W	0.75	182	0	1	2.79E-02	3.88E-03	4.78E-04	3.53E-04	3.13E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	7.04E-08	1.82E-06	73.8	7.60E-04	1.29E-03
SI15_E	0.75	129	0	1	1.96E-02	2.41E-03	3.33E-04	2.49E-04	2.21E-04	4.54E-05	0.00E+00	1.83E-05	1.30E-05	4.97E-08	1.28E-06	51.3	5.35E-04	9.11E-04
SI15_E	0.75	86	0	1	1.30E-02	1.44E-03	2.19E-04	1.66E-04	1.47E-04	3.02E-05	0.00E+00	1.22E-05	8.64E-06	3.31E-08	8.51E-07	33.9	3.56E-04	6.07E-04
SI15_E	0.75	75	0	1	1.13E-02	1.12E-03	1.90E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.54E-06	2.90E-08	7.43E-07	29.3	3.10E-04	5.31E-04
SI15_E	0.75	54	0	1	8.07E-03	8.00E-04	1.35E-04	1.04E-04	9.21E-05	1.88E-05	0.00E+00	7.59E-06	5.38E-06	2.07E-08	5.30E-07	20.8	2.21E-04	3.79E-04
SI15_E	0.75	75	0	1	1.13E-02	1.12E-03	1.88E-04	1.46E-04	1.29E-04	2.63E-05	0.00E+00	1.06E-05	7.53E-06	2.90E-08	7.41E-07	29.0	3.10E-04	5.31E-04
SI15_E	0.75	182	0	1	2.74E-02	2.72E-03	4.56E-04	3.53E-04	3.13E-04	6.38E-05	0.00E+00	2.58E-05	1.83E-05	7.04E-08	1.80E-06	70.5	7.53E-04	1.29E-03
SI15_E	0.75	546	0	1	8.24E-02	8.16E-03	1.38E-03	1.06E-03	9.39E-04	1.92E-04	0.00E+00	7.75E-05	5.49E-05	2.11E-07	5.41E-06	212.6	2.26E-03	3.87E-03
SI15_E	0.75	835	0	1	1.27E-01	1.52E-02	2.16E-03	1.62E-03	1.44E-03	2.95E-04	0.00E+00	1.19E-04	8.44E-05	3.23E-07	8.31E-06	333.2	3.48E-03	5.92E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	675	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.61E-07	6.77E-06	278.2	2.83E-03	4.78E-03
SI15_E	0.75	557	0	1	8.66E-02	1.57E-02	1.52E-03	1.08E-03	9.57E-04	1.99E-04	0.00E+00	8.04E-05	5.70E-05	2.15E-07	5.61E-06	234.5	2.35E-03	3.95E-03
SI15_E	0.75	503	0	1	7.87E-02	1.59E-02	1.40E-03	9.77E-04	8.65E-04	1.81E-04	0.00E+00	7.30E-05	5.17E-05	1.95E-07	5.09E-06	215.6	2.13E-03	3.57E-03
SI15_E	0.75	568	0	1	8.98E-02	2.13E-02	1.62E-03	1.10E-03	9.76E-04	2.05E-04	0.00E+00	8.29E-05	5.87E-05	2.19E-07	5.78E-06	250.6	2.42E-03	4.02E-03
SI15_E	0.75	600	0	1	9.52E-02	2.34E-02	1.73E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.77E-05	6.22E-05	2.32E-07	6.12E-06	266.9	2.56E-03	4.25E-03
SI15_E	0.75	610	0	1	9.71E-02	2.45E-02	1.77E-03	1.18E-03	1.05E-03	2.21E-04	0.00E+00	8.94E-05	6.33E-05	2.36E-07	6.24E-06	272.8	2.61E-03	4.33E-03
SI15_E	0.75	632	0	1	1.01E-01	2.60E-02	1.84E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.26E-05	6.56E-05	2.44E-07	6.46E-06	283.8	2.70E-03	4.48E-03
SI15_E	0.75	685	0	1	1.09E-01	2.80E-02	1.99E-03	1.33E-03	1.18E-03	2.49E-04	0.00E+00	1.00E-04	7.12E-05	2.65E-07	7.01E-06	307.2	2.93E-03	4.86E-03
SI15_E	0.75	846	0	1	1.35E-01	3.44E-02	2.45E-03	1.64E-03	1.45E-03	3.07E-04	0.00E+00	1.24E-04	8.78E-05	3.27E-07	8.65E-06	378.9	3.62E-03	6.00E-03
SI15_E	0.75	910	0	1	1.45E-01	3.60E-02	2.62E-03	1.77E-03	1.56E-03	3.30E-04	0.00E+00	1.33E-04	9.44E-05	3.52E-07	9.29E-06	405.2	3.89E-03	6.45E-03
SI15_E	0.75	632	0	1	1.00E-01	2.42E-02	1.81E-03	1.23E-03	1.09E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	279.3	2.69E-03	4.48E-03
SI15_E	0.75	418	0	1	6.55E-02	1.39E-02	1.17E-03	8.11E-04	7.18E-04	1.50E-04	0.00E+00	6.06E-05	4.30E-05	1.61E-07	4.23E-06	180.0	1.77E-03	2.96E-03
SI15_E	0.75	353	0	1	5.50E-02	1.05E-02	9.69E-04	6.86E-04	6.08E-04	1.26E-04	0.00E+00	5.11E-05	3.62E-05	1.37E-07	3.57E-06	149.7	1.49E-03	2.50E-03
SI15_E	0.75	300	0	1	4.64E-02	8.00E-03	8.09E-04	5.82E-04	5.15E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.16E-07	3.01E-06	124.9	1.26E-03	2.12E-03
SI15_E	0.75	246	0	1	3.79E-02	5.88E-03	6.55E-04	4.78E-04	4.23E-04	8.75E-05	0.00E+00	3.54E-05	2.51E-05	9.52E-08	2.47E-06	101.1	1.03E-03	1.75E-03
SI15_E	0.75	182	0	1	2.79E-02	3.88E-03	4.78E-04	3.53E-04	3.13E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	7.04E-08	1.82E-06	73.8	7.60E-04	1.29E-03
SI15_W	0.75	144	0	1	2.19E-02	2.69E-03	3.72E-04	2.79E-04	2.47E-04	5.07E-05	0.00E+00	2.05E-05	1.45E-05	5.55E-08	1.43E-06	57.4	5.98E-04	1.02E-03
SI15_W	0.75	96	0	1	1.45E-02	1.61E-03	2.45E-04	1.86E-04	1.65E-04	3.37E-05	0.00E+00	1.36E-05	9.66E-06	3.70E-08	9.51E-07	37.9	3.98E-04	6.79E-04
SI15_W	0.75	84	0	1	1.27E-02	1.25E-03	2.12E-04	1.63E-04	1.44E-04	2.94E-05	0.00E+00	1.19E-05	8.43E-06	3.24E-08	8.30E-07	32.7	3.47E-04	5.94E-04
SI15_W	0.75	60	0	1	9.02E-03	8.94E-04	1.50E-04	1.16E-04	1.03E-04	2.10E-05	0.00E+00	8.48E-06	6.01E-06	2.31E-08	5.92E-07	23.2	2.48E-04	4.24E-04
SI15_W	0.75	84	0	1	1.26E-02	1.25E-03	2.10E-04	1.63E-04	1.44E-04	2.94E-05	0.00E+00	1.19E-05	8.41E-06	3.24E-08	8.28E-07	32.4	3.46E-04	5.94E-04
SI15_W	0.75	203	0	1	3.06E-02	3.04E-03	5.10E-04	3.95E-04	3.50E-04	7.13E-05	0.00E+00	2.88E-05	2.04E-05	7.87E-08	2.01E-06	78.8	8.41E-04	1.44E-03
SI15_W	0.75	610	0	1	9.21E-02	9.12E-03	1.54E-03	1.18E-03	1.05E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.36E-07	6.04E-06	237.7	2.53E-03	4.33E-03
SI15_W	0.75	934	0	1	1.42E-01	1.70E-02	2.41E-03	1.81E-03	1.60E-03	3.30E-04	0.00E+00	1.33E-04	9.44E-05	3.61E-07	9.29E-06	372.4	3.88E-03	6.62E-03
SI15_W	0.75	754	0	1	1.16E-01	1.84E-02	2.01E-03	1.46E-03	1.30E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.92E-07	7.56E-06	311.0	3.16E-03	5.34E-03
SI15_W	0.75	622	0	1	9.67E-02	1.76E-02	1.70E-03	1.21E-03	1.07E-03	2.22E-04	0.00E+00	8.99E-05	6.37E-05	2.41E-07	6.27E-06	262.1	2.62E-03	4.41E-03
SI15_W	0.75	563	0	1	8.80E-02	1.77E-02	1.56E-03	1.09E-03	9.67E-04	2.02E-04	0.00E+00	8.16E-05	5.78E-05	2.18E-07	5.69E-06	241.0	2.38E-03	3.99E-03
SI15_W	0.75	634	0	1	1.00E-01	2.38E-02	1.81E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.26E-05	6.56E-05	2.45E-07	6.46E-06	280.1	2.70E-03	4.50E-03
SI15_W	0.75	670	0	1	1.06E-01	2.61E-02	1.93E-03	1.30E-03	1.15E-03	2.43E-04	0.00E+00	9.81E-05	6.95E-05	2.59E-07	6.84E-06	298.3	2.86E-03	4.75E-03
SI15_W	0.75	682	0	1	1.09E-01	2.73E-02	1.97E-03	1.32E-03	1.17E-03	2.47E-04	0.00E+00	9.99E-05	7.08E-05	2.64E-07	6.97E-06	305.0	2.91E-03	4.83E-03
SI15_W	0.75	706	0	1	1.13E-01	2.91E-02	2.05E-03	1.37E-03	1.21E-03	2.56E-04	0.00E+00	1.04E-04	7.34E-05	2.73E-07	7.23E-06	317.2	3.02E-03	5.00E-03
SI15_W	0.75	766	0	1	1.22E-01	3.12E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.12E-04	7.95E-05	2.96E-07	7.83E-06	343.4	3.27E-03	5.43E-03
SI15_W	0.75	946	0	1	1.51E-01	3.85E-02	2.74E-03	1.84E-03	1.63E-03	3.43E-04	0.00E+00	1.39E-04	9.82E-05	3.66E-07	9.67E-06	423.5	4.04E-03	6.70E-03
SI15_W	0.75	1017	0	1	1.62E-01	4.03E-02	2.93E-03	1.97E-03	1.75E-03	3.68E-04	0.00E+00	1.49E-04	1.05E-04	3.93E-07	1.04E-05	452.9	4.34E-03	7.21E-03
SI15_W	0.75	706	0	1	1.12E-01	2.71E-02	2.02E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.73E-07	7.20E-06	312.2	3.01E-03	5.00E-03
SI15_W	0.75	467	0	1	7.32E-02	1.56E-02	1.30E-03	9.06E-04	8.02E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.80E-07	4.73E-06	201.2	1.98E-03	3.31E-03
SI15_W	0.75	395	0	1	6.15E-02	1.18E-02	1.08E-03	7.67E-04	6.79E-04	1.41E-04	0.00E+00	5.71E-05	4.05E-05	1.53E-07	3.99E-06	167.3	1.67E-03	2.80E-03
SI15_W	0.75	335	0	1	5.19E-02	8.95E-03	9.04E-04	6.51E-04	5.76E-04	1.19E-04	0.00E+00	4.83E-05	3.42E-05	1.30E-07	3.37E-06	139.6	1.41E-03	2.37E-03
SI15_W	0.75	275	0	1	4.24E-02	6.57E-03	7.32E-04	5.34E-04	4.73E-04	9.78E-05	0.00E+00	3.95E-05	2.80E-05	1.06E-07	2.76E-06	113.0	1.15E-03	1.95E-03
SI15_W	0.75	203	0	1	3.12E-02	4.33E-03	5.34E-04	3.95E-04	3.50E-04	7.21E-05	0.00E+00	2.91E-05	2.06E-05	7.87E-08	2.03E-06	82.4	8.50E-04	1.44E-03
SI16_E	0.75	144	0	1	2.19E-02	2.69E-03	3.72E-04	2.79E-04	2.47E-04	5.07E-05	0.00E+00	2.05E-05	1.45E-05	5.55E-08	1.43E-06	57.4	5.98E-04	1.02E-03
SI16_E	0.75	96	0	1	1.45E-02	1.61E-03	2.45E-04	1.86E-04	1.65E-04	3.37E-05	0.00E+00	1.36E-05	9.66E-06	3.70E-08	9.51E-07	37.9	3.98E-04	6.79E-04
SI16_E	0.75	84	0	1	1.27E-02	1.25E-03	2.12E-04	1.63E-04	1.44E-04	2.94E-05	0.00E+00	1.19E-05	8.43E-06	3.24E-08	8.30E-07	32.7	3.47E-04	5.94E-04
SI16_E	0.75	60	0	1	9.02E-03	8.94E-04	1.50E-04	1.16E-04	1.03E-04	2.10E-05	0.00E+00	8.48E-06	6.01E-06	2.31E-08	5.92E-07	23.2	2.48E-04	4.24E-04
SI16_E	0.75	84	0	1	1.26E-02	1.25E-03	2.10E-04	1.63E-04	1.44E-04	2.94E-05	0.00E+00	1.19E-05	8.41E-06	3.24E-08	8.28E-07	32.4	3.46E-04	5.94E-04
SI16_E	0.75	203	0	1	3.06E-02	3.04E-03	5.10E-04	3.95E-04	3.50E-04	7.13E-05	0.00E+00	2.88E-05	2.04E-05	7.87E-08	2.01E-06	78.8	8.41E-04	1.44E-03
SI16_E	0.75	610	0	1	9.21E-02	9.12E-03	1.54E-03	1.18E-03	1.05E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.36E-07	6.04E-06	237.7	2.53E-03	4.33E-03
SI16_E	0.75	934	0	1	1.42E-01	1.70E-02	2.41E-03	1.81E-03	1.60E-03	3.30E-04	0.00E+00	1.33E-04	9.44E-05	3.61E-07	9.29E-06	372.4	3.88E-03	6.62E-03
SI16_E	0.75	754	0	1	1.16E-01	1.84E-02	2.01E-03	1.46E-03	1.30E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.92E-07	7.56E-06	311.0	3.16E-03	5.34E-03
SI16_E	0.75	622	0	1	9.67E-02	1.76E-02	1.70E-03	1.21E-03	1.07E-03	2.22E-04	0.00E+00	8.99E-05	6.37E-05	2.41E-07	6.27E-06	262.1	2.62E-03	4.41E-03
SI16_E	0.75	563	0	1	8.80E-02	1.77E-02	1.56E-03	1.09E-03	9.67E-04	2.02E-04	0.00E+00	8.16E-05	5.78E-05	2.18E-07	5.69E-06	241.0	2.38E-03	3.99E-03
SI16_E	0.75	634	0	1	1.00E-01	2.38E-02	1.81E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.26E-05	6.56E-05	2.45E-07	6.46E-06	280.1	2.70E-03	4.50E-03
SI16_E	0.75	670	0	1	1.06E-01	2.61E-02	1.93E-03	1.30E-03	1.15E-03	2.43E-04	0.00E+00	9.81E-05	6.95E-05	2.59E-07	6.84E-06	298.3	2.86E-03	4.75E-03
SI16_E	0.75	682	0	1	1.09E-01	2.73E-02	1.97E-03	1.32E-03	1.17E-03	2.47E-04	0.00E+00	9.99E-05	7.08E-05	2.64E-07	6.97E-06	305.0	2.91E-03	4.83E-03
SI16_E	0.75	706	0	1	1.13E-01	2.91E-02	2.05E-03	1.37E-03	1.21E-03	2.56E-04	0.00E+00	1.04E-04	7.34E-05	2.73E-07	7.23E-06	317.2	3.02E-03	5.00E-03
SI16_E	0.75	766	0	1	1.22E-01	3.12E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.12E-04	7.95E-05	2.96E-07	7.83E-06	343.4	3.27E-03	5.43E-03
SI16_E	0.75	946	0	1	1.51E-01	3.85E-02	2.74E-03	1.84E-03	1.63E-03	3.43E-04	0.00E+00	1.39E-04	9.82E-05	3.66E-07	9.67E-06	423.5	4.04E-03	6.70E-03
SI16_E	0.75	1017	0	1	1.62E-01	4.03E-02	2.93E-03	1.97E-03	1.75E-03	3.68E-04	0.00E+00	1.49E-04	1.05E-04	3.93E-07	1.04E-05	452.9	4.34E-03	7.21E-03
SI16_E	0.75	706	0	1	1.12E-01	2.71E-02	2.02E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.73E-07	7.20E-06	312.2	3.01E-03	5.00E-03
SI16_E	0.75	467	0	1	7.32E-02	1.56E-02	1.30E-03	9.06E-04	8.02E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.80E-07	4.73E-06	201.2	1.98E-03	3.31E-03
SI16_E	0.75	395	0	1	6.15E-02	1.18E-02	1.08E-03	7.67E-04	6.79E-04	1.41E-04	0.00E+00	5.71E-05	4.05E-05	1.53E-07	3.99E-06	167.3	1.67E-03	2.80E-03
SI16_E	0.75	335	0	1	5.19E-02	8.95E-03	9.04E-04	6.51E-04	5.76E-04	1.19E-04	0.00E+00	4.83E-05	3.42E-05	1.30E-07	3.37E-06	139.6	1.41E-03	2.37E-03
SI16_E	0.75	275	0	1	4.24E-02	6.57E-03	7.32E-04	5.34E-04	4.73E-04	9.78E-05	0.00E+00	3.95E-05	2.80E-05	1.06E-07	2.76E-06	113.0	1.15E-03	1.95E-03
SI16_E	0.75	203	0	1	3.12E-02	4.33E-03	5.34E-04	3.95E-04	3.50E-04	7.21E-05	0.00E+00	2.91E-05	2.06E-05	7.87E-08	2.03E-06	82.4	8.50E-04	1.44E-03
SI16_W	0.75	132	0	1	2.02E-02	2.48E-03	3.43E-04	2.57E-04	2.28E-04	4.67E-05	0.00E+00	1.89E-05	1.34E-05	5.12E-08	1.32E-06	52.9	5.51E-04	9.38E-04
SI16_W	0.75	88	0	1	1.34E-02	1.48E-03	2.26E-04	1.71E-04	1.52E-04	3.11E-05	0.00E+00	1.26E-05	8.90E-06	3.41E-08	8.77E-07	34.9	3.67E-04	6.25E-04
SI16_W	0.75	77	0	1	1.17E-02	1.15E-03	1.95E-04	1.50E-04	1.33E-04	2.71E-05	0.00E+00	1.10E-05	7.77E-06	2.99E-08	7.65E-07	30.2	3.20E-04	5.47E-04
SI16_W	0.75	55	0	1	8.32E-03	8.24E-04	1.39E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.82E-06	5.54E-06	2.13E-08	5.46E-07	21.4	2.28E-04	3.91E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	77	0	1	1.16E-02	1.15E-03	1.94E-04	1.50E-04	1.33E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.99E-08	7.64E-07	29.9	3.19E-04	5.47E-04
SI16_W	0.75	188	0	1	2.82E-02	2.80E-03	4.70E-04	3.64E-04	3.22E-04	6.58E-05	0.00E+00	2.66E-05	1.88E-05	7.25E-08	1.85E-06	72.6	7.75E-04	1.33E-03
SI16_W	0.75	563	0	1	8.49E-02	8.40E-03	1.42E-03	1.09E-03	9.67E-04	1.98E-04	0.00E+00	7.98E-05	5.66E-05	2.18E-07	5.57E-06	219.1	2.33E-03	3.99E-03
SI16_W	0.75	861	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.04E-04	0.00E+00	1.23E-04	8.70E-05	3.33E-07	8.57E-06	343.3	3.58E-03	6.10E-03
SI16_W	0.75	695	0	1	1.07E-01	1.69E-02	1.86E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.99E-05	7.08E-05	2.69E-07	6.97E-06	286.6	2.91E-03	4.93E-03
SI16_W	0.75	574	0	1	8.92E-02	1.62E-02	1.56E-03	1.11E-03	9.86E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.22E-07	5.78E-06	241.6	2.42E-03	4.07E-03
SI16_W	0.75	519	0	1	8.11E-02	1.63E-02	1.44E-03	1.01E-03	8.91E-04	1.86E-04	0.00E+00	7.52E-05	5.33E-05	2.00E-07	5.25E-06	222.1	2.19E-03	3.67E-03
SI16_W	0.75	585	0	1	9.26E-02	2.19E-02	1.67E-03	1.14E-03	1.01E-03	2.11E-04	0.00E+00	8.54E-05	6.05E-05	2.26E-07	5.96E-06	258.2	2.49E-03	4.14E-03
SI16_W	0.75	618	0	1	9.81E-02	2.41E-02	1.78E-03	1.20E-03	1.06E-03	2.24E-04	0.00E+00	9.04E-05	6.40E-05	2.39E-07	6.31E-06	274.9	2.64E-03	4.38E-03
SI16_W	0.75	629	0	1	1.00E-01	2.52E-02	1.82E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.21E-05	6.53E-05	2.43E-07	6.43E-06	281.1	2.69E-03	4.46E-03
SI16_W	0.75	651	0	1	1.04E-01	2.68E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.54E-05	6.76E-05	2.52E-07	6.66E-06	292.3	2.78E-03	4.61E-03
SI16_W	0.75	706	0	1	1.12E-01	2.88E-02	2.05E-03	1.37E-03	1.21E-03	2.56E-04	0.00E+00	1.03E-04	7.33E-05	2.73E-07	7.22E-06	316.5	3.02E-03	5.00E-03
SI16_W	0.75	872	0	1	1.39E-01	3.55E-02	2.53E-03	1.69E-03	1.50E-03	3.16E-04	0.00E+00	1.28E-04	9.05E-05	3.37E-07	8.91E-06	390.3	3.73E-03	6.18E-03
SI16_W	0.75	938	0	1	1.49E-01	3.71E-02	2.70E-03	1.82E-03	1.61E-03	3.40E-04	0.00E+00	1.37E-04	9.72E-05	3.63E-07	9.57E-06	417.5	4.00E-03	6.65E-03
SI16_W	0.75	651	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.51E-05	6.74E-05	2.52E-07	6.63E-06	287.8	2.77E-03	4.61E-03
SI16_W	0.75	430	0	1	6.75E-02	1.44E-02	1.20E-03	8.35E-04	7.40E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.66E-07	4.36E-06	185.5	1.82E-03	3.05E-03
SI16_W	0.75	364	0	1	5.67E-02	1.09E-02	9.99E-04	7.07E-04	6.26E-04	1.30E-04	0.00E+00	5.26E-05	3.73E-05	1.41E-07	3.67E-06	154.2	1.54E-03	2.58E-03
SI16_W	0.75	309	0	1	4.78E-02	8.25E-03	8.34E-04	6.00E-04	5.31E-04	1.10E-04	0.00E+00	4.45E-05	3.15E-05	1.19E-07	3.11E-06	128.7	1.30E-03	2.19E-03
SI16_W	0.75	254	0	1	3.91E-02	6.06E-03	6.75E-04	4.93E-04	4.36E-04	9.02E-05	0.00E+00	3.64E-05	2.58E-05	9.81E-08	2.54E-06	104.2	1.06E-03	1.80E-03
SI16_W	0.75	188	0	1	2.87E-02	3.99E-03	4.92E-04	3.64E-04	3.22E-04	6.64E-05	0.00E+00	2.68E-05	1.90E-05	7.25E-08	1.87E-06	76.0	7.83E-04	1.33E-03
SI17_E	0.75	132	0	1	2.02E-02	2.48E-03	3.43E-04	2.57E-04	2.28E-04	4.67E-05	0.00E+00	1.89E-05	1.34E-05	5.12E-08	1.32E-06	52.9	5.51E-04	9.38E-04
SI17_E	0.75	88	0	1	1.34E-02	1.48E-03	2.26E-04	1.71E-04	1.52E-04	3.11E-05	0.00E+00	1.26E-05	8.90E-06	3.41E-08	8.77E-07	34.9	3.67E-04	6.25E-04
SI17_E	0.75	77	0	1	1.17E-02	1.15E-03	1.95E-04	1.50E-04	1.33E-04	2.71E-05	0.00E+00	1.10E-05	7.77E-06	2.99E-08	7.65E-07	30.2	3.20E-04	5.47E-04
SI17_E	0.75	55	0	1	8.32E-03	8.24E-04	1.39E-04	1.07E-04	9.48E-05	1.94E-05	0.00E+00	7.82E-06	5.54E-06	2.13E-08	5.46E-07	21.4	2.28E-04	3.91E-04
SI17_E	0.75	77	0	1	1.16E-02	1.15E-03	1.94E-04	1.50E-04	1.33E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.99E-08	7.64E-07	29.9	3.19E-04	5.47E-04
SI17_E	0.75	188	0	1	2.82E-02	2.80E-03	4.70E-04	3.64E-04	3.22E-04	6.58E-05	0.00E+00	2.66E-05	1.88E-05	7.25E-08	1.85E-06	72.6	7.75E-04	1.33E-03
SI17_E	0.75	563	0	1	8.49E-02	8.40E-03	1.42E-03	1.09E-03	9.67E-04	1.98E-04	0.00E+00	7.98E-05	5.66E-05	2.18E-07	5.57E-06	219.1	2.33E-03	3.99E-03
SI17_E	0.75	861	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.04E-04	0.00E+00	1.23E-04	8.70E-05	3.33E-07	8.57E-06	343.3	3.58E-03	6.10E-03
SI17_E	0.75	695	0	1	1.07E-01	1.69E-02	1.86E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.99E-05	7.08E-05	2.69E-07	6.97E-06	286.6	2.91E-03	4.93E-03
SI17_E	0.75	574	0	1	8.92E-02	1.62E-02	1.56E-03	1.11E-03	9.86E-04	2.05E-04	0.00E+00	8.28E-05	5.87E-05	2.22E-07	5.78E-06	241.6	2.42E-03	4.07E-03
SI17_E	0.75	519	0	1	8.11E-02	1.63E-02	1.44E-03	1.01E-03	8.91E-04	1.86E-04	0.00E+00	7.52E-05	5.33E-05	2.00E-07	5.25E-06	222.1	2.19E-03	3.67E-03
SI17_E	0.75	585	0	1	9.26E-02	2.19E-02	1.67E-03	1.14E-03	1.01E-03	2.11E-04	0.00E+00	8.54E-05	6.05E-05	2.26E-07	5.96E-06	258.2	2.49E-03	4.14E-03
SI17_E	0.75	618	0	1	9.81E-02	2.41E-02	1.78E-03	1.20E-03	1.06E-03	2.24E-04	0.00E+00	9.04E-05	6.40E-05	2.39E-07	6.31E-06	274.9	2.64E-03	4.38E-03
SI17_E	0.75	629	0	1	1.00E-01	2.52E-02	1.82E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.21E-05	6.53E-05	2.43E-07	6.43E-06	281.1	2.69E-03	4.46E-03
SI17_E	0.75	651	0	1	1.04E-01	2.68E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.54E-05	6.76E-05	2.52E-07	6.66E-06	292.3	2.78E-03	4.61E-03
SI17_E	0.75	706	0	1	1.12E-01	2.88E-02	2.05E-03	1.37E-03	1.21E-03	2.56E-04	0.00E+00	1.03E-04	7.33E-05	2.73E-07	7.22E-06	316.5	3.02E-03	5.00E-03
SI17_E	0.75	872	0	1	1.39E-01	3.55E-02	2.53E-03	1.69E-03	1.50E-03	3.16E-04	0.00E+00	1.28E-04	9.05E-05	3.37E-07	8.91E-06	390.3	3.73E-03	6.18E-03
SI17_E	0.75	938	0	1	1.49E-01	3.71E-02	2.70E-03	1.82E-03	1.61E-03	3.40E-04	0.00E+00	1.37E-04	9.72E-05	3.63E-07	9.57E-06	417.5	4.00E-03	6.65E-03
SI17_E	0.75	651	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.51E-05	6.74E-05	2.52E-07	6.63E-06	287.8	2.77E-03	4.61E-03
SI17_E	0.75	430	0	1	6.75E-02	1.44E-02	1.20E-03	8.35E-04	7.40E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.66E-07	4.36E-06	185.5	1.82E-03	3.05E-03
SI17_E	0.75	364	0	1	5.67E-02	1.09E-02	9.99E-04	7.07E-04	6.26E-04	1.30E-04	0.00E+00	5.26E-05	3.73E-05	1.41E-07	3.67E-06	154.2	1.54E-03	2.58E-03
SI17_E	0.75	309	0	1	4.78E-02	8.25E-03	8.34E-04	6.00E-04	5.31E-04	1.10E-04	0.00E+00	4.45E-05	3.15E-05	1.19E-07	3.11E-06	128.7	1.30E-03	2.19E-03
SI17_E	0.75	254	0	1	3.91E-02	6.06E-03	6.75E-04	4.93E-04	4.36E-04	9.02E-05	0.00E+00	3.64E-05	2.58E-05	9.81E-08	2.54E-06	104.2	1.06E-03	1.80E-03
SI17_E	0.75	188	0	1	2.87E-02	3.99E-03	4.92E-04	3.64E-04	3.22E-04	6.64E-05	0.00E+00	2.68E-05	1.90E-05	7.25E-08	1.87E-06	76.0	7.83E-04	1.33E-03
SI17_W	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI17_W	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI17_W	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI17_W	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI17_W	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI17_W	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI17_W	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI17_W	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI17_W	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI17_W	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI17_W	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI17_W	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI17_W	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI17_W	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI17_W	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI17_W	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI17_W	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI17_W	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI17_W	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI17_W	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03
SI17_W	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI17_W	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI17_W	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI17_W	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI18_E	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI18_E	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI18_E	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI18_E	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI18_E	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI18_E	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI18_E	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI18_E	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI18_E	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI18_E	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI18_E	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI18_E	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI18_E	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI18_E	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI18_E	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI18_E	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI18_E	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI18_E	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI18_E	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03
SI18_E	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI18_E	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI18_E	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI18_E	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03
SI18_W	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI18_W	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI18_W	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI18_W	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI18_W	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI18_W	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI18_W	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI18_W	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI18_W	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI18_W	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI18_W	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI18_W	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI18_W	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI18_W	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI18_W	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI18_W	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI18_W	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI18_W	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI18_W	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI18_W	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03
SI18_W	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI18_W	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI18_W	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI18_W	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03
SI19_E	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI19_E	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI19_E	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI19_E	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI19_E	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI19_E	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI19_E	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI19_E	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI19_E	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI19_E	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI19_E	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI19_E	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI19_E	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI19_E	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI19_E	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI19_E	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI19_E	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI19_E	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI19_E	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI19_E	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_E	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI19_E	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI19_E	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI19_E	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03
SI19_W	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI19_W	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI19_W	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI19_W	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI19_W	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI19_W	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI19_W	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI19_W	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI19_W	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI19_W	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI19_W	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI19_W	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI19_W	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI19_W	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI19_W	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI19_W	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI19_W	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI19_W	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI19_W	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI19_W	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03
SI19_W	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI19_W	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI19_W	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI19_W	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03
SI20_E	0.75	132	0	1	2.01E-02	2.48E-03	3.42E-04	2.56E-04	2.27E-04	4.66E-05	0.00E+00	1.88E-05	1.34E-05	5.11E-08	1.32E-06	52.8	5.50E-04	9.36E-04
SI20_E	0.75	88	0	1	1.34E-02	1.48E-03	2.25E-04	1.71E-04	1.51E-04	3.10E-05	0.00E+00	1.25E-05	8.88E-06	3.40E-08	8.75E-07	34.8	3.66E-04	6.24E-04
SI20_E	0.75	77	0	1	1.16E-02	1.15E-03	1.95E-04	1.50E-04	1.32E-04	2.71E-05	0.00E+00	1.09E-05	7.75E-06	2.98E-08	7.63E-07	30.1	3.19E-04	5.46E-04
SI20_E	0.75	55	0	1	8.30E-03	8.22E-04	1.38E-04	1.07E-04	9.46E-05	1.93E-05	0.00E+00	7.80E-06	5.53E-06	2.13E-08	5.44E-07	21.3	2.28E-04	3.90E-04
SI20_E	0.75	77	0	1	1.16E-02	1.15E-03	1.93E-04	1.50E-04	1.32E-04	2.70E-05	0.00E+00	1.09E-05	7.73E-06	2.98E-08	7.62E-07	29.8	3.18E-04	5.46E-04
SI20_E	0.75	187	0	1	2.82E-02	2.79E-03	4.69E-04	3.63E-04	3.22E-04	6.56E-05	0.00E+00	2.65E-05	1.88E-05	7.23E-08	1.85E-06	72.4	7.73E-04	1.33E-03
SI20_E	0.75	561	0	1	8.47E-02	8.38E-03	1.42E-03	1.09E-03	9.65E-04	1.97E-04	0.00E+00	7.96E-05	5.64E-05	2.17E-07	5.56E-06	218.5	2.32E-03	3.98E-03
SI20_E	0.75	858	0	1	1.31E-01	1.57E-02	2.22E-03	1.67E-03	1.48E-03	3.03E-04	0.00E+00	1.22E-04	8.68E-05	3.32E-07	8.54E-06	342.4	3.57E-03	6.08E-03
SI20_E	0.75	693	0	1	1.07E-01	1.69E-02	1.85E-03	1.35E-03	1.19E-03	2.47E-04	0.00E+00	9.96E-05	7.06E-05	2.68E-07	6.95E-06	285.9	2.91E-03	4.91E-03
SI20_E	0.75	572	0	1	8.90E-02	1.62E-02	1.56E-03	1.11E-03	9.84E-04	2.05E-04	0.00E+00	8.26E-05	5.86E-05	2.21E-07	5.77E-06	241.0	2.41E-03	4.06E-03
SI20_E	0.75	517	0	1	8.09E-02	1.63E-02	1.44E-03	1.00E-03	8.89E-04	1.86E-04	0.00E+00	7.50E-05	5.31E-05	2.00E-07	5.23E-06	221.6	2.19E-03	3.67E-03
SI20_E	0.75	583	0	1	9.23E-02	2.19E-02	1.67E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.52E-05	6.03E-05	2.26E-07	5.94E-06	257.5	2.48E-03	4.13E-03
SI20_E	0.75	616	0	1	9.79E-02	2.40E-02	1.78E-03	1.20E-03	1.06E-03	2.23E-04	0.00E+00	9.02E-05	6.39E-05	2.38E-07	6.29E-06	274.3	2.63E-03	4.37E-03
SI20_E	0.75	627	0	1	9.98E-02	2.51E-02	1.82E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.19E-05	6.51E-05	2.43E-07	6.41E-06	280.4	2.68E-03	4.45E-03
SI20_E	0.75	649	0	1	1.03E-01	2.67E-02	1.89E-03	1.26E-03	1.12E-03	2.36E-04	0.00E+00	9.52E-05	6.75E-05	2.51E-07	6.64E-06	291.6	2.78E-03	4.60E-03
SI20_E	0.75	704	0	1	1.12E-01	2.87E-02	2.04E-03	1.37E-03	1.21E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.72E-07	7.20E-06	315.7	3.01E-03	4.99E-03
SI20_E	0.75	869	0	1	1.38E-01	3.54E-02	2.52E-03	1.69E-03	1.49E-03	3.15E-04	0.00E+00	1.27E-04	9.03E-05	3.36E-07	8.89E-06	389.4	3.72E-03	6.16E-03
SI20_E	0.75	936	0	1	1.49E-01	3.70E-02	2.70E-03	1.82E-03	1.61E-03	3.39E-04	0.00E+00	1.37E-04	9.70E-05	3.62E-07	9.55E-06	416.4	3.99E-03	6.63E-03
SI20_E	0.75	649	0	1	1.03E-01	2.49E-02	1.86E-03	1.26E-03	1.12E-03	2.35E-04	0.00E+00	9.48E-05	6.72E-05	2.51E-07	6.62E-06	287.1	2.77E-03	4.60E-03
SI20_E	0.75	429	0	1	6.73E-02	1.43E-02	1.20E-03	8.33E-04	7.38E-04	1.54E-04	0.00E+00	6.23E-05	4.42E-05	1.66E-07	4.35E-06	185.0	1.82E-03	3.04E-03
SI20_E	0.75	363	0	1	5.66E-02	1.08E-02	9.96E-04	7.05E-04	6.24E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.66E-06	153.8	1.53E-03	2.57E-03
SI20_E	0.75	308	0	1	4.77E-02	8.23E-03	8.31E-04	5.98E-04	5.30E-04	1.10E-04	0.00E+00	4.44E-05	3.15E-05	1.19E-07	3.10E-06	128.4	1.29E-03	2.18E-03
SI20_E	0.75	253	0	1	3.90E-02	6.04E-03	6.73E-04	4.91E-04	4.35E-04	8.99E-05	0.00E+00	3.63E-05	2.57E-05	9.79E-08	2.54E-06	103.9	1.06E-03	1.79E-03
SI20_E	0.75	187	0	1	2.87E-02	3.98E-03	4.91E-04	3.63E-04	3.22E-04	6.63E-05	0.00E+00	2.68E-05	1.90E-05	7.23E-08	1.87E-06	75.8	7.81E-04	1.33E-03
SI20_W	0.75	116	0	1	1.77E-02	2.18E-03	3.01E-04	2.26E-04	2.00E-04	4.10E-05	0.00E+00	1.66E-05	1.17E-05	4.49E-08	1.16E-06	46.4	4.84E-04	8.23E-04
SI20_W	0.75	77	0	1	1.18E-02	1.30E-03	1.98E-04	1.50E-04	1.33E-04	2.73E-05	0.00E+00	1.10E-05	7.81E-06	2.99E-08	7.70E-07	30.6	3.22E-04	5.49E-04
SI20_W	0.75	68	0	1	1.02E-02	1.01E-03	1.71E-04	1.32E-04	1.17E-04	2.38E-05	0.00E+00	9.62E-06	6.82E-06	2.62E-08	6.72E-07	26.5	2.81E-04	4.80E-04
SI20_W	0.75	48	0	1	7.30E-03	7.23E-04	1.22E-04	9.40E-05	8.32E-05	1.70E-05	0.00E+00	6.86E-06	4.86E-06	1.87E-08	4.79E-07	18.8	2.00E-04	3.43E-04
SI20_W	0.75	68	0	1	1.02E-02	1.01E-03	1.70E-04	1.32E-04	1.17E-04	2.38E-05	0.00E+00	9.60E-06	6.81E-06	2.62E-08	6.70E-07	26.2	2.80E-04	4.80E-04
SI20_W	0.75	165	0	1	2.48E-02	2.46E-03	4.13E-04	3.20E-04	2.83E-04	5.77E-05	0.00E+00	2.33E-05	1.65E-05	6.36E-08	1.63E-06	63.7	6.80E-04	1.17E-03
SI20_W	0.75	494	0	1	7.45E-02	7.38E-03	1.25E-03	9.59E-04	8.49E-04	1.73E-04	0.00E+00	7.01E-05	4.96E-05	1.91E-07	4.89E-06	192.3	2.04E-03	3.50E-03
SI20_W	0.75	755	0	1	1.15E-01	1.38E-02	1.95E-03	1.47E-03	1.30E-03	2.67E-04	0.00E+00	1.08E-04	7.63E-05	2.92E-07	7.52E-06	301.3	3.14E-03	5.35E-03
SI20_W	0.75	610	0	1	9.41E-02	1.49E-02	1.63E-03	1.18E-03	1.05E-03	2.17E-04	0.00E+00	8.77E-05	6.21E-05	2.36E-07	6.12E-06	251.6	2.56E-03	4.32E-03
SI20_W	0.75	504	0	1	7.83E-02	1.42E-02	1.37E-03	9.77E-04	8.66E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.95E-07	5.07E-06	212.1	2.12E-03	3.57E-03
SI20_W	0.75	455	0	1	7.12E-02	1.43E-02	1.26E-03	8.83E-04	7.82E-04	1.63E-04	0.00E+00	6.60E-05	4.67E-05	1.76E-07	4.60E-06	195.0	1.92E-03	3.23E-03
SI20_W	0.75	513	0	1	8.12E-02	1.93E-02	1.47E-03	9.96E-04	8.82E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	226.6	2.19E-03	3.64E-03
SI20_W	0.75	542	0	1	8.61E-02	2.12E-02	1.56E-03	1.05E-03	9.32E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.54E-06	241.3	2.31E-03	3.84E-03
SI20_W	0.75	552	0	1	8.78E-02	2.21E-02	1.60E-03	1.07E-03	9.49E-04	2.00E-04	0.00E+00	8.08E-05	5.73E-05	2.13E-07	5.64E-06	246.7	2.36E-03	3.91E-03
SI20_W	0.75	571	0	1	9.11E-02	2.35E-02	1.66E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.38E-05	5.93E-05	2.21E-07	5.85E-06	256.6	2.44E-03	4.05E-03
SI20_W	0.75	620	0	1	9.87E-02	2.53E-02	1.80E-03	1.20E-03	1.07E-03	2.25E-04	0.00E+00	9.08E-05	6.43E-05	2.40E-07	6.34E-06	277.8	2.65E-03	4.39E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI20_W	0.75	765	0	1	1.22E-01	3.11E-02	2.22E-03	1.48E-03	1.32E-03	2.77E-04	0.00E+00	1.12E-04	7.94E-05	2.96E-07	7.82E-06	342.6	3.27E-03	5.42E-03
SI20_W	0.75	823	0	1	1.31E-01	3.26E-02	2.37E-03	1.60E-03	1.41E-03	2.98E-04	0.00E+00	1.20E-04	8.53E-05	3.18E-07	8.40E-06	366.4	3.51E-03	5.83E-03
SI20_W	0.75	571	0	1	9.05E-02	2.19E-02	1.64E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.34E-05	5.91E-05	2.21E-07	5.82E-06	252.6	2.43E-03	4.05E-03
SI20_W	0.75	378	0	1	5.92E-02	1.26E-02	1.05E-03	7.33E-04	6.49E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.83E-06	162.8	1.60E-03	2.68E-03
SI20_W	0.75	320	0	1	4.98E-02	9.53E-03	8.76E-04	6.20E-04	5.49E-04	1.14E-04	0.00E+00	4.62E-05	3.27E-05	1.24E-07	3.22E-06	135.3	1.35E-03	2.26E-03
SI20_W	0.75	271	0	1	4.20E-02	7.24E-03	7.32E-04	5.26E-04	4.66E-04	9.66E-05	0.00E+00	3.91E-05	2.77E-05	1.05E-07	2.73E-06	113.0	1.14E-03	1.92E-03
SI20_W	0.75	223	0	1	3.43E-02	5.32E-03	5.92E-04	4.32E-04	3.83E-04	7.91E-05	0.00E+00	3.20E-05	2.27E-05	8.61E-08	2.23E-06	91.4	9.33E-04	1.58E-03
SI20_W	0.75	165	0	1	2.52E-02	3.50E-03	4.32E-04	3.20E-04	2.83E-04	5.83E-05	0.00E+00	2.36E-05	1.67E-05	6.36E-08	1.64E-06	66.7	6.87E-04	1.17E-03
SI21_E	0.75	116	0	1	1.77E-02	2.18E-03	3.01E-04	2.26E-04	2.00E-04	4.10E-05	0.00E+00	1.66E-05	1.17E-05	4.49E-08	1.16E-06	46.4	4.84E-04	8.23E-04
SI21_E	0.75	77	0	1	1.18E-02	1.30E-03	1.98E-04	1.50E-04	1.33E-04	2.73E-05	0.00E+00	1.10E-05	7.81E-06	2.99E-08	7.70E-07	30.6	3.22E-04	5.49E-04
SI21_E	0.75	68	0	1	1.02E-02	1.01E-03	1.71E-04	1.32E-04	1.17E-04	2.38E-05	0.00E+00	9.62E-06	6.82E-06	2.62E-08	6.72E-07	26.5	2.81E-04	4.80E-04
SI21_E	0.75	48	0	1	7.30E-03	7.23E-04	1.22E-04	9.40E-05	8.32E-05	1.70E-05	0.00E+00	6.86E-06	4.86E-06	1.87E-08	4.79E-07	18.8	2.00E-04	3.43E-04
SI21_E	0.75	68	0	1	1.02E-02	1.01E-03	1.70E-04	1.32E-04	1.17E-04	2.38E-05	0.00E+00	9.60E-06	6.81E-06	2.62E-08	6.70E-07	26.2	2.80E-04	4.80E-04
SI21_E	0.75	165	0	1	2.48E-02	2.46E-03	4.13E-04	3.20E-04	2.83E-04	5.77E-05	0.00E+00	2.33E-05	1.65E-05	6.36E-08	1.63E-06	63.7	6.80E-04	1.17E-03
SI21_E	0.75	494	0	1	7.45E-02	7.38E-03	1.25E-03	9.59E-04	8.49E-04	1.73E-04	0.00E+00	7.01E-05	4.96E-05	1.91E-07	4.89E-06	192.3	2.04E-03	3.50E-03
SI21_E	0.75	755	0	1	1.15E-01	1.38E-02	1.95E-03	1.47E-03	1.30E-03	2.67E-04	0.00E+00	1.08E-04	7.63E-05	2.92E-07	7.52E-06	301.3	3.14E-03	5.35E-03
SI21_E	0.75	610	0	1	9.41E-02	1.49E-02	1.63E-03	1.18E-03	1.05E-03	2.17E-04	0.00E+00	8.77E-05	6.21E-05	2.36E-07	6.12E-06	251.6	2.56E-03	4.32E-03
SI21_E	0.75	504	0	1	7.83E-02	1.42E-02	1.37E-03	9.77E-04	8.66E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.95E-07	5.07E-06	212.1	2.12E-03	3.57E-03
SI21_E	0.75	455	0	1	7.12E-02	1.43E-02	1.26E-03	8.83E-04	7.82E-04	1.63E-04	0.00E+00	6.60E-05	4.67E-05	1.76E-07	4.60E-06	195.0	1.92E-03	3.23E-03
SI21_E	0.75	513	0	1	8.12E-02	1.93E-02	1.47E-03	9.96E-04	8.82E-04	1.85E-04	0.00E+00	7.49E-05	5.31E-05	1.98E-07	5.23E-06	226.6	2.19E-03	3.64E-03
SI21_E	0.75	542	0	1	8.61E-02	2.12E-02	1.56E-03	1.05E-03	9.32E-04	1.96E-04	0.00E+00	7.93E-05	5.62E-05	2.10E-07	5.54E-06	241.3	2.31E-03	3.84E-03
SI21_E	0.75	552	0	1	8.78E-02	2.21E-02	1.60E-03	1.07E-03	9.49E-04	2.00E-04	0.00E+00	8.08E-05	5.73E-05	2.13E-07	5.64E-06	246.7	2.36E-03	3.91E-03
SI21_E	0.75	571	0	1	9.11E-02	2.35E-02	1.66E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.38E-05	5.93E-05	2.21E-07	5.85E-06	256.6	2.44E-03	4.05E-03
SI21_E	0.75	620	0	1	9.87E-02	2.53E-02	1.80E-03	1.20E-03	1.07E-03	2.25E-04	0.00E+00	9.08E-05	6.43E-05	2.40E-07	6.34E-06	277.8	2.65E-03	4.39E-03
SI21_E	0.75	765	0	1	1.22E-01	3.11E-02	2.22E-03	1.48E-03	1.32E-03	2.77E-04	0.00E+00	1.12E-04	7.94E-05	2.96E-07	7.82E-06	342.6	3.27E-03	5.42E-03
SI21_E	0.75	823	0	1	1.31E-01	3.26E-02	2.37E-03	1.60E-03	1.41E-03	2.98E-04	0.00E+00	1.20E-04	8.53E-05	3.18E-07	8.40E-06	366.4	3.51E-03	5.83E-03
SI21_E	0.75	571	0	1	9.05E-02	2.19E-02	1.64E-03	1.11E-03	9.82E-04	2.07E-04	0.00E+00	8.34E-05	5.91E-05	2.21E-07	5.82E-06	252.6	2.43E-03	4.05E-03
SI21_E	0.75	378	0	1	5.92E-02	1.26E-02	1.05E-03	7.33E-04	6.49E-04	1.36E-04	0.00E+00	5.48E-05	3.88E-05	1.46E-07	3.83E-06	162.8	1.60E-03	2.68E-03
SI21_E	0.75	320	0	1	4.98E-02	9.53E-03	8.76E-04	6.20E-04	5.49E-04	1.14E-04	0.00E+00	4.62E-05	3.27E-05	1.24E-07	3.22E-06	135.3	1.35E-03	2.26E-03
SI21_E	0.75	271	0	1	4.20E-02	7.24E-03	7.32E-04	5.26E-04	4.66E-04	9.66E-05	0.00E+00	3.91E-05	2.77E-05	1.05E-07	2.73E-06	113.0	1.14E-03	1.92E-03
SI21_E	0.75	223	0	1	3.43E-02	5.32E-03	5.92E-04	4.32E-04	3.83E-04	7.91E-05	0.00E+00	3.20E-05	2.27E-05	8.61E-08	2.23E-06	91.4	9.33E-04	1.58E-03
SI21_E	0.75	165	0	1	2.52E-02	3.50E-03	4.32E-04	3.20E-04	2.83E-04	5.83E-05	0.00E+00	2.36E-05	1.67E-05	6.36E-08	1.64E-06	66.7	6.87E-04	1.17E-03
SI21_W	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI21_W	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI21_W	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI21_W	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI21_W	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI21_W	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI21_W	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI21_W	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03
SI21_W	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI21_W	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI21_W	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI21_W	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03
SI21_W	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI21_W	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI21_W	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI21_W	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI21_W	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI21_W	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI21_W	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI21_W	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI21_W	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI21_W	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI21_W	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI21_W	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI22_E	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI22_E	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI22_E	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI22_E	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI22_E	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI22_E	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI22_E	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI22_E	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03
SI22_E	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI22_E	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI22_E	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI22_E	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI22_E	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI22_E	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI22_E	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI22_E	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI22_E	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI22_E	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI22_E	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI22_E	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI22_E	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI22_E	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI22_E	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI22_W	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI22_W	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI22_W	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI22_W	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI22_W	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI22_W	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI22_W	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI22_W	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03
SI22_W	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI22_W	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI22_W	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI22_W	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03
SI22_W	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI22_W	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI22_W	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI22_W	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI22_W	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI22_W	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI22_W	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI22_W	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI22_W	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI22_W	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI22_W	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI22_W	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI23_E	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI23_E	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI23_E	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI23_E	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI23_E	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI23_E	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI23_E	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI23_E	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03
SI23_E	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI23_E	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI23_E	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI23_E	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03
SI23_E	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI23_E	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI23_E	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI23_E	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI23_E	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI23_E	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI23_E	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI23_E	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI23_E	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI23_E	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI23_E	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI23_E	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI23_W	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI23_W	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI23_W	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI23_W	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI23_W	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI23_W	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI23_W	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI23_W	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI23_W	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI23_W	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI23_W	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03
SI23_W	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI23_W	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI23_W	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI23_W	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI23_W	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI23_W	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI23_W	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI23_W	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI23_W	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI23_W	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI23_W	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI23_W	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI24_E	0.75	109	0	1	1.65E-02	2.04E-03	2.81E-04	2.11E-04	1.87E-04	3.83E-05	0.00E+00	1.55E-05	1.10E-05	4.20E-08	1.08E-06	43.4	4.52E-04	7.69E-04
SI24_E	0.75	72	0	1	1.10E-02	1.21E-03	1.85E-04	1.41E-04	1.24E-04	2.55E-05	0.00E+00	1.03E-05	7.30E-06	2.80E-08	7.19E-07	28.6	3.01E-04	5.13E-04
SI24_E	0.75	63	0	1	9.57E-03	9.46E-04	1.60E-04	1.23E-04	1.09E-04	2.23E-05	0.00E+00	8.99E-06	6.37E-06	2.45E-08	6.27E-07	24.7	2.62E-04	4.49E-04
SI24_E	0.75	45	0	1	6.82E-03	6.76E-04	1.14E-04	8.78E-05	7.78E-05	1.59E-05	0.00E+00	6.41E-06	4.54E-06	1.75E-08	4.48E-07	17.6	1.87E-04	3.21E-04
SI24_E	0.75	63	0	1	9.54E-03	9.46E-04	1.59E-04	1.23E-04	1.09E-04	2.22E-05	0.00E+00	8.97E-06	6.36E-06	2.45E-08	6.26E-07	24.5	2.62E-04	4.49E-04
SI24_E	0.75	154	0	1	2.32E-02	2.30E-03	3.85E-04	2.99E-04	2.64E-04	5.39E-05	0.00E+00	2.18E-05	1.54E-05	5.95E-08	1.52E-06	59.5	6.36E-04	1.09E-03
SI24_E	0.75	461	0	1	6.96E-02	6.89E-03	1.16E-03	8.96E-04	7.93E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.78E-07	4.57E-06	179.7	1.91E-03	3.27E-03
SI24_E	0.75	706	0	1	1.07E-01	1.29E-02	1.82E-03	1.37E-03	1.21E-03	2.49E-04	0.00E+00	1.01E-04	7.13E-05	2.73E-07	7.02E-06	281.5	2.94E-03	5.00E-03
SI24_E	0.75	570	0	1	8.79E-02	1.39E-02	1.52E-03	1.11E-03	9.80E-04	2.03E-04	0.00E+00	8.19E-05	5.80E-05	2.20E-07	5.72E-06	235.1	2.39E-03	4.04E-03
SI24_E	0.75	470	0	1	7.31E-02	1.33E-02	1.28E-03	9.13E-04	8.09E-04	1.68E-04	0.00E+00	6.79E-05	4.81E-05	1.82E-07	4.74E-06	198.2	1.98E-03	3.33E-03
SI24_E	0.75	425	0	1	6.65E-02	1.34E-02	1.18E-03	8.25E-04	7.31E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.64E-07	4.30E-06	182.2	1.80E-03	3.01E-03
SI24_E	0.75	480	0	1	7.59E-02	1.80E-02	1.37E-03	9.31E-04	8.24E-04	1.73E-04	0.00E+00	7.00E-05	4.96E-05	1.85E-07	4.89E-06	211.7	2.04E-03	3.40E-03
SI24_E	0.75	507	0	1	8.05E-02	1.98E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.4	2.16E-03	3.59E-03
SI24_E	0.75	516	0	1	8.20E-02	2.07E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	230.5	2.20E-03	3.65E-03
SI24_E	0.75	534	0	1	8.51E-02	2.20E-02	1.55E-03	1.04E-03	9.18E-04	1.94E-04	0.00E+00	7.83E-05	5.54E-05	2.06E-07	5.46E-06	239.7	2.28E-03	3.78E-03
SI24_E	0.75	579	0	1	9.22E-02	2.36E-02	1.68E-03	1.12E-03	9.95E-04	2.10E-04	0.00E+00	8.49E-05	6.01E-05	2.24E-07	5.92E-06	259.5	2.48E-03	4.10E-03
SI24_E	0.75	715	0	1	1.14E-01	2.91E-02	2.07E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.76E-07	7.31E-06	320.1	3.06E-03	5.06E-03
SI24_E	0.75	769	0	1	1.22E-01	3.04E-02	2.22E-03	1.49E-03	1.32E-03	2.78E-04	0.00E+00	1.13E-04	7.97E-05	2.97E-07	7.85E-06	342.3	3.28E-03	5.45E-03
SI24_E	0.75	534	0	1	8.45E-02	2.05E-02	1.53E-03	1.04E-03	9.18E-04	1.93E-04	0.00E+00	7.80E-05	5.52E-05	2.06E-07	5.44E-06	236.0	2.27E-03	3.78E-03
SI24_E	0.75	353	0	1	5.53E-02	1.18E-02	9.85E-04	6.85E-04	6.07E-04	1.27E-04	0.00E+00	5.12E-05	3.63E-05	1.36E-07	3.57E-06	152.1	1.49E-03	2.50E-03
SI24_E	0.75	299	0	1	4.65E-02	8.90E-03	8.19E-04	5.80E-04	5.13E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.15E-07	3.01E-06	126.4	1.26E-03	2.12E-03
SI24_E	0.75	253	0	1	3.92E-02	6.76E-03	6.84E-04	4.92E-04	4.35E-04	9.03E-05	0.00E+00	3.65E-05	2.59E-05	9.79E-08	2.55E-06	105.5	1.06E-03	1.80E-03
SI24_E	0.75	208	0	1	3.20E-02	4.97E-03	5.53E-04	4.04E-04	3.58E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	8.04E-08	2.08E-06	85.4	8.71E-04	1.47E-03
SI24_E	0.75	154	0	1	2.36E-02	3.27E-03	4.04E-04	2.99E-04	2.64E-04	5.45E-05	0.00E+00	2.20E-05	1.56E-05	5.95E-08	1.54E-06	62.3	6.42E-04	1.09E-03
SI24_W	0.75	83	0	1	1.27E-02	1.56E-03	2.15E-04	1.61E-04	1.43E-04	2.94E-05	0.00E+00	1.19E-05	8.41E-06	3.22E-08	8.28E-07	33.2	3.46E-04	5.89E-04
SI24_W	0.75	55	0	1	8.42E-03	9.30E-04	1.42E-04	1.08E-04	9.53E-05	1.95E-05	0.00E+00	7.89E-06	5.59E-06	2.14E-08	5.51E-07	21.9	2.30E-04	3.93E-04
SI24_W	0.75	49	0	1	7.33E-03	7.25E-04	1.23E-04	9.42E-05	8.34E-05	1.70E-05	0.00E+00	6.89E-06	4.88E-06	1.88E-08	4.81E-07	18.9	2.01E-04	3.44E-04
SI24_W	0.75	35	0	1	5.22E-03	5.18E-04	8.71E-05	6.73E-05	5.96E-05	1.22E-05	0.00E+00	4.91E-06	3.48E-06	1.34E-08	3.43E-07	13.4	1.43E-04	2.46E-04
SI24_W	0.75	49	0	1	7.31E-03	7.25E-04	1.22E-04	9.42E-05	8.34E-05	1.70E-05	0.00E+00	6.88E-06	4.87E-06	1.88E-08	4.80E-07	18.8	2.01E-04	3.44E-04
SI24_W	0.75	118	0	1	1.77E-02	1.76E-03	2.95E-04	2.29E-04	2.03E-04	4.13E-05	0.00E+00	1.67E-05	1.18E-05	4.56E-08	1.17E-06	45.6	4.87E-04	8.35E-04
SI24_W	0.75	354	0	1	5.34E-02	5.28E-03	8.91E-04	6.86E-04	6.08E-04	1.24E-04	0.00E+00	5.02E-05	3.55E-05	1.37E-07	3.50E-06	137.6	1.46E-03	2.51E-03
SI24_W	0.75	541	0	1	8.23E-02	9.87E-03	1.40E-03	1.05E-03	9.29E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.09E-07	5.38E-06	215.7	2.25E-03	3.83E-03
SI24_W	0.75	437	0	1	6.73E-02	1.06E-02	1.17E-03	8.48E-04	7.51E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.69E-07	4.38E-06	180.1	1.83E-03	3.09E-03
SI24_W	0.75	360	0	1	5.60E-02	1.02E-02	9.83E-04	7.00E-04	6.20E-04	1.29E-04	0.00E+00	5.21E-05	3.69E-05	1.39E-07	3.63E-06	151.8	1.52E-03	2.55E-03
SI24_W	0.75	326	0	1	5.10E-02	1.03E-02	9.04E-04	6.32E-04	5.60E-04	1.17E-04	0.00E+00	4.72E-05	3.35E-05	1.26E-07	3.30E-06	139.6	1.38E-03	2.31E-03
SI24_W	0.75	367	0	1	5.82E-02	1.38E-02	1.05E-03	7.13E-04	6.32E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.42E-07	3.74E-06	162.2	1.56E-03	2.60E-03
SI24_W	0.75	388	0	1	6.16E-02	1.51E-02	1.12E-03	7.54E-04	6.67E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.50E-07	3.96E-06	172.7	1.66E-03	2.75E-03
SI24_W	0.75	395	0	1	6.29E-02	1.58E-02	1.14E-03	7.67E-04	6.79E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	176.6	1.69E-03	2.80E-03
SI24_W	0.75	409	0	1	6.52E-02	1.68E-02	1.19E-03	7.94E-04	7.03E-04	1.48E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.18E-06	183.7	1.75E-03	2.90E-03
SI24_W	0.75	444	0	1	7.06E-02	1.81E-02	1.29E-03	8.61E-04	7.63E-04	1.61E-04	0.00E+00	6.50E-05	4.61E-05	1.72E-07	4.54E-06	198.9	1.90E-03	3.14E-03
SI24_W	0.75	548	0	1	8.72E-02	2.23E-02	1.59E-03	1.06E-03	9.41E-04	1.99E-04	0.00E+00	8.02E-05	5.68E-05	2.12E-07	5.60E-06	245.2	2.34E-03	3.88E-03
SI24_W	0.75	589	0	1	9.36E-02	2.33E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.62E-05	6.11E-05	2.28E-07	6.02E-06	262.3	2.51E-03	4.18E-03
SI24_W	0.75	409	0	1	6.48E-02	1.57E-02	1.17E-03	7.94E-04	7.03E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.58E-07	4.17E-06	180.8	1.74E-03	2.90E-03
SI24_W	0.75	270	0	1	4.24E-02	9.02E-03	7.55E-04	5.25E-04	4.65E-04	9.71E-05	0.00E+00	3.92E-05	2.78E-05	1.05E-07	2.74E-06	116.5	1.15E-03	1.92E-03
SI24_W	0.75	229	0	1	3.56E-02	6.82E-03	6.27E-04	4.44E-04	3.93E-04	8.18E-05	0.00E+00	3.31E-05	2.34E-05	8.84E-08	2.31E-06	96.9	9.65E-04	1.62E-03
SI24_W	0.75	194	0	1	3.00E-02	5.18E-03	5.24E-04	3.77E-04	3.34E-04	6.92E-05	0.00E+00	2.80E-05	1.98E-05	7.50E-08	1.95E-06	80.9	8.16E-04	1.38E-03
SI24_W	0.75	159	0	1	2.45E-02	3.81E-03	4.24E-04	3.09E-04	2.74E-04	5.66E-05	0.00E+00	2.29E-05	1.62E-05	6.16E-08	1.60E-06	65.5	6.68E-04	1.13E-03
SI24_W	0.75	118	0	1	1.80E-02	2.51E-03	3.09E-04	2.29E-04	2.03E-04	4.17E-05	0.00E+00	1.69E-05	1.20E-05	4.56E-08	1.18E-06	47.7	4.92E-04	8.35E-04
SI25_E	0.75	83	0	1	1.27E-02	1.56E-03	2.15E-04	1.61E-04	1.43E-04	2.94E-05	0.00E+00	1.19E-05	8.41E-06	3.22E-08	8.28E-07	33.2	3.46E-04	5.89E-04
SI25_E	0.75	55	0	1	8.42E-03	9.30E-04	1.42E-04	1.08E-04	9.53E-05	1.95E-05	0.00E+00	7.89E-06	5.59E-06	2.14E-08	5.51E-07	21.9	2.30E-04	3.93E-04
SI25_E	0.75	49	0	1	7.33E-03	7.25E-04	1.23E-04	9.42E-05	8.34E-05	1.70E-05	0.00E+00	6.89E-06	4.88E-06	1.88E-08	4.81E-07	18.9	2.01E-04	3.44E-04
SI25_E	0.75	35	0	1	5.22E-03	5.18E-04	8.71E-05	6.73E-05	5.96E-05	1.22E-05	0.00E+00	4.91E-06	3.48E-06	1.34E-08	3.43E-07	13.4	1.43E-04	2.46E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	49	0	1	7.31E-03	7.25E-04	1.22E-04	9.42E-05	8.34E-05	1.70E-05	0.00E+00	6.88E-06	4.87E-06	1.88E-08	4.80E-07	18.8	2.01E-04	3.44E-04
SI25_E	0.75	118	0	1	1.77E-02	1.76E-03	2.95E-04	2.29E-04	2.03E-04	4.13E-05	0.00E+00	1.67E-05	1.18E-05	4.56E-08	1.17E-06	45.6	4.87E-04	8.35E-04
SI25_E	0.75	354	0	1	5.34E-02	5.28E-03	8.91E-04	6.86E-04	6.08E-04	1.24E-04	0.00E+00	5.02E-05	3.55E-05	1.37E-07	3.50E-06	137.6	1.46E-03	2.51E-03
SI25_E	0.75	541	0	1	8.23E-02	9.87E-03	1.40E-03	1.05E-03	9.29E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.09E-07	5.38E-06	215.7	2.25E-03	3.83E-03
SI25_E	0.75	437	0	1	6.73E-02	1.06E-02	1.17E-03	8.48E-04	7.51E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.69E-07	4.38E-06	180.1	1.83E-03	3.09E-03
SI25_E	0.75	360	0	1	5.60E-02	1.02E-02	9.83E-04	7.00E-04	6.20E-04	1.29E-04	0.00E+00	5.21E-05	3.69E-05	1.39E-07	3.63E-06	151.8	1.52E-03	2.55E-03
SI25_E	0.75	326	0	1	5.10E-02	1.03E-02	9.04E-04	6.32E-04	5.60E-04	1.17E-04	0.00E+00	4.72E-05	3.35E-05	1.26E-07	3.30E-06	139.6	1.38E-03	2.31E-03
SI25_E	0.75	367	0	1	5.82E-02	1.38E-02	1.05E-03	7.13E-04	6.32E-04	1.33E-04	0.00E+00	5.36E-05	3.80E-05	1.42E-07	3.74E-06	162.2	1.56E-03	2.60E-03
SI25_E	0.75	388	0	1	6.16E-02	1.51E-02	1.12E-03	7.54E-04	6.67E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.50E-07	3.96E-06	172.7	1.66E-03	2.75E-03
SI25_E	0.75	395	0	1	6.29E-02	1.58E-02	1.14E-03	7.67E-04	6.79E-04	1.43E-04	0.00E+00	5.79E-05	4.10E-05	1.53E-07	4.04E-06	176.6	1.69E-03	2.80E-03
SI25_E	0.75	409	0	1	6.52E-02	1.68E-02	1.19E-03	7.94E-04	7.03E-04	1.48E-04	0.00E+00	6.00E-05	4.25E-05	1.58E-07	4.18E-06	183.7	1.75E-03	2.90E-03
SI25_E	0.75	444	0	1	7.06E-02	1.81E-02	1.29E-03	8.61E-04	7.63E-04	1.61E-04	0.00E+00	6.50E-05	4.61E-05	1.72E-07	4.54E-06	198.9	1.90E-03	3.14E-03
SI25_E	0.75	548	0	1	8.72E-02	2.23E-02	1.59E-03	1.06E-03	9.41E-04	1.99E-04	0.00E+00	8.02E-05	5.68E-05	2.12E-07	5.60E-06	245.2	2.34E-03	3.88E-03
SI25_E	0.75	589	0	1	9.36E-02	2.33E-02	1.70E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.62E-05	6.11E-05	2.28E-07	6.02E-06	262.3	2.51E-03	4.18E-03
SI25_E	0.75	409	0	1	6.48E-02	1.57E-02	1.17E-03	7.94E-04	7.03E-04	1.48E-04	0.00E+00	5.97E-05	4.23E-05	1.58E-07	4.17E-06	180.8	1.74E-03	2.90E-03
SI25_E	0.75	270	0	1	4.24E-02	9.02E-03	7.55E-04	5.25E-04	4.65E-04	9.71E-05	0.00E+00	3.92E-05	2.78E-05	1.05E-07	2.74E-06	116.5	1.15E-03	1.92E-03
SI25_E	0.75	229	0	1	3.56E-02	6.82E-03	6.27E-04	4.44E-04	3.93E-04	8.18E-05	0.00E+00	3.31E-05	2.34E-05	8.84E-08	2.31E-06	96.9	9.65E-04	1.62E-03
SI25_E	0.75	194	0	1	3.00E-02	5.18E-03	5.24E-04	3.77E-04	3.34E-04	6.92E-05	0.00E+00	2.80E-05	1.98E-05	7.50E-08	1.95E-06	80.9	8.16E-04	1.38E-03
SI25_E	0.75	159	0	1	2.45E-02	3.81E-03	4.24E-04	3.09E-04	2.74E-04	5.66E-05	0.00E+00	2.29E-05	1.62E-05	6.16E-08	1.60E-06	65.5	6.68E-04	1.13E-03
SI25_E	0.75	118	0	1	1.80E-02	2.51E-03	3.09E-04	2.29E-04	2.03E-04	4.17E-05	0.00E+00	1.69E-05	1.20E-05	4.56E-08	1.18E-06	47.7	4.92E-04	8.35E-04
SI25_W	0.75	82	0	1	1.25E-02	1.54E-03	2.12E-04	1.59E-04	1.41E-04	2.90E-05	0.00E+00	1.17E-05	8.30E-06	3.17E-08	8.18E-07	32.8	3.42E-04	5.82E-04
SI25_W	0.75	55	0	1	8.31E-03	9.18E-04	1.40E-04	1.06E-04	9.41E-05	1.93E-05	0.00E+00	7.79E-06	5.52E-06	2.12E-08	5.44E-07	21.6	2.27E-04	3.88E-04
SI25_W	0.75	48	0	1	7.24E-03	7.16E-04	1.21E-04	9.30E-05	8.23E-05	1.68E-05	0.00E+00	6.80E-06	4.82E-06	1.85E-08	4.75E-07	18.7	1.98E-04	3.39E-04
SI25_W	0.75	34	0	1	5.16E-03	5.11E-04	8.60E-05	6.64E-05	5.88E-05	1.20E-05	0.00E+00	4.85E-06	3.44E-06	1.32E-08	3.39E-07	13.3	1.42E-04	2.42E-04
SI25_W	0.75	48	0	1	7.21E-03	7.16E-04	1.20E-04	9.30E-05	8.23E-05	1.68E-05	0.00E+00	6.79E-06	4.81E-06	1.85E-08	4.74E-07	18.5	1.98E-04	3.39E-04
SI25_W	0.75	116	0	1	1.75E-02	1.74E-03	2.92E-04	2.26E-04	2.00E-04	4.08E-05	0.00E+00	1.65E-05	1.17E-05	4.50E-08	1.15E-06	45.0	4.81E-04	8.24E-04
SI25_W	0.75	349	0	1	5.27E-02	5.21E-03	8.80E-04	6.77E-04	6.00E-04	1.23E-04	0.00E+00	4.95E-05	3.51E-05	1.35E-07	3.46E-06	135.9	1.44E-03	2.47E-03
SI25_W	0.75	534	0	1	8.13E-02	9.74E-03	1.38E-03	1.04E-03	9.18E-04	1.88E-04	0.00E+00	7.61E-05	5.39E-05	2.06E-07	5.31E-06	212.9	2.22E-03	3.78E-03
SI25_W	0.75	431	0	1	6.65E-02	1.05E-02	1.15E-03	8.37E-04	7.41E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.67E-07	4.32E-06	177.8	1.81E-03	3.06E-03
SI25_W	0.75	356	0	1	5.53E-02	1.01E-02	9.71E-04	6.91E-04	6.12E-04	1.27E-04	0.00E+00	5.14E-05	3.64E-05	1.38E-07	3.59E-06	149.9	1.50E-03	2.52E-03
SI25_W	0.75	322	0	1	5.03E-02	1.01E-02	8.92E-04	6.24E-04	5.53E-04	1.15E-04	0.00E+00	4.66E-05	3.30E-05	1.24E-07	3.25E-06	137.8	1.36E-03	2.28E-03
SI25_W	0.75	363	0	1	5.74E-02	1.36E-02	1.04E-03	7.04E-04	6.24E-04	1.31E-04	0.00E+00	5.30E-05	3.75E-05	1.40E-07	3.70E-06	160.1	1.54E-03	2.57E-03
SI25_W	0.75	383	0	1	6.09E-02	1.49E-02	1.10E-03	7.44E-04	6.59E-04	1.39E-04	0.00E+00	5.61E-05	3.97E-05	1.48E-07	3.91E-06	170.5	1.64E-03	2.72E-03
SI25_W	0.75	390	0	1	6.20E-02	1.56E-02	1.13E-03	7.57E-04	6.71E-04	1.41E-04	0.00E+00	5.71E-05	4.05E-05	1.51E-07	3.99E-06	174.3	1.67E-03	2.76E-03
SI25_W	0.75	404	0	1	6.43E-02	1.66E-02	1.17E-03	7.84E-04	6.94E-04	1.46E-04	0.00E+00	5.92E-05	4.19E-05	1.56E-07	4.13E-06	181.3	1.73E-03	2.86E-03
SI25_W	0.75	438	0	1	6.97E-02	1.79E-02	1.27E-03	8.50E-04	7.53E-04	1.59E-04	0.00E+00	6.42E-05	4.55E-05	1.69E-07	4.48E-06	196.3	1.87E-03	3.10E-03
SI25_W	0.75	541	0	1	8.61E-02	2.20E-02	1.57E-03	1.05E-03	9.29E-04	1.96E-04	0.00E+00	7.92E-05	5.61E-05	2.09E-07	5.53E-06	242.1	2.31E-03	3.83E-03
SI25_W	0.75	582	0	1	9.24E-02	2.30E-02	1.68E-03	1.13E-03	1.00E-03	2.11E-04	0.00E+00	8.51E-05	6.03E-05	2.25E-07	5.94E-06	258.9	2.48E-03	4.12E-03
SI25_W	0.75	404	0	1	6.39E-02	1.55E-02	1.16E-03	7.84E-04	6.94E-04	1.46E-04	0.00E+00	5.90E-05	4.18E-05	1.56E-07	4.12E-06	178.5	1.72E-03	2.86E-03
SI25_W	0.75	267	0	1	4.19E-02	8.90E-03	7.45E-04	5.18E-04	4.59E-04	9.59E-05	0.00E+00	3.87E-05	2.75E-05	1.03E-07	2.70E-06	115.0	1.13E-03	1.89E-03
SI25_W	0.75	226	0	1	3.52E-02	6.73E-03	6.19E-04	4.38E-04	3.88E-04	8.08E-05	0.00E+00	3.27E-05	2.31E-05	8.73E-08	2.28E-06	95.6	9.53E-04	1.60E-03
SI25_W	0.75	192	0	1	2.97E-02	5.11E-03	5.17E-04	3.72E-04	3.29E-04	6.83E-05	0.00E+00	2.76E-05	1.96E-05	7.41E-08	1.93E-06	79.8	8.05E-04	1.36E-03
SI25_W	0.75	157	0	1	2.42E-02	3.76E-03	4.18E-04	3.06E-04	2.71E-04	5.59E-05	0.00E+00	2.26E-05	1.60E-05	6.08E-08	1.58E-06	64.6	6.59E-04	1.12E-03
SI25_W	0.75	116	0	1	1.78E-02	2.48E-03	3.05E-04	2.26E-04	2.00E-04	4.12E-05	0.00E+00	1.67E-05	1.18E-05	4.50E-08	1.16E-06	47.1	4.86E-04	8.24E-04
SI26_E	0.52	57	0	1	8.70E-03	1.07E-03	1.48E-04	1.11E-04	9.81E-05	2.02E-05	0.00E+00	8.15E-06	5.77E-06	2.21E-08	5.68E-07	22.8	2.38E-04	4.05E-04
SI26_E	0.52	38	0	1	5.78E-03	6.38E-04	9.74E-05	7.39E-05	6.54E-05	1.34E-05	0.00E+00	5.42E-06	3.84E-06	1.47E-08	3.78E-07	15.0	1.58E-04	2.70E-04
SI26_E	0.52	33	0	1	5.03E-03	4.97E-04	8.42E-05	6.46E-05	5.73E-05	1.17E-05	0.00E+00	4.73E-06	3.35E-06	1.29E-08	3.30E-07	13.0	1.38E-04	2.36E-04
SI26_E	0.52	24	0	1	3.59E-03	3.55E-04	5.98E-05	4.62E-05	4.09E-05	8.35E-06	0.00E+00	3.37E-06	2.39E-06	9.20E-09	2.35E-07	9.2	9.84E-05	1.69E-04
SI26_E	0.52	33	0	1	5.02E-03	4.97E-04	8.35E-05	6.46E-05	5.73E-05	1.17E-05	0.00E+00	4.72E-06	3.34E-06	1.29E-08	3.29E-07	12.9	1.38E-04	2.36E-04
SI26_E	0.52	81	0	1	1.22E-02	1.21E-03	2.03E-04	1.57E-04	1.39E-04	2.84E-05	0.00E+00	1.15E-05	8.12E-06	3.13E-08	8.00E-07	31.3	3.34E-04	5.73E-04
SI26_E	0.52	243	0	1	3.66E-02	3.62E-03	6.12E-04	4.71E-04	4.17E-04	8.52E-05	0.00E+00	3.44E-05	2.44E-05	9.38E-08	2.40E-06	94.5	1.00E-03	1.72E-03
SI26_E	0.52	371	0	1	5.65E-02	6.77E-03	9.59E-04	7.20E-04	6.38E-04	1.31E-04	0.00E+00	5.29E-05	3.75E-05	1.43E-07	3.69E-06	148.0	1.54E-03	2.63E-03
SI26_E	0.52	300	0	1	4.62E-02	7.30E-03	8.00E-04	5.82E-04	5.15E-04	1.07E-04	0.00E+00	4.31E-05	3.05E-05	1.16E-07	3.01E-06	123.6	1.26E-03	2.12E-03
SI26_E	0.52	247	0	1	3.85E-02	6.99E-03	6.75E-04	4.80E-04	4.25E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.56E-08	2.49E-06	104.2	1.04E-03	1.75E-03
SI26_E	0.52	224	0	1	3.50E-02	7.04E-03	6.20E-04	4.34E-04	3.84E-04	8.02E-05	0.00E+00	3.24E-05	2.30E-05	8.65E-08	2.26E-06	95.8	9.46E-04	1.58E-03
SI26_E	0.52	252	0	1	3.99E-02	9.46E-03	7.21E-04	4.89E-04	4.33E-04	9.11E-05	0.00E+00	3.68E-05	2.61E-05	9.75E-08	2.57E-06	111.3	1.07E-03	1.79E-03
SI26_E	0.52	266	0	1	4.23E-02	1.04E-02	7.68E-04	5.17E-04	4.58E-04	9.65E-05	0.00E+00	3.90E-05	2.76E-05	1.03E-07	2.72E-06	118.6	1.14E-03	1.89E-03
SI26_E	0.52	271	0	1	4.31E-02	1.09E-02	7.85E-04	5.26E-04	4.66E-04	9.83E-05	0.00E+00	3.97E-05	2.81E-05	1.05E-07	2.77E-06	121.2	1.16E-03	1.92E-03
SI26_E	0.52	281	0	1	4.47E-02	1.16E-02	8.16E-04	5.45E-04	4.83E-04	1.02E-04	0.00E+00	4.12E-05	2.92E-05	1.09E-07	2.87E-06	126.1	1.20E-03	1.99E-03
SI26_E	0.52	304	0	1	4.85E-02	1.24E-02	8.84E-04	5.91E-04	5.23E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.18E-07	3.11E-06	136.5	1.30E-03	2.16E-03
SI26_E	0.52	376	0	1	5.98E-02	1.53E-02	1.09E-03	7.30E-04	6.46E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.45E-07	3.84E-06	168.3	1.61E-03	2.66E-03
SI26_E	0.52	404	0	1	6.42E-02	1.60E-02	1.17E-03	7.85E-04	6.95E-04	1.46E-04	0.00E+00	5.92E-05	4.19E-05	1.56E-07	4.13E-06	180.0	1.73E-03	2.87E-03
SI26_E	0.52	281	0	1	4.45E-02	1.08E-02	8.04E-04	5.45E-04	4.83E-04	1.01E-04	0.00E+00	4.10E-05	2.90E-05	1.09E-07	2.86E-06	124.1	1.20E-03	1.99E-03
SI26_E	0.52	186	0	1	2.91E-02	6.19E-03	5.18E-04	3.60E-04	3.19E-04	6.67E-05	0.00E+00	2.69E-05	1.91E-05	7.17E-08	1.88E-06	80.0	7.86E-04	1.31E-03
SI26_E	0.52	157	0	1	2.45E-02	4.68E-03	4.31E-04	3.05E-04	2.70E-04	5.62E-05	0.00E+00	2.27E-05	1.61E-05	6.07E-08	1.58E-06	66.5	6.62E-04	1.11E-03
SI26_E	0.52	133	0	1	2.06E-02	3.56E-03	3.59E-04	2.59E-04	2.29E-04	4.75E-05	0.00E+00	1.92E-05	1.36E-05	5.15E-08	1.34E-06	55.5	5.60E-04	9.44E-04
SI26_E	0.52	109	0	1	1.68E-02	2.61E-03	2.91E-04	2.12E-04	1.88E-04	3.89E-05	0.00E+00	1.57E-05	1.11E-05	4.23E-08	1.10E-06	44.9	4.58E-04	7.75E-04
SI26_E	0.52	81	0	1	1.24E-02	1.72E-03	2.12E-04	1.57E-04	1.39E-04	2.86E-05	0.00E+00	1.16E-05	8.20E-06	3.13E-08	8.08E-07	32.8	3.38E-04	5.73E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	44	0	1	6.66E-03	8.20E-04	1.13E-04	8.49E-05	7.52E-05	1.54E-05	0.00E+00	6.24E-06	4.42E-06	1.69E-08	4.35E-07	17.5	1.82E-04	3.10E-04
SI26_W	0.49	29	0	1	4.42E-03	4.89E-04	7.46E-05	5.66E-05	5.01E-05	1.03E-05	0.00E+00	4.15E-06	2.94E-06	1.13E-08	2.90E-07	11.5	1.21E-04	2.07E-04
SI26_W	0.49	26	0	1	3.85E-03	3.81E-04	6.45E-05	4.95E-05	4.38E-05	8.96E-06	0.00E+00	3.62E-06	2.57E-06	9.86E-09	2.53E-07	10.0	1.06E-04	1.81E-04
SI26_W	0.49	18	0	1	2.75E-03	2.72E-04	4.58E-05	3.54E-05	3.13E-05	6.39E-06	0.00E+00	2.58E-06	1.83E-06	7.04E-09	1.80E-07	7.1	7.53E-05	1.29E-04
SI26_W	0.49	26	0	1	3.84E-03	3.81E-04	6.39E-05	4.95E-05	4.38E-05	8.94E-06	0.00E+00	3.61E-06	2.56E-06	9.86E-09	2.52E-07	9.9	1.05E-04	1.81E-04
SI26_W	0.49	62	0	1	9.33E-03	9.25E-04	1.55E-04	1.20E-04	1.06E-04	2.17E-05	0.00E+00	8.78E-06	6.22E-06	2.39E-08	6.13E-07	24.0	2.56E-04	4.39E-04
SI26_W	0.49	186	0	1	2.80E-02	2.78E-03	4.69E-04	3.61E-04	3.19E-04	6.52E-05	0.00E+00	2.64E-05	1.87E-05	7.18E-08	1.84E-06	72.4	7.69E-04	1.32E-03
SI26_W	0.49	284	0	1	4.33E-02	5.19E-03	7.34E-04	5.52E-04	4.89E-04	1.00E-04	0.00E+00	4.05E-05	2.87E-05	1.10E-07	2.83E-06	113.4	1.18E-03	2.01E-03
SI26_W	0.49	230	0	1	3.54E-02	5.59E-03	6.13E-04	4.46E-04	3.95E-04	8.16E-05	0.00E+00	3.30E-05	2.34E-05	8.87E-08	2.30E-06	94.7	9.62E-04	1.63E-03
SI26_W	0.49	189	0	1	2.95E-02	5.36E-03	5.17E-04	3.68E-04	3.26E-04	6.77E-05	0.00E+00	2.74E-05	1.94E-05	7.33E-08	1.91E-06	79.8	7.98E-04	1.34E-03
SI26_W	0.49	171	0	1	2.68E-02	5.39E-03	4.75E-04	3.32E-04	2.94E-04	6.14E-05	0.00E+00	2.48E-05	1.76E-05	6.62E-08	1.73E-06	73.4	7.24E-04	1.21E-03
SI26_W	0.49	193	0	1	3.06E-02	7.24E-03	5.52E-04	3.75E-04	3.32E-04	6.98E-05	0.00E+00	2.82E-05	2.00E-05	7.47E-08	1.97E-06	85.3	8.23E-04	1.37E-03
SI26_W	0.49	204	0	1	3.24E-02	7.96E-03	5.88E-04	3.96E-04	3.51E-04	7.39E-05	0.00E+00	2.98E-05	2.11E-05	7.89E-08	2.08E-06	90.8	8.71E-04	1.45E-03
SI26_W	0.49	208	0	1	3.30E-02	8.32E-03	6.01E-04	4.03E-04	3.57E-04	7.53E-05	0.00E+00	3.04E-05	2.15E-05	8.03E-08	2.12E-06	92.8	8.87E-04	1.47E-03
SI26_W	0.49	215	0	1	3.43E-02	8.85E-03	6.25E-04	4.17E-04	3.70E-04	7.80E-05	0.00E+00	3.15E-05	2.23E-05	8.31E-08	2.20E-06	96.6	9.20E-04	1.52E-03
SI26_W	0.49	233	0	1	3.71E-02	9.51E-03	6.77E-04	4.53E-04	4.01E-04	8.46E-05	0.00E+00	3.42E-05	2.42E-05	9.02E-08	2.38E-06	104.5	9.97E-04	1.65E-03
SI26_W	0.49	288	0	1	4.58E-02	1.17E-02	8.35E-04	5.59E-04	4.95E-04	1.04E-04	0.00E+00	4.22E-05	2.99E-05	1.11E-07	2.94E-06	128.9	1.23E-03	2.04E-03
SI26_W	0.49	310	0	1	4.92E-02	1.23E-02	8.93E-04	6.01E-04	5.32E-04	1.12E-04	0.00E+00	4.53E-05	3.21E-05	1.20E-07	3.16E-06	137.9	1.32E-03	2.19E-03
SI26_W	0.49	215	0	1	3.40E-02	8.24E-03	6.15E-04	4.17E-04	3.70E-04	7.77E-05	0.00E+00	3.14E-05	2.22E-05	8.31E-08	2.19E-06	95.0	9.16E-04	1.52E-03
SI26_W	0.49	142	0	1	2.23E-02	4.74E-03	3.97E-04	2.76E-04	2.44E-04	5.11E-05	0.00E+00	2.06E-05	1.46E-05	5.49E-08	1.44E-06	61.3	6.02E-04	1.01E-03
SI26_W	0.49	120	0	1	1.87E-02	3.59E-03	3.30E-04	2.33E-04	2.07E-04	4.30E-05	0.00E+00	1.74E-05	1.23E-05	4.65E-08	1.21E-06	50.9	5.07E-04	8.52E-04
SI26_W	0.49	102	0	1	1.58E-02	2.72E-03	2.75E-04	1.98E-04	1.75E-04	3.64E-05	0.00E+00	1.47E-05	1.04E-05	3.94E-08	1.03E-06	42.5	4.29E-04	7.23E-04
SI26_W	0.49	84	0	1	1.29E-02	2.00E-03	2.23E-04	1.63E-04	1.44E-04	2.98E-05	0.00E+00	1.20E-05	8.52E-06	3.24E-08	8.40E-07	34.4	3.51E-04	5.94E-04
SI26_W	0.49	62	0	1	9.49E-03	1.32E-03	1.63E-04	1.20E-04	1.06E-04	2.19E-05	0.00E+00	8.87E-06	6.28E-06	2.39E-08	6.19E-07	25.1	2.59E-04	4.39E-04
SI27_E	0.61	55	0	1	8.43E-03	1.04E-03	1.43E-04	1.07E-04	9.51E-05	1.95E-05	0.00E+00	7.89E-06	5.59E-06	2.14E-08	5.51E-07	22.1	2.30E-04	3.92E-04
SI27_E	0.61	37	0	1	5.60E-03	6.18E-04	9.44E-05	7.16E-05	6.34E-05	1.30E-05	0.00E+00	5.25E-06	3.72E-06	1.43E-08	3.66E-07	14.6	1.53E-04	2.61E-04
SI27_E	0.61	32	0	1	4.87E-03	4.82E-04	8.16E-05	6.26E-05	5.55E-05	1.13E-05	0.00E+00	4.58E-06	3.24E-06	1.25E-08	3.20E-07	12.6	1.34E-04	2.29E-04
SI27_E	0.61	23	0	1	3.47E-03	3.44E-04	5.79E-05	4.47E-05	3.96E-05	8.08E-06	0.00E+00	3.27E-06	2.31E-06	8.91E-09	2.28E-07	8.9	9.53E-05	1.63E-04
SI27_E	0.61	32	0	1	4.86E-03	4.82E-04	8.09E-05	6.26E-05	5.55E-05	1.13E-05	0.00E+00	4.57E-06	3.24E-06	1.25E-08	3.19E-07	12.5	1.33E-04	2.29E-04
SI27_E	0.61	78	0	1	1.18E-02	1.17E-03	1.96E-04	1.52E-04	1.35E-04	2.75E-05	0.00E+00	1.11E-05	7.87E-06	3.03E-08	7.75E-07	30.3	3.24E-04	5.55E-04
SI27_E	0.61	235	0	1	3.55E-02	3.51E-03	5.93E-04	4.56E-04	4.04E-04	8.25E-05	0.00E+00	3.33E-05	2.36E-05	9.09E-08	2.33E-06	91.5	9.73E-04	1.67E-03
SI27_E	0.61	359	0	1	5.47E-02	6.56E-03	9.29E-04	6.98E-04	6.18E-04	1.27E-04	0.00E+00	5.13E-05	3.63E-05	1.39E-07	3.58E-06	143.4	1.50E-03	2.55E-03
SI27_E	0.61	290	0	1	4.48E-02	7.07E-03	7.75E-04	5.64E-04	4.99E-04	1.03E-04	0.00E+00	4.17E-05	2.96E-05	1.12E-07	2.91E-06	119.7	1.22E-03	2.06E-03
SI27_E	0.61	240	0	1	3.72E-02	6.77E-03	6.54E-04	4.65E-04	4.12E-04	8.56E-05	0.00E+00	3.46E-05	2.45E-05	9.26E-08	2.41E-06	100.9	1.01E-03	1.70E-03
SI27_E	0.61	217	0	1	3.39E-02	6.82E-03	6.01E-04	4.20E-04	3.72E-04	7.77E-05	0.00E+00	3.14E-05	2.22E-05	8.37E-08	2.19E-06	92.8	9.16E-04	1.53E-03
SI27_E	0.61	244	0	1	3.87E-02	9.16E-03	6.98E-04	4.74E-04	4.20E-04	8.83E-05	0.00E+00	3.57E-05	2.53E-05	9.44E-08	2.49E-06	107.8	1.04E-03	1.73E-03
SI27_E	0.61	258	0	1	4.10E-02	1.01E-02	7.44E-04	5.01E-04	4.44E-04	9.34E-05	0.00E+00	3.78E-05	2.67E-05	9.98E-08	2.63E-06	114.8	1.10E-03	1.83E-03
SI27_E	0.61	263	0	1	4.18E-02	1.05E-02	7.60E-04	5.10E-04	4.52E-04	9.52E-05	0.00E+00	3.85E-05	2.73E-05	1.02E-07	2.68E-06	117.4	1.12E-03	1.86E-03
SI27_E	0.61	272	0	1	4.33E-02	1.12E-02	7.91E-04	5.28E-04	4.67E-04	9.87E-05	0.00E+00	3.99E-05	2.82E-05	1.05E-07	2.78E-06	122.1	1.16E-03	1.93E-03
SI27_E	0.61	295	0	1	4.70E-02	1.20E-02	8.56E-04	5.73E-04	5.07E-04	1.07E-04	0.00E+00	4.32E-05	3.06E-05	1.14E-07	3.02E-06	132.2	1.26E-03	2.09E-03
SI27_E	0.61	364	0	1	5.80E-02	1.48E-02	1.06E-03	7.07E-04	6.26E-04	1.32E-04	0.00E+00	5.33E-05	3.78E-05	1.41E-07	3.72E-06	163.0	1.56E-03	2.58E-03
SI27_E	0.61	392	0	1	6.22E-02	1.55E-02	1.13E-03	7.60E-04	6.73E-04	1.42E-04	0.00E+00	5.73E-05	4.06E-05	1.51E-07	4.00E-06	174.4	1.67E-03	2.78E-03
SI27_E	0.61	272	0	1	4.31E-02	1.04E-02	7.78E-04	5.28E-04	4.67E-04	9.83E-05	0.00E+00	3.97E-05	2.81E-05	1.05E-07	2.77E-06	120.2	1.16E-03	1.93E-03
SI27_E	0.61	180	0	1	2.82E-02	6.00E-03	5.02E-04	3.49E-04	3.09E-04	6.46E-05	0.00E+00	2.61E-05	1.85E-05	6.95E-08	1.82E-06	77.5	7.61E-04	1.27E-03
SI27_E	0.61	152	0	1	2.37E-02	4.53E-03	4.17E-04	2.95E-04	2.61E-04	5.44E-05	0.00E+00	2.20E-05	1.56E-05	5.88E-08	1.53E-06	64.4	6.41E-04	1.08E-03
SI27_E	0.61	129	0	1	2.00E-02	3.44E-03	3.48E-04	2.50E-04	2.22E-04	4.60E-05	0.00E+00	1.86E-05	1.32E-05	4.99E-08	1.30E-06	53.8	5.42E-04	9.14E-04
SI27_E	0.61	106	0	1	1.63E-02	2.53E-03	2.82E-04	2.06E-04	1.82E-04	3.77E-05	0.00E+00	1.52E-05	1.08E-05	4.10E-08	1.06E-06	43.5	4.44E-04	7.51E-04
SI27_E	0.61	78	0	1	1.20E-02	1.67E-03	2.06E-04	1.52E-04	1.35E-04	2.77E-05	0.00E+00	1.12E-05	7.94E-06	3.03E-08	7.82E-07	31.7	3.27E-04	5.55E-04
SI27_W	0.66	62	0	1	9.45E-03	1.16E-03	1.60E-04	1.20E-04	1.07E-04	2.19E-05	0.00E+00	8.85E-06	6.27E-06	2.40E-08	6.18E-07	24.8	2.58E-04	4.40E-04
SI27_W	0.66	41	0	1	6.28E-03	6.94E-04	1.06E-04	8.03E-05	7.11E-05	1.46E-05	0.00E+00	5.89E-06	4.17E-06	1.60E-08	4.11E-07	16.3	1.72E-04	2.93E-04
SI27_W	0.66	36	0	1	5.47E-03	5.40E-04	9.15E-05	7.02E-05	6.22E-05	1.27E-05	0.00E+00	5.14E-06	3.64E-06	1.40E-08	3.58E-07	14.1	1.50E-04	2.56E-04
SI27_W	0.66	26	0	1	3.90E-03	3.86E-04	6.49E-05	5.02E-05	4.44E-05	9.07E-06	0.00E+00	3.66E-06	2.60E-06	9.99E-09	2.56E-07	10.0	1.07E-04	1.83E-04
SI27_W	0.66	36	0	1	5.45E-03	5.40E-04	9.07E-05	7.02E-05	6.22E-05	1.27E-05	0.00E+00	5.13E-06	3.63E-06	1.40E-08	3.58E-07	14.0	1.50E-04	2.56E-04
SI27_W	0.66	88	0	1	1.32E-02	1.31E-03	2.20E-04	1.71E-04	1.51E-04	3.08E-05	0.00E+00	1.25E-05	8.82E-06	3.40E-08	8.69E-07	34.0	3.63E-04	6.23E-04
SI27_W	0.66	264	0	1	3.98E-02	3.94E-03	6.65E-04	5.12E-04	4.53E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	1.02E-07	2.61E-06	102.6	1.09E-03	1.87E-03
SI27_W	0.66	403	0	1	6.14E-02	7.36E-03	1.04E-03	7.83E-04	6.93E-04	1.42E-04	0.00E+00	5.75E-05	4.07E-05	1.56E-07	4.01E-06	160.8	1.68E-03	2.86E-03
SI27_W	0.66	326	0	1	5.02E-02	7.93E-03	8.70E-04	6.32E-04	5.60E-04	1.16E-04	0.00E+00	4.68E-05	3.32E-05	1.26E-07	3.27E-06	134.3	1.37E-03	2.31E-03
SI27_W	0.66	269	0	1	4.18E-02	7.60E-03	7.33E-04	5.22E-04	4.62E-04	9.60E-05	0.00E+00	3.88E-05	2.75E-05	1.04E-07	2.71E-06	113.2	1.13E-03	1.90E-03
SI27_W	0.66	243	0	1	3.80E-02	7.65E-03	6.74E-04	4.72E-04	4.18E-04	8.72E-05	0.00E+00	3.52E-05	2.50E-05	9.39E-08	2.46E-06	104.1	1.03E-03	1.72E-03
SI27_W	0.66	274	0	1	4.34E-02	1.03E-02	7.83E-04	5.32E-04	4.71E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.06E-07	2.79E-06	120.9	1.17E-03	1.94E-03
SI27_W	0.66	289	0	1	4.60E-02	1.13E-02	8.34E-04	5.62E-04	4.98E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.12E-07	2.95E-06	128.8	1.24E-03	2.05E-03
SI27_W	0.66	295	0	1	4.69E-02	1.18E-02	8.53E-04	5.72E-04	5.06E-04	1.07E-04	0.00E+00	4.31E-05	3.06E-05	1.14E-07	3.01E-06	131.7	1.26E-03	2.09E-03
SI27_W	0.66	305	0	1	4.86E-02	1.26E-02	8.87E-04	5.92E-04	5.24E-04	1.11E-04	0.00E+00	4.47E-05	3.17E-05	1.18E-07	3.12E-06	137.0	1.30E-03	2.16E-03
SI27_W	0.66	331	0	1	5.27E-02	1.35E-02	9.60E-04	6.42E-04	5.69E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.28E-07	3.38E-06	148.3	1.41E-03	2.34E-03
SI27_W	0.66	408	0	1	6.50E-02	1.66E-02	1.18E-03	7.93E-04	7.02E-04	1.48E-04	0.00E+00	5.98E-05	4.24E-05	1.58E-07	4.17E-06	182.9	1.75E-03	2.89E-03
SI27_W	0.66	439	0	1	6.98E-02	1.74E-02	1.27E-03	8.53E-04	7.55E-04	1.59E-04	0.00E+00	6.43E-05	4.55E-05	1.70E-07	4.49E-06	195.6	1.88E-03	3.11E-03
SI27_W	0.66	305	0	1	4.83E-02	1.17E-02	8.73E-04	5.92E-04	5.24E-04	1.10E-04	0.00E+00	4.45E-05	3.16E-05	1.18E-07	3.11E-06	134.8	1.30E-03	2.16E-03
SI27_W	0.66	202	0	1	3.16E-02	6.73E-03	5.63E-04	3.91E-04	3.47E-04	7.24E-05	0.00E+00	2.93E-05	2.07E-05	7.79E-08	2.04E-06	86.9	8.54E-04	1.43E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI27_W	0.66	171	0	1	2.66E-02	5.09E-03	4.68E-04	3.31E-04	2.93E-04	6.10E-05	0.00E+00	2.47E-05	1.75E-05	6.59E-08	1.72E-06	72.2	7.19E-04	1.21E-03
SI27_W	0.66	145	0	1	2.24E-02	3.86E-03	3.90E-04	2.81E-04	2.49E-04	5.16E-05	0.00E+00	2.08E-05	1.48E-05	5.60E-08	1.45E-06	60.3	6.08E-04	1.03E-03
SI27_W	0.66	119	0	1	1.83E-02	2.84E-03	3.16E-04	2.31E-04	2.04E-04	4.22E-05	0.00E+00	1.71E-05	1.21E-05	4.60E-08	1.19E-06	48.8	4.98E-04	8.42E-04
SI27_W	0.66	88	0	1	1.35E-02	1.87E-03	2.31E-04	1.71E-04	1.51E-04	3.11E-05	0.00E+00	1.26E-05	8.91E-06	3.40E-08	8.78E-07	35.6	3.67E-04	6.23E-04
SI28_E	0.55	52	0	1	7.91E-03	9.73E-04	1.34E-04	1.01E-04	8.92E-05	1.83E-05	0.00E+00	7.41E-06	5.25E-06	2.01E-08	5.17E-07	20.7	2.16E-04	3.68E-04
SI28_E	0.55	35	0	1	5.25E-03	5.81E-04	8.86E-05	6.72E-05	5.95E-05	1.22E-05	0.00E+00	4.93E-06	3.49E-06	1.34E-08	3.44E-07	13.7	1.44E-04	2.45E-04
SI28_E	0.55	30	0	1	4.58E-03	4.52E-04	7.66E-05	5.88E-05	5.21E-05	1.06E-05	0.00E+00	4.30E-06	3.05E-06	1.17E-08	3.00E-07	11.8	1.25E-04	2.15E-04
SI28_E	0.55	22	0	1	3.26E-03	3.23E-04	5.43E-05	4.20E-05	3.72E-05	7.59E-06	0.00E+00	3.07E-06	2.17E-06	8.36E-09	2.14E-07	8.4	8.95E-05	1.53E-04
SI28_E	0.55	30	0	1	4.56E-03	4.52E-04	7.59E-05	5.88E-05	5.21E-05	1.06E-05	0.00E+00	4.29E-06	3.04E-06	1.17E-08	2.99E-07	11.7	1.25E-04	2.15E-04
SI28_E	0.55	74	0	1	1.11E-02	1.10E-03	1.84E-04	1.43E-04	1.26E-04	2.58E-05	0.00E+00	1.04E-05	7.38E-06	2.84E-08	7.27E-07	28.5	3.04E-04	5.21E-04
SI28_E	0.55	221	0	1	3.33E-02	3.30E-03	5.56E-04	4.28E-04	3.79E-04	7.75E-05	0.00E+00	3.13E-05	2.22E-05	8.53E-08	2.18E-06	85.9	9.13E-04	1.56E-03
SI28_E	0.55	337	0	1	5.14E-02	6.16E-03	8.72E-04	6.55E-04	5.80E-04	1.19E-04	0.00E+00	4.81E-05	3.41E-05	1.30E-07	3.36E-06	134.6	1.40E-03	2.39E-03
SI28_E	0.55	273	0	1	4.20E-02	6.64E-03	7.28E-04	5.29E-04	4.69E-04	9.69E-05	0.00E+00	3.92E-05	2.77E-05	1.05E-07	2.73E-06	112.4	1.14E-03	1.93E-03
SI28_E	0.55	225	0	1	3.50E-02	6.36E-03	6.14E-04	4.37E-04	3.87E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.70E-08	2.27E-06	94.7	9.48E-04	1.59E-03
SI28_E	0.55	203	0	1	3.18E-02	6.40E-03	5.64E-04	3.95E-04	3.50E-04	7.29E-05	0.00E+00	2.95E-05	2.09E-05	7.86E-08	2.06E-06	87.1	8.60E-04	1.44E-03
SI28_E	0.55	229	0	1	3.63E-02	8.60E-03	6.56E-04	4.45E-04	3.94E-04	8.28E-05	0.00E+00	3.35E-05	2.37E-05	8.86E-08	2.34E-06	101.2	9.77E-04	1.62E-03
SI28_E	0.55	242	0	1	3.85E-02	9.45E-03	6.98E-04	4.70E-04	4.16E-04	8.77E-05	0.00E+00	3.54E-05	2.51E-05	9.37E-08	2.47E-06	107.8	1.03E-03	1.72E-03
SI28_E	0.55	247	0	1	3.92E-02	9.88E-03	7.14E-04	4.79E-04	4.24E-04	8.94E-05	0.00E+00	3.61E-05	2.56E-05	9.53E-08	2.52E-06	110.2	1.05E-03	1.75E-03
SI28_E	0.55	255	0	1	4.07E-02	1.05E-02	7.42E-04	4.95E-04	4.39E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	9.87E-08	2.61E-06	114.6	1.09E-03	1.81E-03
SI28_E	0.55	277	0	1	4.41E-02	1.13E-02	8.04E-04	5.37E-04	4.76E-04	1.00E-04	0.00E+00	4.06E-05	2.87E-05	1.07E-07	2.83E-06	124.1	1.18E-03	1.96E-03
SI28_E	0.55	342	0	1	5.44E-02	1.39E-02	9.91E-04	6.63E-04	5.88E-04	1.24E-04	0.00E+00	5.01E-05	3.55E-05	1.32E-07	3.49E-06	153.1	1.46E-03	2.42E-03
SI28_E	0.55	368	0	1	5.84E-02	1.46E-02	1.06E-03	7.14E-04	6.32E-04	1.33E-04	0.00E+00	5.38E-05	3.81E-05	1.42E-07	3.75E-06	163.7	1.57E-03	2.61E-03
SI28_E	0.55	255	0	1	4.04E-02	9.78E-03	7.31E-04	4.95E-04	4.39E-04	9.23E-05	0.00E+00	3.73E-05	2.64E-05	9.87E-08	2.60E-06	112.8	1.09E-03	1.81E-03
SI28_E	0.55	169	0	1	2.65E-02	5.63E-03	4.71E-04	3.28E-04	2.90E-04	6.06E-05	0.00E+00	2.45E-05	1.74E-05	6.52E-08	1.71E-06	72.7	7.15E-04	1.20E-03
SI28_E	0.55	143	0	1	2.22E-02	4.26E-03	3.92E-04	2.77E-04	2.45E-04	5.11E-05	0.00E+00	2.06E-05	1.46E-05	5.52E-08	1.44E-06	60.5	6.02E-04	1.01E-03
SI28_E	0.55	121	0	1	1.87E-02	3.23E-03	3.27E-04	2.35E-04	2.08E-04	4.32E-05	0.00E+00	1.74E-05	1.24E-05	4.68E-08	1.22E-06	50.5	5.09E-04	8.58E-04
SI28_E	0.55	99	0	1	1.53E-02	2.38E-03	2.65E-04	1.93E-04	1.71E-04	3.53E-05	0.00E+00	1.43E-05	1.01E-05	3.85E-08	9.97E-07	40.8	4.17E-04	7.05E-04
SI28_E	0.55	74	0	1	1.13E-02	1.57E-03	1.93E-04	1.43E-04	1.26E-04	2.60E-05	0.00E+00	1.05E-05	7.46E-06	2.84E-08	7.35E-07	29.8	3.07E-04	5.21E-04
SI28_W	0.63	72	0	1	1.09E-02	1.34E-03	1.85E-04	1.39E-04	1.23E-04	2.53E-05	0.00E+00	1.02E-05	7.23E-06	2.77E-08	7.12E-07	28.6	2.98E-04	5.07E-04
SI28_W	0.63	48	0	1	7.24E-03	8.00E-04	1.22E-04	9.26E-05	8.20E-05	1.68E-05	0.00E+00	6.79E-06	4.81E-06	1.84E-08	4.74E-07	18.9	1.98E-04	3.38E-04
SI28_W	0.63	42	0	1	6.31E-03	6.23E-04	1.06E-04	8.10E-05	7.17E-05	1.47E-05	0.00E+00	5.93E-06	4.20E-06	1.61E-08	4.13E-07	16.3	1.73E-04	2.96E-04
SI28_W	0.63	30	0	1	4.49E-03	4.45E-04	7.49E-05	5.79E-05	5.12E-05	1.05E-05	0.00E+00	4.23E-06	2.99E-06	1.15E-08	2.95E-07	11.6	1.23E-04	2.11E-04
SI28_W	0.63	42	0	1	6.29E-03	6.23E-04	1.05E-04	8.10E-05	7.17E-05	1.46E-05	0.00E+00	5.91E-06	4.19E-06	1.61E-08	4.13E-07	16.2	1.73E-04	2.96E-04
SI28_W	0.63	101	0	1	1.53E-02	1.51E-03	2.54E-04	1.97E-04	1.74E-04	3.55E-05	0.00E+00	1.44E-05	1.02E-05	3.92E-08	1.00E-06	39.2	4.19E-04	7.18E-04
SI28_W	0.63	304	0	1	4.59E-02	4.54E-03	7.67E-04	5.90E-04	5.23E-04	1.07E-04	0.00E+00	4.31E-05	3.06E-05	1.18E-07	3.01E-06	118.4	1.26E-03	2.15E-03
SI28_W	0.63	465	0	1	7.08E-02	8.49E-03	1.20E-03	9.03E-04	7.99E-04	1.64E-04	0.00E+00	6.63E-05	4.70E-05	1.80E-07	4.63E-06	185.5	1.94E-03	3.30E-03
SI28_W	0.63	376	0	1	5.79E-02	9.15E-03	1.00E-03	7.29E-04	6.46E-04	1.34E-04	0.00E+00	5.40E-05	3.82E-05	1.45E-07	3.77E-06	154.9	1.57E-03	2.66E-03
SI28_W	0.63	310	0	1	4.82E-02	8.76E-03	8.46E-04	6.02E-04	5.33E-04	1.11E-04	0.00E+00	4.48E-05	3.17E-05	1.20E-07	3.12E-06	130.6	1.31E-03	2.20E-03
SI28_W	0.63	280	0	1	4.38E-02	8.82E-03	7.77E-04	5.44E-04	4.82E-04	1.01E-04	0.00E+00	4.06E-05	2.88E-05	1.08E-07	2.83E-06	120.0	1.19E-03	1.99E-03
SI28_W	0.63	316	0	1	5.00E-02	1.19E-02	9.04E-04	6.13E-04	5.43E-04	1.14E-04	0.00E+00	4.61E-05	3.27E-05	1.22E-07	3.22E-06	139.5	1.35E-03	2.24E-03
SI28_W	0.63	334	0	1	5.30E-02	1.30E-02	9.62E-04	6.48E-04	5.74E-04	1.21E-04	0.00E+00	4.88E-05	3.46E-05	1.29E-07	3.41E-06	148.6	1.42E-03	2.37E-03
SI28_W	0.63	340	0	1	5.41E-02	1.36E-02	9.84E-04	6.60E-04	5.84E-04	1.23E-04	0.00E+00	4.98E-05	3.53E-05	1.31E-07	3.47E-06	151.9	1.45E-03	2.41E-03
SI28_W	0.63	352	0	1	5.61E-02	1.45E-02	1.02E-03	6.83E-04	6.05E-04	1.28E-04	0.00E+00	5.16E-05	3.65E-05	1.36E-07	3.60E-06	158.0	1.50E-03	2.49E-03
SI28_W	0.63	382	0	1	6.08E-02	1.56E-02	1.11E-03	7.41E-04	6.56E-04	1.38E-04	0.00E+00	5.59E-05	3.96E-05	1.48E-07	3.90E-06	171.0	1.63E-03	2.70E-03
SI28_W	0.63	471	0	1	7.50E-02	1.92E-02	1.37E-03	9.14E-04	8.10E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.82E-07	4.82E-06	210.9	2.01E-03	3.34E-03
SI28_W	0.63	507	0	1	8.05E-02	2.01E-02	1.46E-03	9.84E-04	8.71E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	225.6	2.16E-03	3.59E-03
SI28_W	0.63	352	0	1	5.57E-02	1.35E-02	1.01E-03	6.83E-04	6.05E-04	1.27E-04	0.00E+00	5.14E-05	3.64E-05	1.36E-07	3.59E-06	155.5	1.50E-03	2.49E-03
SI28_W	0.63	233	0	1	3.65E-02	7.76E-03	6.49E-04	4.51E-04	4.00E-04	8.35E-05	0.00E+00	3.38E-05	2.39E-05	8.99E-08	2.36E-06	100.2	9.85E-04	1.65E-03
SI28_W	0.63	197	0	1	3.06E-02	5.87E-03	5.40E-04	3.82E-04	3.38E-04	7.04E-05	0.00E+00	2.84E-05	2.02E-05	7.61E-08	1.99E-06	83.3	8.30E-04	1.39E-03
SI28_W	0.63	167	0	1	2.58E-02	4.46E-03	4.50E-04	3.24E-04	2.87E-04	5.95E-05	0.00E+00	2.40E-05	1.70E-05	6.45E-08	1.68E-06	69.6	7.01E-04	1.18E-03
SI28_W	0.63	137	0	1	2.11E-02	3.27E-03	3.65E-04	2.66E-04	2.36E-04	4.87E-05	0.00E+00	1.97E-05	1.39E-05	5.30E-08	1.37E-06	56.3	5.74E-04	9.72E-04
SI28_W	0.63	101	0	1	1.55E-02	2.16E-03	2.66E-04	1.97E-04	1.74E-04	3.59E-05	0.00E+00	1.45E-05	1.03E-05	3.92E-08	1.01E-06	41.1	4.23E-04	7.18E-04
SI29_E	0.75	85	0	1	1.30E-02	1.60E-03	2.21E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.63E-06	3.30E-08	8.50E-07	34.1	3.55E-04	6.05E-04
SI29_E	0.75	57	0	1	8.64E-03	9.55E-04	1.46E-04	1.10E-04	9.78E-05	2.00E-05	0.00E+00	8.10E-06	5.74E-06	2.20E-08	5.65E-07	22.5	2.36E-04	4.03E-04
SI29_E	0.75	50	0	1	7.52E-03	7.44E-04	1.26E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.07E-06	5.01E-06	1.93E-08	4.93E-07	19.4	2.06E-04	3.53E-04
SI29_E	0.75	36	0	1	5.36E-03	5.31E-04	8.94E-05	6.90E-05	6.11E-05	1.25E-05	0.00E+00	5.04E-06	3.57E-06	1.38E-08	3.52E-07	13.8	1.47E-04	2.52E-04
SI29_E	0.75	50	0	1	7.50E-03	7.44E-04	1.25E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.06E-06	5.00E-06	1.93E-08	4.92E-07	19.3	2.06E-04	3.53E-04
SI29_E	0.75	121	0	1	1.82E-02	1.81E-03	3.03E-04	2.35E-04	2.08E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.68E-08	1.20E-06	46.8	5.00E-04	8.57E-04
SI29_E	0.75	363	0	1	5.48E-02	5.42E-03	9.15E-04	7.04E-04	6.24E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.40E-07	3.59E-06	141.3	1.50E-03	2.57E-03
SI29_E	0.75	555	0	1	8.45E-02	1.01E-02	1.43E-03	1.08E-03	9.54E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.15E-07	5.52E-06	221.3	2.31E-03	3.93E-03
SI29_E	0.75	448	0	1	6.91E-02	1.09E-02	1.20E-03	8.70E-04	7.70E-04	1.59E-04	0.00E+00	6.44E-05	4.56E-05	1.73E-07	4.49E-06	184.8	1.88E-03	3.18E-03
SI29_E	0.75	370	0	1	5.75E-02	1.05E-02	1.01E-03	7.18E-04	6.36E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	155.8	1.56E-03	2.62E-03
SI29_E	0.75	334	0	1	5.23E-02	1.05E-02	9.28E-04	6.49E-04	5.75E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.29E-07	3.38E-06	143.2	1.41E-03	2.37E-03
SI29_E	0.75	377	0	1	5.97E-02	1.41E-02	1.08E-03	7.32E-04	6.48E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.46E-07	3.84E-06	166.5	1.61E-03	2.67E-03
SI29_E	0.75	398	0	1	6.33E-02	1.55E-02	1.15E-03	7.73E-04	6.85E-04	1.44E-04	0.00E+00	5.83E-05	4.13E-05	1.54E-07	4.07E-06	177.3	1.70E-03	2.82E-03
SI29_E	0.75	405	0	1	6.45E-02	1.62E-02	1.17E-03	7.87E-04	6.97E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	181.2	1.73E-03	2.87E-03
SI29_E	0.75	420	0	1	6.69E-02	1.73E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	188.5	1.80E-03	2.97E-03
SI29_E	0.75	455	0	1	7.25E-02	1.86E-02	1.32E-03	8.84E-04	7.83E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	204.1	1.95E-03	3.23E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_E	0.75	562	0	1	8.95E-02	2.29E-02	1.63E-03	1.09E-03	9.66E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.17E-07	5.75E-06	251.7	2.40E-03	3.98E-03
SI29_E	0.75	605	0	1	9.60E-02	2.39E-02	1.74E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	269.2	2.58E-03	4.28E-03
SI29_E	0.75	420	0	1	6.65E-02	1.61E-02	1.20E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	185.5	1.79E-03	2.97E-03
SI29_E	0.75	277	0	1	4.35E-02	9.26E-03	7.75E-04	5.39E-04	4.77E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.07E-07	2.81E-06	119.6	1.18E-03	1.97E-03
SI29_E	0.75	235	0	1	3.66E-02	7.00E-03	6.44E-04	4.56E-04	4.04E-04	8.40E-05	0.00E+00	3.39E-05	2.40E-05	9.08E-08	2.37E-06	99.4	9.90E-04	1.66E-03
SI29_E	0.75	199	0	1	3.08E-02	5.32E-03	5.37E-04	3.87E-04	3.42E-04	7.10E-05	0.00E+00	2.87E-05	2.03E-05	7.70E-08	2.00E-06	83.0	8.37E-04	1.41E-03
SI29_E	0.75	164	0	1	2.52E-02	3.91E-03	4.35E-04	3.18E-04	2.81E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.33E-08	1.64E-06	67.2	6.85E-04	1.16E-03
SI29_E	0.75	121	0	1	1.85E-02	2.57E-03	3.17E-04	2.35E-04	2.08E-04	4.28E-05	0.00E+00	1.73E-05	1.23E-05	4.68E-08	1.21E-06	49.0	5.05E-04	8.57E-04
SI29_W	0.75	85	0	1	1.30E-02	1.60E-03	2.21E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.63E-06	3.30E-08	8.50E-07	34.1	3.55E-04	6.05E-04
SI29_W	0.75	57	0	1	8.64E-03	9.55E-04	1.46E-04	1.10E-04	9.78E-05	2.00E-05	0.00E+00	8.10E-06	5.74E-06	2.20E-08	5.65E-07	22.5	2.36E-04	4.03E-04
SI29_W	0.75	50	0	1	7.52E-03	7.44E-04	1.26E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.07E-06	5.01E-06	1.93E-08	4.93E-07	19.4	2.06E-04	3.53E-04
SI29_W	0.75	36	0	1	5.36E-03	5.31E-04	8.94E-05	6.90E-05	6.11E-05	1.25E-05	0.00E+00	5.04E-06	3.57E-06	1.38E-08	3.52E-07	13.8	1.47E-04	2.52E-04
SI29_W	0.75	50	0	1	7.50E-03	7.44E-04	1.25E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.06E-06	5.00E-06	1.93E-08	4.92E-07	19.3	2.06E-04	3.53E-04
SI29_W	0.75	121	0	1	1.82E-02	1.81E-03	3.03E-04	2.35E-04	2.08E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.68E-08	1.20E-06	46.8	5.00E-04	8.57E-04
SI29_W	0.75	363	0	1	5.48E-02	5.42E-03	9.15E-04	7.04E-04	6.24E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.40E-07	3.59E-06	141.3	1.50E-03	2.57E-03
SI29_W	0.75	555	0	1	8.45E-02	1.01E-02	1.43E-03	1.08E-03	9.54E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.15E-07	5.52E-06	221.3	2.31E-03	3.93E-03
SI29_W	0.75	448	0	1	6.91E-02	1.09E-02	1.20E-03	8.70E-04	7.70E-04	1.59E-04	0.00E+00	6.44E-05	4.56E-05	1.73E-07	4.49E-06	184.8	1.88E-03	3.18E-03
SI29_W	0.75	370	0	1	5.75E-02	1.05E-02	1.01E-03	7.18E-04	6.36E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	155.8	1.56E-03	2.62E-03
SI29_W	0.75	334	0	1	5.23E-02	1.05E-02	9.28E-04	6.49E-04	5.75E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.29E-07	3.38E-06	143.2	1.41E-03	2.37E-03
SI29_W	0.75	377	0	1	5.97E-02	1.41E-02	1.08E-03	7.32E-04	6.48E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.46E-07	3.84E-06	166.5	1.61E-03	2.67E-03
SI29_W	0.75	398	0	1	6.33E-02	1.55E-02	1.15E-03	7.73E-04	6.85E-04	1.44E-04	0.00E+00	5.83E-05	4.13E-05	1.54E-07	4.07E-06	177.3	1.70E-03	2.82E-03
SI29_W	0.75	405	0	1	6.45E-02	1.62E-02	1.17E-03	7.87E-04	6.97E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	181.2	1.73E-03	2.87E-03
SI29_W	0.75	420	0	1	6.69E-02	1.73E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	188.5	1.80E-03	2.97E-03
SI29_W	0.75	455	0	1	7.25E-02	1.86E-02	1.32E-03	8.84E-04	7.83E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	204.1	1.95E-03	3.23E-03
SI29_W	0.75	562	0	1	8.95E-02	2.29E-02	1.63E-03	1.09E-03	9.66E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.17E-07	5.75E-06	251.7	2.40E-03	3.98E-03
SI29_W	0.75	605	0	1	9.60E-02	2.39E-02	1.74E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	269.2	2.58E-03	4.28E-03
SI29_W	0.75	420	0	1	6.65E-02	1.61E-02	1.20E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	185.5	1.79E-03	2.97E-03
SI29_W	0.75	277	0	1	4.35E-02	9.26E-03	7.75E-04	5.39E-04	4.77E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.07E-07	2.81E-06	119.6	1.18E-03	1.97E-03
SI29_W	0.75	235	0	1	3.66E-02	7.00E-03	6.44E-04	4.56E-04	4.04E-04	8.40E-05	0.00E+00	3.39E-05	2.40E-05	9.08E-08	2.37E-06	99.4	9.90E-04	1.66E-03
SI29_W	0.75	199	0	1	3.08E-02	5.32E-03	5.37E-04	3.87E-04	3.42E-04	7.10E-05	0.00E+00	2.87E-05	2.03E-05	7.70E-08	2.00E-06	83.0	8.37E-04	1.41E-03
SI29_W	0.75	164	0	1	2.52E-02	3.91E-03	4.35E-04	3.18E-04	2.81E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.33E-08	1.64E-06	67.2	6.85E-04	1.16E-03
SI29_W	0.75	121	0	1	1.85E-02	2.57E-03	3.17E-04	2.35E-04	2.08E-04	4.28E-05	0.00E+00	1.73E-05	1.23E-05	4.68E-08	1.21E-06	49.0	5.05E-04	8.57E-04
SI30_E	0.75	85	0	1	1.30E-02	1.60E-03	2.21E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.63E-06	3.30E-08	8.50E-07	34.1	3.55E-04	6.05E-04
SI30_E	0.75	57	0	1	8.64E-03	9.55E-04	1.46E-04	1.10E-04	9.78E-05	2.00E-05	0.00E+00	8.10E-06	5.74E-06	2.20E-08	5.65E-07	22.5	2.36E-04	4.03E-04
SI30_E	0.75	50	0	1	7.52E-03	7.44E-04	1.26E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.07E-06	5.01E-06	1.93E-08	4.93E-07	19.4	2.06E-04	3.53E-04
SI30_E	0.75	36	0	1	5.36E-03	5.31E-04	8.94E-05	6.90E-05	6.11E-05	1.25E-05	0.00E+00	5.04E-06	3.57E-06	1.38E-08	3.52E-07	13.8	1.47E-04	2.52E-04
SI30_E	0.75	50	0	1	7.50E-03	7.44E-04	1.25E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.06E-06	5.00E-06	1.93E-08	4.92E-07	19.3	2.06E-04	3.53E-04
SI30_E	0.75	121	0	1	1.82E-02	1.81E-03	3.03E-04	2.35E-04	2.08E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.68E-08	1.20E-06	46.8	5.00E-04	8.57E-04
SI30_E	0.75	363	0	1	5.48E-02	5.42E-03	9.15E-04	7.04E-04	6.24E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.40E-07	3.59E-06	141.3	1.50E-03	2.57E-03
SI30_E	0.75	555	0	1	8.45E-02	1.01E-02	1.43E-03	1.08E-03	9.54E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.15E-07	5.52E-06	221.3	2.31E-03	3.93E-03
SI30_E	0.75	448	0	1	6.91E-02	1.09E-02	1.20E-03	8.70E-04	7.70E-04	1.59E-04	0.00E+00	6.44E-05	4.56E-05	1.73E-07	4.49E-06	184.8	1.88E-03	3.18E-03
SI30_E	0.75	370	0	1	5.75E-02	1.05E-02	1.01E-03	7.18E-04	6.36E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	155.8	1.56E-03	2.62E-03
SI30_E	0.75	334	0	1	5.23E-02	1.05E-02	9.28E-04	6.49E-04	5.75E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.29E-07	3.38E-06	143.2	1.41E-03	2.37E-03
SI30_E	0.75	377	0	1	5.97E-02	1.41E-02	1.08E-03	7.32E-04	6.48E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.46E-07	3.84E-06	166.5	1.61E-03	2.67E-03
SI30_E	0.75	398	0	1	6.33E-02	1.55E-02	1.15E-03	7.73E-04	6.85E-04	1.44E-04	0.00E+00	5.83E-05	4.13E-05	1.54E-07	4.07E-06	177.3	1.70E-03	2.82E-03
SI30_E	0.75	405	0	1	6.45E-02	1.62E-02	1.17E-03	7.87E-04	6.97E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	181.2	1.73E-03	2.87E-03
SI30_E	0.75	420	0	1	6.69E-02	1.73E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	188.5	1.80E-03	2.97E-03
SI30_E	0.75	455	0	1	7.25E-02	1.86E-02	1.32E-03	8.84E-04	7.83E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	204.1	1.95E-03	3.23E-03
SI30_E	0.75	562	0	1	8.95E-02	2.29E-02	1.63E-03	1.09E-03	9.66E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.17E-07	5.75E-06	251.7	2.40E-03	3.98E-03
SI30_E	0.75	605	0	1	9.60E-02	2.39E-02	1.74E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	269.2	2.58E-03	4.28E-03
SI30_E	0.75	420	0	1	6.65E-02	1.61E-02	1.20E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	185.5	1.79E-03	2.97E-03
SI30_E	0.75	277	0	1	4.35E-02	9.26E-03	7.75E-04	5.39E-04	4.77E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.07E-07	2.81E-06	119.6	1.18E-03	1.97E-03
SI30_E	0.75	235	0	1	3.66E-02	7.00E-03	6.44E-04	4.56E-04	4.04E-04	8.40E-05	0.00E+00	3.39E-05	2.40E-05	9.08E-08	2.37E-06	99.4	9.90E-04	1.66E-03
SI30_E	0.75	199	0	1	3.08E-02	5.32E-03	5.37E-04	3.87E-04	3.42E-04	7.10E-05	0.00E+00	2.87E-05	2.03E-05	7.70E-08	2.00E-06	83.0	8.37E-04	1.41E-03
SI30_E	0.75	164	0	1	2.52E-02	3.91E-03	4.35E-04	3.18E-04	2.81E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.33E-08	1.64E-06	67.2	6.85E-04	1.16E-03
SI30_E	0.75	121	0	1	1.85E-02	2.57E-03	3.17E-04	2.35E-04	2.08E-04	4.28E-05	0.00E+00	1.73E-05	1.23E-05	4.68E-08	1.21E-06	49.0	5.05E-04	8.57E-04
SI30_W	0.75	85	0	1	1.30E-02	1.60E-03	2.21E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.63E-06	3.30E-08	8.50E-07	34.1	3.55E-04	6.05E-04
SI30_W	0.75	57	0	1	8.64E-03	9.55E-04	1.46E-04	1.10E-04	9.78E-05	2.00E-05	0.00E+00	8.10E-06	5.74E-06	2.20E-08	5.65E-07	22.5	2.36E-04	4.03E-04
SI30_W	0.75	50	0	1	7.52E-03	7.44E-04	1.26E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.07E-06	5.01E-06	1.93E-08	4.93E-07	19.4	2.06E-04	3.53E-04
SI30_W	0.75	36	0	1	5.36E-03	5.31E-04	8.94E-05	6.90E-05	6.11E-05	1.25E-05	0.00E+00	5.04E-06	3.57E-06	1.38E-08	3.52E-07	13.8	1.47E-04	2.52E-04
SI30_W	0.75	50	0	1	7.50E-03	7.44E-04	1.25E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.06E-06	5.00E-06	1.93E-08	4.92E-07	19.3	2.06E-04	3.53E-04
SI30_W	0.75	121	0	1	1.82E-02	1.81E-03	3.03E-04	2.35E-04	2.08E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.68E-08	1.20E-06	46.8	5.00E-04	8.57E-04
SI30_W	0.75	363	0	1	5.48E-02	5.42E-03	9.15E-04	7.04E-04	6.24E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.40E-07	3.59E-06	141.3	1.50E-03	2.57E-03
SI30_W	0.75	555	0	1	8.45E-02	1.01E-02	1.43E-03	1.08E-03	9.54E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.15E-07	5.52E-06	221.3	2.31E-03	3.93E-03
SI30_W	0.75	448	0	1	6.91E-02	1.09E-02	1.20E-03	8.70E-04	7.70E-04	1.59E-04	0.00E+00	6.44E-05	4.56E-05	1.73E-07	4.49E-06	184.8	1.88E-03	3.18E-03
SI30_W	0.75	370	0	1	5.75E-02	1.05E-02	1.01E-03	7.18E-04	6.36E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	155.8	1.56E-03	2.62E-03
SI30_W	0.75	334	0	1	5.23E-02	1.05E-02	9.28E-04	6.49E-04	5.75E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.29E-07	3.38E-06	143.2	1.41E-03	2.37E-03
SI30_W	0.75	377	0	1	5.97E-02	1.41E-02	1.08E-03	7.32E-04	6.48E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.46E-07	3.84E-06	166.5	1.61E-03	2.67E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI30_W	0.75	398	0	1	6.33E-02	1.55E-02	1.15E-03	7.73E-04	6.85E-04	1.44E-04	0.00E+00	5.83E-05	4.13E-05	1.54E-07	4.07E-06	177.3	1.70E-03	2.82E-03
SI30_W	0.75	405	0	1	6.45E-02	1.62E-02	1.17E-03	7.87E-04	6.97E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	181.2	1.73E-03	2.87E-03
SI30_W	0.75	420	0	1	6.69E-02	1.73E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	188.5	1.80E-03	2.97E-03
SI30_W	0.75	455	0	1	7.25E-02	1.86E-02	1.32E-03	8.84E-04	7.83E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	204.1	1.95E-03	3.23E-03
SI30_W	0.75	562	0	1	8.95E-02	2.29E-02	1.63E-03	1.09E-03	9.66E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.17E-07	5.75E-06	251.7	2.40E-03	3.98E-03
SI30_W	0.75	605	0	1	9.60E-02	2.39E-02	1.74E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	269.2	2.58E-03	4.28E-03
SI30_W	0.75	420	0	1	6.65E-02	1.61E-02	1.20E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	185.5	1.79E-03	2.97E-03
SI30_W	0.75	277	0	1	4.35E-02	9.26E-03	7.75E-04	5.39E-04	4.77E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.07E-07	2.81E-06	119.6	1.18E-03	1.97E-03
SI30_W	0.75	235	0	1	3.66E-02	7.00E-03	6.44E-04	4.56E-04	4.04E-04	8.40E-05	0.00E+00	3.39E-05	2.40E-05	9.08E-08	2.37E-06	99.4	9.90E-04	1.66E-03
SI30_W	0.75	199	0	1	3.08E-02	5.32E-03	5.37E-04	3.87E-04	3.42E-04	7.10E-05	0.00E+00	2.87E-05	2.03E-05	7.70E-08	2.00E-06	83.0	8.37E-04	1.41E-03
SI30_W	0.75	164	0	1	2.52E-02	3.91E-03	4.35E-04	3.18E-04	2.81E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.33E-08	1.64E-06	67.2	6.85E-04	1.16E-03
SI30_W	0.75	121	0	1	1.85E-02	2.57E-03	3.17E-04	2.35E-04	2.08E-04	4.28E-05	0.00E+00	1.73E-05	1.23E-05	4.68E-08	1.21E-06	49.0	5.05E-04	8.57E-04
SI31_E	0.75	85	0	1	1.30E-02	1.60E-03	2.21E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.63E-06	3.30E-08	8.50E-07	34.1	3.55E-04	6.05E-04
SI31_E	0.75	57	0	1	8.64E-03	9.55E-04	1.46E-04	1.10E-04	9.78E-05	2.00E-05	0.00E+00	8.10E-06	5.74E-06	2.20E-08	5.65E-07	22.5	2.36E-04	4.03E-04
SI31_E	0.75	50	0	1	7.52E-03	7.44E-04	1.26E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.07E-06	5.01E-06	1.93E-08	4.93E-07	19.4	2.06E-04	3.53E-04
SI31_E	0.75	36	0	1	5.36E-03	5.31E-04	8.94E-05	6.90E-05	6.11E-05	1.25E-05	0.00E+00	5.04E-06	3.57E-06	1.38E-08	3.52E-07	13.8	1.47E-04	2.52E-04
SI31_E	0.75	50	0	1	7.50E-03	7.44E-04	1.25E-04	9.67E-05	8.56E-05	1.75E-05	0.00E+00	7.06E-06	5.00E-06	1.93E-08	4.92E-07	19.3	2.06E-04	3.53E-04
SI31_E	0.75	121	0	1	1.82E-02	1.81E-03	3.03E-04	2.35E-04	2.08E-04	4.24E-05	0.00E+00	1.71E-05	1.21E-05	4.68E-08	1.20E-06	46.8	5.00E-04	8.57E-04
SI31_E	0.75	363	0	1	5.48E-02	5.42E-03	9.15E-04	7.04E-04	6.24E-04	1.27E-04	0.00E+00	5.15E-05	3.65E-05	1.40E-07	3.59E-06	141.3	1.50E-03	2.57E-03
SI31_E	0.75	555	0	1	8.45E-02	1.01E-02	1.43E-03	1.08E-03	9.54E-04	1.96E-04	0.00E+00	7.91E-05	5.61E-05	2.15E-07	5.52E-06	221.3	2.31E-03	3.93E-03
SI31_E	0.75	448	0	1	6.91E-02	1.09E-02	1.20E-03	8.70E-04	7.70E-04	1.59E-04	0.00E+00	6.44E-05	4.56E-05	1.73E-07	4.49E-06	184.8	1.88E-03	3.18E-03
SI31_E	0.75	370	0	1	5.75E-02	1.05E-02	1.01E-03	7.18E-04	6.36E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	155.8	1.56E-03	2.62E-03
SI31_E	0.75	334	0	1	5.23E-02	1.05E-02	9.28E-04	6.49E-04	5.75E-04	1.20E-04	0.00E+00	4.85E-05	3.43E-05	1.29E-07	3.38E-06	143.2	1.41E-03	2.37E-03
SI31_E	0.75	377	0	1	5.97E-02	1.41E-02	1.08E-03	7.32E-04	6.48E-04	1.36E-04	0.00E+00	5.51E-05	3.90E-05	1.46E-07	3.84E-06	166.5	1.61E-03	2.67E-03
SI31_E	0.75	398	0	1	6.33E-02	1.55E-02	1.15E-03	7.73E-04	6.85E-04	1.44E-04	0.00E+00	5.83E-05	4.13E-05	1.54E-07	4.07E-06	177.3	1.70E-03	2.82E-03
SI31_E	0.75	405	0	1	6.45E-02	1.62E-02	1.17E-03	7.87E-04	6.97E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.57E-07	4.14E-06	181.2	1.73E-03	2.87E-03
SI31_E	0.75	420	0	1	6.69E-02	1.73E-02	1.22E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.15E-05	4.36E-05	1.62E-07	4.29E-06	188.5	1.80E-03	2.97E-03
SI31_E	0.75	455	0	1	7.25E-02	1.86E-02	1.32E-03	8.84E-04	7.83E-04	1.65E-04	0.00E+00	6.67E-05	4.73E-05	1.76E-07	4.66E-06	204.1	1.95E-03	3.23E-03
SI31_E	0.75	562	0	1	8.95E-02	2.29E-02	1.63E-03	1.09E-03	9.66E-04	2.04E-04	0.00E+00	8.23E-05	5.83E-05	2.17E-07	5.75E-06	251.7	2.40E-03	3.98E-03
SI31_E	0.75	605	0	1	9.60E-02	2.39E-02	1.74E-03	1.17E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	269.2	2.58E-03	4.28E-03
SI31_E	0.75	420	0	1	6.65E-02	1.61E-02	1.20E-03	8.15E-04	7.22E-04	1.52E-04	0.00E+00	6.13E-05	4.34E-05	1.62E-07	4.28E-06	185.5	1.79E-03	2.97E-03
SI31_E	0.75	277	0	1	4.35E-02	9.26E-03	7.75E-04	5.39E-04	4.77E-04	9.97E-05	0.00E+00	4.03E-05	2.85E-05	1.07E-07	2.81E-06	119.6	1.18E-03	1.97E-03
SI31_E	0.75	235	0	1	3.66E-02	7.00E-03	6.44E-04	4.56E-04	4.04E-04	8.40E-05	0.00E+00	3.39E-05	2.40E-05	9.08E-08	2.37E-06	99.4	9.90E-04	1.66E-03
SI31_E	0.75	199	0	1	3.08E-02	5.32E-03	5.37E-04	3.87E-04	3.42E-04	7.10E-05	0.00E+00	2.87E-05	2.03E-05	7.70E-08	2.00E-06	83.0	8.37E-04	1.41E-03
SI31_E	0.75	164	0	1	2.52E-02	3.91E-03	4.35E-04	3.18E-04	2.81E-04	5.81E-05	0.00E+00	2.35E-05	1.66E-05	6.33E-08	1.64E-06	67.2	6.85E-04	1.16E-03
SI31_E	0.75	121	0	1	1.85E-02	2.57E-03	3.17E-04	2.35E-04	2.08E-04	4.28E-05	0.00E+00	1.73E-05	1.23E-05	4.68E-08	1.21E-06	49.0	5.05E-04	8.57E-04
SI31_W	0.75	90	0	1	1.37E-02	1.68E-03	2.33E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.08E-06	3.47E-08	8.95E-07	35.9	3.74E-04	6.37E-04
SI31_W	0.75	60	0	1	9.09E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.53E-06	6.04E-06	2.32E-08	5.95E-07	23.7	2.49E-04	4.24E-04
SI31_W	0.75	52	0	1	7.92E-03	7.83E-04	1.33E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.44E-06	5.27E-06	2.03E-08	5.19E-07	20.5	2.17E-04	3.71E-04
SI31_W	0.75	37	0	1	5.64E-03	5.59E-04	9.41E-05	7.27E-05	6.44E-05	1.31E-05	0.00E+00	5.31E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI31_W	0.75	52	0	1	7.89E-03	7.83E-04	1.31E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.43E-06	5.26E-06	2.03E-08	5.18E-07	20.3	2.17E-04	3.71E-04
SI31_W	0.75	127	0	1	1.92E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.3	5.26E-04	9.02E-04
SI31_W	0.75	382	0	1	5.76E-02	5.70E-03	9.63E-04	7.41E-04	6.57E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.48E-07	3.78E-06	148.7	1.58E-03	2.71E-03
SI31_W	0.75	584	0	1	8.89E-02	1.07E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.33E-05	5.90E-05	2.26E-07	5.81E-06	233.0	2.43E-03	4.14E-03
SI31_W	0.75	472	0	1	7.27E-02	1.15E-02	1.26E-03	9.16E-04	8.11E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.82E-07	4.73E-06	194.5	1.98E-03	3.34E-03
SI31_W	0.75	389	0	1	6.05E-02	1.10E-02	1.06E-03	7.56E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.51E-07	3.92E-06	164.0	1.64E-03	2.76E-03
SI31_W	0.75	352	0	1	5.51E-02	1.11E-02	9.76E-04	6.83E-04	6.05E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.8	1.49E-03	2.49E-03
SI31_W	0.75	397	0	1	6.28E-02	1.49E-02	1.13E-03	7.70E-04	6.82E-04	1.43E-04	0.00E+00	5.79E-05	4.11E-05	1.53E-07	4.04E-06	175.2	1.69E-03	2.81E-03
SI31_W	0.75	419	0	1	6.66E-02	1.64E-02	1.21E-03	8.14E-04	7.21E-04	1.52E-04	0.00E+00	6.13E-05	4.35E-05	1.62E-07	4.28E-06	186.6	1.79E-03	2.97E-03
SI31_W	0.75	427	0	1	6.79E-02	1.71E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.65E-07	4.36E-06	190.8	1.82E-03	3.02E-03
SI31_W	0.75	442	0	1	7.04E-02	1.82E-02	1.28E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.48E-05	4.59E-05	1.71E-07	4.52E-06	198.4	1.89E-03	3.13E-03
SI31_W	0.75	479	0	1	7.63E-02	1.95E-02	1.39E-03	9.30E-04	8.24E-04	1.74E-04	0.00E+00	7.02E-05	4.98E-05	1.85E-07	4.90E-06	214.8	2.05E-03	3.40E-03
SI31_W	0.75	592	0	1	9.42E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.67E-05	6.14E-05	2.29E-07	6.05E-06	264.9	2.53E-03	4.19E-03
SI31_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.24E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.60E-05	2.46E-07	6.50E-06	283.3	2.72E-03	4.51E-03
SI31_W	0.75	442	0	1	7.00E-02	1.69E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.3	1.88E-03	3.13E-03
SI31_W	0.75	292	0	1	4.58E-02	9.74E-03	8.15E-04	5.67E-04	5.02E-04	1.05E-04	0.00E+00	4.24E-05	3.00E-05	1.13E-07	2.96E-06	125.9	1.24E-03	2.07E-03
SI31_W	0.75	247	0	1	3.85E-02	7.37E-03	6.78E-04	4.80E-04	4.25E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.55E-08	2.49E-06	104.7	1.04E-03	1.75E-03
SI31_W	0.75	210	0	1	3.25E-02	5.60E-03	5.66E-04	4.07E-04	3.60E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.11E-08	2.11E-06	87.4	8.81E-04	1.49E-03
SI31_W	0.75	172	0	1	2.65E-02	4.11E-03	4.58E-04	3.34E-04	2.96E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.66E-08	1.73E-06	70.7	7.21E-04	1.22E-03
SI31_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.51E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.6	5.32E-04	9.02E-04
SI32_E	0.75	90	0	1	1.37E-02	1.68E-03	2.33E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.08E-06	3.47E-08	8.95E-07	35.9	3.74E-04	6.37E-04
SI32_E	0.75	60	0	1	9.09E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.53E-06	6.04E-06	2.32E-08	5.95E-07	23.7	2.49E-04	4.24E-04
SI32_E	0.75	52	0	1	7.92E-03	7.83E-04	1.33E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.44E-06	5.27E-06	2.03E-08	5.19E-07	20.5	2.17E-04	3.71E-04
SI32_E	0.75	37	0	1	5.64E-03	5.59E-04	9.41E-05	7.27E-05	6.44E-05	1.31E-05	0.00E+00	5.31E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI32_E	0.75	52	0	1	7.89E-03	7.83E-04	1.31E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.43E-06	5.26E-06	2.03E-08	5.18E-07	20.3	2.17E-04	3.71E-04
SI32_E	0.75	127	0	1	1.92E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.3	5.26E-04	9.02E-04
SI32_E	0.75	382	0	1	5.76E-02	5.70E-03	9.63E-04	7.41E-04	6.57E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.48E-07	3.78E-06	148.7	1.58E-03	2.71E-03
SI32_E	0.75	584	0	1	8.89E-02	1.07E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.33E-05	5.90E-05	2.26E-07	5.81E-06	233.0	2.43E-03	4.14E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_E	0.75	472	0	1	7.27E-02	1.15E-02	1.26E-03	9.16E-04	8.11E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.82E-07	4.73E-06	194.5	1.98E-03	3.34E-03
SI32_E	0.75	389	0	1	6.05E-02	1.10E-02	1.06E-03	7.56E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.51E-07	3.92E-06	164.0	1.64E-03	2.76E-03
SI32_E	0.75	352	0	1	5.51E-02	1.11E-02	9.76E-04	6.83E-04	6.05E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.8	1.49E-03	2.49E-03
SI32_E	0.75	397	0	1	6.28E-02	1.49E-02	1.13E-03	7.70E-04	6.82E-04	1.43E-04	0.00E+00	5.79E-05	4.11E-05	1.53E-07	4.04E-06	175.2	1.69E-03	2.81E-03
SI32_E	0.75	419	0	1	6.66E-02	1.64E-02	1.21E-03	8.14E-04	7.21E-04	1.52E-04	0.00E+00	6.13E-05	4.35E-05	1.62E-07	4.28E-06	186.6	1.79E-03	2.97E-03
SI32_E	0.75	427	0	1	6.79E-02	1.71E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.65E-07	4.36E-06	190.8	1.82E-03	3.02E-03
SI32_E	0.75	442	0	1	7.04E-02	1.82E-02	1.28E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.48E-05	4.59E-05	1.71E-07	4.52E-06	198.4	1.89E-03	3.13E-03
SI32_E	0.75	479	0	1	7.63E-02	1.95E-02	1.39E-03	9.30E-04	8.24E-04	1.74E-04	0.00E+00	7.02E-05	4.98E-05	1.85E-07	4.90E-06	214.8	2.05E-03	3.40E-03
SI32_E	0.75	592	0	1	9.42E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.67E-05	6.14E-05	2.29E-07	6.05E-06	264.9	2.53E-03	4.19E-03
SI32_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.24E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.60E-05	2.46E-07	6.50E-06	283.3	2.72E-03	4.51E-03
SI32_E	0.75	442	0	1	7.00E-02	1.69E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.3	1.88E-03	3.13E-03
SI32_E	0.75	292	0	1	4.58E-02	9.74E-03	8.15E-04	5.67E-04	5.02E-04	1.05E-04	0.00E+00	4.24E-05	3.00E-05	1.13E-07	2.96E-06	125.9	1.24E-03	2.07E-03
SI32_E	0.75	247	0	1	3.85E-02	7.37E-03	6.78E-04	4.80E-04	4.25E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.55E-08	2.49E-06	104.7	1.04E-03	1.75E-03
SI32_E	0.75	210	0	1	3.25E-02	5.60E-03	5.66E-04	4.07E-04	3.60E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.11E-08	2.11E-06	87.4	8.81E-04	1.49E-03
SI32_E	0.75	172	0	1	2.65E-02	4.11E-03	4.58E-04	3.34E-04	2.96E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.66E-08	1.73E-06	70.7	7.21E-04	1.22E-03
SI32_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.51E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.6	5.32E-04	9.02E-04
SI32_W	0.75	90	0	1	1.37E-02	1.68E-03	2.33E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.08E-06	3.47E-08	8.95E-07	35.9	3.74E-04	6.37E-04
SI32_W	0.75	60	0	1	9.09E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.53E-06	6.04E-06	2.32E-08	5.95E-07	23.7	2.49E-04	4.24E-04
SI32_W	0.75	52	0	1	7.92E-03	7.83E-04	1.33E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.44E-06	5.27E-06	2.03E-08	5.19E-07	20.5	2.17E-04	3.71E-04
SI32_W	0.75	37	0	1	5.64E-03	5.59E-04	9.41E-05	7.27E-05	6.44E-05	1.31E-05	0.00E+00	5.31E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI32_W	0.75	52	0	1	7.89E-03	7.83E-04	1.31E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.43E-06	5.26E-06	2.03E-08	5.18E-07	20.3	2.17E-04	3.71E-04
SI32_W	0.75	127	0	1	1.92E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.3	5.26E-04	9.02E-04
SI32_W	0.75	382	0	1	5.76E-02	5.70E-03	9.63E-04	7.41E-04	6.57E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.48E-07	3.78E-06	148.7	1.58E-03	2.71E-03
SI32_W	0.75	584	0	1	8.89E-02	1.07E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.33E-05	5.90E-05	2.26E-07	5.81E-06	233.0	2.43E-03	4.14E-03
SI32_W	0.75	472	0	1	7.27E-02	1.15E-02	1.26E-03	9.16E-04	8.11E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.82E-07	4.73E-06	194.5	1.98E-03	3.34E-03
SI32_W	0.75	389	0	1	6.05E-02	1.10E-02	1.06E-03	7.56E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.51E-07	3.92E-06	164.0	1.64E-03	2.76E-03
SI32_W	0.75	352	0	1	5.51E-02	1.11E-02	9.76E-04	6.83E-04	6.05E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.8	1.49E-03	2.49E-03
SI32_W	0.75	397	0	1	6.28E-02	1.49E-02	1.13E-03	7.70E-04	6.82E-04	1.43E-04	0.00E+00	5.79E-05	4.11E-05	1.53E-07	4.04E-06	175.2	1.69E-03	2.81E-03
SI32_W	0.75	419	0	1	6.66E-02	1.64E-02	1.21E-03	8.14E-04	7.21E-04	1.52E-04	0.00E+00	6.13E-05	4.35E-05	1.62E-07	4.28E-06	186.6	1.79E-03	2.97E-03
SI32_W	0.75	427	0	1	6.79E-02	1.71E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.65E-07	4.36E-06	190.8	1.82E-03	3.02E-03
SI32_W	0.75	442	0	1	7.04E-02	1.82E-02	1.28E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.48E-05	4.59E-05	1.71E-07	4.52E-06	198.4	1.89E-03	3.13E-03
SI32_W	0.75	479	0	1	7.63E-02	1.95E-02	1.39E-03	9.30E-04	8.24E-04	1.74E-04	0.00E+00	7.02E-05	4.98E-05	1.85E-07	4.90E-06	214.8	2.05E-03	3.40E-03
SI32_W	0.75	592	0	1	9.42E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.67E-05	6.14E-05	2.29E-07	6.05E-06	264.9	2.53E-03	4.19E-03
SI32_W	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.24E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.60E-05	2.46E-07	6.50E-06	283.3	2.72E-03	4.51E-03
SI32_W	0.75	442	0	1	7.00E-02	1.69E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.3	1.88E-03	3.13E-03
SI32_W	0.75	292	0	1	4.58E-02	9.74E-03	8.15E-04	5.67E-04	5.02E-04	1.05E-04	0.00E+00	4.24E-05	3.00E-05	1.13E-07	2.96E-06	125.9	1.24E-03	2.07E-03
SI32_W	0.75	247	0	1	3.85E-02	7.37E-03	6.78E-04	4.80E-04	4.25E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.55E-08	2.49E-06	104.7	1.04E-03	1.75E-03
SI32_W	0.75	210	0	1	3.25E-02	5.60E-03	5.66E-04	4.07E-04	3.60E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.11E-08	2.11E-06	87.4	8.81E-04	1.49E-03
SI32_W	0.75	172	0	1	2.65E-02	4.11E-03	4.58E-04	3.34E-04	2.96E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.66E-08	1.73E-06	70.7	7.21E-04	1.22E-03
SI32_W	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.51E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.6	5.32E-04	9.02E-04
SI33_E	0.75	90	0	1	1.37E-02	1.68E-03	2.33E-04	1.74E-04	1.54E-04	3.17E-05	0.00E+00	1.28E-05	9.08E-06	3.47E-08	8.95E-07	35.9	3.74E-04	6.37E-04
SI33_E	0.75	60	0	1	9.09E-03	1.00E-03	1.53E-04	1.16E-04	1.03E-04	2.11E-05	0.00E+00	8.53E-06	6.04E-06	2.32E-08	5.95E-07	23.7	2.49E-04	4.24E-04
SI33_E	0.75	52	0	1	7.92E-03	7.83E-04	1.33E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.44E-06	5.27E-06	2.03E-08	5.19E-07	20.5	2.17E-04	3.71E-04
SI33_E	0.75	37	0	1	5.64E-03	5.59E-04	9.41E-05	7.27E-05	6.44E-05	1.31E-05	0.00E+00	5.31E-06	3.76E-06	1.45E-08	3.70E-07	14.5	1.55E-04	2.65E-04
SI33_E	0.75	52	0	1	7.89E-03	7.83E-04	1.31E-04	1.02E-04	9.01E-05	1.84E-05	0.00E+00	7.43E-06	5.26E-06	2.03E-08	5.18E-07	20.3	2.17E-04	3.71E-04
SI33_E	0.75	127	0	1	1.92E-02	1.90E-03	3.19E-04	2.47E-04	2.19E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.92E-08	1.26E-06	49.3	5.26E-04	9.02E-04
SI33_E	0.75	382	0	1	5.76E-02	5.70E-03	9.63E-04	7.41E-04	6.57E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.48E-07	3.78E-06	148.7	1.58E-03	2.71E-03
SI33_E	0.75	584	0	1	8.89E-02	1.07E-02	1.51E-03	1.13E-03	1.00E-03	2.06E-04	0.00E+00	8.33E-05	5.90E-05	2.26E-07	5.81E-06	233.0	2.43E-03	4.14E-03
SI33_E	0.75	472	0	1	7.27E-02	1.15E-02	1.26E-03	9.16E-04	8.11E-04	1.68E-04	0.00E+00	6.78E-05	4.80E-05	1.82E-07	4.73E-06	194.5	1.98E-03	3.34E-03
SI33_E	0.75	389	0	1	6.05E-02	1.10E-02	1.06E-03	7.56E-04	6.69E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.51E-07	3.92E-06	164.0	1.64E-03	2.76E-03
SI33_E	0.75	352	0	1	5.51E-02	1.11E-02	9.76E-04	6.83E-04	6.05E-04	1.26E-04	0.00E+00	5.10E-05	3.61E-05	1.36E-07	3.56E-06	150.8	1.49E-03	2.49E-03
SI33_E	0.75	397	0	1	6.28E-02	1.49E-02	1.13E-03	7.70E-04	6.82E-04	1.43E-04	0.00E+00	5.79E-05	4.11E-05	1.53E-07	4.04E-06	175.2	1.69E-03	2.81E-03
SI33_E	0.75	419	0	1	6.66E-02	1.64E-02	1.21E-03	8.14E-04	7.21E-04	1.52E-04	0.00E+00	6.13E-05	4.35E-05	1.62E-07	4.28E-06	186.6	1.79E-03	2.97E-03
SI33_E	0.75	427	0	1	6.79E-02	1.71E-02	1.24E-03	8.29E-04	7.34E-04	1.55E-04	0.00E+00	6.25E-05	4.43E-05	1.65E-07	4.36E-06	190.8	1.82E-03	3.02E-03
SI33_E	0.75	442	0	1	7.04E-02	1.82E-02	1.28E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.48E-05	4.59E-05	1.71E-07	4.52E-06	198.4	1.89E-03	3.13E-03
SI33_E	0.75	479	0	1	7.63E-02	1.95E-02	1.39E-03	9.30E-04	8.24E-04	1.74E-04	0.00E+00	7.02E-05	4.98E-05	1.85E-07	4.90E-06	214.8	2.05E-03	3.40E-03
SI33_E	0.75	592	0	1	9.42E-02	2.41E-02	1.72E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.67E-05	6.14E-05	2.29E-07	6.05E-06	264.9	2.53E-03	4.19E-03
SI33_E	0.75	636	0	1	1.01E-01	2.52E-02	1.83E-03	1.24E-03	1.09E-03	2.30E-04	0.00E+00	9.31E-05	6.60E-05	2.46E-07	6.50E-06	283.3	2.72E-03	4.51E-03
SI33_E	0.75	442	0	1	7.00E-02	1.69E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.3	1.88E-03	3.13E-03
SI33_E	0.75	292	0	1	4.58E-02	9.74E-03	8.15E-04	5.67E-04	5.02E-04	1.05E-04	0.00E+00	4.24E-05	3.00E-05	1.13E-07	2.96E-06	125.9	1.24E-03	2.07E-03
SI33_E	0.75	247	0	1	3.85E-02	7.37E-03	6.78E-04	4.80E-04	4.25E-04	8.84E-05	0.00E+00	3.57E-05	2.53E-05	9.55E-08	2.49E-06	104.7	1.04E-03	1.75E-03
SI33_E	0.75	210	0	1	3.25E-02	5.60E-03	5.66E-04	4.07E-04	3.60E-04	7.47E-05	0.00E+00	3.02E-05	2.14E-05	8.11E-08	2.11E-06	87.4	8.81E-04	1.49E-03
SI33_E	0.75	172	0	1	2.65E-02	4.11E-03	4.58E-04	3.34E-04	2.96E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.66E-08	1.73E-06	70.7	7.21E-04	1.22E-03
SI33_E	0.75	127	0	1	1.95E-02	2.71E-03	3.34E-04	2.47E-04	2.19E-04	4.51E-05	0.00E+00	1.82E-05	1.29E-05	4.92E-08	1.27E-06	51.6	5.32E-04	9.02E-04
SI33_W	0.75	106	0	1	1.62E-02	2.00E-03	2.76E-04	2.07E-04	1.83E-04	3.76E-05	0.00E+00	1.52E-05	1.08E-05	4.12E-08	1.06E-06	42.5	4.43E-04	7.55E-04
SI33_W	0.75	71	0	1	1.08E-02	1.19E-03	1.82E-04	1.38E-04	1.22E-04	2.50E-05	0.00E+00	1.01E-05	7.16E-06	2.74E-08	7.05E-07	28.1	2.95E-04	5.03E-04
SI33_W	0.75	62	0	1	9.39E-03	9.28E-04	1.57E-04	1.21E-04	1.07E-04	2.18E-05	0.00E+00	8.82E-06	6.25E-06	2.40E-08	6.15E-07	24.3	2.57E-04	4.40E-04
SI33_W	0.75	44	0	1	6.69E-03	6.63E-04	1.11E-04	8.61E-05	7.63E-05	1.56E-05	0.00E+00	6.29E-06	4.46E-06	1.72E-08	4.39E-07	17.2	1.83E-04	3.14E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	62	0	1	9.36E-03	9.28E-04	1.56E-04	1.21E-04	1.07E-04	2.18E-05	0.00E+00	8.80E-06	6.24E-06	2.40E-08	6.14E-07	24.0	2.57E-04	4.40E-04
SI33_W	0.75	151	0	1	2.27E-02	2.25E-03	3.78E-04	2.93E-04	2.59E-04	5.29E-05	0.00E+00	2.14E-05	1.51E-05	5.83E-08	1.49E-06	58.4	6.24E-04	1.07E-03
SI33_W	0.75	453	0	1	6.83E-02	6.76E-03	1.14E-03	8.78E-04	7.78E-04	1.59E-04	0.00E+00	6.42E-05	4.55E-05	1.75E-07	4.48E-06	176.2	1.87E-03	3.21E-03
SI33_W	0.75	692	0	1	1.05E-01	1.26E-02	1.79E-03	1.34E-03	1.19E-03	2.44E-04	0.00E+00	9.87E-05	6.99E-05	2.68E-07	6.89E-06	276.1	2.88E-03	4.90E-03
SI33_W	0.75	559	0	1	8.62E-02	1.36E-02	1.49E-03	1.09E-03	9.61E-04	1.99E-04	0.00E+00	8.03E-05	5.69E-05	2.16E-07	5.61E-06	230.5	2.34E-03	3.96E-03
SI33_W	0.75	461	0	1	7.17E-02	1.30E-02	1.26E-03	8.96E-04	7.93E-04	1.65E-04	0.00E+00	6.66E-05	4.72E-05	1.78E-07	4.65E-06	194.3	1.94E-03	3.27E-03
SI33_W	0.75	417	0	1	6.52E-02	1.31E-02	1.16E-03	8.10E-04	7.17E-04	1.50E-04	0.00E+00	6.05E-05	4.28E-05	1.61E-07	4.22E-06	178.7	1.76E-03	2.96E-03
SI33_W	0.75	470	0	1	7.44E-02	1.76E-02	1.34E-03	9.13E-04	8.08E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.82E-07	4.79E-06	207.6	2.00E-03	3.33E-03
SI33_W	0.75	497	0	1	7.89E-02	1.94E-02	1.43E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.92E-07	5.07E-06	221.1	2.12E-03	3.52E-03
SI33_W	0.75	506	0	1	8.05E-02	2.03E-02	1.46E-03	9.82E-04	8.70E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	226.1	2.16E-03	3.58E-03
SI33_W	0.75	524	0	1	8.34E-02	2.15E-02	1.52E-03	1.02E-03	9.00E-04	1.90E-04	0.00E+00	7.68E-05	5.44E-05	2.02E-07	5.36E-06	235.1	2.24E-03	3.71E-03
SI33_W	0.75	568	0	1	9.04E-02	2.32E-02	1.65E-03	1.10E-03	9.76E-04	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.20E-07	5.81E-06	254.5	2.43E-03	4.02E-03
SI33_W	0.75	701	0	1	1.12E-01	2.85E-02	2.03E-03	1.36E-03	1.21E-03	2.54E-04	0.00E+00	1.03E-04	7.28E-05	2.71E-07	7.17E-06	313.9	3.00E-03	4.97E-03
SI33_W	0.75	754	0	1	1.20E-01	2.99E-02	2.17E-03	1.46E-03	1.30E-03	2.73E-04	0.00E+00	1.10E-04	7.82E-05	2.92E-07	7.70E-06	335.8	3.22E-03	5.34E-03
SI33_W	0.75	524	0	1	8.29E-02	2.01E-02	1.50E-03	1.02E-03	9.00E-04	1.89E-04	0.00E+00	7.65E-05	5.42E-05	2.02E-07	5.34E-06	231.4	2.23E-03	3.71E-03
SI33_W	0.75	346	0	1	5.43E-02	1.15E-02	9.66E-04	6.72E-04	5.95E-04	1.24E-04	0.00E+00	5.02E-05	3.56E-05	1.34E-07	3.51E-06	149.2	1.47E-03	2.45E-03
SI33_W	0.75	293	0	1	4.56E-02	8.73E-03	8.03E-04	5.68E-04	5.03E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	124.0	1.24E-03	2.08E-03
SI33_W	0.75	248	0	1	3.85E-02	6.63E-03	6.70E-04	4.82E-04	4.27E-04	8.86E-05	0.00E+00	3.58E-05	2.54E-05	9.61E-08	2.50E-06	103.5	1.04E-03	1.76E-03
SI33_W	0.75	204	0	1	3.14E-02	4.87E-03	5.43E-04	3.96E-04	3.51E-04	7.25E-05	0.00E+00	2.93E-05	2.08E-05	7.89E-08	2.04E-06	83.8	8.55E-04	1.45E-03
SI33_W	0.75	151	0	1	2.31E-02	3.21E-03	3.96E-04	2.93E-04	2.59E-04	5.34E-05	0.00E+00	2.16E-05	1.53E-05	5.83E-08	1.51E-06	61.1	6.30E-04	1.07E-03
SI34_E	0.75	106	0	1	1.62E-02	2.00E-03	2.76E-04	2.07E-04	1.83E-04	3.76E-05	0.00E+00	1.52E-05	1.08E-05	4.12E-08	1.06E-06	42.5	4.43E-04	7.55E-04
SI34_E	0.75	71	0	1	1.08E-02	1.19E-03	1.82E-04	1.38E-04	1.22E-04	2.50E-05	0.00E+00	1.01E-05	7.16E-06	2.74E-08	7.05E-07	28.1	2.95E-04	5.03E-04
SI34_E	0.75	62	0	1	9.39E-03	9.28E-04	1.57E-04	1.21E-04	1.07E-04	2.18E-05	0.00E+00	8.82E-06	6.25E-06	2.40E-08	6.15E-07	24.3	2.57E-04	4.40E-04
SI34_E	0.75	44	0	1	6.69E-03	6.63E-04	1.11E-04	8.61E-05	7.63E-05	1.56E-05	0.00E+00	6.29E-06	4.46E-06	1.72E-08	4.39E-07	17.2	1.83E-04	3.14E-04
SI34_E	0.75	62	0	1	9.36E-03	9.28E-04	1.56E-04	1.21E-04	1.07E-04	2.18E-05	0.00E+00	8.80E-06	6.24E-06	2.40E-08	6.14E-07	24.0	2.57E-04	4.40E-04
SI34_E	0.75	151	0	1	2.27E-02	2.25E-03	3.78E-04	2.93E-04	2.59E-04	5.29E-05	0.00E+00	2.14E-05	1.51E-05	5.83E-08	1.49E-06	58.4	6.24E-04	1.07E-03
SI34_E	0.75	453	0	1	6.83E-02	6.76E-03	1.14E-03	8.78E-04	7.78E-04	1.59E-04	0.00E+00	6.42E-05	4.55E-05	1.75E-07	4.48E-06	176.2	1.87E-03	3.21E-03
SI34_E	0.75	692	0	1	1.05E-01	1.26E-02	1.79E-03	1.34E-03	1.19E-03	2.44E-04	0.00E+00	9.87E-05	6.99E-05	2.68E-07	6.89E-06	276.1	2.88E-03	4.90E-03
SI34_E	0.75	559	0	1	8.62E-02	1.36E-02	1.49E-03	1.09E-03	9.61E-04	1.99E-04	0.00E+00	8.03E-05	5.69E-05	2.16E-07	5.61E-06	230.5	2.34E-03	3.96E-03
SI34_E	0.75	461	0	1	7.17E-02	1.30E-02	1.26E-03	8.96E-04	7.93E-04	1.65E-04	0.00E+00	6.66E-05	4.72E-05	1.78E-07	4.65E-06	194.3	1.94E-03	3.27E-03
SI34_E	0.75	417	0	1	6.52E-02	1.31E-02	1.16E-03	8.10E-04	7.17E-04	1.50E-04	0.00E+00	6.05E-05	4.28E-05	1.61E-07	4.22E-06	178.7	1.76E-03	2.96E-03
SI34_E	0.75	470	0	1	7.44E-02	1.76E-02	1.34E-03	9.13E-04	8.08E-04	1.70E-04	0.00E+00	6.87E-05	4.87E-05	1.82E-07	4.79E-06	207.6	2.00E-03	3.33E-03
SI34_E	0.75	497	0	1	7.89E-02	1.94E-02	1.43E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.92E-07	5.07E-06	221.1	2.12E-03	3.52E-03
SI34_E	0.75	506	0	1	8.05E-02	2.03E-02	1.46E-03	9.82E-04	8.70E-04	1.83E-04	0.00E+00	7.41E-05	5.25E-05	1.96E-07	5.17E-06	226.1	2.16E-03	3.58E-03
SI34_E	0.75	524	0	1	8.34E-02	2.15E-02	1.52E-03	1.02E-03	9.00E-04	1.90E-04	0.00E+00	7.68E-05	5.44E-05	2.02E-07	5.36E-06	235.1	2.24E-03	3.71E-03
SI34_E	0.75	568	0	1	9.04E-02	2.32E-02	1.65E-03	1.10E-03	9.76E-04	2.06E-04	0.00E+00	8.32E-05	5.90E-05	2.20E-07	5.81E-06	254.5	2.43E-03	4.02E-03
SI34_E	0.75	701	0	1	1.12E-01	2.85E-02	2.03E-03	1.36E-03	1.21E-03	2.54E-04	0.00E+00	1.03E-04	7.28E-05	2.71E-07	7.17E-06	313.9	3.00E-03	4.97E-03
SI34_E	0.75	754	0	1	1.20E-01	2.99E-02	2.17E-03	1.46E-03	1.30E-03	2.73E-04	0.00E+00	1.10E-04	7.82E-05	2.92E-07	7.70E-06	335.8	3.22E-03	5.34E-03
SI34_E	0.75	524	0	1	8.29E-02	2.01E-02	1.50E-03	1.02E-03	9.00E-04	1.89E-04	0.00E+00	7.65E-05	5.42E-05	2.02E-07	5.34E-06	231.4	2.23E-03	3.71E-03
SI34_E	0.75	346	0	1	5.43E-02	1.15E-02	9.66E-04	6.72E-04	5.95E-04	1.24E-04	0.00E+00	5.02E-05	3.56E-05	1.34E-07	3.51E-06	149.2	1.47E-03	2.45E-03
SI34_E	0.75	293	0	1	4.56E-02	8.73E-03	8.03E-04	5.68E-04	5.03E-04	1.05E-04	0.00E+00	4.23E-05	3.00E-05	1.13E-07	2.95E-06	124.0	1.24E-03	2.08E-03
SI34_E	0.75	248	0	1	3.85E-02	6.63E-03	6.70E-04	4.82E-04	4.27E-04	8.86E-05	0.00E+00	3.58E-05	2.54E-05	9.61E-08	2.50E-06	103.5	1.04E-03	1.76E-03
SI34_E	0.75	204	0	1	3.14E-02	4.87E-03	5.43E-04	3.96E-04	3.51E-04	7.25E-05	0.00E+00	2.93E-05	2.08E-05	7.89E-08	2.04E-06	83.8	8.55E-04	1.45E-03
SI34_E	0.75	151	0	1	2.31E-02	3.21E-03	3.96E-04	2.93E-04	2.59E-04	5.34E-05	0.00E+00	2.16E-05	1.53E-05	5.83E-08	1.51E-06	61.1	6.30E-04	1.07E-03
SI34_W	0.75	118	0	1	1.80E-02	2.21E-03	3.06E-04	2.29E-04	2.03E-04	4.17E-05	0.00E+00	1.69E-05	1.19E-05	4.57E-08	1.18E-06	47.2	4.92E-04	8.37E-04
SI34_W	0.75	79	0	1	1.20E-02	1.32E-03	2.02E-04	1.53E-04	1.35E-04	2.77E-05	0.00E+00	1.12E-05	7.94E-06	3.04E-08	7.82E-07	31.1	3.27E-04	5.58E-04
SI34_W	0.75	69	0	1	1.04E-02	1.03E-03	1.74E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.78E-06	6.93E-06	2.66E-08	6.83E-07	26.9	2.85E-04	4.88E-04
SI34_W	0.75	49	0	1	7.42E-03	7.35E-04	1.24E-04	9.55E-05	8.46E-05	1.73E-05	0.00E+00	6.98E-06	4.94E-06	1.90E-08	4.87E-07	19.1	2.04E-04	3.49E-04
SI34_W	0.75	69	0	1	1.04E-02	1.03E-03	1.73E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.76E-06	6.92E-06	2.66E-08	6.81E-07	26.7	2.85E-04	4.88E-04
SI34_W	0.75	167	0	1	2.52E-02	2.50E-03	4.19E-04	3.25E-04	2.88E-04	5.87E-05	0.00E+00	2.37E-05	1.68E-05	6.47E-08	1.65E-06	64.8	6.92E-04	1.19E-03
SI34_W	0.75	502	0	1	7.58E-02	7.50E-03	1.27E-03	9.74E-04	8.63E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.94E-07	4.97E-06	195.4	2.08E-03	3.56E-03
SI34_W	0.75	768	0	1	1.17E-01	1.40E-02	1.98E-03	1.49E-03	1.32E-03	2.71E-04	0.00E+00	1.10E-04	7.76E-05	2.97E-07	7.64E-06	306.3	3.19E-03	5.44E-03
SI34_W	0.75	620	0	1	9.56E-02	1.51E-02	1.66E-03	1.20E-03	1.07E-03	2.21E-04	0.00E+00	8.91E-05	6.31E-05	2.40E-07	6.22E-06	255.7	2.60E-03	4.39E-03
SI34_W	0.75	512	0	1	7.96E-02	1.45E-02	1.40E-03	9.94E-04	8.80E-04	1.83E-04	0.00E+00	7.39E-05	5.24E-05	1.98E-07	5.16E-06	215.6	2.16E-03	3.63E-03
SI34_W	0.75	463	0	1	7.24E-02	1.46E-02	1.28E-03	8.98E-04	7.95E-04	1.66E-04	0.00E+00	6.71E-05	4.75E-05	1.79E-07	4.68E-06	198.2	1.96E-03	3.28E-03
SI34_W	0.75	522	0	1	8.26E-02	1.96E-02	1.49E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.02E-07	5.32E-06	230.3	2.22E-03	3.70E-03
SI34_W	0.75	551	0	1	8.75E-02	2.15E-02	1.59E-03	1.07E-03	9.48E-04	2.00E-04	0.00E+00	8.06E-05	5.71E-05	2.13E-07	5.63E-06	245.3	2.35E-03	3.91E-03
SI34_W	0.75	561	0	1	8.92E-02	2.25E-02	1.62E-03	1.09E-03	9.64E-04	2.03E-04	0.00E+00	8.22E-05	5.82E-05	2.17E-07	5.73E-06	250.8	2.40E-03	3.98E-03
SI34_W	0.75	581	0	1	9.26E-02	2.39E-02	1.69E-03	1.13E-03	9.98E-04	2.11E-04	0.00E+00	8.51E-05	6.03E-05	2.25E-07	5.94E-06	260.8	2.48E-03	4.12E-03
SI34_W	0.75	630	0	1	1.00E-01	2.57E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	282.4	2.69E-03	4.46E-03
SI34_W	0.75	778	0	1	1.24E-01	3.16E-02	2.26E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.07E-05	3.01E-07	7.95E-06	348.2	3.32E-03	5.51E-03
SI34_W	0.75	837	0	1	1.33E-01	3.31E-02	2.41E-03	1.62E-03	1.44E-03	3.03E-04	0.00E+00	1.22E-04	8.67E-05	3.23E-07	8.54E-06	372.4	3.57E-03	5.93E-03
SI34_W	0.75	581	0	1	9.20E-02	2.23E-02	1.66E-03	1.13E-03	9.98E-04	2.10E-04	0.00E+00	8.48E-05	6.01E-05	2.25E-07	5.92E-06	256.7	2.47E-03	4.12E-03
SI34_W	0.75	384	0	1	6.02E-02	1.28E-02	1.07E-03	7.45E-04	6.60E-04	1.38E-04	0.00E+00	5.57E-05	3.95E-05	1.48E-07	3.89E-06	165.5	1.63E-03	2.72E-03
SI34_W	0.75	325	0	1	5.06E-02	9.69E-03	8.91E-04	6.31E-04	5.58E-04	1.16E-04	0.00E+00	4.70E-05	3.33E-05	1.26E-07	3.28E-06	137.6	1.37E-03	2.30E-03
SI34_W	0.75	276	0	1	4.27E-02	7.36E-03	7.44E-04	5.35E-04	4.74E-04	9.82E-05	0.00E+00	3.97E-05	2.81E-05	1.07E-07	2.77E-06	114.8	1.16E-03	1.95E-03
SI34_W	0.75	226	0	1	3.48E-02	5.41E-03	6.02E-04	4.39E-04	3.89E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.75E-08	2.27E-06	92.9	9.48E-04	1.60E-03
SI34_W	0.75	167	0	1	2.56E-02	3.56E-03	4.39E-04	3.25E-04	2.88E-04	5.93E-05	0.00E+00	2.39E-05	1.70E-05	6.47E-08	1.67E-06	67.8	6.99E-04	1.19E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	118	0	1	1.80E-02	2.21E-03	3.06E-04	2.29E-04	2.03E-04	4.17E-05	0.00E+00	1.69E-05	1.19E-05	4.57E-08	1.18E-06	47.2	4.92E-04	8.37E-04
SI35_E	0.75	79	0	1	1.20E-02	1.32E-03	2.02E-04	1.53E-04	1.35E-04	2.77E-05	0.00E+00	1.12E-05	7.94E-06	3.04E-08	7.82E-07	31.1	3.27E-04	5.58E-04
SI35_E	0.75	69	0	1	1.04E-02	1.03E-03	1.74E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.78E-06	6.93E-06	2.66E-08	6.83E-07	26.9	2.85E-04	4.88E-04
SI35_E	0.75	49	0	1	7.42E-03	7.35E-04	1.24E-04	9.55E-05	8.46E-05	1.73E-05	0.00E+00	6.98E-06	4.94E-06	1.90E-08	4.87E-07	19.1	2.04E-04	3.49E-04
SI35_E	0.75	69	0	1	1.04E-02	1.03E-03	1.73E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.76E-06	6.92E-06	2.66E-08	6.81E-07	26.7	2.85E-04	4.88E-04
SI35_E	0.75	167	0	1	2.52E-02	2.50E-03	4.19E-04	3.25E-04	2.88E-04	5.87E-05	0.00E+00	2.37E-05	1.68E-05	6.47E-08	1.65E-06	64.8	6.92E-04	1.19E-03
SI35_E	0.75	502	0	1	7.58E-02	7.50E-03	1.27E-03	9.74E-04	8.63E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.94E-07	4.97E-06	195.4	2.08E-03	3.56E-03
SI35_E	0.75	768	0	1	1.17E-01	1.40E-02	1.98E-03	1.49E-03	1.32E-03	2.71E-04	0.00E+00	1.10E-04	7.76E-05	2.97E-07	7.64E-06	306.3	3.19E-03	5.44E-03
SI35_E	0.75	620	0	1	9.56E-02	1.51E-02	1.66E-03	1.20E-03	1.07E-03	2.21E-04	0.00E+00	8.91E-05	6.31E-05	2.40E-07	6.22E-06	255.7	2.60E-03	4.39E-03
SI35_E	0.75	512	0	1	7.96E-02	1.45E-02	1.40E-03	9.94E-04	8.80E-04	1.83E-04	0.00E+00	7.39E-05	5.24E-05	1.98E-07	5.16E-06	215.6	2.16E-03	3.63E-03
SI35_E	0.75	463	0	1	7.24E-02	1.46E-02	1.28E-03	8.98E-04	7.95E-04	1.66E-04	0.00E+00	6.71E-05	4.75E-05	1.79E-07	4.68E-06	198.2	1.96E-03	3.28E-03
SI35_E	0.75	522	0	1	8.26E-02	1.96E-02	1.49E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.02E-07	5.32E-06	230.3	2.22E-03	3.70E-03
SI35_E	0.75	551	0	1	8.75E-02	2.15E-02	1.59E-03	1.07E-03	9.48E-04	2.00E-04	0.00E+00	8.06E-05	5.71E-05	2.13E-07	5.63E-06	245.3	2.35E-03	3.91E-03
SI35_E	0.75	561	0	1	8.92E-02	2.25E-02	1.62E-03	1.09E-03	9.64E-04	2.03E-04	0.00E+00	8.22E-05	5.82E-05	2.17E-07	5.73E-06	250.8	2.40E-03	3.98E-03
SI35_E	0.75	581	0	1	9.26E-02	2.39E-02	1.69E-03	1.13E-03	9.98E-04	2.11E-04	0.00E+00	8.51E-05	6.03E-05	2.25E-07	5.94E-06	260.8	2.48E-03	4.12E-03
SI35_E	0.75	630	0	1	1.00E-01	2.57E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	282.4	2.69E-03	4.46E-03
SI35_E	0.75	778	0	1	1.24E-01	3.16E-02	2.26E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.07E-05	3.01E-07	7.95E-06	348.2	3.32E-03	5.51E-03
SI35_E	0.75	837	0	1	1.33E-01	3.31E-02	2.41E-03	1.62E-03	1.44E-03	3.03E-04	0.00E+00	1.22E-04	8.67E-05	3.23E-07	8.54E-06	372.4	3.57E-03	5.93E-03
SI35_E	0.75	581	0	1	9.20E-02	2.23E-02	1.66E-03	1.13E-03	9.98E-04	2.10E-04	0.00E+00	8.48E-05	6.01E-05	2.25E-07	5.92E-06	256.7	2.47E-03	4.12E-03
SI35_E	0.75	384	0	1	6.02E-02	1.28E-02	1.07E-03	7.45E-04	6.60E-04	1.38E-04	0.00E+00	5.57E-05	3.95E-05	1.48E-07	3.89E-06	165.5	1.63E-03	2.72E-03
SI35_E	0.75	325	0	1	5.06E-02	9.69E-03	8.91E-04	6.31E-04	5.58E-04	1.16E-04	0.00E+00	4.70E-05	3.33E-05	1.26E-07	3.28E-06	137.6	1.37E-03	2.30E-03
SI35_E	0.75	276	0	1	4.27E-02	7.36E-03	7.44E-04	5.35E-04	4.74E-04	9.82E-05	0.00E+00	3.97E-05	2.81E-05	1.07E-07	2.77E-06	114.8	1.16E-03	1.95E-03
SI35_E	0.75	226	0	1	3.48E-02	5.41E-03	6.02E-04	4.39E-04	3.89E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.75E-08	2.27E-06	92.9	9.48E-04	1.60E-03
SI35_E	0.75	167	0	1	2.56E-02	3.56E-03	4.39E-04	3.25E-04	2.88E-04	5.93E-05	0.00E+00	2.39E-05	1.70E-05	6.47E-08	1.67E-06	67.8	6.99E-04	1.19E-03
SI35_W	0.75	118	0	1	1.80E-02	2.21E-03	3.06E-04	2.29E-04	2.03E-04	4.17E-05	0.00E+00	1.69E-05	1.19E-05	4.57E-08	1.18E-06	47.2	4.92E-04	8.37E-04
SI35_W	0.75	79	0	1	1.20E-02	1.32E-03	2.02E-04	1.53E-04	1.35E-04	2.77E-05	0.00E+00	1.12E-05	7.94E-06	3.04E-08	7.82E-07	31.1	3.27E-04	5.58E-04
SI35_W	0.75	69	0	1	1.04E-02	1.03E-03	1.74E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.78E-06	6.93E-06	2.66E-08	6.83E-07	26.9	2.85E-04	4.88E-04
SI35_W	0.75	49	0	1	7.42E-03	7.35E-04	1.24E-04	9.55E-05	8.46E-05	1.73E-05	0.00E+00	6.98E-06	4.94E-06	1.90E-08	4.87E-07	19.1	2.04E-04	3.49E-04
SI35_W	0.75	69	0	1	1.04E-02	1.03E-03	1.73E-04	1.34E-04	1.18E-04	2.42E-05	0.00E+00	9.76E-06	6.92E-06	2.66E-08	6.81E-07	26.7	2.85E-04	4.88E-04
SI35_W	0.75	167	0	1	2.52E-02	2.50E-03	4.19E-04	3.25E-04	2.88E-04	5.87E-05	0.00E+00	2.37E-05	1.68E-05	6.47E-08	1.65E-06	64.8	6.92E-04	1.19E-03
SI35_W	0.75	502	0	1	7.58E-02	7.50E-03	1.27E-03	9.74E-04	8.63E-04	1.76E-04	0.00E+00	7.12E-05	5.05E-05	1.94E-07	4.97E-06	195.4	2.08E-03	3.56E-03
SI35_W	0.75	768	0	1	1.17E-01	1.40E-02	1.98E-03	1.49E-03	1.32E-03	2.71E-04	0.00E+00	1.10E-04	7.76E-05	2.97E-07	7.64E-06	306.3	3.19E-03	5.44E-03
SI35_W	0.75	620	0	1	9.56E-02	1.51E-02	1.66E-03	1.20E-03	1.07E-03	2.21E-04	0.00E+00	8.91E-05	6.31E-05	2.40E-07	6.22E-06	255.7	2.60E-03	4.39E-03
SI35_W	0.75	512	0	1	7.96E-02	1.45E-02	1.40E-03	9.94E-04	8.80E-04	1.83E-04	0.00E+00	7.39E-05	5.24E-05	1.98E-07	5.16E-06	215.6	2.16E-03	3.63E-03
SI35_W	0.75	463	0	1	7.24E-02	1.46E-02	1.28E-03	8.98E-04	7.95E-04	1.66E-04	0.00E+00	6.71E-05	4.75E-05	1.79E-07	4.68E-06	198.2	1.96E-03	3.28E-03
SI35_W	0.75	522	0	1	8.26E-02	1.96E-02	1.49E-03	1.01E-03	8.97E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.02E-07	5.32E-06	230.3	2.22E-03	3.70E-03
SI35_W	0.75	551	0	1	8.75E-02	2.15E-02	1.59E-03	1.07E-03	9.48E-04	2.00E-04	0.00E+00	8.06E-05	5.71E-05	2.13E-07	5.63E-06	245.3	2.35E-03	3.91E-03
SI35_W	0.75	561	0	1	8.92E-02	2.25E-02	1.62E-03	1.09E-03	9.64E-04	2.03E-04	0.00E+00	8.22E-05	5.82E-05	2.17E-07	5.73E-06	250.8	2.40E-03	3.98E-03
SI35_W	0.75	581	0	1	9.26E-02	2.39E-02	1.69E-03	1.13E-03	9.98E-04	2.11E-04	0.00E+00	8.51E-05	6.03E-05	2.25E-07	5.94E-06	260.8	2.48E-03	4.12E-03
SI35_W	0.75	630	0	1	1.00E-01	2.57E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.44E-07	6.44E-06	282.4	2.69E-03	4.46E-03
SI35_W	0.75	778	0	1	1.24E-01	3.16E-02	2.26E-03	1.51E-03	1.34E-03	2.82E-04	0.00E+00	1.14E-04	8.07E-05	3.01E-07	7.95E-06	348.2	3.32E-03	5.51E-03
SI35_W	0.75	837	0	1	1.33E-01	3.31E-02	2.41E-03	1.62E-03	1.44E-03	3.03E-04	0.00E+00	1.22E-04	8.67E-05	3.23E-07	8.54E-06	372.4	3.57E-03	5.93E-03
SI35_W	0.75	581	0	1	9.20E-02	2.23E-02	1.66E-03	1.13E-03	9.98E-04	2.10E-04	0.00E+00	8.48E-05	6.01E-05	2.25E-07	5.92E-06	256.7	2.47E-03	4.12E-03
SI35_W	0.75	384	0	1	6.02E-02	1.28E-02	1.07E-03	7.45E-04	6.60E-04	1.38E-04	0.00E+00	5.57E-05	3.95E-05	1.48E-07	3.89E-06	165.5	1.63E-03	2.72E-03
SI35_W	0.75	325	0	1	5.06E-02	9.69E-03	8.91E-04	6.31E-04	5.58E-04	1.16E-04	0.00E+00	4.70E-05	3.33E-05	1.26E-07	3.28E-06	137.6	1.37E-03	2.30E-03
SI35_W	0.75	276	0	1	4.27E-02	7.36E-03	7.44E-04	5.35E-04	4.74E-04	9.82E-05	0.00E+00	3.97E-05	2.81E-05	1.07E-07	2.77E-06	114.8	1.16E-03	1.95E-03
SI35_W	0.75	226	0	1	3.48E-02	5.41E-03	6.02E-04	4.39E-04	3.89E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.75E-08	2.27E-06	92.9	9.48E-04	1.60E-03
SI35_W	0.75	167	0	1	2.56E-02	3.56E-03	4.39E-04	3.25E-04	2.88E-04	5.93E-05	0.00E+00	2.39E-05	1.70E-05	6.47E-08	1.67E-06	67.8	6.99E-04	1.19E-03
SI36_E	0.75	123	0	1	1.88E-02	2.31E-03	3.19E-04	2.39E-04	2.12E-04	4.35E-05	0.00E+00	1.76E-05	1.25E-05	4.76E-08	1.23E-06	49.2	5.13E-04	8.73E-04
SI36_E	0.75	82	0	1	1.25E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.28E-06	3.17E-08	8.16E-07	32.5	3.41E-04	5.82E-04
SI36_E	0.75	72	0	1	1.09E-02	1.07E-03	1.82E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.23E-06	2.78E-08	7.12E-07	28.1	2.98E-04	5.09E-04
SI36_E	0.75	51	0	1	7.74E-03	7.67E-04	1.29E-04	9.96E-05	8.82E-05	1.80E-05	0.00E+00	7.28E-06	5.16E-06	1.98E-08	5.08E-07	19.9	2.12E-04	3.64E-04
SI36_E	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.21E-06	2.78E-08	7.10E-07	27.8	2.97E-04	5.09E-04
SI36_E	0.75	174	0	1	2.63E-02	2.61E-03	4.37E-04	3.39E-04	3.00E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.75E-08	1.73E-06	67.5	7.21E-04	1.24E-03
SI36_E	0.75	523	0	1	7.90E-02	7.82E-03	1.32E-03	1.02E-03	9.00E-04	1.84E-04	0.00E+00	7.43E-05	5.26E-05	2.02E-07	5.18E-06	203.8	2.17E-03	3.71E-03
SI36_E	0.75	801	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.38E-03	2.83E-04	0.00E+00	1.14E-04	8.09E-05	3.10E-07	7.97E-06	319.4	3.33E-03	5.67E-03
SI36_E	0.75	647	0	1	9.97E-02	1.57E-02	1.73E-03	1.26E-03	1.11E-03	2.30E-04	0.00E+00	9.29E-05	6.58E-05	2.50E-07	6.48E-06	266.7	2.71E-03	4.58E-03
SI36_E	0.75	534	0	1	8.30E-02	1.51E-02	1.46E-03	1.04E-03	9.18E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.06E-07	5.38E-06	224.8	2.25E-03	3.78E-03
SI36_E	0.75	482	0	1	7.55E-02	1.52E-02	1.34E-03	9.36E-04	8.29E-04	1.73E-04	0.00E+00	6.99E-05	4.96E-05	1.87E-07	4.88E-06	206.7	2.04E-03	3.42E-03
SI36_E	0.75	544	0	1	8.61E-02	2.04E-02	1.56E-03	1.06E-03	9.35E-04	1.97E-04	0.00E+00	7.94E-05	5.63E-05	2.10E-07	5.54E-06	240.2	2.32E-03	3.85E-03
SI36_E	0.75	575	0	1	9.13E-02	2.24E-02	1.66E-03	1.12E-03	9.88E-04	2.08E-04	0.00E+00	8.41E-05	5.96E-05	2.22E-07	5.87E-06	255.8	2.45E-03	4.07E-03
SI36_E	0.75	585	0	1	9.31E-02	2.34E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	261.5	2.50E-03	4.15E-03
SI36_E	0.75	606	0	1	9.65E-02	2.49E-02	1.76E-03	1.18E-03	1.04E-03	2.20E-04	0.00E+00	8.88E-05	6.29E-05	2.34E-07	6.20E-06	272.0	2.59E-03	4.29E-03
SI36_E	0.75	657	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.38E-04	0.00E+00	9.63E-05	6.82E-05	2.54E-07	6.72E-06	294.4	2.81E-03	4.66E-03
SI36_E	0.75	811	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.42E-05	3.14E-07	8.29E-06	363.1	3.47E-03	5.75E-03
SI36_E	0.75	872	0	1	1.39E-01	3.45E-02	2.52E-03	1.69E-03	1.50E-03	3.16E-04	0.00E+00	1.28E-04	9.04E-05	3.37E-07	8.91E-06	388.4	3.72E-03	6.18E-03
SI36_E	0.75	606	0	1	9.59E-02	2.32E-02	1.73E-03	1.18E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	267.7	2.58E-03	4.29E-03
SI36_E	0.75	400	0	1	6.28E-02	1.34E-02	1.12E-03	7.77E-04	6.88E-04	1.44E-04	0.00E+00	5.81E-05	4.12E-05	1.55E-07	4.06E-06	172.6	1.70E-03	2.84E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_E	0.75	339	0	1	5.28E-02	1.01E-02	9.29E-04	6.58E-04	5.82E-04	1.21E-04	0.00E+00	4.90E-05	3.47E-05	1.31E-07	3.42E-06	143.5	1.43E-03	2.40E-03
SI36_E	0.75	287	0	1	4.45E-02	7.67E-03	7.75E-04	5.58E-04	4.94E-04	1.02E-04	0.00E+00	4.14E-05	2.93E-05	1.11E-07	2.89E-06	119.7	1.21E-03	2.04E-03
SI36_E	0.75	236	0	1	3.63E-02	5.64E-03	6.28E-04	4.58E-04	4.06E-04	8.39E-05	0.00E+00	3.39E-05	2.40E-05	9.13E-08	2.37E-06	96.9	9.89E-04	1.67E-03
SI36_E	0.75	174	0	1	2.67E-02	3.71E-03	4.58E-04	3.39E-04	3.00E-04	6.18E-05	0.00E+00	2.50E-05	1.77E-05	6.75E-08	1.74E-06	70.7	7.29E-04	1.24E-03
SI36_W	0.75	123	0	1	1.88E-02	2.31E-03	3.19E-04	2.39E-04	2.12E-04	4.35E-05	0.00E+00	1.76E-05	1.25E-05	4.76E-08	1.23E-06	49.2	5.13E-04	8.73E-04
SI36_W	0.75	82	0	1	1.25E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.28E-06	3.17E-08	8.16E-07	32.5	3.41E-04	5.82E-04
SI36_W	0.75	72	0	1	1.09E-02	1.07E-03	1.82E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.23E-06	2.78E-08	7.12E-07	28.1	2.98E-04	5.09E-04
SI36_W	0.75	51	0	1	7.74E-03	7.67E-04	1.29E-04	9.96E-05	8.82E-05	1.80E-05	0.00E+00	7.28E-06	5.16E-06	1.98E-08	5.08E-07	19.9	2.12E-04	3.64E-04
SI36_W	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.21E-06	2.78E-08	7.10E-07	27.8	2.97E-04	5.09E-04
SI36_W	0.75	174	0	1	2.63E-02	2.61E-03	4.37E-04	3.39E-04	3.00E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.75E-08	1.73E-06	67.5	7.21E-04	1.24E-03
SI36_W	0.75	523	0	1	7.90E-02	7.82E-03	1.32E-03	1.02E-03	9.00E-04	1.84E-04	0.00E+00	7.43E-05	5.26E-05	2.02E-07	5.18E-06	203.8	2.17E-03	3.71E-03
SI36_W	0.75	801	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.38E-03	2.83E-04	0.00E+00	1.14E-04	8.09E-05	3.10E-07	7.97E-06	319.4	3.33E-03	5.67E-03
SI36_W	0.75	647	0	1	9.97E-02	1.57E-02	1.73E-03	1.26E-03	1.11E-03	2.30E-04	0.00E+00	9.29E-05	6.58E-05	2.50E-07	6.48E-06	266.7	2.71E-03	4.58E-03
SI36_W	0.75	534	0	1	8.30E-02	1.51E-02	1.46E-03	1.04E-03	9.18E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.06E-07	5.38E-06	224.8	2.25E-03	3.78E-03
SI36_W	0.75	482	0	1	7.55E-02	1.52E-02	1.34E-03	9.36E-04	8.29E-04	1.73E-04	0.00E+00	6.99E-05	4.96E-05	1.87E-07	4.88E-06	206.7	2.04E-03	3.42E-03
SI36_W	0.75	544	0	1	8.61E-02	2.04E-02	1.56E-03	1.06E-03	9.35E-04	1.97E-04	0.00E+00	7.94E-05	5.63E-05	2.10E-07	5.54E-06	240.2	2.32E-03	3.85E-03
SI36_W	0.75	575	0	1	9.13E-02	2.24E-02	1.66E-03	1.12E-03	9.88E-04	2.08E-04	0.00E+00	8.41E-05	5.96E-05	2.22E-07	5.87E-06	255.8	2.45E-03	4.07E-03
SI36_W	0.75	585	0	1	9.31E-02	2.34E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	261.5	2.50E-03	4.15E-03
SI36_W	0.75	606	0	1	9.65E-02	2.49E-02	1.76E-03	1.18E-03	1.04E-03	2.20E-04	0.00E+00	8.88E-05	6.29E-05	2.34E-07	6.20E-06	272.0	2.59E-03	4.29E-03
SI36_W	0.75	657	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.38E-04	0.00E+00	9.63E-05	6.82E-05	2.54E-07	6.72E-06	294.4	2.81E-03	4.66E-03
SI36_W	0.75	811	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.42E-05	3.14E-07	8.29E-06	363.1	3.47E-03	5.75E-03
SI36_W	0.75	872	0	1	1.39E-01	3.45E-02	2.52E-03	1.69E-03	1.50E-03	3.16E-04	0.00E+00	1.28E-04	9.04E-05	3.37E-07	8.91E-06	388.4	3.72E-03	6.18E-03
SI36_W	0.75	606	0	1	9.59E-02	2.32E-02	1.73E-03	1.18E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	267.7	2.58E-03	4.29E-03
SI36_W	0.75	400	0	1	6.28E-02	1.34E-02	1.12E-03	7.77E-04	6.88E-04	1.44E-04	0.00E+00	5.81E-05	4.12E-05	1.55E-07	4.06E-06	172.6	1.70E-03	2.84E-03
SI36_W	0.75	339	0	1	5.28E-02	1.01E-02	9.29E-04	6.58E-04	5.82E-04	1.21E-04	0.00E+00	4.90E-05	3.47E-05	1.31E-07	3.42E-06	143.5	1.43E-03	2.40E-03
SI36_W	0.75	287	0	1	4.45E-02	7.67E-03	7.75E-04	5.58E-04	4.94E-04	1.02E-04	0.00E+00	4.14E-05	2.93E-05	1.11E-07	2.89E-06	119.7	1.21E-03	2.04E-03
SI36_W	0.75	236	0	1	3.63E-02	5.64E-03	6.28E-04	4.58E-04	4.06E-04	8.39E-05	0.00E+00	3.39E-05	2.40E-05	9.13E-08	2.37E-06	96.9	9.89E-04	1.67E-03
SI36_W	0.75	174	0	1	2.67E-02	3.71E-03	4.58E-04	3.39E-04	3.00E-04	6.18E-05	0.00E+00	2.50E-05	1.77E-05	6.75E-08	1.74E-06	70.7	7.29E-04	1.24E-03
SI37_E	0.75	123	0	1	1.88E-02	2.31E-03	3.19E-04	2.39E-04	2.12E-04	4.35E-05	0.00E+00	1.76E-05	1.25E-05	4.76E-08	1.23E-06	49.2	5.13E-04	8.73E-04
SI37_E	0.75	82	0	1	1.25E-02	1.38E-03	2.10E-04	1.59E-04	1.41E-04	2.89E-05	0.00E+00	1.17E-05	8.28E-06	3.17E-08	8.16E-07	32.5	3.41E-04	5.82E-04
SI37_E	0.75	72	0	1	1.09E-02	1.07E-03	1.82E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.23E-06	2.78E-08	7.12E-07	28.1	2.98E-04	5.09E-04
SI37_E	0.75	51	0	1	7.74E-03	7.67E-04	1.29E-04	9.96E-05	8.82E-05	1.80E-05	0.00E+00	7.28E-06	5.16E-06	1.98E-08	5.08E-07	19.9	2.12E-04	3.64E-04
SI37_E	0.75	72	0	1	1.08E-02	1.07E-03	1.80E-04	1.39E-04	1.24E-04	2.52E-05	0.00E+00	1.02E-05	7.21E-06	2.78E-08	7.10E-07	27.8	2.97E-04	5.09E-04
SI37_E	0.75	174	0	1	2.63E-02	2.61E-03	4.37E-04	3.39E-04	3.00E-04	6.12E-05	0.00E+00	2.47E-05	1.75E-05	6.75E-08	1.73E-06	67.5	7.21E-04	1.24E-03
SI37_E	0.75	523	0	1	7.90E-02	7.82E-03	1.32E-03	1.02E-03	9.00E-04	1.84E-04	0.00E+00	7.43E-05	5.26E-05	2.02E-07	5.18E-06	203.8	2.17E-03	3.71E-03
SI37_E	0.75	801	0	1	1.22E-01	1.46E-02	2.07E-03	1.55E-03	1.38E-03	2.83E-04	0.00E+00	1.14E-04	8.09E-05	3.10E-07	7.97E-06	319.4	3.33E-03	5.67E-03
SI37_E	0.75	647	0	1	9.97E-02	1.57E-02	1.73E-03	1.26E-03	1.11E-03	2.30E-04	0.00E+00	9.29E-05	6.58E-05	2.50E-07	6.48E-06	266.7	2.71E-03	4.58E-03
SI37_E	0.75	534	0	1	8.30E-02	1.51E-02	1.46E-03	1.04E-03	9.18E-04	1.91E-04	0.00E+00	7.71E-05	5.46E-05	2.06E-07	5.38E-06	224.8	2.25E-03	3.78E-03
SI37_E	0.75	482	0	1	7.55E-02	1.52E-02	1.34E-03	9.36E-04	8.29E-04	1.73E-04	0.00E+00	6.99E-05	4.96E-05	1.87E-07	4.88E-06	206.7	2.04E-03	3.42E-03
SI37_E	0.75	544	0	1	8.61E-02	2.04E-02	1.56E-03	1.06E-03	9.35E-04	1.97E-04	0.00E+00	7.94E-05	5.63E-05	2.10E-07	5.54E-06	240.2	2.32E-03	3.85E-03
SI37_E	0.75	575	0	1	9.13E-02	2.24E-02	1.66E-03	1.12E-03	9.88E-04	2.08E-04	0.00E+00	8.41E-05	5.96E-05	2.22E-07	5.87E-06	255.8	2.45E-03	4.07E-03
SI37_E	0.75	585	0	1	9.31E-02	2.34E-02	1.69E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.57E-05	6.07E-05	2.26E-07	5.98E-06	261.5	2.50E-03	4.15E-03
SI37_E	0.75	606	0	1	9.65E-02	2.49E-02	1.76E-03	1.18E-03	1.04E-03	2.20E-04	0.00E+00	8.88E-05	6.29E-05	2.34E-07	6.20E-06	272.0	2.59E-03	4.29E-03
SI37_E	0.75	657	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.38E-04	0.00E+00	9.63E-05	6.82E-05	2.54E-07	6.72E-06	294.4	2.81E-03	4.66E-03
SI37_E	0.75	811	0	1	1.29E-01	3.30E-02	2.35E-03	1.57E-03	1.39E-03	2.94E-04	0.00E+00	1.19E-04	8.42E-05	3.14E-07	8.29E-06	363.1	3.47E-03	5.75E-03
SI37_E	0.75	872	0	1	1.39E-01	3.45E-02	2.52E-03	1.69E-03	1.50E-03	3.16E-04	0.00E+00	1.28E-04	9.04E-05	3.37E-07	8.91E-06	388.4	3.72E-03	6.18E-03
SI37_E	0.75	606	0	1	9.59E-02	2.32E-02	1.73E-03	1.18E-03	1.04E-03	2.19E-04	0.00E+00	8.85E-05	6.27E-05	2.34E-07	6.17E-06	267.7	2.58E-03	4.29E-03
SI37_E	0.75	400	0	1	6.28E-02	1.34E-02	1.12E-03	7.77E-04	6.88E-04	1.44E-04	0.00E+00	5.81E-05	4.12E-05	1.55E-07	4.06E-06	172.6	1.70E-03	2.84E-03
SI37_E	0.75	339	0	1	5.28E-02	1.01E-02	9.29E-04	6.58E-04	5.82E-04	1.21E-04	0.00E+00	4.90E-05	3.47E-05	1.31E-07	3.42E-06	143.5	1.43E-03	2.40E-03
SI37_E	0.75	287	0	1	4.45E-02	7.67E-03	7.75E-04	5.58E-04	4.94E-04	1.02E-04	0.00E+00	4.14E-05	2.93E-05	1.11E-07	2.89E-06	119.7	1.21E-03	2.04E-03
SI37_E	0.75	236	0	1	3.63E-02	5.64E-03	6.28E-04	4.58E-04	4.06E-04	8.39E-05	0.00E+00	3.39E-05	2.40E-05	9.13E-08	2.37E-06	96.9	9.89E-04	1.67E-03
SI37_E	0.75	174	0	1	2.67E-02	3.71E-03	4.58E-04	3.39E-04	3.00E-04	6.18E-05	0.00E+00	2.50E-05	1.77E-05	6.75E-08	1.74E-06	70.7	7.29E-04	1.24E-03
SI37_W	0.75	133	0	1	2.03E-02	2.50E-03	3.45E-04	2.59E-04	2.29E-04	4.71E-05	0.00E+00	1.90E-05	1.35E-05	5.15E-08	1.33E-06	53.2	5.55E-04	9.44E-04
SI37_W	0.75	89	0	1	1.35E-02	1.49E-03	2.27E-04	1.72E-04	1.53E-04	3.13E-05	0.00E+00	1.26E-05	8.96E-06	3.43E-08	8.82E-07	35.1	3.69E-04	6.30E-04
SI37_W	0.75	78	0	1	1.17E-02	1.16E-03	1.97E-04	1.51E-04	1.34E-04	2.73E-05	0.00E+00	1.10E-05	7.82E-06	3.00E-08	7.70E-07	30.4	3.22E-04	5.51E-04
SI37_W	0.75	56	0	1	8.37E-03	8.29E-04	1.39E-04	1.08E-04	9.54E-05	1.95E-05	0.00E+00	7.87E-06	5.58E-06	2.15E-08	5.49E-07	21.5	2.30E-04	3.93E-04
SI37_W	0.75	78	0	1	1.17E-02	1.16E-03	1.95E-04	1.51E-04	1.34E-04	2.73E-05	0.00E+00	1.10E-05	7.80E-06	3.00E-08	7.69E-07	30.1	3.21E-04	5.51E-04
SI37_W	0.75	189	0	1	2.84E-02	2.82E-03	4.73E-04	3.66E-04	3.25E-04	6.62E-05	0.00E+00	2.67E-05	1.90E-05	7.30E-08	1.87E-06	73.1	7.80E-04	1.34E-03
SI37_W	0.75	566	0	1	8.55E-02	8.46E-03	1.43E-03	1.10E-03	9.74E-04	1.99E-04	0.00E+00	8.03E-05	5.69E-05	2.19E-07	5.61E-06	220.5	2.34E-03	4.01E-03
SI37_W	0.75	866	0	1	1.32E-01	1.58E-02	2.24E-03	1.68E-03	1.49E-03	3.06E-04	0.00E+00	1.24E-04	8.75E-05	3.35E-07	8.62E-06	345.5	3.60E-03	6.14E-03
SI37_W	0.75	700	0	1	1.08E-01	1.70E-02	1.87E-03	1.36E-03	1.20E-03	2.49E-04	0.00E+00	1.01E-04	7.12E-05	2.70E-07	7.02E-06	288.5	2.93E-03	4.96E-03
SI37_W	0.75	577	0	1	8.98E-02	1.63E-02	1.58E-03	1.12E-03	9.93E-04	2.06E-04	0.00E+00	8.34E-05	5.91E-05	2.23E-07	5.82E-06	243.2	2.43E-03	4.09E-03
SI37_W	0.75	522	0	1	8.17E-02	1.64E-02	1.45E-03	1.01E-03	8.97E-04	1.87E-04	0.00E+00	7.57E-05	5.36E-05	2.02E-07	5.28E-06	223.6	2.21E-03	3.70E-03
SI37_W	0.75	589	0	1	9.32E-02	2.21E-02	1.68E-03	1.14E-03	1.01E-03	2.13E-04	0.00E+00	8.59E-05	6.09E-05	2.28E-07	6.00E-06	259.8	2.51E-03	4.17E-03
SI37_W	0.75	622	0	1	9.87E-02	2.43E-02	1.79E-03	1.21E-03	1.07E-03	2.25E-04	0.00E+00	9.10E-05	6.45E-05	2.40E-07	6.35E-06	276.7	2.65E-03	4.41E-03
SI37_W	0.75	633	0	1	1.01E-01	2.54E-02	1.83E-03	1.23E-03	1.09E-03	2.29E-04	0.00E+00	9.27E-05	6.57E-05	2.45E-07	6.47E-06	282.9	2.70E-03	4.49E-03
SI37_W	0.75	655	0	1	1.04E-01	2.70E-02	1.91E-03	1.27E-03	1.13E-03	2.38E-04	0.00E+00	9.61E-05	6.81E-05	2.53E-07	6.70E-06	294.2	2.80E-03	4.64E-03
SI37_W	0.75	711	0	1	1.13E-01	2.90E-02	2.06E-03	1.38E-03	1.22E-03	2.58E-04	0.00E+00	1.04E-04	7.38E-05	2.75E-07	7.27E-06	318.5	3.04E-03	5.04E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI37_W	0.75	877	0	1	1.40E-01	3.57E-02	2.54E-03	1.70E-03	1.51E-03	3.18E-04	0.00E+00	1.29E-04	9.11E-05	3.39E-07	8.97E-06	392.9	3.75E-03	6.22E-03
SI37_W	0.75	944	0	1	1.50E-01	3.74E-02	2.72E-03	1.83E-03	1.62E-03	3.42E-04	0.00E+00	1.38E-04	9.78E-05	3.65E-07	9.64E-06	420.2	4.03E-03	6.69E-03
SI37_W	0.75	655	0	1	1.04E-01	2.51E-02	1.88E-03	1.27E-03	1.13E-03	2.37E-04	0.00E+00	9.57E-05	6.78E-05	2.53E-07	6.68E-06	289.6	2.79E-03	4.64E-03
SI37_W	0.75	433	0	1	6.79E-02	1.44E-02	1.21E-03	8.41E-04	7.44E-04	1.56E-04	0.00E+00	6.29E-05	4.45E-05	1.67E-07	4.39E-06	186.7	1.83E-03	3.07E-03
SI37_W	0.75	366	0	1	5.71E-02	1.09E-02	1.01E-03	7.11E-04	6.30E-04	1.31E-04	0.00E+00	5.30E-05	3.75E-05	1.42E-07	3.70E-06	155.2	1.55E-03	2.60E-03
SI37_W	0.75	311	0	1	4.81E-02	8.30E-03	8.39E-04	6.04E-04	5.35E-04	1.11E-04	0.00E+00	4.48E-05	3.17E-05	1.20E-07	3.13E-06	129.5	1.31E-03	2.20E-03
SI37_W	0.75	255	0	1	3.93E-02	6.10E-03	6.79E-04	4.96E-04	4.39E-04	9.07E-05	0.00E+00	3.67E-05	2.60E-05	9.87E-08	2.56E-06	104.9	1.07E-03	1.81E-03
SI37_W	0.75	189	0	1	2.89E-02	4.02E-03	4.95E-04	3.66E-04	3.25E-04	6.69E-05	0.00E+00	2.70E-05	1.91E-05	7.30E-08	1.89E-06	76.5	7.88E-04	1.34E-03
SI38_E	0.36	63	0	1	9.67E-03	1.19E-03	1.64E-04	1.23E-04	1.09E-04	2.24E-05	0.00E+00	9.05E-06	6.42E-06	2.45E-08	6.32E-07	25.4	2.64E-04	4.50E-04
SI38_E	0.36	42	0	1	6.42E-03	7.10E-04	1.08E-04	8.21E-05	7.27E-05	1.49E-05	0.00E+00	6.02E-06	4.27E-06	1.64E-08	4.20E-07	16.7	1.76E-04	3.00E-04
SI38_E	0.36	37	0	1	5.59E-03	5.53E-04	9.36E-05	7.19E-05	6.36E-05	1.30E-05	0.00E+00	5.26E-06	3.72E-06	1.43E-08	3.67E-07	14.5	1.53E-04	2.62E-04
SI38_E	0.36	26	0	1	3.99E-03	3.95E-04	6.64E-05	5.13E-05	4.55E-05	9.28E-06	0.00E+00	3.75E-06	2.66E-06	1.02E-08	2.62E-07	10.3	1.09E-04	1.87E-04
SI38_E	0.36	37	0	1	5.57E-03	5.53E-04	9.28E-05	7.19E-05	6.36E-05	1.30E-05	0.00E+00	5.24E-06	3.72E-06	1.43E-08	3.66E-07	14.3	1.53E-04	2.62E-04
SI38_E	0.36	90	0	1	1.35E-02	1.34E-03	2.25E-04	1.74E-04	1.55E-04	3.15E-05	0.00E+00	1.27E-05	9.02E-06	3.48E-08	8.89E-07	34.8	3.72E-04	6.37E-04
SI38_E	0.36	270	0	1	4.07E-02	4.03E-03	6.80E-04	5.23E-04	4.64E-04	9.47E-05	0.00E+00	3.83E-05	2.71E-05	1.04E-07	2.67E-06	105.0	1.12E-03	1.91E-03
SI38_E	0.36	412	0	1	6.28E-02	7.53E-03	1.07E-03	8.01E-04	7.09E-04	1.46E-04	0.00E+00	5.88E-05	4.17E-05	1.59E-07	4.11E-06	164.5	1.72E-03	2.92E-03
SI38_E	0.36	333	0	1	5.14E-02	8.11E-03	8.90E-04	6.47E-04	5.73E-04	1.18E-04	0.00E+00	4.79E-05	3.39E-05	1.29E-07	3.34E-06	137.4	1.40E-03	2.36E-03
SI38_E	0.36	275	0	1	4.27E-02	7.77E-03	7.50E-04	5.34E-04	4.73E-04	9.83E-05	0.00E+00	3.97E-05	2.81E-05	1.06E-07	2.77E-06	115.8	1.16E-03	1.95E-03
SI38_E	0.36	249	0	1	3.89E-02	7.83E-03	6.89E-04	4.82E-04	4.27E-04	8.92E-05	0.00E+00	3.60E-05	2.55E-05	9.61E-08	2.51E-06	106.5	1.05E-03	1.76E-03
SI38_E	0.36	280	0	1	4.44E-02	1.05E-02	8.01E-04	5.44E-04	4.82E-04	1.01E-04	0.00E+00	4.09E-05	2.90E-05	1.08E-07	2.86E-06	123.7	1.19E-03	1.99E-03
SI38_E	0.36	296	0	1	4.70E-02	1.16E-02	8.53E-04	5.75E-04	5.09E-04	1.07E-04	0.00E+00	4.33E-05	3.07E-05	1.14E-07	3.02E-06	131.8	1.26E-03	2.10E-03
SI38_E	0.36	301	0	1	4.79E-02	1.21E-02	8.72E-04	5.85E-04	5.18E-04	1.09E-04	0.00E+00	4.41E-05	3.13E-05	1.17E-07	3.08E-06	134.7	1.29E-03	2.14E-03
SI38_E	0.36	312	0	1	4.97E-02	1.28E-02	9.07E-04	6.06E-04	5.36E-04	1.13E-04	0.00E+00	4.57E-05	3.24E-05	1.21E-07	3.19E-06	140.1	1.33E-03	2.21E-03
SI38_E	0.36	338	0	1	5.39E-02	1.38E-02	9.82E-04	6.57E-04	5.82E-04	1.23E-04	0.00E+00	4.96E-05	3.51E-05	1.31E-07	3.46E-06	151.7	1.45E-03	2.40E-03
SI38_E	0.36	418	0	1	6.65E-02	1.70E-02	1.21E-03	8.11E-04	7.18E-04	1.51E-04	0.00E+00	6.12E-05	4.34E-05	1.62E-07	4.27E-06	187.1	1.79E-03	2.96E-03
SI38_E	0.36	449	0	1	7.14E-02	1.78E-02	1.30E-03	8.72E-04	7.73E-04	1.63E-04	0.00E+00	6.58E-05	4.66E-05	1.74E-07	4.59E-06	200.1	1.92E-03	3.18E-03
SI38_E	0.36	312	0	1	4.94E-02	1.20E-02	8.93E-04	6.06E-04	5.36E-04	1.13E-04	0.00E+00	4.56E-05	3.23E-05	1.21E-07	3.18E-06	137.9	1.33E-03	2.21E-03
SI38_E	0.36	206	0	1	3.23E-02	6.88E-03	5.76E-04	4.00E-04	3.55E-04	7.41E-05	0.00E+00	2.99E-05	2.12E-05	7.97E-08	2.09E-06	88.9	8.73E-04	1.46E-03
SI38_E	0.36	174	0	1	2.72E-02	5.20E-03	4.79E-04	3.39E-04	3.00E-04	6.24E-05	0.00E+00	2.52E-05	1.79E-05	6.75E-08	1.76E-06	73.9	7.36E-04	1.24E-03
SI38_E	0.36	148	0	1	2.29E-02	3.95E-03	3.99E-04	2.87E-04	2.55E-04	5.28E-05	0.00E+00	2.13E-05	1.51E-05	5.72E-08	1.49E-06	61.7	6.22E-04	1.05E-03
SI38_E	0.36	122	0	1	1.87E-02	2.90E-03	3.23E-04	2.36E-04	2.09E-04	4.32E-05	0.00E+00	1.75E-05	1.24E-05	4.70E-08	1.22E-06	49.9	5.09E-04	8.62E-04
SI38_E	0.36	90	0	1	1.38E-02	1.91E-03	2.36E-04	1.74E-04	1.55E-04	3.18E-05	0.00E+00	1.29E-05	9.12E-06	3.48E-08	8.98E-07	36.4	3.75E-04	6.37E-04
SI38_W	0.39	69	0	1	1.04E-02	1.28E-03	1.77E-04	1.33E-04	1.18E-04	2.42E-05	0.00E+00	9.78E-06	6.93E-06	2.65E-08	6.82E-07	27.4	2.85E-04	4.86E-04
SI38_W	0.39	46	0	1	6.93E-03	7.66E-04	1.17E-04	8.87E-05	7.85E-05	1.61E-05	0.00E+00	6.50E-06	4.61E-06	1.77E-08	4.54E-07	18.1	1.90E-04	3.24E-04
SI38_W	0.39	40	0	1	6.04E-03	5.97E-04	1.01E-04	7.76E-05	6.87E-05	1.40E-05	0.00E+00	5.68E-06	4.02E-06	1.55E-08	3.96E-07	15.6	1.66E-04	2.83E-04
SI38_W	0.39	29	0	1	4.30E-03	4.27E-04	7.17E-05	5.54E-05	4.91E-05	1.00E-05	0.00E+00	4.05E-06	2.87E-06	1.10E-08	2.82E-07	11.1	1.18E-04	2.02E-04
SI38_W	0.39	40	0	1	6.02E-03	5.97E-04	1.00E-04	7.76E-05	6.87E-05	1.40E-05	0.00E+00	5.66E-06	4.01E-06	1.55E-08	3.95E-07	15.5	1.65E-04	2.83E-04
SI38_W	0.39	97	0	1	1.46E-02	1.45E-03	2.43E-04	1.88E-04	1.67E-04	3.40E-05	0.00E+00	1.38E-05	9.75E-06	3.75E-08	9.60E-07	37.6	4.01E-04	6.88E-04
SI38_W	0.39	291	0	1	4.40E-02	4.35E-03	7.34E-04	5.65E-04	5.01E-04	1.02E-04	0.00E+00	4.13E-05	2.93E-05	1.13E-07	2.88E-06	113.4	1.21E-03	2.06E-03
SI38_W	0.39	445	0	1	6.78E-02	8.13E-03	1.15E-03	8.65E-04	7.66E-04	1.57E-04	0.00E+00	6.35E-05	4.50E-05	1.72E-07	4.43E-06	177.7	1.85E-03	3.16E-03
SI38_W	0.39	360	0	1	5.55E-02	8.76E-03	9.61E-04	6.98E-04	6.19E-04	1.28E-04	0.00E+00	5.17E-05	3.66E-05	1.39E-07	3.61E-06	148.4	1.51E-03	2.55E-03
SI38_W	0.39	297	0	1	4.62E-02	8.40E-03	8.10E-04	5.76E-04	5.11E-04	1.06E-04	0.00E+00	4.29E-05	3.04E-05	1.15E-07	2.99E-06	125.1	1.25E-03	2.10E-03
SI38_W	0.39	268	0	1	4.20E-02	8.45E-03	7.45E-04	5.21E-04	4.61E-04	9.63E-05	0.00E+00	3.89E-05	2.76E-05	1.04E-07	2.72E-06	115.0	1.14E-03	1.90E-03
SI38_W	0.39	303	0	1	4.79E-02	1.14E-02	8.65E-04	5.88E-04	5.20E-04	1.09E-04	0.00E+00	4.42E-05	3.13E-05	1.17E-07	3.08E-06	133.6	1.29E-03	2.14E-03
SI38_W	0.39	320	0	1	5.08E-02	1.25E-02	9.22E-04	6.21E-04	5.50E-04	1.16E-04	0.00E+00	4.68E-05	3.31E-05	1.24E-07	3.26E-06	142.3	1.36E-03	2.27E-03
SI38_W	0.39	326	0	1	5.18E-02	1.30E-02	9.42E-04	6.32E-04	5.60E-04	1.18E-04	0.00E+00	4.77E-05	3.38E-05	1.26E-07	3.33E-06	145.5	1.39E-03	2.31E-03
SI38_W	0.39	337	0	1	5.37E-02	1.39E-02	9.80E-04	6.54E-04	5.79E-04	1.22E-04	0.00E+00	4.94E-05	3.50E-05	1.30E-07	3.45E-06	151.3	1.44E-03	2.39E-03
SI38_W	0.39	365	0	1	5.82E-02	1.49E-02	1.06E-03	7.09E-04	6.28E-04	1.33E-04	0.00E+00	5.36E-05	3.79E-05	1.41E-07	3.74E-06	163.8	1.56E-03	2.59E-03
SI38_W	0.39	451	0	1	7.18E-02	1.84E-02	1.31E-03	8.76E-04	7.76E-04	1.64E-04	0.00E+00	6.61E-05	4.68E-05	1.74E-07	4.61E-06	202.0	1.93E-03	3.20E-03
SI38_W	0.39	485	0	1	7.71E-02	1.92E-02	1.40E-03	9.42E-04	8.34E-04	1.76E-04	0.00E+00	7.10E-05	5.03E-05	1.88E-07	4.96E-06	216.1	2.07E-03	3.44E-03
SI38_W	0.39	337	0	1	5.34E-02	1.29E-02	9.65E-04	6.54E-04	5.79E-04	1.22E-04	0.00E+00	4.92E-05	3.49E-05	1.30E-07	3.43E-06	149.0	1.44E-03	2.39E-03
SI38_W	0.39	223	0	1	3.49E-02	7.43E-03	6.22E-04	4.32E-04	3.83E-04	8.00E-05	0.00E+00	3.23E-05	2.29E-05	8.61E-08	2.26E-06	96.0	9.43E-04	1.58E-03
SI38_W	0.39	188	0	1	2.94E-02	5.62E-03	5.17E-04	3.66E-04	3.24E-04	6.74E-05	0.00E+00	2.72E-05	1.93E-05	7.29E-08	1.90E-06	79.8	7.95E-04	1.34E-03
SI38_W	0.39	160	0	1	2.48E-02	4.27E-03	4.31E-04	3.10E-04	2.75E-04	5.70E-05	0.00E+00	2.30E-05	1.63E-05	6.18E-08	1.61E-06	66.6	6.72E-04	1.13E-03
SI38_W	0.39	131	0	1	2.02E-02	3.14E-03	3.49E-04	2.55E-04	2.26E-04	4.67E-05	0.00E+00	1.89E-05	1.34E-05	5.08E-08	1.32E-06	53.9	5.50E-04	9.31E-04
SI38_W	0.39	97	0	1	1.49E-02	2.07E-03	2.55E-04	1.88E-04	1.67E-04	3.44E-05	0.00E+00	1.39E-05	9.85E-06	3.75E-08	9.70E-07	39.3	4.05E-04	6.88E-04
SI39_E	0.25	43	0	1	6.59E-03	8.10E-04	1.12E-04	8.39E-05	7.43E-05	1.53E-05	0.00E+00	6.17E-06	4.37E-06	1.67E-08	4.30E-07	17.3	1.80E-04	3.06E-04
SI39_E	0.25	29	0	1	4.37E-03	4.83E-04	7.38E-05	5.59E-05	4.95E-05	1.02E-05	0.00E+00	4.10E-06	2.91E-06	1.11E-08	2.86E-07	11.4	1.20E-04	2.04E-04
SI39_E	0.25	25	0	1	3.81E-03	3.77E-04	6.38E-05	4.90E-05	4.34E-05	8.86E-06	0.00E+00	3.58E-06	2.54E-06	9.75E-09	2.50E-07	9.8	1.04E-04	1.79E-04
SI39_E	0.25	18	0	1	2.72E-03	2.69E-04	4.53E-05	3.50E-05	3.10E-05	6.32E-06	0.00E+00	2.55E-06	1.81E-06	6.96E-09	1.78E-07	7.0	7.45E-05	1.28E-04
SI39_E	0.25	25	0	1	3.80E-03	3.77E-04	6.32E-05	4.90E-05	4.34E-05	8.84E-06	0.00E+00	3.57E-06	2.53E-06	9.75E-09	2.49E-07	9.8	1.04E-04	1.79E-04
SI39_E	0.25	61	0	1	9.22E-03	9.15E-04	1.53E-04	1.19E-04	1.05E-04	2.15E-05	0.00E+00	8.68E-06	6.15E-06	2.37E-08	6.06E-07	23.7	2.53E-04	4.34E-04
SI39_E	0.25	184	0	1	2.77E-02	2.74E-03	4.63E-04	3.57E-04	3.16E-04	6.45E-05	0.00E+00	2.61E-05	1.85E-05	7.10E-08	1.82E-06	71.5	7.60E-04	1.30E-03
SI39_E	0.25	281	0	1	4.28E-02	5.13E-03	7.26E-04	5.45E-04	4.83E-04	9.92E-05	0.00E+00	4.01E-05	2.84E-05	1.09E-07	2.80E-06	112.1	1.17E-03	1.99E-03
SI39_E	0.25	227	0	1	3.50E-02	5.53E-03	6.06E-04	4.41E-04	3.90E-04	8.07E-05	0.00E+00	3.26E-05	2.31E-05	8.77E-08	2.28E-06	93.6	9.51E-04	1.61E-03
SI39_E	0.25	187	0	1	2.91E-02	5.30E-03	5.11E-04	3.64E-04	3.22E-04	6.69E-05	0.00E+00	2.71E-05	1.92E-05	7.24E-08	1.89E-06	78.9	7.89E-04	1.33E-03
SI39_E	0.25	169	0	1	2.65E-02	5.33E-03	4.70E-04	3.29E-04	2.91E-04	6.07E-05	0.00E+00	2.45E-05	1.74E-05	6.55E-08	1.71E-06	72.5	7.16E-04	1.20E-03
SI39_E	0.25	191	0	1	3.02E-02	7.16E-03	5.46E-04	3.71E-04	3.28E-04	6.90E-05	0.00E+00	2.79E-05	1.98E-05	7.38E-08	1.95E-06	84.3	8.13E-04	1.35E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_E	0.25	202	0	1	3.20E-02	7.87E-03	5.81E-04	3.92E-04	3.47E-04	7.30E-05	0.00E+00	2.95E-05	2.09E-05	7.80E-08	2.06E-06	89.8	8.61E-04	1.43E-03
SI39_E	0.25	205	0	1	3.27E-02	8.23E-03	5.94E-04	3.99E-04	3.53E-04	7.44E-05	0.00E+00	3.01E-05	2.13E-05	7.94E-08	2.10E-06	91.8	8.77E-04	1.46E-03
SI39_E	0.25	213	0	1	3.39E-02	8.75E-03	6.18E-04	4.13E-04	3.65E-04	7.71E-05	0.00E+00	3.12E-05	2.21E-05	8.22E-08	2.17E-06	95.5	9.09E-04	1.51E-03
SI39_E	0.25	231	0	1	3.67E-02	9.40E-03	6.69E-04	4.48E-04	3.96E-04	8.36E-05	0.00E+00	3.38E-05	2.39E-05	8.91E-08	2.36E-06	103.3	9.86E-04	1.63E-03
SI39_E	0.25	285	0	1	4.53E-02	1.16E-02	8.25E-04	5.52E-04	4.89E-04	1.03E-04	0.00E+00	4.17E-05	2.95E-05	1.10E-07	2.91E-06	127.5	1.22E-03	2.02E-03
SI39_E	0.25	306	0	1	4.86E-02	1.21E-02	8.83E-04	5.94E-04	5.26E-04	1.11E-04	0.00E+00	4.48E-05	3.17E-05	1.18E-07	3.13E-06	136.3	1.31E-03	2.17E-03
SI39_E	0.25	213	0	1	3.37E-02	8.15E-03	6.09E-04	4.13E-04	3.65E-04	7.68E-05	0.00E+00	3.10E-05	2.20E-05	8.22E-08	2.17E-06	94.0	9.06E-04	1.51E-03
SI39_E	0.25	140	0	1	2.20E-02	4.69E-03	3.92E-04	2.73E-04	2.42E-04	5.05E-05	0.00E+00	2.04E-05	1.45E-05	5.43E-08	1.42E-06	60.6	5.95E-04	9.96E-04
SI39_E	0.25	119	0	1	1.85E-02	3.55E-03	3.26E-04	2.31E-04	2.04E-04	4.25E-05	0.00E+00	1.72E-05	1.22E-05	4.60E-08	1.20E-06	50.3	5.01E-04	8.42E-04
SI39_E	0.25	101	0	1	1.56E-02	2.69E-03	2.72E-04	1.96E-04	1.73E-04	3.60E-05	0.00E+00	1.45E-05	1.03E-05	3.90E-08	1.01E-06	42.0	4.24E-04	7.15E-04
SI39_E	0.25	83	0	1	1.28E-02	1.98E-03	2.20E-04	1.61E-04	1.42E-04	2.94E-05	0.00E+00	1.19E-05	8.43E-06	3.20E-08	8.30E-07	34.0	3.47E-04	5.87E-04
SI39_E	0.25	61	0	1	9.38E-03	1.30E-03	1.61E-04	1.19E-04	1.05E-04	2.17E-05	0.00E+00	8.77E-06	6.21E-06	2.37E-08	6.12E-07	24.8	2.56E-04	4.34E-04
SI39_W	0.17	29	0	1	4.39E-03	5.40E-04	7.46E-05	5.60E-05	4.96E-05	1.02E-05	0.00E+00	4.11E-06	2.91E-06	1.11E-08	2.87E-07	11.5	1.20E-04	2.04E-04
SI39_W	0.17	19	0	1	2.92E-03	3.22E-04	4.92E-05	3.73E-05	3.30E-05	6.77E-06	0.00E+00	2.74E-06	1.94E-06	7.43E-09	1.91E-07	7.6	7.98E-05	1.36E-04
SI39_W	0.17	17	0	1	2.54E-03	2.51E-04	4.25E-05	3.26E-05	2.89E-05	5.91E-06	0.00E+00	2.39E-06	1.69E-06	6.50E-09	1.67E-07	6.6	6.96E-05	1.19E-04
SI39_W	0.17	12	0	1	1.81E-03	1.79E-04	3.02E-05	2.33E-05	2.06E-05	4.21E-06	0.00E+00	1.70E-06	1.21E-06	4.64E-09	1.19E-07	4.7	4.97E-05	8.51E-05
SI39_W	0.17	17	0	1	2.53E-03	2.51E-04	4.21E-05	3.26E-05	2.89E-05	5.90E-06	0.00E+00	2.38E-06	1.69E-06	6.50E-09	1.66E-07	6.5	6.95E-05	1.19E-04
SI39_W	0.17	41	0	1	6.15E-03	6.10E-04	1.02E-04	7.93E-05	7.02E-05	1.43E-05	0.00E+00	5.79E-06	4.10E-06	1.58E-08	4.04E-07	15.8	1.69E-04	2.89E-04
SI39_W	0.17	123	0	1	1.85E-02	1.83E-03	3.09E-04	2.38E-04	2.11E-04	4.30E-05	0.00E+00	1.74E-05	1.23E-05	4.74E-08	1.21E-06	47.7	5.07E-04	8.68E-04
SI39_W	0.17	187	0	1	2.85E-02	3.42E-03	4.84E-04	3.64E-04	3.22E-04	6.61E-05	0.00E+00	2.67E-05	1.89E-05	7.24E-08	1.87E-06	74.7	7.80E-04	1.33E-03
SI39_W	0.17	151	0	1	2.33E-02	3.69E-03	4.04E-04	2.94E-04	2.60E-04	5.38E-05	0.00E+00	2.17E-05	1.54E-05	5.85E-08	1.52E-06	62.4	6.34E-04	1.07E-03
SI39_W	0.17	125	0	1	1.94E-02	3.53E-03	3.41E-04	2.43E-04	2.15E-04	4.46E-05	0.00E+00	1.80E-05	1.28E-05	4.83E-08	1.26E-06	52.6	5.26E-04	8.85E-04
SI39_W	0.17	113	0	1	1.77E-02	3.56E-03	3.13E-04	2.19E-04	1.94E-04	4.05E-05	0.00E+00	1.64E-05	1.16E-05	4.37E-08	1.14E-06	48.4	4.78E-04	8.00E-04
SI39_W	0.17	127	0	1	2.02E-02	4.78E-03	3.64E-04	2.47E-04	2.19E-04	4.60E-05	0.00E+00	1.86E-05	1.32E-05	4.92E-08	1.30E-06	56.2	5.42E-04	9.02E-04
SI39_W	0.17	135	0	1	2.14E-02	5.25E-03	3.88E-04	2.61E-04	2.31E-04	4.87E-05	0.00E+00	1.97E-05	1.39E-05	5.20E-08	1.37E-06	59.9	5.74E-04	9.53E-04
SI39_W	0.17	137	0	1	2.18E-02	5.49E-03	3.96E-04	2.66E-04	2.35E-04	4.96E-05	0.00E+00	2.01E-05	1.42E-05	5.29E-08	1.40E-06	61.2	5.85E-04	9.70E-04
SI39_W	0.17	142	0	1	2.26E-02	5.83E-03	4.12E-04	2.75E-04	2.44E-04	5.14E-05	0.00E+00	2.08E-05	1.47E-05	5.48E-08	1.45E-06	63.7	6.06E-04	1.00E-03
SI39_W	0.17	154	0	1	2.45E-02	6.27E-03	4.46E-04	2.98E-04	2.64E-04	5.58E-05	0.00E+00	2.25E-05	1.60E-05	5.94E-08	1.57E-06	68.9	6.57E-04	1.09E-03
SI39_W	0.17	190	0	1	3.02E-02	7.72E-03	5.50E-04	3.68E-04	3.26E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.34E-08	1.94E-06	85.0	8.11E-04	1.34E-03
SI39_W	0.17	204	0	1	3.24E-02	8.08E-03	5.89E-04	3.96E-04	3.51E-04	7.39E-05	0.00E+00	2.99E-05	2.12E-05	7.90E-08	2.08E-06	90.9	8.72E-04	1.45E-03
SI39_W	0.17	142	0	1	2.24E-02	5.43E-03	4.06E-04	2.75E-04	2.44E-04	5.12E-05	0.00E+00	2.07E-05	1.47E-05	5.48E-08	1.44E-06	62.7	6.04E-04	1.00E-03
SI39_W	0.17	94	0	1	1.47E-02	3.13E-03	2.62E-04	1.82E-04	1.61E-04	3.37E-05	0.00E+00	1.36E-05	9.64E-06	3.62E-08	9.49E-07	40.4	3.97E-04	6.64E-04
SI39_W	0.17	79	0	1	1.23E-02	2.36E-03	2.17E-04	1.54E-04	1.36E-04	2.84E-05	0.00E+00	1.15E-05	8.12E-06	3.07E-08	8.00E-07	33.6	3.34E-04	5.62E-04
SI39_W	0.17	67	0	1	1.04E-02	1.80E-03	1.81E-04	1.31E-04	1.16E-04	2.40E-05	0.00E+00	9.69E-06	6.87E-06	2.60E-08	6.76E-07	28.0	2.83E-04	4.77E-04
SI39_W	0.17	55	0	1	8.51E-03	1.32E-03	1.47E-04	1.07E-04	9.50E-05	1.96E-05	0.00E+00	7.93E-06	5.62E-06	2.14E-08	5.54E-07	22.7	2.31E-04	3.92E-04
SI39_W	0.17	41	0	1	6.26E-03	8.69E-04	1.07E-04	7.93E-05	7.02E-05	1.45E-05	0.00E+00	5.85E-06	4.14E-06	1.58E-08	4.08E-07	16.5	1.71E-04	2.89E-04
SI40_E	0.49	82	0	1	1.24E-02	1.53E-03	2.11E-04	1.59E-04	1.40E-04	2.88E-05	0.00E+00	1.17E-05	8.26E-06	3.16E-08	8.13E-07	32.6	3.40E-04	5.79E-04
SI40_E	0.49	54	0	1	8.27E-03	9.13E-04	1.39E-04	1.06E-04	9.36E-05	1.92E-05	0.00E+00	7.75E-06	5.49E-06	2.11E-08	5.41E-07	21.5	2.26E-04	3.86E-04
SI40_E	0.49	48	0	1	7.20E-03	7.12E-04	1.21E-04	9.25E-05	8.19E-05	1.67E-05	0.00E+00	6.76E-06	4.79E-06	1.84E-08	4.72E-07	18.6	1.97E-04	3.38E-04
SI40_E	0.49	34	0	1	5.13E-03	5.08E-04	8.55E-05	6.61E-05	5.85E-05	1.19E-05	0.00E+00	4.83E-06	3.42E-06	1.32E-08	3.37E-07	13.2	1.41E-04	2.41E-04
SI40_E	0.49	48	0	1	7.18E-03	7.12E-04	1.19E-04	9.25E-05	8.19E-05	1.67E-05	0.00E+00	6.75E-06	4.78E-06	1.84E-08	4.71E-07	18.4	1.97E-04	3.38E-04
SI40_E	0.49	116	0	1	1.74E-02	1.73E-03	2.90E-04	2.25E-04	1.99E-04	4.06E-05	0.00E+00	1.64E-05	1.16E-05	4.47E-08	1.14E-06	44.8	4.78E-04	8.20E-04
SI40_E	0.49	347	0	1	5.24E-02	5.19E-03	8.75E-04	6.74E-04	5.97E-04	1.22E-04	0.00E+00	4.93E-05	3.49E-05	1.34E-07	3.44E-06	135.2	1.44E-03	2.46E-03
SI40_E	0.49	531	0	1	8.09E-02	9.69E-03	1.37E-03	1.03E-03	9.13E-04	1.87E-04	0.00E+00	7.57E-05	5.37E-05	2.05E-07	5.28E-06	211.8	2.21E-03	3.76E-03
SI40_E	0.49	429	0	1	6.61E-02	1.04E-02	1.15E-03	8.32E-04	7.37E-04	1.53E-04	0.00E+00	6.16E-05	4.37E-05	1.66E-07	4.30E-06	176.8	1.80E-03	3.04E-03
SI40_E	0.49	354	0	1	5.50E-02	1.00E-02	9.65E-04	6.87E-04	6.08E-04	1.26E-04	0.00E+00	5.11E-05	3.62E-05	1.37E-07	3.57E-06	149.1	1.49E-03	2.51E-03
SI40_E	0.49	320	0	1	5.01E-02	1.01E-02	8.88E-04	6.21E-04	5.50E-04	1.15E-04	0.00E+00	4.64E-05	3.29E-05	1.24E-07	3.24E-06	137.1	1.35E-03	2.27E-03
SI40_E	0.49	361	0	1	5.71E-02	1.35E-02	1.03E-03	7.00E-04	6.20E-04	1.30E-04	0.00E+00	5.27E-05	3.73E-05	1.39E-07	3.68E-06	159.3	1.54E-03	2.56E-03
SI40_E	0.49	381	0	1	6.05E-02	1.49E-02	1.10E-03	7.40E-04	6.55E-04	1.38E-04	0.00E+00	5.58E-05	3.95E-05	1.47E-07	3.89E-06	169.6	1.63E-03	2.70E-03
SI40_E	0.49	388	0	1	6.17E-02	1.55E-02	1.12E-03	7.53E-04	6.67E-04	1.41E-04	0.00E+00	5.68E-05	4.03E-05	1.50E-07	3.97E-06	173.4	1.66E-03	2.75E-03
SI40_E	0.49	402	0	1	6.40E-02	1.65E-02	1.17E-03	7.80E-04	6.90E-04	1.46E-04	0.00E+00	5.89E-05	4.17E-05	1.55E-07	4.11E-06	180.4	1.72E-03	2.85E-03
SI40_E	0.49	436	0	1	6.94E-02	1.78E-02	1.26E-03	8.46E-04	7.49E-04	1.58E-04	0.00E+00	6.38E-05	4.52E-05	1.68E-07	4.45E-06	195.3	1.86E-03	3.09E-03
SI40_E	0.49	538	0	1	8.56E-02	2.19E-02	1.56E-03	1.04E-03	9.24E-04	1.95E-04	0.00E+00	7.88E-05	5.58E-05	2.08E-07	5.50E-06	240.8	2.30E-03	3.81E-03
SI40_E	0.49	579	0	1	9.19E-02	2.29E-02	1.67E-03	1.12E-03	9.95E-04	2.09E-04	0.00E+00	8.46E-05	6.00E-05	2.24E-07	5.91E-06	257.6	2.47E-03	4.10E-03
SI40_E	0.49	402	0	1	6.36E-02	1.54E-02	1.15E-03	7.80E-04	6.90E-04	1.45E-04	0.00E+00	5.87E-05	4.16E-05	1.55E-07	4.09E-06	177.5	1.71E-03	2.85E-03
SI40_E	0.49	265	0	1	4.16E-02	8.86E-03	7.41E-04	5.15E-04	4.56E-04	9.54E-05	0.00E+00	3.85E-05	2.73E-05	1.03E-07	2.69E-06	114.4	1.12E-03	1.88E-03
SI40_E	0.49	225	0	1	3.50E-02	6.70E-03	6.16E-04	4.36E-04	3.86E-04	8.04E-05	0.00E+00	3.25E-05	2.30E-05	8.68E-08	2.27E-06	95.1	9.47E-04	1.59E-03
SI40_E	0.49	191	0	1	2.95E-02	5.09E-03	5.14E-04	3.70E-04	3.28E-04	6.79E-05	0.00E+00	2.75E-05	1.95E-05	7.37E-08	1.92E-06	79.4	8.01E-04	1.35E-03
SI40_E	0.49	157	0	1	2.41E-02	3.74E-03	4.16E-04	3.04E-04	2.69E-04	5.56E-05	0.00E+00	2.25E-05	1.59E-05	6.05E-08	1.57E-06	64.3	6.56E-04	1.11E-03
SI40_E	0.49	116	0	1	1.77E-02	2.46E-03	3.04E-04	2.25E-04	1.99E-04	4.10E-05	0.00E+00	1.66E-05	1.17E-05	4.47E-08	1.16E-06	46.9	4.83E-04	8.20E-04
SI40_W	0.50	79	0	1	1.21E-02	1.49E-03	2.05E-04	1.54E-04	1.36E-04	2.80E-05	0.00E+00	1.13E-05	8.02E-06	3.07E-08	7.90E-07	31.7	3.30E-04	5.62E-04
SI40_W	0.50	53	0	1	8.03E-03	8.87E-04	1.35E-04	1.03E-04	9.09E-05	1.86E-05	0.00E+00	7.53E-06	5.33E-06	2.04E-08	5.25E-07	20.9	2.20E-04	3.75E-04
SI40_W	0.50	46	0	1	6.99E-03	6.91E-04	1.17E-04	8.98E-05	7.96E-05	1.63E-05	0.00E+00	6.57E-06	4.66E-06	1.79E-08	4.58E-07	18.1	1.92E-04	3.28E-04
SI40_W	0.50	33	0	1	4.98E-03	4.94E-04	8.31E-05	6.42E-05	5.68E-05	1.16E-05	0.00E+00	4.69E-06	3.32E-06	1.28E-08	3.27E-07	12.8	1.37E-04	2.34E-04
SI40_W	0.50	46	0	1	6.97E-03	6.91E-04	1.16E-04	8.98E-05	7.96E-05	1.62E-05	0.00E+00	6.56E-06	4.65E-06	1.79E-08	4.58E-07	17.9	1.91E-04	3.28E-04
SI40_W	0.50	112	0	1	1.69E-02	1.68E-03	2.82E-04	2.18E-04	1.93E-04	3.94E-05	0.00E+00	1.59E-05	1.13E-05	4.34E-08	1.11E-06	43.5	4.65E-04	7.96E-04
SI40_W	0.50	337	0	1	5.09E-02	5.04E-03	8.50E-04	6.55E-04	5.80E-04	1.18E-04	0.00E+00	4.78E-05	3.39E-05	1.30E-07	3.34E-06	131.3	1.40E-03	2.39E-03
SI40_W	0.50	516	0	1	7.85E-02	9.41E-03	1.33E-03	1.00E-03	8.86E-04	1.82E-04	0.00E+00	7.36E-05	5.21E-05	1.99E-07	5.13E-06	205.7	2.15E-03	3.65E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI40_W	0.50	416	0	1	6.42E-02	1.01E-02	1.11E-03	8.09E-04	7.16E-04	1.48E-04	0.00E+00	5.99E-05	4.24E-05	1.61E-07	4.18E-06	171.8	1.75E-03	2.95E-03
SI40_W	0.50	344	0	1	5.34E-02	9.72E-03	9.38E-04	6.67E-04	5.91E-04	1.23E-04	0.00E+00	4.96E-05	3.52E-05	1.33E-07	3.46E-06	144.8	1.45E-03	2.44E-03
SI40_W	0.50	311	0	1	4.86E-02	9.79E-03	8.62E-04	6.03E-04	5.34E-04	1.11E-04	0.00E+00	4.50E-05	3.19E-05	1.20E-07	3.14E-06	133.1	1.31E-03	2.20E-03
SI40_W	0.50	350	0	1	5.55E-02	1.31E-02	1.00E-03	6.80E-04	6.02E-04	1.27E-04	0.00E+00	5.12E-05	3.62E-05	1.35E-07	3.57E-06	154.7	1.49E-03	2.48E-03
SI40_W	0.50	370	0	1	5.88E-02	1.44E-02	1.07E-03	7.19E-04	6.36E-04	1.34E-04	0.00E+00	5.42E-05	3.84E-05	1.43E-07	3.78E-06	164.7	1.58E-03	2.62E-03
SI40_W	0.50	377	0	1	5.99E-02	1.51E-02	1.09E-03	7.32E-04	6.48E-04	1.37E-04	0.00E+00	5.52E-05	3.91E-05	1.46E-07	3.85E-06	168.4	1.61E-03	2.67E-03
SI40_W	0.50	390	0	1	6.22E-02	1.61E-02	1.13E-03	7.57E-04	6.71E-04	1.42E-04	0.00E+00	5.72E-05	4.05E-05	1.51E-07	3.99E-06	175.2	1.67E-03	2.76E-03
SI40_W	0.50	423	0	1	6.74E-02	1.73E-02	1.23E-03	8.21E-04	7.27E-04	1.53E-04	0.00E+00	6.20E-05	4.39E-05	1.64E-07	4.33E-06	189.6	1.81E-03	3.00E-03
SI40_W	0.50	522	0	1	8.31E-02	2.13E-02	1.51E-03	1.01E-03	8.98E-04	1.89E-04	0.00E+00	7.65E-05	5.42E-05	2.02E-07	5.34E-06	233.9	2.23E-03	3.70E-03
SI40_W	0.50	562	0	1	8.92E-02	2.22E-02	1.62E-03	1.09E-03	9.66E-04	2.03E-04	0.00E+00	8.22E-05	5.82E-05	2.17E-07	5.74E-06	250.2	2.40E-03	3.98E-03
SI40_W	0.50	390	0	1	6.18E-02	1.49E-02	1.12E-03	7.57E-04	6.71E-04	1.41E-04	0.00E+00	5.70E-05	4.04E-05	1.51E-07	3.98E-06	172.4	1.66E-03	2.76E-03
SI40_W	0.50	258	0	1	4.04E-02	8.60E-03	7.20E-04	5.01E-04	4.43E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	9.97E-08	2.61E-06	111.1	1.09E-03	1.83E-03
SI40_W	0.50	218	0	1	3.40E-02	6.51E-03	5.98E-04	4.24E-04	3.75E-04	7.81E-05	0.00E+00	3.15E-05	2.23E-05	8.43E-08	2.20E-06	92.4	9.20E-04	1.55E-03
SI40_W	0.50	185	0	1	2.87E-02	4.94E-03	4.99E-04	3.59E-04	3.18E-04	6.60E-05	0.00E+00	2.67E-05	1.89E-05	7.16E-08	1.86E-06	77.1	7.78E-04	1.31E-03
SI40_W	0.50	152	0	1	2.34E-02	3.63E-03	4.04E-04	2.95E-04	2.61E-04	5.40E-05	0.00E+00	2.18E-05	1.55E-05	5.88E-08	1.52E-06	62.4	6.37E-04	1.08E-03
SI40_W	0.50	112	0	1	1.72E-02	2.39E-03	2.95E-04	2.18E-04	1.93E-04	3.98E-05	0.00E+00	1.61E-05	1.14E-05	4.34E-08	1.12E-06	45.5	4.69E-04	7.96E-04
SI41_E	0.75	119	0	1	1.81E-02	2.23E-03	3.08E-04	2.31E-04	2.05E-04	4.20E-05	0.00E+00	1.70E-05	1.20E-05	4.60E-08	1.18E-06	47.5	4.95E-04	8.43E-04
SI41_E	0.75	79	0	1	1.20E-02	1.33E-03	2.03E-04	1.54E-04	1.36E-04	2.79E-05	0.00E+00	1.13E-05	8.00E-06	3.07E-08	7.88E-07	31.4	3.29E-04	5.62E-04
SI41_E	0.75	69	0	1	1.05E-02	1.04E-03	1.76E-04	1.35E-04	1.19E-04	2.44E-05	0.00E+00	9.86E-06	6.98E-06	2.68E-08	6.88E-07	27.1	2.87E-04	4.92E-04
SI41_E	0.75	50	0	1	7.47E-03	7.41E-04	1.25E-04	9.63E-05	8.52E-05	1.74E-05	0.00E+00	7.03E-06	4.98E-06	1.92E-08	4.91E-07	19.2	2.05E-04	3.51E-04
SI41_E	0.75	69	0	1	1.05E-02	1.04E-03	1.74E-04	1.35E-04	1.19E-04	2.43E-05	0.00E+00	9.84E-06	6.97E-06	2.68E-08	6.86E-07	26.9	2.87E-04	4.92E-04
SI41_E	0.75	169	0	1	2.54E-02	2.52E-03	4.23E-04	3.27E-04	2.90E-04	5.91E-05	0.00E+00	2.39E-05	1.69E-05	6.52E-08	1.67E-06	65.2	6.97E-04	1.19E-03
SI41_E	0.75	506	0	1	7.63E-02	7.55E-03	1.28E-03	9.82E-04	8.69E-04	1.78E-04	0.00E+00	7.18E-05	5.08E-05	1.96E-07	5.01E-06	196.9	2.09E-03	3.58E-03
SI41_E	0.75	773	0	1	1.18E-01	1.41E-02	2.00E-03	1.50E-03	1.33E-03	2.73E-04	0.00E+00	1.10E-04	7.82E-05	2.99E-07	7.70E-06	308.6	3.22E-03	5.48E-03
SI41_E	0.75	625	0	1	9.63E-02	1.52E-02	1.67E-03	1.21E-03	1.07E-03	2.22E-04	0.00E+00	8.98E-05	6.36E-05	2.42E-07	6.27E-06	257.6	2.62E-03	4.43E-03
SI41_E	0.75	516	0	1	8.02E-02	1.46E-02	1.41E-03	1.00E-03	8.86E-04	1.84E-04	0.00E+00	7.45E-05	5.28E-05	1.99E-07	5.20E-06	217.2	2.17E-03	3.65E-03
SI41_E	0.75	466	0	1	7.29E-02	1.47E-02	1.29E-03	9.05E-04	8.01E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.80E-07	4.72E-06	199.7	1.97E-03	3.30E-03
SI41_E	0.75	526	0	1	8.32E-02	1.97E-02	1.50E-03	1.02E-03	9.04E-04	1.90E-04	0.00E+00	7.67E-05	5.44E-05	2.03E-07	5.36E-06	232.0	2.24E-03	3.72E-03
SI41_E	0.75	555	0	1	8.82E-02	2.17E-02	1.60E-03	1.08E-03	9.55E-04	2.01E-04	0.00E+00	8.12E-05	5.76E-05	2.15E-07	5.67E-06	247.1	2.37E-03	3.94E-03
SI41_E	0.75	565	0	1	8.99E-02	2.26E-02	1.64E-03	1.10E-03	9.72E-04	2.05E-04	0.00E+00	8.28E-05	5.86E-05	2.19E-07	5.78E-06	252.7	2.41E-03	4.01E-03
SI41_E	0.75	585	0	1	9.32E-02	2.41E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.8	2.50E-03	4.15E-03
SI41_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.45E-07	6.49E-06	284.5	2.71E-03	4.50E-03
SI41_E	0.75	783	0	1	1.25E-01	3.19E-02	2.27E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.13E-05	3.03E-07	8.01E-06	350.8	3.35E-03	5.55E-03
SI41_E	0.75	843	0	1	1.34E-01	3.34E-02	2.43E-03	1.64E-03	1.45E-03	3.05E-04	0.00E+00	1.23E-04	8.74E-05	3.26E-07	8.61E-06	375.2	3.60E-03	5.97E-03
SI41_E	0.75	585	0	1	9.27E-02	2.24E-02	1.68E-03	1.14E-03	1.01E-03	2.11E-04	0.00E+00	8.55E-05	6.05E-05	2.26E-07	5.96E-06	258.6	2.49E-03	4.15E-03
SI41_E	0.75	387	0	1	6.07E-02	1.29E-02	1.08E-03	7.51E-04	6.65E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	166.7	1.64E-03	2.74E-03
SI41_E	0.75	327	0	1	5.10E-02	9.76E-03	8.98E-04	6.35E-04	5.63E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.27E-07	3.30E-06	138.6	1.38E-03	2.32E-03
SI41_E	0.75	278	0	1	4.30E-02	7.41E-03	7.49E-04	5.39E-04	4.77E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.07E-07	2.79E-06	115.7	1.17E-03	1.97E-03
SI41_E	0.75	228	0	1	3.51E-02	5.45E-03	6.06E-04	4.43E-04	3.92E-04	8.10E-05	0.00E+00	3.27E-05	2.32E-05	8.82E-08	2.28E-06	93.6	9.55E-04	1.62E-03
SI41_E	0.75	169	0	1	2.58E-02	3.59E-03	4.42E-04	3.27E-04	2.90E-04	5.97E-05	0.00E+00	2.41E-05	1.71E-05	6.52E-08	1.68E-06	68.3	7.04E-04	1.19E-03
SI41_W	0.75	119	0	1	1.81E-02	2.23E-03	3.08E-04	2.31E-04	2.05E-04	4.20E-05	0.00E+00	1.70E-05	1.20E-05	4.60E-08	1.18E-06	47.5	4.95E-04	8.43E-04
SI41_W	0.75	79	0	1	1.20E-02	1.33E-03	2.03E-04	1.54E-04	1.36E-04	2.79E-05	0.00E+00	1.13E-05	8.00E-06	3.07E-08	7.88E-07	31.4	3.29E-04	5.62E-04
SI41_W	0.75	69	0	1	1.05E-02	1.04E-03	1.76E-04	1.35E-04	1.19E-04	2.44E-05	0.00E+00	9.86E-06	6.98E-06	2.68E-08	6.88E-07	27.1	2.87E-04	4.92E-04
SI41_W	0.75	50	0	1	7.47E-03	7.41E-04	1.25E-04	9.63E-05	8.52E-05	1.74E-05	0.00E+00	7.03E-06	4.98E-06	1.92E-08	4.91E-07	19.2	2.05E-04	3.51E-04
SI41_W	0.75	69	0	1	1.05E-02	1.04E-03	1.74E-04	1.35E-04	1.19E-04	2.43E-05	0.00E+00	9.84E-06	6.97E-06	2.68E-08	6.86E-07	26.9	2.87E-04	4.92E-04
SI41_W	0.75	169	0	1	2.54E-02	2.52E-03	4.23E-04	3.27E-04	2.90E-04	5.91E-05	0.00E+00	2.39E-05	1.69E-05	6.52E-08	1.67E-06	65.2	6.97E-04	1.19E-03
SI41_W	0.75	506	0	1	7.63E-02	7.55E-03	1.28E-03	9.82E-04	8.69E-04	1.78E-04	0.00E+00	7.18E-05	5.08E-05	1.96E-07	5.01E-06	196.9	2.09E-03	3.58E-03
SI41_W	0.75	773	0	1	1.18E-01	1.41E-02	2.00E-03	1.50E-03	1.33E-03	2.73E-04	0.00E+00	1.10E-04	7.82E-05	2.99E-07	7.70E-06	308.6	3.22E-03	5.48E-03
SI41_W	0.75	625	0	1	9.63E-02	1.52E-02	1.67E-03	1.21E-03	1.07E-03	2.22E-04	0.00E+00	8.98E-05	6.36E-05	2.42E-07	6.27E-06	257.6	2.62E-03	4.43E-03
SI41_W	0.75	516	0	1	8.02E-02	1.46E-02	1.41E-03	1.00E-03	8.86E-04	1.84E-04	0.00E+00	7.45E-05	5.28E-05	1.99E-07	5.20E-06	217.2	2.17E-03	3.65E-03
SI41_W	0.75	466	0	1	7.29E-02	1.47E-02	1.29E-03	9.05E-04	8.01E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.80E-07	4.72E-06	199.7	1.97E-03	3.30E-03
SI41_W	0.75	526	0	1	8.32E-02	1.97E-02	1.50E-03	1.02E-03	9.04E-04	1.90E-04	0.00E+00	7.67E-05	5.44E-05	2.03E-07	5.36E-06	232.0	2.24E-03	3.72E-03
SI41_W	0.75	555	0	1	8.82E-02	2.17E-02	1.60E-03	1.08E-03	9.55E-04	2.01E-04	0.00E+00	8.12E-05	5.76E-05	2.15E-07	5.67E-06	247.1	2.37E-03	3.94E-03
SI41_W	0.75	565	0	1	8.99E-02	2.26E-02	1.64E-03	1.10E-03	9.72E-04	2.05E-04	0.00E+00	8.28E-05	5.86E-05	2.19E-07	5.78E-06	252.7	2.41E-03	4.01E-03
SI41_W	0.75	585	0	1	9.32E-02	2.41E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.8	2.50E-03	4.15E-03
SI41_W	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.45E-07	6.49E-06	284.5	2.71E-03	4.50E-03
SI41_W	0.75	783	0	1	1.25E-01	3.19E-02	2.27E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.13E-05	3.03E-07	8.01E-06	350.8	3.35E-03	5.55E-03
SI41_W	0.75	843	0	1	1.34E-01	3.34E-02	2.43E-03	1.64E-03	1.45E-03	3.05E-04	0.00E+00	1.23E-04	8.74E-05	3.26E-07	8.61E-06	375.2	3.60E-03	5.97E-03
SI41_W	0.75	585	0	1	9.27E-02	2.24E-02	1.68E-03	1.14E-03	1.01E-03	2.11E-04	0.00E+00	8.55E-05	6.05E-05	2.26E-07	5.96E-06	258.6	2.49E-03	4.15E-03
SI41_W	0.75	387	0	1	6.07E-02	1.29E-02	1.08E-03	7.51E-04	6.65E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	166.7	1.64E-03	2.74E-03
SI41_W	0.75	327	0	1	5.10E-02	9.76E-03	8.98E-04	6.35E-04	5.63E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.27E-07	3.30E-06	138.6	1.38E-03	2.32E-03
SI41_W	0.75	278	0	1	4.30E-02	7.41E-03	7.49E-04	5.39E-04	4.77E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.07E-07	2.79E-06	115.7	1.17E-03	1.97E-03
SI41_W	0.75	228	0	1	3.51E-02	5.45E-03	6.06E-04	4.43E-04	3.92E-04	8.10E-05	0.00E+00	3.27E-05	2.32E-05	8.82E-08	2.28E-06	93.6	9.55E-04	1.62E-03
SI41_W	0.75	169	0	1	2.58E-02	3.59E-03	4.42E-04	3.27E-04	2.90E-04	5.97E-05	0.00E+00	2.41E-05	1.71E-05	6.52E-08	1.68E-06	68.3	7.04E-04	1.19E-03
SI42_E	0.75	119	0	1	1.81E-02	2.23E-03	3.08E-04	2.31E-04	2.05E-04	4.20E-05	0.00E+00	1.70E-05	1.20E-05	4.60E-08	1.18E-06	47.5	4.95E-04	8.43E-04
SI42_E	0.75	79	0	1	1.20E-02	1.33E-03	2.03E-04	1.54E-04	1.36E-04	2.79E-05	0.00E+00	1.13E-05	8.00E-06	3.07E-08	7.88E-07	31.4	3.29E-04	5.62E-04
SI42_E	0.75	69	0	1	1.05E-02	1.04E-03	1.76E-04	1.35E-04	1.19E-04	2.44E-05	0.00E+00	9.86E-06	6.98E-06	2.68E-08	6.88E-07	27.1	2.87E-04	4.92E-04
SI42_E	0.75	50	0	1	7.47E-03	7.41E-04	1.25E-04	9.63E-05	8.52E-05	1.74E-05	0.00E+00	7.03E-06	4.98E-06	1.92E-08	4.91E-07	19.2	2.05E-04	3.51E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_E	0.75	69	0	1	1.05E-02	1.04E-03	1.74E-04	1.35E-04	1.19E-04	2.43E-05	0.00E+00	9.84E-06	6.97E-06	2.68E-08	6.86E-07	26.9	2.87E-04	4.92E-04
SI42_E	0.75	169	0	1	2.54E-02	2.52E-03	4.23E-04	3.27E-04	2.90E-04	5.91E-05	0.00E+00	2.39E-05	1.69E-05	6.52E-08	1.67E-06	65.2	6.97E-04	1.19E-03
SI42_E	0.75	506	0	1	7.63E-02	7.55E-03	1.28E-03	9.82E-04	8.69E-04	1.78E-04	0.00E+00	7.18E-05	5.08E-05	1.96E-07	5.01E-06	196.9	2.09E-03	3.58E-03
SI42_E	0.75	773	0	1	1.18E-01	1.41E-02	2.00E-03	1.50E-03	1.33E-03	2.73E-04	0.00E+00	1.10E-04	7.82E-05	2.99E-07	7.70E-06	308.6	3.22E-03	5.48E-03
SI42_E	0.75	625	0	1	9.63E-02	1.52E-02	1.67E-03	1.21E-03	1.07E-03	2.22E-04	0.00E+00	8.98E-05	6.36E-05	2.42E-07	6.27E-06	257.6	2.62E-03	4.43E-03
SI42_E	0.75	516	0	1	8.02E-02	1.46E-02	1.41E-03	1.00E-03	8.86E-04	1.84E-04	0.00E+00	7.45E-05	5.28E-05	1.99E-07	5.20E-06	217.2	2.17E-03	3.65E-03
SI42_E	0.75	466	0	1	7.29E-02	1.47E-02	1.29E-03	9.05E-04	8.01E-04	1.67E-04	0.00E+00	6.76E-05	4.79E-05	1.80E-07	4.72E-06	199.7	1.97E-03	3.30E-03
SI42_E	0.75	526	0	1	8.32E-02	1.97E-02	1.50E-03	1.02E-03	9.04E-04	1.90E-04	0.00E+00	7.67E-05	5.44E-05	2.03E-07	5.36E-06	232.0	2.24E-03	3.72E-03
SI42_E	0.75	555	0	1	8.82E-02	2.17E-02	1.60E-03	1.08E-03	9.55E-04	2.01E-04	0.00E+00	8.12E-05	5.76E-05	2.15E-07	5.67E-06	247.1	2.37E-03	3.94E-03
SI42_E	0.75	565	0	1	8.99E-02	2.26E-02	1.64E-03	1.10E-03	9.72E-04	2.05E-04	0.00E+00	8.28E-05	5.86E-05	2.19E-07	5.78E-06	252.7	2.41E-03	4.01E-03
SI42_E	0.75	585	0	1	9.32E-02	2.41E-02	1.70E-03	1.14E-03	1.01E-03	2.12E-04	0.00E+00	8.58E-05	6.08E-05	2.26E-07	5.99E-06	262.8	2.50E-03	4.15E-03
SI42_E	0.75	635	0	1	1.01E-01	2.59E-02	1.84E-03	1.23E-03	1.09E-03	2.30E-04	0.00E+00	9.30E-05	6.59E-05	2.45E-07	6.49E-06	284.5	2.71E-03	4.50E-03
SI42_E	0.75	783	0	1	1.25E-01	3.19E-02	2.27E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.13E-05	3.03E-07	8.01E-06	350.8	3.35E-03	5.55E-03
SI42_E	0.75	843	0	1	1.34E-01	3.34E-02	2.43E-03	1.64E-03	1.45E-03	3.05E-04	0.00E+00	1.23E-04	8.74E-05	3.26E-07	8.61E-06	375.2	3.60E-03	5.97E-03
SI42_E	0.75	585	0	1	9.27E-02	2.24E-02	1.68E-03	1.14E-03	1.01E-03	2.11E-04	0.00E+00	8.55E-05	6.05E-05	2.26E-07	5.96E-06	258.6	2.49E-03	4.15E-03
SI42_E	0.75	387	0	1	6.07E-02	1.29E-02	1.08E-03	7.51E-04	6.65E-04	1.39E-04	0.00E+00	5.62E-05	3.98E-05	1.50E-07	3.92E-06	166.7	1.64E-03	2.74E-03
SI42_E	0.75	327	0	1	5.10E-02	9.76E-03	8.98E-04	6.35E-04	5.63E-04	1.17E-04	0.00E+00	4.73E-05	3.35E-05	1.27E-07	3.30E-06	138.6	1.38E-03	2.32E-03
SI42_E	0.75	278	0	1	4.30E-02	7.41E-03	7.49E-04	5.39E-04	4.77E-04	9.90E-05	0.00E+00	4.00E-05	2.83E-05	1.07E-07	2.79E-06	115.7	1.17E-03	1.97E-03
SI42_E	0.75	228	0	1	3.51E-02	5.45E-03	6.06E-04	4.43E-04	3.92E-04	8.10E-05	0.00E+00	3.27E-05	2.32E-05	8.82E-08	2.28E-06	93.6	9.55E-04	1.62E-03
SI42_E	0.75	169	0	1	2.58E-02	3.59E-03	4.42E-04	3.27E-04	2.90E-04	5.97E-05	0.00E+00	2.41E-05	1.71E-05	6.52E-08	1.68E-06	68.3	7.04E-04	1.19E-03
SI42_W	0.75	102	0	1	1.56E-02	1.91E-03	2.64E-04	1.98E-04	1.76E-04	3.60E-05	0.00E+00	1.46E-05	1.03E-05	3.95E-08	1.02E-06	40.8	4.25E-04	7.23E-04
SI42_W	0.75	68	0	1	1.03E-02	1.14E-03	1.74E-04	1.32E-04	1.17E-04	2.40E-05	0.00E+00	9.69E-06	6.86E-06	2.63E-08	6.76E-07	26.9	2.83E-04	4.82E-04
SI42_W	0.75	60	0	1	9.00E-03	8.90E-04	1.51E-04	1.16E-04	1.02E-04	2.09E-05	0.00E+00	8.46E-06	5.99E-06	2.30E-08	5.90E-07	23.3	2.47E-04	4.22E-04
SI42_W	0.75	43	0	1	6.41E-03	6.35E-04	1.07E-04	8.26E-05	7.31E-05	1.49E-05	0.00E+00	6.03E-06	4.27E-06	1.64E-08	4.21E-07	16.5	1.76E-04	3.01E-04
SI42_W	0.75	60	0	1	8.97E-03	8.90E-04	1.49E-04	1.16E-04	1.02E-04	2.09E-05	0.00E+00	8.44E-06	5.98E-06	2.30E-08	5.89E-07	23.0	2.46E-04	4.22E-04
SI42_W	0.75	145	0	1	2.18E-02	2.16E-03	3.63E-04	2.81E-04	2.49E-04	5.07E-05	0.00E+00	2.05E-05	1.45E-05	5.59E-08	1.43E-06	56.0	5.98E-04	1.02E-03
SI42_W	0.75	434	0	1	6.55E-02	6.48E-03	1.09E-03	8.42E-04	7.46E-04	1.52E-04	0.00E+00	6.16E-05	4.36E-05	1.68E-07	4.30E-06	168.9	1.80E-03	3.07E-03
SI42_W	0.75	664	0	1	1.01E-01	1.21E-02	1.71E-03	1.29E-03	1.14E-03	2.34E-04	0.00E+00	9.47E-05	6.71E-05	2.57E-07	6.61E-06	264.7	2.76E-03	4.70E-03
SI42_W	0.75	536	0	1	8.26E-02	1.31E-02	1.43E-03	1.04E-03	9.21E-04	1.91E-04	0.00E+00	7.70E-05	5.46E-05	2.07E-07	5.38E-06	221.0	2.25E-03	3.80E-03
SI42_W	0.75	442	0	1	6.88E-02	1.25E-02	1.21E-03	8.59E-04	7.61E-04	1.58E-04	0.00E+00	6.39E-05	4.53E-05	1.71E-07	4.46E-06	186.3	1.86E-03	3.13E-03
SI42_W	0.75	400	0	1	6.26E-02	1.26E-02	1.11E-03	7.76E-04	6.87E-04	1.43E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	171.3	1.69E-03	2.83E-03
SI42_W	0.75	451	0	1	7.14E-02	1.69E-02	1.29E-03	8.75E-04	7.75E-04	1.63E-04	0.00E+00	6.58E-05	4.66E-05	1.74E-07	4.59E-06	199.1	1.92E-03	3.20E-03
SI42_W	0.75	476	0	1	7.57E-02	1.86E-02	1.37E-03	9.25E-04	8.19E-04	1.72E-04	0.00E+00	6.97E-05	4.94E-05	1.84E-07	4.86E-06	212.0	2.03E-03	3.38E-03
SI42_W	0.75	485	0	1	7.71E-02	1.94E-02	1.40E-03	9.41E-04	8.34E-04	1.76E-04	0.00E+00	7.10E-05	5.03E-05	1.88E-07	4.96E-06	216.8	2.07E-03	3.44E-03
SI42_W	0.75	502	0	1	8.00E-02	2.07E-02	1.46E-03	9.74E-04	8.63E-04	1.82E-04	0.00E+00	7.36E-05	5.21E-05	1.94E-07	5.14E-06	225.4	2.15E-03	3.56E-03
SI42_W	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.11E-07	5.57E-06	244.1	2.33E-03	3.86E-03
SI42_W	0.75	672	0	1	1.07E-01	2.74E-02	1.95E-03	1.30E-03	1.16E-03	2.44E-04	0.00E+00	9.85E-05	6.98E-05	2.60E-07	6.87E-06	301.0	2.87E-03	4.76E-03
SI42_W	0.75	723	0	1	1.15E-01	2.86E-02	2.08E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.80E-07	7.38E-06	321.9	3.09E-03	5.12E-03
SI42_W	0.75	502	0	1	7.95E-02	1.92E-02	1.44E-03	9.74E-04	8.63E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	1.94E-07	5.12E-06	221.9	2.14E-03	3.56E-03
SI42_W	0.75	332	0	1	5.20E-02	1.11E-02	9.26E-04	6.44E-04	5.70E-04	1.19E-04	0.00E+00	4.82E-05	3.41E-05	1.28E-07	3.36E-06	143.0	1.41E-03	2.35E-03
SI42_W	0.75	281	0	1	4.37E-02	8.37E-03	7.70E-04	5.45E-04	4.83E-04	1.00E-04	0.00E+00	4.06E-05	2.88E-05	1.09E-07	2.83E-06	118.9	1.18E-03	1.99E-03
SI42_W	0.75	238	0	1	3.69E-02	6.36E-03	6.43E-04	4.62E-04	4.10E-04	8.49E-05	0.00E+00	3.43E-05	2.43E-05	9.21E-08	2.39E-06	99.2	1.00E-03	1.69E-03
SI42_W	0.75	196	0	1	3.01E-02	4.67E-03	5.20E-04	3.80E-04	3.36E-04	6.95E-05	0.00E+00	2.81E-05	1.99E-05	7.57E-08	1.96E-06	80.3	8.19E-04	1.39E-03
SI42_W	0.75	145	0	1	2.22E-02	3.08E-03	3.79E-04	2.81E-04	2.49E-04	5.12E-05	0.00E+00	2.07E-05	1.47E-05	5.59E-08	1.44E-06	58.6	6.04E-04	1.02E-03
SI43_E	0.75	111	0	1	1.68E-02	2.07E-03	2.86E-04	2.15E-04	1.90E-04	3.90E-05	0.00E+00	1.58E-05	1.12E-05	4.27E-08	1.10E-06	44.2	4.60E-04	7.83E-04
SI43_E	0.75	74	0	1	1.12E-02	1.24E-03	1.89E-04	1.43E-04	1.27E-04	2.60E-05	0.00E+00	1.05E-05	7.43E-06	2.85E-08	7.32E-07	29.1	3.06E-04	5.22E-04
SI43_E	0.75	64	0	1	9.74E-03	9.63E-04	1.63E-04	1.25E-04	1.11E-04	2.27E-05	0.00E+00	9.16E-06	6.49E-06	2.49E-08	6.39E-07	25.2	2.67E-04	4.57E-04
SI43_E	0.75	46	0	1	6.94E-03	6.88E-04	1.16E-04	8.94E-05	7.92E-05	1.62E-05	0.00E+00	6.53E-06	4.63E-06	1.78E-08	4.56E-07	17.9	1.90E-04	3.26E-04
SI43_E	0.75	64	0	1	9.71E-03	9.63E-04	1.62E-04	1.25E-04	1.11E-04	2.26E-05	0.00E+00	9.14E-06	6.47E-06	2.49E-08	6.38E-07	25.0	2.67E-04	4.57E-04
SI43_E	0.75	157	0	1	2.36E-02	2.34E-03	3.93E-04	3.04E-04	2.69E-04	5.49E-05	0.00E+00	2.22E-05	1.57E-05	6.05E-08	1.55E-06	60.6	6.47E-04	1.11E-03
SI43_E	0.75	470	0	1	7.09E-02	7.02E-03	1.18E-03	9.12E-04	8.08E-04	1.65E-04	0.00E+00	6.67E-05	4.72E-05	1.82E-07	4.65E-06	182.9	1.94E-03	3.33E-03
SI43_E	0.75	719	0	1	1.09E-01	1.31E-02	1.86E-03	1.39E-03	1.24E-03	2.54E-04	0.00E+00	1.02E-04	7.26E-05	2.78E-07	7.15E-06	286.6	2.99E-03	5.09E-03
SI43_E	0.75	580	0	1	8.95E-02	1.41E-02	1.55E-03	1.13E-03	9.98E-04	2.06E-04	0.00E+00	8.34E-05	5.91E-05	2.24E-07	5.82E-06	239.3	2.43E-03	4.11E-03
SI43_E	0.75	479	0	1	7.45E-02	1.35E-02	1.31E-03	9.30E-04	8.24E-04	1.71E-04	0.00E+00	6.92E-05	4.90E-05	1.85E-07	4.83E-06	201.8	2.02E-03	3.39E-03
SI43_E	0.75	433	0	1	6.77E-02	1.36E-02	1.20E-03	8.40E-04	7.44E-04	1.55E-04	0.00E+00	6.28E-05	4.45E-05	1.67E-07	4.38E-06	185.5	1.83E-03	3.07E-03
SI43_E	0.75	488	0	1	7.73E-02	1.83E-02	1.40E-03	9.48E-04	8.39E-04	1.76E-04	0.00E+00	7.13E-05	5.05E-05	1.89E-07	4.97E-06	215.6	2.08E-03	3.46E-03
SI43_E	0.75	516	0	1	8.19E-02	2.01E-02	1.49E-03	1.00E-03	8.87E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	1.99E-07	5.27E-06	229.6	2.20E-03	3.66E-03
SI43_E	0.75	525	0	1	8.35E-02	2.10E-02	1.52E-03	1.02E-03	9.03E-04	1.90E-04	0.00E+00	7.69E-05	5.45E-05	2.03E-07	5.37E-06	234.7	2.24E-03	3.72E-03
SI43_E	0.75	544	0	1	8.66E-02	2.24E-02	1.58E-03	1.06E-03	9.34E-04	1.97E-04	0.00E+00	7.97E-05	5.65E-05	2.10E-07	5.56E-06	244.1	2.32E-03	3.85E-03
SI43_E	0.75	590	0	1	9.39E-02	2.40E-02	1.71E-03	1.14E-03	1.01E-03	2.14E-04	0.00E+00	8.64E-05	6.12E-05	2.28E-07	6.03E-06	264.3	2.52E-03	4.18E-03
SI43_E	0.75	728	0	1	1.16E-01	2.96E-02	2.11E-03	1.41E-03	1.25E-03	2.64E-04	0.00E+00	1.07E-04	7.55E-05	2.81E-07	7.44E-06	325.9	3.11E-03	5.16E-03
SI43_E	0.75	783	0	1	1.24E-01	3.10E-02	2.26E-03	1.52E-03	1.35E-03	2.84E-04	0.00E+00	1.15E-04	8.12E-05	3.03E-07	7.99E-06	348.6	3.34E-03	5.55E-03
SI43_E	0.75	544	0	1	8.61E-02	2.08E-02	1.56E-03	1.06E-03	9.34E-04	1.96E-04	0.00E+00	7.94E-05	5.62E-05	2.10E-07	5.54E-06	240.3	2.32E-03	3.85E-03
SI43_E	0.75	359	0	1	5.63E-02	1.20E-02	1.00E-03	6.97E-04	6.18E-04	1.29E-04	0.00E+00	5.22E-05	3.70E-05	1.39E-07	3.64E-06	154.9	1.52E-03	2.55E-03
SI43_E	0.75	304	0	1	4.74E-02	9.07E-03	8.34E-04	5.90E-04	5.23E-04	1.09E-04	0.00E+00	4.40E-05	3.11E-05	1.18E-07	3.07E-06	128.8	1.28E-03	2.15E-03
SI43_E	0.75	258	0	1	3.99E-02	6.89E-03	6.96E-04	5.01E-04	4.43E-04	9.19E-05	0.00E+00	3.72E-05	2.63E-05	9.97E-08	2.59E-06	107.5	1.08E-03	1.83E-03
SI43_E	0.75	212	0	1	3.26E-02	5.06E-03	5.63E-04	4.11E-04	3.64E-04	7.53E-05	0.00E+00	3.04E-05	2.16E-05	8.19E-08	2.12E-06	87.0	8.87E-04	1.50E-03
SI43_E	0.75	157	0	1	2.40E-02	3.33E-03	4.11E-04	3.04E-04	2.69E-04	5.55E-05	0.00E+00	2.24E-05	1.59E-05	6.05E-08	1.56E-06	63.4	6.54E-04	1.11E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI43_W	0.75	101	0	1	1.54E-02	1.89E-03	2.62E-04	1.96E-04	1.74E-04	3.57E-05	0.00E+00	1.44E-05	1.02E-05	3.91E-08	1.01E-06	40.4	4.21E-04	7.16E-04
SI43_W	0.75	67	0	1	1.02E-02	1.13E-03	1.72E-04	1.31E-04	1.16E-04	2.37E-05	0.00E+00	9.59E-06	6.80E-06	2.60E-08	6.69E-07	26.6	2.80E-04	4.77E-04
SI43_W	0.75	59	0	1	8.91E-03	8.81E-04	1.49E-04	1.14E-04	1.01E-04	2.07E-05	0.00E+00	8.37E-06	5.93E-06	2.28E-08	5.84E-07	23.0	2.44E-04	4.18E-04
SI43_W	0.75	42	0	1	6.35E-03	6.29E-04	1.06E-04	8.17E-05	7.24E-05	1.48E-05	0.00E+00	5.97E-06	4.23E-06	1.63E-08	4.17E-07	16.3	1.74E-04	2.98E-04
SI43_W	0.75	59	0	1	8.88E-03	8.81E-04	1.48E-04	1.14E-04	1.01E-04	2.07E-05	0.00E+00	8.35E-06	5.92E-06	2.28E-08	5.83E-07	22.8	2.44E-04	4.18E-04
SI43_W	0.75	143	0	1	2.16E-02	2.14E-03	3.59E-04	2.78E-04	2.46E-04	5.02E-05	0.00E+00	2.03E-05	1.44E-05	5.53E-08	1.42E-06	55.4	5.92E-04	1.01E-03
SI43_W	0.75	430	0	1	6.48E-02	6.42E-03	1.08E-03	8.34E-04	7.38E-04	1.51E-04	0.00E+00	6.09E-05	4.32E-05	1.66E-07	4.25E-06	167.2	1.78E-03	3.04E-03
SI43_W	0.75	657	0	1	1.00E-01	1.20E-02	1.70E-03	1.28E-03	1.13E-03	2.32E-04	0.00E+00	9.37E-05	6.64E-05	2.54E-07	6.54E-06	262.0	2.73E-03	4.65E-03
SI43_W	0.75	531	0	1	8.18E-02	1.29E-02	1.42E-03	1.03E-03	9.12E-04	1.89E-04	0.00E+00	7.62E-05	5.40E-05	2.05E-07	5.32E-06	218.8	2.22E-03	3.76E-03
SI43_W	0.75	438	0	1	6.81E-02	1.24E-02	1.19E-03	8.50E-04	7.53E-04	1.56E-04	0.00E+00	6.32E-05	4.48E-05	1.69E-07	4.41E-06	184.5	1.84E-03	3.10E-03
SI43_W	0.75	396	0	1	6.19E-02	1.25E-02	1.10E-03	7.68E-04	6.80E-04	1.42E-04	0.00E+00	5.74E-05	4.07E-05	1.53E-07	4.00E-06	169.6	1.67E-03	2.80E-03
SI43_W	0.75	446	0	1	7.07E-02	1.67E-02	1.28E-03	8.66E-04	7.67E-04	1.61E-04	0.00E+00	6.52E-05	4.62E-05	1.73E-07	4.55E-06	197.1	1.90E-03	3.16E-03
SI43_W	0.75	472	0	1	7.49E-02	1.84E-02	1.36E-03	9.16E-04	8.11E-04	1.71E-04	0.00E+00	6.90E-05	4.89E-05	1.82E-07	4.81E-06	209.9	2.01E-03	3.34E-03
SI43_W	0.75	480	0	1	7.64E-02	1.92E-02	1.39E-03	9.32E-04	8.25E-04	1.74E-04	0.00E+00	7.03E-05	4.98E-05	1.86E-07	4.91E-06	214.6	2.05E-03	3.40E-03
SI43_W	0.75	497	0	1	7.92E-02	2.05E-02	1.45E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.29E-05	5.16E-05	1.92E-07	5.08E-06	223.2	2.13E-03	3.52E-03
SI43_W	0.75	539	0	1	8.58E-02	2.20E-02	1.56E-03	1.05E-03	9.27E-04	1.95E-04	0.00E+00	7.90E-05	5.60E-05	2.08E-07	5.51E-06	241.6	2.30E-03	3.82E-03
SI43_W	0.75	665	0	1	1.06E-01	2.71E-02	1.93E-03	1.29E-03	1.14E-03	2.41E-04	0.00E+00	9.75E-05	6.91E-05	2.57E-07	6.80E-06	298.0	2.84E-03	4.71E-03
SI43_W	0.75	716	0	1	1.14E-01	2.83E-02	2.06E-03	1.39E-03	1.23E-03	2.59E-04	0.00E+00	1.05E-04	7.42E-05	2.77E-07	7.31E-06	318.7	3.06E-03	5.07E-03
SI43_W	0.75	497	0	1	7.87E-02	1.90E-02	1.42E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.26E-05	5.14E-05	1.92E-07	5.06E-06	219.7	2.12E-03	3.52E-03
SI43_W	0.75	328	0	1	5.15E-02	1.10E-02	9.17E-04	6.38E-04	5.65E-04	1.18E-04	0.00E+00	4.77E-05	3.38E-05	1.27E-07	3.33E-06	141.6	1.39E-03	2.33E-03
SI43_W	0.75	278	0	1	4.33E-02	8.29E-03	7.62E-04	5.40E-04	4.78E-04	9.94E-05	0.00E+00	4.02E-05	2.85E-05	1.07E-07	2.80E-06	117.7	1.17E-03	1.97E-03
SI43_W	0.75	236	0	1	3.65E-02	6.29E-03	6.36E-04	4.58E-04	4.05E-04	8.41E-05	0.00E+00	3.40E-05	2.41E-05	9.12E-08	2.37E-06	98.2	9.91E-04	1.67E-03
SI43_W	0.75	194	0	1	2.98E-02	4.62E-03	5.15E-04	3.76E-04	3.33E-04	6.88E-05	0.00E+00	2.78E-05	1.97E-05	7.49E-08	1.94E-06	79.5	8.11E-04	1.37E-03
SI43_W	0.75	143	0	1	2.19E-02	3.05E-03	3.76E-04	2.78E-04	2.46E-04	5.07E-05	0.00E+00	2.05E-05	1.45E-05	5.53E-08	1.43E-06	58.0	5.98E-04	1.01E-03
SI44_E	0.75	102	0	1	1.56E-02	1.91E-03	2.64E-04	1.98E-04	1.76E-04	3.60E-05	0.00E+00	1.46E-05	1.03E-05	3.95E-08	1.02E-06	40.8	4.25E-04	7.23E-04
SI44_E	0.75	68	0	1	1.03E-02	1.14E-03	1.74E-04	1.32E-04	1.17E-04	2.40E-05	0.00E+00	9.69E-06	6.86E-06	2.63E-08	6.76E-07	26.9	2.83E-04	4.82E-04
SI44_E	0.75	60	0	1	9.00E-03	8.90E-04	1.51E-04	1.16E-04	1.02E-04	2.09E-05	0.00E+00	8.46E-06	5.99E-06	2.30E-08	5.90E-07	23.3	2.47E-04	4.22E-04
SI44_E	0.75	43	0	1	6.41E-03	6.35E-04	1.07E-04	8.26E-05	7.31E-05	1.49E-05	0.00E+00	6.03E-06	4.27E-06	1.64E-08	4.21E-07	16.5	1.76E-04	3.01E-04
SI44_E	0.75	60	0	1	8.97E-03	8.90E-04	1.49E-04	1.16E-04	1.02E-04	2.09E-05	0.00E+00	8.44E-06	5.98E-06	2.30E-08	5.89E-07	23.0	2.46E-04	4.22E-04
SI44_E	0.75	145	0	1	2.18E-02	2.16E-03	3.63E-04	2.81E-04	2.49E-04	5.07E-05	0.00E+00	2.05E-05	1.45E-05	5.59E-08	1.43E-06	56.0	5.98E-04	1.02E-03
SI44_E	0.75	434	0	1	6.55E-02	6.48E-03	1.09E-03	8.42E-04	7.46E-04	1.52E-04	0.00E+00	6.16E-05	4.36E-05	1.68E-07	4.30E-06	168.9	1.80E-03	3.07E-03
SI44_E	0.75	664	0	1	1.01E-01	1.21E-02	1.71E-03	1.29E-03	1.14E-03	2.34E-04	0.00E+00	9.47E-05	6.71E-05	2.57E-07	6.61E-06	264.7	2.76E-03	4.70E-03
SI44_E	0.75	536	0	1	8.26E-02	1.31E-02	1.43E-03	1.04E-03	9.21E-04	1.91E-04	0.00E+00	7.70E-05	5.46E-05	2.07E-07	5.38E-06	221.0	2.25E-03	3.80E-03
SI44_E	0.75	442	0	1	6.88E-02	1.25E-02	1.21E-03	8.59E-04	7.61E-04	1.58E-04	0.00E+00	6.39E-05	4.53E-05	1.71E-07	4.46E-06	186.3	1.86E-03	3.13E-03
SI44_E	0.75	400	0	1	6.26E-02	1.26E-02	1.11E-03	7.76E-04	6.87E-04	1.43E-04	0.00E+00	5.80E-05	4.11E-05	1.55E-07	4.05E-06	171.3	1.69E-03	2.83E-03
SI44_E	0.75	451	0	1	7.14E-02	1.69E-02	1.29E-03	8.75E-04	7.75E-04	1.63E-04	0.00E+00	6.58E-05	4.66E-05	1.74E-07	4.59E-06	199.1	1.92E-03	3.20E-03
SI44_E	0.75	476	0	1	7.57E-02	1.86E-02	1.37E-03	9.25E-04	8.19E-04	1.72E-04	0.00E+00	6.97E-05	4.94E-05	1.84E-07	4.86E-06	212.0	2.03E-03	3.38E-03
SI44_E	0.75	485	0	1	7.71E-02	1.94E-02	1.40E-03	9.41E-04	8.34E-04	1.76E-04	0.00E+00	7.10E-05	5.03E-05	1.88E-07	4.96E-06	216.8	2.07E-03	3.44E-03
SI44_E	0.75	502	0	1	8.00E-02	2.07E-02	1.46E-03	9.74E-04	8.63E-04	1.82E-04	0.00E+00	7.36E-05	5.21E-05	1.94E-07	5.14E-06	225.4	2.15E-03	3.56E-03
SI44_E	0.75	544	0	1	8.67E-02	2.22E-02	1.58E-03	1.06E-03	9.36E-04	1.97E-04	0.00E+00	7.98E-05	5.65E-05	2.11E-07	5.57E-06	244.1	2.33E-03	3.86E-03
SI44_E	0.75	672	0	1	1.07E-01	2.74E-02	1.95E-03	1.30E-03	1.16E-03	2.44E-04	0.00E+00	9.85E-05	6.98E-05	2.60E-07	6.87E-06	301.0	2.87E-03	4.76E-03
SI44_E	0.75	723	0	1	1.15E-01	2.86E-02	2.08E-03	1.40E-03	1.24E-03	2.62E-04	0.00E+00	1.06E-04	7.50E-05	2.80E-07	7.38E-06	321.9	3.09E-03	5.12E-03
SI44_E	0.75	502	0	1	7.95E-02	1.92E-02	1.44E-03	9.74E-04	8.63E-04	1.81E-04	0.00E+00	7.33E-05	5.19E-05	1.94E-07	5.12E-06	221.9	2.14E-03	3.56E-03
SI44_E	0.75	332	0	1	5.20E-02	1.11E-02	9.26E-04	6.44E-04	5.70E-04	1.19E-04	0.00E+00	4.82E-05	3.41E-05	1.28E-07	3.36E-06	143.0	1.41E-03	2.35E-03
SI44_E	0.75	281	0	1	4.37E-02	8.37E-03	7.70E-04	5.45E-04	4.83E-04	1.00E-04	0.00E+00	4.06E-05	2.88E-05	1.09E-07	2.83E-06	118.9	1.18E-03	1.99E-03
SI44_E	0.75	238	0	1	3.69E-02	6.36E-03	6.43E-04	4.62E-04	4.10E-04	8.49E-05	0.00E+00	3.43E-05	2.43E-05	9.21E-08	2.39E-06	99.2	1.00E-03	1.69E-03
SI44_E	0.75	196	0	1	3.01E-02	4.67E-03	5.20E-04	3.80E-04	3.36E-04	6.95E-05	0.00E+00	2.81E-05	1.99E-05	7.57E-08	1.96E-06	80.3	8.19E-04	1.39E-03
SI44_E	0.75	145	0	1	2.22E-02	3.08E-03	3.79E-04	2.81E-04	2.49E-04	5.12E-05	0.00E+00	2.07E-05	1.47E-05	5.59E-08	1.44E-06	58.6	6.04E-04	1.02E-03
SI44_W	0.75	100	0	1	1.52E-02	1.88E-03	2.59E-04	1.94E-04	1.72E-04	3.53E-05	0.00E+00	1.43E-05	1.01E-05	3.87E-08	9.96E-07	40.0	4.16E-04	7.09E-04
SI44_W	0.75	67	0	1	1.01E-02	1.12E-03	1.71E-04	1.29E-04	1.15E-04	2.35E-05	0.00E+00	9.49E-06	6.73E-06	2.58E-08	6.62E-07	26.4	2.77E-04	4.73E-04
SI44_W	0.75	58	0	1	8.82E-03	8.72E-04	1.48E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.28E-06	5.87E-06	2.26E-08	5.78E-07	22.8	2.42E-04	4.13E-04
SI44_W	0.75	42	0	1	6.28E-03	6.23E-04	1.05E-04	8.09E-05	7.17E-05	1.46E-05	0.00E+00	5.91E-06	4.19E-06	1.61E-08	4.12E-07	16.2	1.72E-04	2.95E-04
SI44_W	0.75	58	0	1	8.79E-03	8.72E-04	1.46E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.27E-06	5.86E-06	2.26E-08	5.77E-07	22.6	2.41E-04	4.13E-04
SI44_W	0.75	142	0	1	2.13E-02	2.12E-03	3.55E-04	2.75E-04	2.44E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.48E-08	1.40E-06	54.8	5.86E-04	1.00E-03
SI44_W	0.75	425	0	1	6.42E-02	6.35E-03	1.07E-03	8.25E-04	7.31E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.64E-07	4.21E-06	165.5	1.76E-03	3.01E-03
SI44_W	0.75	650	0	1	9.90E-02	1.19E-02	1.68E-03	1.26E-03	1.12E-03	2.30E-04	0.00E+00	9.27E-05	6.57E-05	2.51E-07	6.47E-06	259.4	2.71E-03	4.61E-03
SI44_W	0.75	525	0	1	8.10E-02	1.28E-02	1.40E-03	1.02E-03	9.03E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	2.03E-07	5.27E-06	216.6	2.20E-03	3.72E-03
SI44_W	0.75	433	0	1	6.74E-02	1.23E-02	1.18E-03	8.41E-04	7.45E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.68E-07	4.37E-06	182.6	1.83E-03	3.07E-03
SI44_W	0.75	392	0	1	6.13E-02	1.23E-02	1.09E-03	7.61E-04	6.74E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.51E-07	3.96E-06	167.8	1.66E-03	2.78E-03
SI44_W	0.75	442	0	1	6.99E-02	1.66E-02	1.26E-03	8.58E-04	7.60E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI44_W	0.75	467	0	1	7.41E-02	1.82E-02	1.35E-03	9.06E-04	8.03E-04	1.69E-04	0.00E+00	6.83E-05	4.84E-05	1.80E-07	4.77E-06	207.7	1.99E-03	3.31E-03
SI44_W	0.75	475	0	1	7.56E-02	1.90E-02	1.38E-03	9.22E-04	8.17E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.84E-07	4.86E-06	212.4	2.03E-03	3.37E-03
SI44_W	0.75	492	0	1	7.84E-02	2.02E-02	1.43E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.21E-05	5.11E-05	1.90E-07	5.03E-06	220.9	2.10E-03	3.49E-03
SI44_W	0.75	533	0	1	8.50E-02	2.18E-02	1.55E-03	1.04E-03	9.17E-04	1.93E-04	0.00E+00	7.82E-05	5.54E-05	2.06E-07	5.46E-06	239.1	2.28E-03	3.78E-03
SI44_W	0.75	659	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	294.9	2.81E-03	4.67E-03
SI44_W	0.75	709	0	1	1.13E-01	2.81E-02	2.04E-03	1.38E-03	1.22E-03	2.57E-04	0.00E+00	1.04E-04	7.34E-05	2.74E-07	7.23E-06	315.4	3.02E-03	5.02E-03
SI44_W	0.75	492	0	1	7.79E-02	1.88E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.4	2.10E-03	3.49E-03
SI44_W	0.75	325	0	1	5.10E-02	1.08E-02	9.08E-04	6.31E-04	5.59E-04	1.17E-04	0.00E+00	4.72E-05	3.34E-05	1.26E-07	3.29E-06	140.1	1.38E-03	2.30E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_W	0.75	275	0	1	4.28E-02	8.20E-03	7.55E-04	5.34E-04	4.73E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.06E-07	2.78E-06	116.5	1.16E-03	1.95E-03
SI44_W	0.75	233	0	1	3.61E-02	6.23E-03	6.30E-04	4.53E-04	4.01E-04	8.32E-05	0.00E+00	3.36E-05	2.38E-05	9.02E-08	2.35E-06	97.2	9.81E-04	1.65E-03
SI44_W	0.75	192	0	1	2.95E-02	4.58E-03	5.10E-04	3.72E-04	3.30E-04	6.81E-05	0.00E+00	2.75E-05	1.95E-05	7.41E-08	1.92E-06	78.7	8.03E-04	1.36E-03
SI44_W	0.75	142	0	1	2.17E-02	3.02E-03	3.72E-04	2.75E-04	2.44E-04	5.02E-05	0.00E+00	2.03E-05	1.44E-05	5.48E-08	1.42E-06	57.4	5.92E-04	1.00E-03
SI45_E	0.75	100	0	1	1.52E-02	1.88E-03	2.59E-04	1.94E-04	1.72E-04	3.53E-05	0.00E+00	1.43E-05	1.01E-05	3.87E-08	9.96E-07	40.0	4.16E-04	7.09E-04
SI45_E	0.75	67	0	1	1.01E-02	1.12E-03	1.71E-04	1.29E-04	1.15E-04	2.35E-05	0.00E+00	9.49E-06	6.73E-06	2.58E-08	6.62E-07	26.4	2.77E-04	4.73E-04
SI45_E	0.75	58	0	1	8.82E-03	8.72E-04	1.48E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.28E-06	5.87E-06	2.26E-08	5.78E-07	22.8	2.42E-04	4.13E-04
SI45_E	0.75	42	0	1	6.28E-03	6.23E-04	1.05E-04	8.09E-05	7.17E-05	1.46E-05	0.00E+00	5.91E-06	4.19E-06	1.61E-08	4.12E-07	16.2	1.72E-04	2.95E-04
SI45_E	0.75	58	0	1	8.79E-03	8.72E-04	1.46E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.27E-06	5.86E-06	2.26E-08	5.77E-07	22.6	2.41E-04	4.13E-04
SI45_E	0.75	142	0	1	2.13E-02	2.12E-03	3.55E-04	2.75E-04	2.44E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.48E-08	1.40E-06	54.8	5.86E-04	1.00E-03
SI45_E	0.75	425	0	1	6.42E-02	6.35E-03	1.07E-03	8.25E-04	7.31E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.64E-07	4.21E-06	165.5	1.76E-03	3.01E-03
SI45_E	0.75	650	0	1	9.90E-02	1.19E-02	1.68E-03	1.26E-03	1.12E-03	2.30E-04	0.00E+00	9.27E-05	6.57E-05	2.51E-07	6.47E-06	259.4	2.71E-03	4.61E-03
SI45_E	0.75	525	0	1	8.10E-02	1.28E-02	1.40E-03	1.02E-03	9.03E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	2.03E-07	5.27E-06	216.6	2.20E-03	3.72E-03
SI45_E	0.75	433	0	1	6.74E-02	1.23E-02	1.18E-03	8.41E-04	7.45E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.68E-07	4.37E-06	182.6	1.83E-03	3.07E-03
SI45_E	0.75	392	0	1	6.13E-02	1.23E-02	1.09E-03	7.61E-04	6.74E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.51E-07	3.96E-06	167.8	1.66E-03	2.78E-03
SI45_E	0.75	442	0	1	6.99E-02	1.66E-02	1.26E-03	8.58E-04	7.60E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI45_E	0.75	467	0	1	7.41E-02	1.82E-02	1.35E-03	9.06E-04	8.03E-04	1.69E-04	0.00E+00	6.83E-05	4.84E-05	1.80E-07	4.77E-06	207.7	1.99E-03	3.31E-03
SI45_E	0.75	475	0	1	7.56E-02	1.90E-02	1.38E-03	9.22E-04	8.17E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.84E-07	4.86E-06	212.4	2.03E-03	3.37E-03
SI45_E	0.75	492	0	1	7.84E-02	2.02E-02	1.43E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.21E-05	5.11E-05	1.90E-07	5.03E-06	220.9	2.10E-03	3.49E-03
SI45_E	0.75	533	0	1	8.50E-02	2.18E-02	1.55E-03	1.04E-03	9.17E-04	1.93E-04	0.00E+00	7.82E-05	5.54E-05	2.06E-07	5.46E-06	239.1	2.28E-03	3.78E-03
SI45_E	0.75	659	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	294.9	2.81E-03	4.67E-03
SI45_E	0.75	709	0	1	1.13E-01	2.81E-02	2.04E-03	1.38E-03	1.22E-03	2.57E-04	0.00E+00	1.04E-04	7.34E-05	2.74E-07	7.23E-06	315.4	3.02E-03	5.02E-03
SI45_E	0.75	492	0	1	7.79E-02	1.88E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.4	2.10E-03	3.49E-03
SI45_E	0.75	325	0	1	5.10E-02	1.08E-02	9.08E-04	6.31E-04	5.59E-04	1.17E-04	0.00E+00	4.72E-05	3.34E-05	1.26E-07	3.29E-06	140.1	1.38E-03	2.30E-03
SI45_E	0.75	275	0	1	4.28E-02	8.20E-03	7.55E-04	5.34E-04	4.73E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.06E-07	2.78E-06	116.5	1.16E-03	1.95E-03
SI45_E	0.75	233	0	1	3.61E-02	6.23E-03	6.30E-04	4.53E-04	4.01E-04	8.32E-05	0.00E+00	3.36E-05	2.38E-05	9.02E-08	2.35E-06	97.2	9.81E-04	1.65E-03
SI45_E	0.75	192	0	1	2.95E-02	4.58E-03	5.10E-04	3.72E-04	3.30E-04	6.81E-05	0.00E+00	2.75E-05	1.95E-05	7.41E-08	1.92E-06	78.7	8.03E-04	1.36E-03
SI45_E	0.75	142	0	1	2.17E-02	3.02E-03	3.72E-04	2.75E-04	2.44E-04	5.02E-05	0.00E+00	2.03E-05	1.44E-05	5.48E-08	1.42E-06	57.4	5.92E-04	1.00E-03
SI45_W	0.75	100	0	1	1.52E-02	1.88E-03	2.59E-04	1.94E-04	1.72E-04	3.53E-05	0.00E+00	1.43E-05	1.01E-05	3.87E-08	9.96E-07	40.0	4.16E-04	7.09E-04
SI45_W	0.75	67	0	1	1.01E-02	1.12E-03	1.71E-04	1.29E-04	1.15E-04	2.35E-05	0.00E+00	9.49E-06	6.73E-06	2.58E-08	6.62E-07	26.4	2.77E-04	4.73E-04
SI45_W	0.75	58	0	1	8.82E-03	8.72E-04	1.48E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.28E-06	5.87E-06	2.26E-08	5.78E-07	22.8	2.42E-04	4.13E-04
SI45_W	0.75	42	0	1	6.28E-03	6.23E-04	1.05E-04	8.09E-05	7.16E-05	1.46E-05	0.00E+00	5.91E-06	4.19E-06	1.61E-08	4.12E-07	16.2	1.72E-04	2.95E-04
SI45_W	0.75	58	0	1	8.79E-03	8.72E-04	1.46E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.27E-06	5.86E-06	2.26E-08	5.77E-07	22.6	2.41E-04	4.13E-04
SI45_W	0.75	142	0	1	2.13E-02	2.12E-03	3.55E-04	2.75E-04	2.44E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.48E-08	1.40E-06	54.8	5.86E-04	1.00E-03
SI45_W	0.75	425	0	1	6.42E-02	6.35E-03	1.07E-03	8.25E-04	7.31E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.64E-07	4.21E-06	165.5	1.76E-03	3.01E-03
SI45_W	0.75	650	0	1	9.90E-02	1.19E-02	1.68E-03	1.26E-03	1.12E-03	2.29E-04	0.00E+00	9.27E-05	6.57E-05	2.51E-07	6.47E-06	259.4	2.71E-03	4.61E-03
SI45_W	0.75	525	0	1	8.10E-02	1.28E-02	1.40E-03	1.02E-03	9.03E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	2.03E-07	5.27E-06	216.6	2.20E-03	3.72E-03
SI45_W	0.75	433	0	1	6.74E-02	1.23E-02	1.18E-03	8.41E-04	7.45E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.68E-07	4.37E-06	182.6	1.83E-03	3.07E-03
SI45_W	0.75	392	0	1	6.13E-02	1.23E-02	1.09E-03	7.61E-04	6.73E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.51E-07	3.96E-06	167.8	1.66E-03	2.78E-03
SI45_W	0.75	442	0	1	6.99E-02	1.66E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI45_W	0.75	467	0	1	7.41E-02	1.82E-02	1.35E-03	9.06E-04	8.02E-04	1.69E-04	0.00E+00	6.83E-05	4.84E-05	1.80E-07	4.77E-06	207.7	1.99E-03	3.31E-03
SI45_W	0.75	475	0	1	7.56E-02	1.90E-02	1.38E-03	9.22E-04	8.17E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.84E-07	4.86E-06	212.4	2.03E-03	3.37E-03
SI45_W	0.75	492	0	1	7.84E-02	2.02E-02	1.43E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.21E-05	5.11E-05	1.90E-07	5.03E-06	220.9	2.10E-03	3.48E-03
SI45_W	0.75	533	0	1	8.50E-02	2.18E-02	1.55E-03	1.04E-03	9.17E-04	1.93E-04	0.00E+00	7.82E-05	5.54E-05	2.06E-07	5.46E-06	239.1	2.28E-03	3.78E-03
SI45_W	0.75	659	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	294.9	2.81E-03	4.67E-03
SI45_W	0.75	709	0	1	1.13E-01	2.81E-02	2.04E-03	1.38E-03	1.22E-03	2.57E-04	0.00E+00	1.04E-04	7.34E-05	2.74E-07	7.23E-06	315.4	3.02E-03	5.02E-03
SI45_W	0.75	492	0	1	7.79E-02	1.88E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.4	2.10E-03	3.48E-03
SI45_W	0.75	325	0	1	5.10E-02	1.08E-02	9.08E-04	6.31E-04	5.59E-04	1.17E-04	0.00E+00	4.72E-05	3.34E-05	1.26E-07	3.29E-06	140.1	1.38E-03	2.30E-03
SI45_W	0.75	275	0	1	4.28E-02	8.20E-03	7.54E-04	5.34E-04	4.73E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.06E-07	2.78E-06	116.5	1.16E-03	1.95E-03
SI45_W	0.75	233	0	1	3.61E-02	6.23E-03	6.30E-04	4.53E-04	4.01E-04	8.32E-05	0.00E+00	3.36E-05	2.38E-05	9.02E-08	2.35E-06	97.2	9.81E-04	1.65E-03
SI45_W	0.75	192	0	1	2.95E-02	4.58E-03	5.10E-04	3.72E-04	3.30E-04	6.81E-05	0.00E+00	2.75E-05	1.95E-05	7.41E-08	1.92E-06	78.7	8.03E-04	1.36E-03
SI45_W	0.75	142	0	1	2.17E-02	3.02E-03	3.72E-04	2.75E-04	2.44E-04	5.02E-05	0.00E+00	2.03E-05	1.44E-05	5.48E-08	1.42E-06	57.4	5.92E-04	1.00E-03
SI46_E	0.75	100	0	1	1.52E-02	1.88E-03	2.59E-04	1.94E-04	1.72E-04	3.53E-05	0.00E+00	1.43E-05	1.01E-05	3.87E-08	9.96E-07	40.0	4.16E-04	7.09E-04
SI46_E	0.75	67	0	1	1.01E-02	1.12E-03	1.71E-04	1.29E-04	1.15E-04	2.35E-05	0.00E+00	9.49E-06	6.73E-06	2.58E-08	6.62E-07	26.4	2.77E-04	4.73E-04
SI46_E	0.75	58	0	1	8.82E-03	8.72E-04	1.48E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.28E-06	5.87E-06	2.26E-08	5.78E-07	22.8	2.42E-04	4.13E-04
SI46_E	0.75	42	0	1	6.28E-03	6.23E-04	1.05E-04	8.09E-05	7.16E-05	1.46E-05	0.00E+00	5.91E-06	4.19E-06	1.61E-08	4.12E-07	16.2	1.72E-04	2.95E-04
SI46_E	0.75	58	0	1	8.79E-03	8.72E-04	1.46E-04	1.13E-04	1.00E-04	2.05E-05	0.00E+00	8.27E-06	5.86E-06	2.26E-08	5.77E-07	22.6	2.41E-04	4.13E-04
SI46_E	0.75	142	0	1	2.13E-02	2.12E-03	3.55E-04	2.75E-04	2.44E-04	4.97E-05	0.00E+00	2.01E-05	1.42E-05	5.48E-08	1.40E-06	54.8	5.86E-04	1.00E-03
SI46_E	0.75	425	0	1	6.42E-02	6.35E-03	1.07E-03	8.25E-04	7.31E-04	1.49E-04	0.00E+00	6.03E-05	4.27E-05	1.64E-07	4.21E-06	165.5	1.76E-03	3.01E-03
SI46_E	0.75	650	0	1	9.90E-02	1.19E-02	1.68E-03	1.26E-03	1.12E-03	2.29E-04	0.00E+00	9.27E-05	6.57E-05	2.51E-07	6.47E-06	259.4	2.71E-03	4.61E-03
SI46_E	0.75	525	0	1	8.10E-02	1.28E-02	1.40E-03	1.02E-03	9.03E-04	1.87E-04	0.00E+00	7.55E-05	5.35E-05	2.03E-07	5.27E-06	216.6	2.20E-03	3.72E-03
SI46_E	0.75	433	0	1	6.74E-02	1.23E-02	1.18E-03	8.41E-04	7.45E-04	1.55E-04	0.00E+00	6.26E-05	4.43E-05	1.68E-07	4.37E-06	182.6	1.83E-03	3.07E-03
SI46_E	0.75	392	0	1	6.13E-02	1.23E-02	1.09E-03	7.61E-04	6.73E-04	1.41E-04	0.00E+00	5.68E-05	4.02E-05	1.51E-07	3.96E-06	167.8	1.66E-03	2.78E-03
SI46_E	0.75	442	0	1	6.99E-02	1.66E-02	1.26E-03	8.58E-04	7.59E-04	1.60E-04	0.00E+00	6.45E-05	4.57E-05	1.71E-07	4.50E-06	195.1	1.88E-03	3.13E-03
SI46_E	0.75	467	0	1	7.41E-02	1.82E-02	1.35E-03	9.06E-04	8.02E-04	1.69E-04	0.00E+00	6.83E-05	4.84E-05	1.80E-07	4.77E-06	207.7	1.99E-03	3.31E-03
SI46_E	0.75	475	0	1	7.56E-02	1.90E-02	1.38E-03	9.22E-04	8.17E-04	1.72E-04	0.00E+00	6.96E-05	4.93E-05	1.84E-07	4.86E-06	212.4	2.03E-03	3.37E-03
SI46_E	0.75	492	0	1	7.84E-02	2.02E-02	1.43E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.21E-05	5.11E-05	1.90E-07	5.03E-06	220.9	2.10E-03	3.48E-03
SI46_E	0.75	533	0	1	8.50E-02	2.18E-02	1.55E-03	1.04E-03	9.17E-04	1.93E-04	0.00E+00	7.82E-05	5.54E-05	2.06E-07	5.46E-06	239.1	2.28E-03	3.78E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_E	0.75	659	0	1	1.05E-01	2.68E-02	1.91E-03	1.28E-03	1.13E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	294.9	2.81E-03	4.67E-03
SI46_E	0.75	709	0	1	1.13E-01	2.81E-02	2.04E-03	1.38E-03	1.22E-03	2.57E-04	0.00E+00	1.04E-04	7.34E-05	2.74E-07	7.23E-06	315.4	3.02E-03	5.02E-03
SI46_E	0.75	492	0	1	7.79E-02	1.88E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.4	2.10E-03	3.48E-03
SI46_E	0.75	325	0	1	5.10E-02	1.08E-02	9.08E-04	6.31E-04	5.59E-04	1.17E-04	0.00E+00	4.72E-05	3.34E-05	1.26E-07	3.29E-06	140.1	1.38E-03	2.30E-03
SI46_E	0.75	275	0	1	4.28E-02	8.20E-03	7.54E-04	5.34E-04	4.73E-04	9.84E-05	0.00E+00	3.98E-05	2.82E-05	1.06E-07	2.78E-06	116.5	1.16E-03	1.95E-03
SI46_E	0.75	233	0	1	3.61E-02	6.23E-03	6.30E-04	4.53E-04	4.01E-04	8.32E-05	0.00E+00	3.36E-05	2.38E-05	9.02E-08	2.35E-06	97.2	9.81E-04	1.65E-03
SI46_E	0.75	192	0	1	2.95E-02	4.58E-03	5.10E-04	3.72E-04	3.30E-04	6.81E-05	0.00E+00	2.75E-05	1.95E-05	7.41E-08	1.92E-06	78.7	8.03E-04	1.36E-03
SI46_E	0.75	142	0	1	2.17E-02	3.02E-03	3.72E-04	2.75E-04	2.44E-04	5.02E-05	0.00E+00	2.03E-05	1.44E-05	5.48E-08	1.42E-06	57.4	5.92E-04	1.00E-03
SI46_W	0.75	105	0	1	1.59E-02	1.96E-03	2.71E-04	2.03E-04	1.80E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.04E-08	1.04E-06	41.8	4.36E-04	7.41E-04
SI46_W	0.75	70	0	1	1.06E-02	1.17E-03	1.79E-04	1.35E-04	1.20E-04	2.46E-05	0.00E+00	9.93E-06	7.04E-06	2.70E-08	6.93E-07	27.6	2.90E-04	4.94E-04
SI46_W	0.75	61	0	1	9.22E-03	9.12E-04	1.54E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.14E-06	2.36E-08	6.05E-07	23.8	2.53E-04	4.32E-04
SI46_W	0.75	44	0	1	6.57E-03	6.51E-04	1.10E-04	8.46E-05	7.49E-05	1.53E-05	0.00E+00	6.18E-06	4.38E-06	1.69E-08	4.31E-07	16.9	1.80E-04	3.09E-04
SI46_W	0.75	61	0	1	9.19E-03	9.12E-04	1.53E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.65E-06	6.13E-06	2.36E-08	6.03E-07	23.6	2.52E-04	4.32E-04
SI46_W	0.75	148	0	1	2.23E-02	2.21E-03	3.71E-04	2.88E-04	2.55E-04	5.20E-05	0.00E+00	2.10E-05	1.49E-05	5.73E-08	1.47E-06	57.4	6.13E-04	1.05E-03
SI46_W	0.75	445	0	1	6.71E-02	6.64E-03	1.12E-03	8.63E-04	7.64E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.72E-07	4.40E-06	173.1	1.84E-03	3.15E-03
SI46_W	0.75	680	0	1	1.04E-01	1.24E-02	1.76E-03	1.32E-03	1.17E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.63E-07	6.77E-06	271.3	2.83E-03	4.82E-03
SI46_W	0.75	549	0	1	8.47E-02	1.34E-02	1.47E-03	1.07E-03	9.44E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.12E-07	5.51E-06	226.5	2.30E-03	3.89E-03
SI46_W	0.75	453	0	1	7.05E-02	1.28E-02	1.24E-03	8.80E-04	7.79E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.75E-07	4.57E-06	191.0	1.91E-03	3.21E-03
SI46_W	0.75	410	0	1	6.41E-02	1.29E-02	1.14E-03	7.95E-04	7.04E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.58E-07	4.15E-06	175.5	1.73E-03	2.90E-03
SI46_W	0.75	462	0	1	7.31E-02	1.73E-02	1.32E-03	8.97E-04	7.94E-04	1.67E-04	0.00E+00	6.75E-05	4.78E-05	1.79E-07	4.71E-06	204.0	1.97E-03	3.27E-03
SI46_W	0.75	488	0	1	7.75E-02	1.90E-02	1.41E-03	9.48E-04	8.39E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.89E-07	4.98E-06	217.3	2.08E-03	3.46E-03
SI46_W	0.75	497	0	1	7.91E-02	1.99E-02	1.44E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.92E-07	5.08E-06	222.1	2.12E-03	3.52E-03
SI46_W	0.75	514	0	1	8.20E-02	2.12E-02	1.50E-03	9.99E-04	8.84E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	231.0	2.20E-03	3.65E-03
SI46_W	0.75	558	0	1	8.89E-02	2.28E-02	1.62E-03	1.08E-03	9.59E-04	2.02E-04	0.00E+00	8.18E-05	5.79E-05	2.16E-07	5.71E-06	250.1	2.39E-03	3.95E-03
SI46_W	0.75	689	0	1	1.10E-01	2.80E-02	2.00E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.66E-07	7.04E-06	308.5	2.94E-03	4.88E-03
SI46_W	0.75	741	0	1	1.18E-01	2.93E-02	2.14E-03	1.44E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.87E-07	7.57E-06	329.9	3.16E-03	5.25E-03
SI46_W	0.75	514	0	1	8.15E-02	1.97E-02	1.47E-03	9.99E-04	8.84E-04	1.86E-04	0.00E+00	7.51E-05	5.32E-05	1.99E-07	5.24E-06	227.4	2.19E-03	3.65E-03
SI46_W	0.75	340	0	1	5.33E-02	1.13E-02	9.49E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.94E-05	3.50E-05	1.31E-07	3.45E-06	146.6	1.44E-03	2.41E-03
SI46_W	0.75	288	0	1	4.48E-02	8.58E-03	7.89E-04	5.59E-04	4.95E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.11E-07	2.90E-06	121.9	1.21E-03	2.04E-03
SI46_W	0.75	244	0	1	3.78E-02	6.52E-03	6.59E-04	4.74E-04	4.20E-04	8.70E-05	0.00E+00	3.52E-05	2.49E-05	9.44E-08	2.45E-06	101.7	1.03E-03	1.73E-03
SI46_W	0.75	201	0	1	3.09E-02	4.79E-03	5.33E-04	3.89E-04	3.45E-04	7.12E-05	0.00E+00	2.88E-05	2.04E-05	7.75E-08	2.01E-06	82.3	8.40E-04	1.42E-03
SI46_W	0.75	148	0	1	2.27E-02	3.15E-03	3.89E-04	2.88E-04	2.55E-04	5.25E-05	0.00E+00	2.12E-05	1.50E-05	5.73E-08	1.48E-06	60.0	6.19E-04	1.05E-03
SI47_E	0.75	105	0	1	1.59E-02	1.96E-03	2.71E-04	2.03E-04	1.80E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.04E-08	1.04E-06	41.8	4.36E-04	7.41E-04
SI47_E	0.75	70	0	1	1.06E-02	1.17E-03	1.79E-04	1.35E-04	1.20E-04	2.46E-05	0.00E+00	9.93E-06	7.04E-06	2.70E-08	6.93E-07	27.6	2.90E-04	4.94E-04
SI47_E	0.75	61	0	1	9.22E-03	9.12E-04	1.54E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.14E-06	2.36E-08	6.05E-07	23.8	2.53E-04	4.32E-04
SI47_E	0.75	44	0	1	6.57E-03	6.51E-04	1.10E-04	8.46E-05	7.49E-05	1.53E-05	0.00E+00	6.18E-06	4.38E-06	1.69E-08	4.31E-07	16.9	1.80E-04	3.09E-04
SI47_E	0.75	61	0	1	9.19E-03	9.12E-04	1.53E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.65E-06	6.13E-06	2.36E-08	6.03E-07	23.6	2.52E-04	4.32E-04
SI47_E	0.75	148	0	1	2.23E-02	2.21E-03	3.71E-04	2.88E-04	2.55E-04	5.20E-05	0.00E+00	2.10E-05	1.49E-05	5.73E-08	1.47E-06	57.4	6.13E-04	1.05E-03
SI47_E	0.75	445	0	1	6.71E-02	6.64E-03	1.12E-03	8.63E-04	7.64E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.72E-07	4.40E-06	173.1	1.84E-03	3.15E-03
SI47_E	0.75	680	0	1	1.04E-01	1.24E-02	1.76E-03	1.32E-03	1.17E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.63E-07	6.77E-06	271.3	2.83E-03	4.82E-03
SI47_E	0.75	549	0	1	8.47E-02	1.34E-02	1.47E-03	1.07E-03	9.44E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.12E-07	5.51E-06	226.5	2.30E-03	3.89E-03
SI47_E	0.75	453	0	1	7.05E-02	1.28E-02	1.24E-03	8.80E-04	7.79E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.75E-07	4.57E-06	191.0	1.91E-03	3.21E-03
SI47_E	0.75	410	0	1	6.41E-02	1.29E-02	1.14E-03	7.95E-04	7.04E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.58E-07	4.15E-06	175.5	1.73E-03	2.90E-03
SI47_E	0.75	462	0	1	7.31E-02	1.73E-02	1.32E-03	8.97E-04	7.94E-04	1.67E-04	0.00E+00	6.75E-05	4.78E-05	1.79E-07	4.71E-06	204.0	1.97E-03	3.27E-03
SI47_E	0.75	488	0	1	7.75E-02	1.90E-02	1.41E-03	9.48E-04	8.39E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.89E-07	4.98E-06	217.3	2.08E-03	3.46E-03
SI47_E	0.75	497	0	1	7.91E-02	1.99E-02	1.44E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.92E-07	5.08E-06	222.1	2.12E-03	3.52E-03
SI47_E	0.75	514	0	1	8.20E-02	2.12E-02	1.50E-03	9.99E-04	8.84E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	231.0	2.20E-03	3.65E-03
SI47_E	0.75	558	0	1	8.89E-02	2.28E-02	1.62E-03	1.08E-03	9.59E-04	2.02E-04	0.00E+00	8.18E-05	5.79E-05	2.16E-07	5.71E-06	250.1	2.39E-03	3.95E-03
SI47_E	0.75	689	0	1	1.10E-01	2.80E-02	2.00E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.66E-07	7.04E-06	308.5	2.94E-03	4.88E-03
SI47_E	0.75	741	0	1	1.18E-01	2.93E-02	2.14E-03	1.44E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.87E-07	7.57E-06	329.9	3.16E-03	5.25E-03
SI47_E	0.75	514	0	1	8.15E-02	1.97E-02	1.47E-03	9.99E-04	8.84E-04	1.86E-04	0.00E+00	7.51E-05	5.32E-05	1.99E-07	5.24E-06	227.4	2.19E-03	3.65E-03
SI47_E	0.75	340	0	1	5.33E-02	1.13E-02	9.49E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.94E-05	3.50E-05	1.31E-07	3.45E-06	146.6	1.44E-03	2.41E-03
SI47_E	0.75	288	0	1	4.48E-02	8.58E-03	7.89E-04	5.59E-04	4.95E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.11E-07	2.90E-06	121.9	1.21E-03	2.04E-03
SI47_E	0.75	244	0	1	3.78E-02	6.52E-03	6.59E-04	4.74E-04	4.20E-04	8.70E-05	0.00E+00	3.52E-05	2.49E-05	9.44E-08	2.45E-06	101.7	1.03E-03	1.73E-03
SI47_E	0.75	201	0	1	3.09E-02	4.79E-03	5.33E-04	3.89E-04	3.45E-04	7.12E-05	0.00E+00	2.88E-05	2.04E-05	7.75E-08	2.01E-06	82.3	8.40E-04	1.42E-03
SI47_E	0.75	148	0	1	2.27E-02	3.15E-03	3.89E-04	2.88E-04	2.55E-04	5.25E-05	0.00E+00	2.12E-05	1.50E-05	5.73E-08	1.48E-06	60.0	6.19E-04	1.05E-03
SI47_W	0.75	105	0	1	1.59E-02	1.96E-03	2.71E-04	2.03E-04	1.80E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.04E-08	1.04E-06	41.8	4.36E-04	7.41E-04
SI47_W	0.75	70	0	1	1.06E-02	1.17E-03	1.79E-04	1.35E-04	1.20E-04	2.46E-05	0.00E+00	9.93E-06	7.04E-06	2.70E-08	6.93E-07	27.6	2.90E-04	4.94E-04
SI47_W	0.75	61	0	1	9.22E-03	9.12E-04	1.54E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.14E-06	2.36E-08	6.05E-07	23.8	2.53E-04	4.32E-04
SI47_W	0.75	44	0	1	6.57E-03	6.51E-04	1.10E-04	8.46E-05	7.49E-05	1.53E-05	0.00E+00	6.18E-06	4.38E-06	1.69E-08	4.31E-07	16.9	1.80E-04	3.09E-04
SI47_W	0.75	61	0	1	9.19E-03	9.12E-04	1.53E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.65E-06	6.13E-06	2.36E-08	6.03E-07	23.6	2.52E-04	4.32E-04
SI47_W	0.75	148	0	1	2.23E-02	2.21E-03	3.71E-04	2.88E-04	2.55E-04	5.20E-05	0.00E+00	2.10E-05	1.49E-05	5.73E-08	1.47E-06	57.4	6.13E-04	1.05E-03
SI47_W	0.75	445	0	1	6.71E-02	6.64E-03	1.12E-03	8.63E-04	7.64E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.72E-07	4.40E-06	173.1	1.84E-03	3.15E-03
SI47_W	0.75	680	0	1	1.04E-01	1.24E-02	1.76E-03	1.32E-03	1.17E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.63E-07	6.77E-06	271.3	2.83E-03	4.82E-03
SI47_W	0.75	549	0	1	8.47E-02	1.34E-02	1.47E-03	1.07E-03	9.44E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.12E-07	5.51E-06	226.5	2.30E-03	3.89E-03
SI47_W	0.75	453	0	1	7.05E-02	1.28E-02	1.24E-03	8.80E-04	7.79E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.75E-07	4.57E-06	191.0	1.91E-03	3.21E-03
SI47_W	0.75	410	0	1	6.41E-02	1.29E-02	1.14E-03	7.95E-04	7.04E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.58E-07	4.15E-06	175.5	1.73E-03	2.90E-03
SI47_W	0.75	462	0	1	7.31E-02	1.73E-02	1.32E-03	8.97E-04	7.94E-04	1.67E-04	0.00E+00	6.75E-05	4.78E-05	1.79E-07	4.71E-06	204.0	1.97E-03	3.27E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI47_W	0.75	488	0	1	7.75E-02	1.90E-02	1.41E-03	9.48E-04	8.39E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.89E-07	4.98E-06	217.3	2.08E-03	3.46E-03
SI47_W	0.75	497	0	1	7.91E-02	1.99E-02	1.44E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.92E-07	5.08E-06	222.1	2.12E-03	3.52E-03
SI47_W	0.75	514	0	1	8.20E-02	2.12E-02	1.50E-03	9.99E-04	8.84E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	231.0	2.20E-03	3.65E-03
SI47_W	0.75	558	0	1	8.89E-02	2.28E-02	1.62E-03	1.08E-03	9.59E-04	2.02E-04	0.00E+00	8.18E-05	5.79E-05	2.16E-07	5.71E-06	250.1	2.39E-03	3.95E-03
SI47_W	0.75	689	0	1	1.10E-01	2.80E-02	2.00E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.66E-07	7.04E-06	308.5	2.94E-03	4.88E-03
SI47_W	0.75	741	0	1	1.18E-01	2.93E-02	2.14E-03	1.44E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.87E-07	7.57E-06	329.9	3.16E-03	5.25E-03
SI47_W	0.75	514	0	1	8.15E-02	1.97E-02	1.47E-03	9.99E-04	8.84E-04	1.86E-04	0.00E+00	7.51E-05	5.32E-05	1.99E-07	5.24E-06	227.4	2.19E-03	3.65E-03
SI47_W	0.75	340	0	1	5.33E-02	1.13E-02	9.49E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.94E-05	3.50E-05	1.31E-07	3.45E-06	146.6	1.44E-03	2.41E-03
SI47_W	0.75	288	0	1	4.48E-02	8.58E-03	7.89E-04	5.59E-04	4.95E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.11E-07	2.90E-06	121.9	1.21E-03	2.04E-03
SI47_W	0.75	244	0	1	3.78E-02	6.52E-03	6.59E-04	4.74E-04	4.20E-04	8.70E-05	0.00E+00	3.52E-05	2.49E-05	9.44E-08	2.45E-06	101.7	1.03E-03	1.73E-03
SI47_W	0.75	201	0	1	3.09E-02	4.79E-03	5.33E-04	3.89E-04	3.45E-04	7.12E-05	0.00E+00	2.88E-05	2.04E-05	7.75E-08	2.01E-06	82.3	8.40E-04	1.42E-03
SI47_W	0.75	148	0	1	2.27E-02	3.15E-03	3.89E-04	2.88E-04	2.55E-04	5.25E-05	0.00E+00	2.12E-05	1.50E-05	5.73E-08	1.48E-06	60.0	6.19E-04	1.05E-03
SI48_E	0.75	105	0	1	1.59E-02	1.96E-03	2.71E-04	2.03E-04	1.80E-04	3.69E-05	0.00E+00	1.49E-05	1.06E-05	4.04E-08	1.04E-06	41.8	4.36E-04	7.41E-04
SI48_E	0.75	70	0	1	1.06E-02	1.17E-03	1.79E-04	1.35E-04	1.20E-04	2.46E-05	0.00E+00	9.93E-06	7.04E-06	2.70E-08	6.93E-07	27.6	2.90E-04	4.94E-04
SI48_E	0.75	61	0	1	9.22E-03	9.12E-04	1.54E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.66E-06	6.14E-06	2.36E-08	6.05E-07	23.8	2.53E-04	4.32E-04
SI48_E	0.75	44	0	1	6.57E-03	6.51E-04	1.10E-04	8.46E-05	7.49E-05	1.53E-05	0.00E+00	6.18E-06	4.38E-06	1.69E-08	4.31E-07	16.9	1.80E-04	3.09E-04
SI48_E	0.75	61	0	1	9.19E-03	9.12E-04	1.53E-04	1.18E-04	1.05E-04	2.14E-05	0.00E+00	8.65E-06	6.13E-06	2.36E-08	6.03E-07	23.6	2.52E-04	4.32E-04
SI48_E	0.75	148	0	1	2.23E-02	2.21E-03	3.71E-04	2.88E-04	2.55E-04	5.20E-05	0.00E+00	2.10E-05	1.49E-05	5.73E-08	1.47E-06	57.4	6.13E-04	1.05E-03
SI48_E	0.75	445	0	1	6.71E-02	6.64E-03	1.12E-03	8.63E-04	7.64E-04	1.56E-04	0.00E+00	6.31E-05	4.47E-05	1.72E-07	4.40E-06	173.1	1.84E-03	3.15E-03
SI48_E	0.75	680	0	1	1.04E-01	1.24E-02	1.76E-03	1.32E-03	1.17E-03	2.40E-04	0.00E+00	9.70E-05	6.87E-05	2.63E-07	6.77E-06	271.3	2.83E-03	4.82E-03
SI48_E	0.75	549	0	1	8.47E-02	1.34E-02	1.47E-03	1.07E-03	9.44E-04	1.95E-04	0.00E+00	7.89E-05	5.59E-05	2.12E-07	5.51E-06	226.5	2.30E-03	3.89E-03
SI48_E	0.75	453	0	1	7.05E-02	1.28E-02	1.24E-03	8.80E-04	7.79E-04	1.62E-04	0.00E+00	6.55E-05	4.64E-05	1.75E-07	4.57E-06	191.0	1.91E-03	3.21E-03
SI48_E	0.75	410	0	1	6.41E-02	1.29E-02	1.14E-03	7.95E-04	7.04E-04	1.47E-04	0.00E+00	5.94E-05	4.21E-05	1.58E-07	4.15E-06	175.5	1.73E-03	2.90E-03
SI48_E	0.75	462	0	1	7.31E-02	1.73E-02	1.32E-03	8.97E-04	7.94E-04	1.67E-04	0.00E+00	6.75E-05	4.78E-05	1.79E-07	4.71E-06	204.0	1.97E-03	3.27E-03
SI48_E	0.75	488	0	1	7.75E-02	1.90E-02	1.41E-03	9.48E-04	8.39E-04	1.77E-04	0.00E+00	7.14E-05	5.06E-05	1.89E-07	4.98E-06	217.3	2.08E-03	3.46E-03
SI48_E	0.75	497	0	1	7.91E-02	1.99E-02	1.44E-03	9.65E-04	8.54E-04	1.80E-04	0.00E+00	7.28E-05	5.16E-05	1.92E-07	5.08E-06	222.1	2.12E-03	3.52E-03
SI48_E	0.75	514	0	1	8.20E-02	2.12E-02	1.50E-03	9.99E-04	8.84E-04	1.87E-04	0.00E+00	7.54E-05	5.34E-05	1.99E-07	5.26E-06	231.0	2.20E-03	3.65E-03
SI48_E	0.75	558	0	1	8.89E-02	2.28E-02	1.62E-03	1.08E-03	9.59E-04	2.02E-04	0.00E+00	8.18E-05	5.79E-05	2.16E-07	5.71E-06	250.1	2.39E-03	3.95E-03
SI48_E	0.75	689	0	1	1.10E-01	2.80E-02	2.00E-03	1.34E-03	1.18E-03	2.50E-04	0.00E+00	1.01E-04	7.15E-05	2.66E-07	7.04E-06	308.5	2.94E-03	4.88E-03
SI48_E	0.75	741	0	1	1.18E-01	2.93E-02	2.14E-03	1.44E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.68E-05	2.87E-07	7.57E-06	329.9	3.16E-03	5.25E-03
SI48_E	0.75	514	0	1	8.15E-02	1.97E-02	1.47E-03	9.99E-04	8.84E-04	1.86E-04	0.00E+00	7.51E-05	5.32E-05	1.99E-07	5.24E-06	227.4	2.19E-03	3.65E-03
SI48_E	0.75	340	0	1	5.33E-02	1.13E-02	9.49E-04	6.60E-04	5.85E-04	1.22E-04	0.00E+00	4.94E-05	3.50E-05	1.31E-07	3.45E-06	146.6	1.44E-03	2.41E-03
SI48_E	0.75	288	0	1	4.48E-02	8.58E-03	7.89E-04	5.59E-04	4.95E-04	1.03E-04	0.00E+00	4.16E-05	2.95E-05	1.11E-07	2.90E-06	121.9	1.21E-03	2.04E-03
SI48_E	0.75	244	0	1	3.78E-02	6.52E-03	6.59E-04	4.74E-04	4.20E-04	8.70E-05	0.00E+00	3.52E-05	2.49E-05	9.44E-08	2.45E-06	101.7	1.03E-03	1.73E-03
SI48_E	0.75	201	0	1	3.09E-02	4.79E-03	5.33E-04	3.89E-04	3.45E-04	7.12E-05	0.00E+00	2.88E-05	2.04E-05	7.75E-08	2.01E-06	82.3	8.40E-04	1.42E-03
SI48_E	0.75	148	0	1	2.27E-02	3.15E-03	3.89E-04	2.88E-04	2.55E-04	5.25E-05	0.00E+00	2.12E-05	1.50E-05	5.73E-08	1.48E-06	60.0	6.19E-04	1.05E-03
SI48_W	0.75	111	0	1	1.70E-02	2.09E-03	2.88E-04	2.16E-04	1.91E-04	3.93E-05	0.00E+00	1.59E-05	1.13E-05	4.30E-08	1.11E-06	44.5	4.63E-04	7.89E-04
SI48_W	0.75	74	0	1	1.13E-02	1.25E-03	1.90E-04	1.44E-04	1.28E-04	2.61E-05	0.00E+00	1.06E-05	7.49E-06	2.87E-08	7.37E-07	29.3	3.08E-04	5.26E-04
SI48_W	0.75	65	0	1	9.81E-03	9.70E-04	1.64E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.22E-06	6.53E-06	2.51E-08	6.43E-07	25.4	2.69E-04	4.60E-04
SI48_W	0.75	46	0	1	6.99E-03	6.93E-04	1.17E-04	9.01E-05	7.98E-05	1.63E-05	0.00E+00	6.58E-06	4.66E-06	1.79E-08	4.59E-07	18.0	1.92E-04	3.29E-04
SI48_W	0.75	65	0	1	9.78E-03	9.70E-04	1.63E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.20E-06	6.52E-06	2.51E-08	6.42E-07	25.1	2.68E-04	4.60E-04
SI48_W	0.75	158	0	1	2.38E-02	2.36E-03	3.95E-04	3.06E-04	2.71E-04	5.53E-05	0.00E+00	2.23E-05	1.58E-05	6.10E-08	1.56E-06	61.0	6.52E-04	1.12E-03
SI48_W	0.75	473	0	1	7.14E-02	7.07E-03	1.19E-03	9.19E-04	8.13E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.83E-07	4.69E-06	184.2	1.96E-03	3.35E-03
SI48_W	0.75	724	0	1	1.10E-01	1.32E-02	1.87E-03	1.40E-03	1.24E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.80E-07	7.20E-06	288.7	3.01E-03	5.13E-03
SI48_W	0.75	585	0	1	9.01E-02	1.42E-02	1.56E-03	1.13E-03	1.00E-03	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.26E-07	5.86E-06	241.1	2.45E-03	4.14E-03
SI48_W	0.75	482	0	1	7.50E-02	1.36E-02	1.32E-03	9.37E-04	8.29E-04	1.72E-04	0.00E+00	6.97E-05	4.94E-05	1.87E-07	4.86E-06	203.2	2.03E-03	3.42E-03
SI48_W	0.75	436	0	1	6.82E-02	1.37E-02	1.21E-03	8.47E-04	7.50E-04	1.56E-04	0.00E+00	6.32E-05	4.48E-05	1.69E-07	4.41E-06	186.8	1.84E-03	3.09E-03
SI48_W	0.75	492	0	1	7.78E-02	1.84E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.1	2.09E-03	3.48E-03
SI48_W	0.75	520	0	1	8.25E-02	2.03E-02	1.50E-03	1.01E-03	8.93E-04	1.88E-04	0.00E+00	7.60E-05	5.39E-05	2.01E-07	5.30E-06	231.2	2.22E-03	3.68E-03
SI48_W	0.75	529	0	1	8.41E-02	2.12E-02	1.53E-03	1.03E-03	9.09E-04	1.92E-04	0.00E+00	7.74E-05	5.49E-05	2.04E-07	5.40E-06	236.4	2.26E-03	3.75E-03
SI48_W	0.75	547	0	1	8.72E-02	2.25E-02	1.59E-03	1.06E-03	9.41E-04	1.99E-04	0.00E+00	8.03E-05	5.69E-05	2.12E-07	5.60E-06	245.9	2.34E-03	3.88E-03
SI48_W	0.75	594	0	1	9.46E-02	2.42E-02	1.72E-03	1.15E-03	1.02E-03	2.15E-04	0.00E+00	8.70E-05	6.17E-05	2.30E-07	6.07E-06	266.2	2.54E-03	4.21E-03
SI48_W	0.75	733	0	1	1.17E-01	2.98E-02	2.13E-03	1.42E-03	1.26E-03	2.66E-04	0.00E+00	1.07E-04	7.61E-05	2.83E-07	7.49E-06	328.3	3.13E-03	5.19E-03
SI48_W	0.75	789	0	1	1.25E-01	3.12E-02	2.27E-03	1.53E-03	1.36E-03	2.86E-04	0.00E+00	1.15E-04	8.17E-05	3.05E-07	8.05E-06	351.1	3.37E-03	5.59E-03
SI48_W	0.75	547	0	1	8.67E-02	2.10E-02	1.57E-03	1.06E-03	9.41E-04	1.98E-04	0.00E+00	8.00E-05	5.66E-05	2.12E-07	5.58E-06	242.0	2.33E-03	3.88E-03
SI48_W	0.75	362	0	1	5.67E-02	1.21E-02	1.01E-03	7.02E-04	6.22E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.67E-06	156.0	1.53E-03	2.56E-03
SI48_W	0.75	306	0	1	4.77E-02	9.13E-03	8.40E-04	5.94E-04	5.26E-04	1.10E-04	0.00E+00	4.43E-05	3.14E-05	1.18E-07	3.09E-06	129.7	1.29E-03	2.17E-03
SI48_W	0.75	260	0	1	4.02E-02	6.93E-03	7.01E-04	5.04E-04	4.47E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	1.00E-07	2.61E-06	108.2	1.09E-03	1.84E-03
SI48_W	0.75	213	0	1	3.28E-02	5.10E-03	5.67E-04	4.14E-04	3.67E-04	7.58E-05	0.00E+00	3.06E-05	2.17E-05	8.25E-08	2.14E-06	87.6	8.94E-04	1.51E-03
SI48_W	0.75	158	0	1	2.42E-02	3.36E-03	4.14E-04	3.06E-04	2.71E-04	5.59E-05	0.00E+00	2.26E-05	1.60E-05	6.10E-08	1.58E-06	63.9	6.59E-04	1.12E-03
SI49_E	0.75	111	0	1	1.70E-02	2.09E-03	2.88E-04	2.16E-04	1.91E-04	3.93E-05	0.00E+00	1.59E-05	1.13E-05	4.30E-08	1.11E-06	44.5	4.63E-04	7.89E-04
SI49_E	0.75	74	0	1	1.13E-02	1.25E-03	1.90E-04	1.44E-04	1.28E-04	2.61E-05	0.00E+00	1.06E-05	7.49E-06	2.87E-08	7.37E-07	29.3	3.08E-04	5.26E-04
SI49_E	0.75	65	0	1	9.81E-03	9.70E-04	1.64E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.22E-06	6.53E-06	2.51E-08	6.43E-07	25.4	2.69E-04	4.60E-04
SI49_E	0.75	46	0	1	6.99E-03	6.93E-04	1.17E-04	9.01E-05	7.98E-05	1.63E-05	0.00E+00	6.58E-06	4.66E-06	1.79E-08	4.59E-07	18.0	1.92E-04	3.29E-04
SI49_E	0.75	65	0	1	9.78E-03	9.70E-04	1.63E-04	1.26E-04	1.12E-04	2.28E-05	0.00E+00	9.20E-06	6.52E-06	2.51E-08	6.42E-07	25.1	2.68E-04	4.60E-04
SI49_E	0.75	158	0	1	2.38E-02	2.36E-03	3.95E-04	3.06E-04	2.71E-04	5.53E-05	0.00E+00	2.23E-05	1.58E-05	6.10E-08	1.56E-06	61.0	6.52E-04	1.12E-03
SI49_E	0.75	473	0	1	7.14E-02	7.07E-03	1.19E-03	9.19E-04	8.13E-04	1.66E-04	0.00E+00	6.71E-05	4.76E-05	1.83E-07	4.69E-06	184.2	1.96E-03	3.35E-03
SI49_E	0.75	724	0	1	1.10E-01	1.32E-02	1.87E-03	1.40E-03	1.24E-03	2.55E-04	0.00E+00	1.03E-04	7.31E-05	2.80E-07	7.20E-06	288.7	3.01E-03	5.13E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_E	0.75	585	0	1	9.01E-02	1.42E-02	1.56E-03	1.13E-03	1.00E-03	2.08E-04	0.00E+00	8.40E-05	5.95E-05	2.26E-07	5.86E-06	241.1	2.45E-03	4.14E-03
SI49_E	0.75	482	0	1	7.50E-02	1.36E-02	1.32E-03	9.37E-04	8.29E-04	1.72E-04	0.00E+00	6.97E-05	4.94E-05	1.87E-07	4.86E-06	203.2	2.03E-03	3.42E-03
SI49_E	0.75	436	0	1	6.82E-02	1.37E-02	1.21E-03	8.47E-04	7.50E-04	1.56E-04	0.00E+00	6.32E-05	4.48E-05	1.69E-07	4.41E-06	186.8	1.84E-03	3.09E-03
SI49_E	0.75	492	0	1	7.78E-02	1.84E-02	1.41E-03	9.55E-04	8.45E-04	1.78E-04	0.00E+00	7.18E-05	5.09E-05	1.90E-07	5.01E-06	217.1	2.09E-03	3.48E-03
SI49_E	0.75	520	0	1	8.25E-02	2.03E-02	1.50E-03	1.01E-03	8.93E-04	1.88E-04	0.00E+00	7.60E-05	5.39E-05	2.01E-07	5.30E-06	231.2	2.22E-03	3.68E-03
SI49_E	0.75	529	0	1	8.41E-02	2.12E-02	1.53E-03	1.03E-03	9.09E-04	1.92E-04	0.00E+00	7.74E-05	5.49E-05	2.04E-07	5.40E-06	236.4	2.26E-03	3.75E-03
SI49_E	0.75	547	0	1	8.72E-02	2.25E-02	1.59E-03	1.06E-03	9.41E-04	1.99E-04	0.00E+00	8.03E-05	5.69E-05	2.12E-07	5.60E-06	245.9	2.34E-03	3.88E-03
SI49_E	0.75	594	0	1	9.46E-02	2.42E-02	1.72E-03	1.15E-03	1.02E-03	2.15E-04	0.00E+00	8.70E-05	6.17E-05	2.30E-07	6.07E-06	266.2	2.54E-03	4.21E-03
SI49_E	0.75	733	0	1	1.17E-01	2.98E-02	2.13E-03	1.42E-03	1.26E-03	2.66E-04	0.00E+00	1.07E-04	7.61E-05	2.83E-07	7.49E-06	328.3	3.13E-03	5.19E-03
SI49_E	0.75	789	0	1	1.25E-01	3.12E-02	2.27E-03	1.53E-03	1.36E-03	2.86E-04	0.00E+00	1.15E-04	8.17E-05	3.05E-07	8.05E-06	351.1	3.37E-03	5.59E-03
SI49_E	0.75	547	0	1	8.67E-02	2.10E-02	1.57E-03	1.06E-03	9.41E-04	1.98E-04	0.00E+00	8.00E-05	5.66E-05	2.12E-07	5.58E-06	242.0	2.33E-03	3.88E-03
SI49_E	0.75	362	0	1	5.67E-02	1.21E-02	1.01E-03	7.02E-04	6.22E-04	1.30E-04	0.00E+00	5.25E-05	3.72E-05	1.40E-07	3.67E-06	156.0	1.53E-03	2.56E-03
SI49_E	0.75	306	0	1	4.77E-02	9.13E-03	8.40E-04	5.94E-04	5.26E-04	1.10E-04	0.00E+00	4.43E-05	3.14E-05	1.18E-07	3.09E-06	129.7	1.29E-03	2.17E-03
SI49_E	0.75	260	0	1	4.02E-02	6.93E-03	7.01E-04	5.04E-04	4.47E-04	9.26E-05	0.00E+00	3.74E-05	2.65E-05	1.00E-07	2.61E-06	108.2	1.09E-03	1.84E-03
SI49_E	0.75	213	0	1	3.28E-02	5.10E-03	5.67E-04	4.14E-04	3.67E-04	7.58E-05	0.00E+00	3.06E-05	2.17E-05	8.25E-08	2.14E-06	87.6	8.94E-04	1.51E-03
SI49_E	0.75	158	0	1	2.42E-02	3.36E-03	4.14E-04	3.06E-04	2.71E-04	5.59E-05	0.00E+00	2.26E-05	1.60E-05	6.10E-08	1.58E-06	63.9	6.59E-04	1.12E-03
SI49_W	0.75	134	0	1	2.05E-02	2.52E-03	3.48E-04	2.61E-04	2.31E-04	4.74E-05	0.00E+00	1.92E-05	1.36E-05	5.19E-08	1.34E-06	53.7	5.59E-04	9.52E-04
SI49_W	0.75	90	0	1	1.36E-02	1.50E-03	2.29E-04	1.74E-04	1.54E-04	3.16E-05	0.00E+00	1.27E-05	9.03E-06	3.46E-08	8.90E-07	35.4	3.72E-04	6.35E-04
SI49_W	0.75	78	0	1	1.18E-02	1.17E-03	1.98E-04	1.52E-04	1.35E-04	2.75E-05	0.00E+00	1.11E-05	7.88E-06	3.03E-08	7.76E-07	30.6	3.25E-04	5.55E-04
SI49_W	0.75	56	0	1	8.44E-03	8.36E-04	1.41E-04	1.09E-04	9.62E-05	1.96E-05	0.00E+00	7.94E-06	5.62E-06	2.16E-08	5.54E-07	21.7	2.32E-04	3.97E-04
SI49_W	0.75	78	0	1	1.18E-02	1.17E-03	1.96E-04	1.52E-04	1.35E-04	2.75E-05	0.00E+00	1.11E-05	7.87E-06	3.03E-08	7.75E-07	30.3	3.24E-04	5.55E-04
SI49_W	0.75	190	0	1	2.87E-02	2.84E-03	4.77E-04	3.69E-04	3.27E-04	6.67E-05	0.00E+00	2.70E-05	1.91E-05	7.36E-08	1.88E-06	73.7	7.87E-04	1.35E-03
SI49_W	0.75	571	0	1	8.62E-02	8.53E-03	1.44E-03	1.11E-03	9.82E-04	2.00E-04	0.00E+00	8.10E-05	5.74E-05	2.21E-07	5.65E-06	222.3	2.36E-03	4.05E-03
SI49_W	0.75	873	0	1	1.33E-01	1.59E-02	2.26E-03	1.70E-03	1.50E-03	3.08E-04	0.00E+00	1.25E-04	8.83E-05	3.38E-07	8.69E-06	348.3	3.63E-03	6.19E-03
SI49_W	0.75	705	0	1	1.09E-01	1.72E-02	1.88E-03	1.37E-03	1.21E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.73E-07	7.07E-06	290.9	2.96E-03	5.00E-03
SI49_W	0.75	582	0	1	9.05E-02	1.65E-02	1.59E-03	1.13E-03	1.00E-03	2.08E-04	0.00E+00	8.41E-05	5.96E-05	2.25E-07	5.87E-06	245.2	2.45E-03	4.13E-03
SI49_W	0.75	526	0	1	8.23E-02	1.66E-02	1.46E-03	1.02E-03	9.05E-04	1.89E-04	0.00E+00	7.63E-05	5.40E-05	2.03E-07	5.32E-06	225.4	2.23E-03	3.73E-03
SI49_W	0.75	593	0	1	9.39E-02	2.23E-02	1.70E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.29E-07	6.05E-06	262.0	2.53E-03	4.20E-03
SI49_W	0.75	627	0	1	9.96E-02	2.45E-02	1.81E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.17E-05	6.50E-05	2.42E-07	6.40E-06	279.0	2.68E-03	4.44E-03
SI49_W	0.75	638	0	1	1.02E-01	2.56E-02	1.85E-03	1.24E-03	1.10E-03	2.31E-04	0.00E+00	9.35E-05	6.62E-05	2.47E-07	6.52E-06	285.2	2.73E-03	4.52E-03
SI49_W	0.75	661	0	1	1.05E-01	2.72E-02	1.92E-03	1.28E-03	1.14E-03	2.40E-04	0.00E+00	9.68E-05	6.86E-05	2.55E-07	6.76E-06	296.7	2.83E-03	4.68E-03
SI49_W	0.75	717	0	1	1.14E-01	2.92E-02	2.08E-03	1.39E-03	1.23E-03	2.60E-04	0.00E+00	1.05E-04	7.44E-05	2.77E-07	7.33E-06	321.2	3.06E-03	5.08E-03
SI49_W	0.75	884	0	1	1.41E-01	3.60E-02	2.57E-03	1.72E-03	1.52E-03	3.21E-04	0.00E+00	1.30E-04	9.18E-05	3.42E-07	9.04E-06	396.1	3.78E-03	6.27E-03
SI49_W	0.75	952	0	1	1.51E-01	3.77E-02	2.74E-03	1.85E-03	1.64E-03	3.45E-04	0.00E+00	1.39E-04	9.86E-05	3.68E-07	9.72E-06	423.6	4.06E-03	6.74E-03
SI49_W	0.75	661	0	1	1.05E-01	2.53E-02	1.89E-03	1.28E-03	1.14E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	292.0	2.81E-03	4.68E-03
SI49_W	0.75	437	0	1	6.85E-02	1.46E-02	1.22E-03	8.48E-04	7.51E-04	1.57E-04	0.00E+00	6.34E-05	4.49E-05	1.69E-07	4.42E-06	188.2	1.85E-03	3.09E-03
SI49_W	0.75	369	0	1	5.75E-02	1.10E-02	1.01E-03	7.17E-04	6.35E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	156.5	1.56E-03	2.62E-03
SI49_W	0.75	313	0	1	4.85E-02	8.37E-03	8.46E-04	6.09E-04	5.39E-04	1.12E-04	0.00E+00	4.52E-05	3.20E-05	1.21E-07	3.15E-06	130.6	1.32E-03	2.22E-03
SI49_W	0.75	257	0	1	3.96E-02	6.15E-03	6.85E-04	5.00E-04	4.43E-04	9.15E-05	0.00E+00	3.70E-05	2.62E-05	9.96E-08	2.58E-06	105.7	1.08E-03	1.82E-03
SI49_W	0.75	190	0	1	2.92E-02	4.05E-03	4.99E-04	3.69E-04	3.27E-04	6.74E-05	0.00E+00	2.72E-05	1.93E-05	7.36E-08	1.90E-06	77.1	7.95E-04	1.35E-03
SI50_E	0.75	134	0	1	2.05E-02	2.52E-03	3.48E-04	2.61E-04	2.31E-04	4.74E-05	0.00E+00	1.92E-05	1.36E-05	5.19E-08	1.34E-06	53.7	5.59E-04	9.52E-04
SI50_E	0.75	90	0	1	1.36E-02	1.50E-03	2.29E-04	1.74E-04	1.54E-04	3.16E-05	0.00E+00	1.27E-05	9.03E-06	3.46E-08	8.90E-07	35.4	3.72E-04	6.35E-04
SI50_E	0.75	78	0	1	1.18E-02	1.17E-03	1.98E-04	1.52E-04	1.35E-04	2.75E-05	0.00E+00	1.11E-05	7.88E-06	3.03E-08	7.76E-07	30.6	3.25E-04	5.55E-04
SI50_E	0.75	56	0	1	8.44E-03	8.36E-04	1.41E-04	1.09E-04	9.62E-05	1.96E-05	0.00E+00	7.94E-06	5.62E-06	2.16E-08	5.54E-07	21.7	2.32E-04	3.97E-04
SI50_E	0.75	78	0	1	1.18E-02	1.17E-03	1.96E-04	1.52E-04	1.35E-04	2.75E-05	0.00E+00	1.11E-05	7.87E-06	3.03E-08	7.75E-07	30.3	3.24E-04	5.55E-04
SI50_E	0.75	190	0	1	2.87E-02	2.84E-03	4.77E-04	3.69E-04	3.27E-04	6.67E-05	0.00E+00	2.70E-05	1.91E-05	7.36E-08	1.88E-06	73.7	7.87E-04	1.35E-03
SI50_E	0.75	571	0	1	8.62E-02	8.53E-03	1.44E-03	1.11E-03	9.82E-04	2.00E-04	0.00E+00	8.10E-05	5.74E-05	2.21E-07	5.65E-06	222.3	2.36E-03	4.05E-03
SI50_E	0.75	873	0	1	1.33E-01	1.59E-02	2.26E-03	1.70E-03	1.50E-03	3.08E-04	0.00E+00	1.25E-04	8.83E-05	3.38E-07	8.69E-06	348.3	3.63E-03	6.19E-03
SI50_E	0.75	705	0	1	1.09E-01	1.72E-02	1.88E-03	1.37E-03	1.21E-03	2.51E-04	0.00E+00	1.01E-04	7.18E-05	2.73E-07	7.07E-06	290.9	2.96E-03	5.00E-03
SI50_E	0.75	582	0	1	9.05E-02	1.65E-02	1.59E-03	1.13E-03	1.00E-03	2.08E-04	0.00E+00	8.41E-05	5.96E-05	2.25E-07	5.87E-06	245.2	2.45E-03	4.13E-03
SI50_E	0.75	526	0	1	8.23E-02	1.66E-02	1.46E-03	1.02E-03	9.05E-04	1.89E-04	0.00E+00	7.63E-05	5.40E-05	2.03E-07	5.32E-06	225.4	2.23E-03	3.73E-03
SI50_E	0.75	593	0	1	9.39E-02	2.23E-02	1.70E-03	1.15E-03	1.02E-03	2.14E-04	0.00E+00	8.66E-05	6.14E-05	2.29E-07	6.05E-06	262.0	2.53E-03	4.20E-03
SI50_E	0.75	627	0	1	9.96E-02	2.45E-02	1.81E-03	1.22E-03	1.08E-03	2.27E-04	0.00E+00	9.17E-05	6.50E-05	2.42E-07	6.40E-06	279.0	2.68E-03	4.44E-03
SI50_E	0.75	638	0	1	1.02E-01	2.56E-02	1.85E-03	1.24E-03	1.10E-03	2.31E-04	0.00E+00	9.35E-05	6.62E-05	2.47E-07	6.52E-06	285.2	2.73E-03	4.52E-03
SI50_E	0.75	661	0	1	1.05E-01	2.72E-02	1.92E-03	1.28E-03	1.14E-03	2.40E-04	0.00E+00	9.68E-05	6.86E-05	2.55E-07	6.76E-06	296.7	2.83E-03	4.68E-03
SI50_E	0.75	717	0	1	1.14E-01	2.92E-02	2.08E-03	1.39E-03	1.23E-03	2.60E-04	0.00E+00	1.05E-04	7.44E-05	2.77E-07	7.33E-06	321.2	3.06E-03	5.08E-03
SI50_E	0.75	884	0	1	1.41E-01	3.60E-02	2.57E-03	1.72E-03	1.52E-03	3.21E-04	0.00E+00	1.30E-04	9.18E-05	3.42E-07	9.04E-06	396.1	3.78E-03	6.27E-03
SI50_E	0.75	952	0	1	1.51E-01	3.77E-02	2.74E-03	1.85E-03	1.64E-03	3.45E-04	0.00E+00	1.39E-04	9.86E-05	3.68E-07	9.72E-06	423.6	4.06E-03	6.74E-03
SI50_E	0.75	661	0	1	1.05E-01	2.53E-02	1.89E-03	1.28E-03	1.14E-03	2.39E-04	0.00E+00	9.65E-05	6.84E-05	2.55E-07	6.73E-06	292.0	2.81E-03	4.68E-03
SI50_E	0.75	437	0	1	6.85E-02	1.46E-02	1.22E-03	8.48E-04	7.51E-04	1.57E-04	0.00E+00	6.34E-05	4.49E-05	1.69E-07	4.42E-06	188.2	1.85E-03	3.09E-03
SI50_E	0.75	369	0	1	5.75E-02	1.10E-02	1.01E-03	7.17E-04	6.35E-04	1.32E-04	0.00E+00	5.34E-05	3.78E-05	1.43E-07	3.73E-06	156.5	1.56E-03	2.62E-03
SI50_E	0.75	313	0	1	4.85E-02	8.37E-03	8.46E-04	6.09E-04	5.39E-04	1.12E-04	0.00E+00	4.52E-05	3.20E-05	1.21E-07	3.15E-06	130.6	1.32E-03	2.22E-03
SI50_E	0.75	257	0	1	3.96E-02	6.15E-03	6.85E-04	5.00E-04	4.43E-04	9.15E-05	0.00E+00	3.70E-05	2.62E-05	9.96E-08	2.58E-06	105.7	1.08E-03	1.82E-03
SI50_E	0.75	190	0	1	2.92E-02	4.05E-03	4.99E-04	3.69E-04	3.27E-04	6.74E-05	0.00E+00	2.72E-05	1.93E-05	7.36E-08	1.90E-06	77.1	7.95E-04	1.35E-03
SI50_W	0.75	112	0	1	1.71E-02	2.10E-03	2.90E-04	2.18E-04	1.93E-04	3.96E-05	0.00E+00	1.60E-05	1.13E-05	4.34E-08	1.12E-06	44.8	4.67E-04	7.95E-04
SI50_W	0.75	75	0	1	1.14E-02	1.25E-03	1.91E-04	1.45E-04	1.29E-04	2.64E-05	0.00E+00	1.06E-05	7.54E-06	2.89E-08	7.43E-07	29.6	3.11E-04	5.30E-04
SI50_W	0.75	65	0	1	9.89E-03	9.78E-04	1.66E-04	1.27E-04	1.13E-04	2.30E-05	0.00E+00	9.29E-06	6.58E-06	2.53E-08	6.48E-07	25.6	2.71E-04	4.64E-04
SI50_W	0.75	47	0	1	7.05E-03	6.98E-04	1.17E-04	9.08E-05	8.04E-05	1.64E-05	0.00E+00	6.63E-06	4.70E-06	1.81E-08	4.63E-07	18.1	1.93E-04	3.31E-04

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI50_W	0.75	65	0	1	9.86E-03	9.78E-04	1.64E-04	1.27E-04	1.13E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.53E-08	6.47E-07	25.3	2.71E-04	4.64E-04
SI50_W	0.75	159	0	1	2.39E-02	2.37E-03	3.98E-04	3.09E-04	2.73E-04	5.57E-05	0.00E+00	2.25E-05	1.60E-05	6.14E-08	1.57E-06	61.5	6.57E-04	1.13E-03
SI50_W	0.75	477	0	1	7.20E-02	7.12E-03	1.20E-03	9.26E-04	8.20E-04	1.67E-04	0.00E+00	6.77E-05	4.79E-05	1.84E-07	4.72E-06	185.7	1.97E-03	3.38E-03
SI50_W	0.75	729	0	1	1.11E-01	1.33E-02	1.88E-03	1.42E-03	1.25E-03	2.57E-04	0.00E+00	1.04E-04	7.37E-05	2.82E-07	7.26E-06	290.9	3.03E-03	5.17E-03
SI50_W	0.75	589	0	1	9.08E-02	1.43E-02	1.57E-03	1.14E-03	1.01E-03	2.09E-04	0.00E+00	8.47E-05	6.00E-05	2.28E-07	5.91E-06	242.9	2.47E-03	4.17E-03
SI50_W	0.75	486	0	1	7.56E-02	1.37E-02	1.33E-03	9.44E-04	8.36E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.88E-07	4.90E-06	204.8	2.05E-03	3.45E-03
SI50_W	0.75	439	0	1	6.88E-02	1.38E-02	1.22E-03	8.53E-04	7.55E-04	1.58E-04	0.00E+00	6.37E-05	4.51E-05	1.70E-07	4.45E-06	188.3	1.86E-03	3.11E-03
SI50_W	0.75	496	0	1	7.84E-02	1.86E-02	1.42E-03	9.62E-04	8.52E-04	1.79E-04	0.00E+00	7.24E-05	5.13E-05	1.92E-07	5.05E-06	218.8	2.11E-03	3.51E-03
SI50_W	0.75	524	0	1	8.31E-02	2.04E-02	1.51E-03	1.02E-03	9.00E-04	1.90E-04	0.00E+00	7.66E-05	5.43E-05	2.02E-07	5.35E-06	233.0	2.23E-03	3.71E-03
SI50_W	0.75	533	0	1	8.48E-02	2.13E-02	1.54E-03	1.03E-03	9.16E-04	1.93E-04	0.00E+00	7.81E-05	5.53E-05	2.06E-07	5.45E-06	238.2	2.28E-03	3.78E-03
SI50_W	0.75	552	0	1	8.79E-02	2.27E-02	1.60E-03	1.07E-03	9.48E-04	2.00E-04	0.00E+00	8.09E-05	5.73E-05	2.13E-07	5.64E-06	247.8	2.36E-03	3.91E-03
SI50_W	0.75	598	0	1	9.53E-02	2.44E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.77E-05	6.21E-05	2.31E-07	6.12E-06	268.2	2.56E-03	4.24E-03
SI50_W	0.75	739	0	1	1.18E-01	3.01E-02	2.14E-03	1.43E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.67E-05	2.86E-07	7.55E-06	330.8	3.16E-03	5.23E-03
SI50_W	0.75	795	0	1	1.26E-01	3.15E-02	2.29E-03	1.54E-03	1.37E-03	2.88E-04	0.00E+00	1.16E-04	8.24E-05	3.07E-07	8.11E-06	353.8	3.39E-03	5.63E-03
SI50_W	0.75	552	0	1	8.74E-02	2.11E-02	1.58E-03	1.07E-03	9.48E-04	1.99E-04	0.00E+00	8.06E-05	5.71E-05	2.13E-07	5.62E-06	243.9	2.35E-03	3.91E-03
SI50_W	0.75	365	0	1	5.72E-02	1.22E-02	1.02E-03	7.08E-04	6.27E-04	1.31E-04	0.00E+00	5.29E-05	3.75E-05	1.41E-07	3.69E-06	157.2	1.54E-03	2.58E-03
SI50_W	0.75	309	0	1	4.81E-02	9.20E-03	8.46E-04	5.99E-04	5.30E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.19E-07	3.11E-06	130.7	1.30E-03	2.19E-03
SI50_W	0.75	262	0	1	4.05E-02	6.99E-03	7.06E-04	5.08E-04	4.50E-04	9.33E-05	0.00E+00	3.77E-05	2.67E-05	1.01E-07	2.63E-06	109.1	1.10E-03	1.86E-03
SI50_W	0.75	215	0	1	3.31E-02	5.13E-03	5.72E-04	4.17E-04	3.70E-04	7.64E-05	0.00E+00	3.09E-05	2.19E-05	8.31E-08	2.15E-06	88.3	9.01E-04	1.52E-03
SI50_W	0.75	159	0	1	2.43E-02	3.38E-03	4.17E-04	3.09E-04	2.73E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.15E-08	1.59E-06	64.4	6.64E-04	1.13E-03
SI51_E	0.75	112	0	1	1.71E-02	2.10E-03	2.90E-04	2.18E-04	1.93E-04	3.96E-05	0.00E+00	1.60E-05	1.13E-05	4.34E-08	1.12E-06	44.8	4.67E-04	7.95E-04
SI51_E	0.75	75	0	1	1.14E-02	1.25E-03	1.91E-04	1.45E-04	1.29E-04	2.64E-05	0.00E+00	1.06E-05	7.54E-06	2.89E-08	7.43E-07	29.6	3.11E-04	5.30E-04
SI51_E	0.75	65	0	1	9.89E-03	9.78E-04	1.66E-04	1.27E-04	1.13E-04	2.30E-05	0.00E+00	9.29E-06	6.58E-06	2.53E-08	6.48E-07	25.6	2.71E-04	4.64E-04
SI51_E	0.75	47	0	1	7.05E-03	6.98E-04	1.17E-04	9.08E-05	8.04E-05	1.64E-05	0.00E+00	6.63E-06	4.70E-06	1.81E-08	4.63E-07	18.1	1.93E-04	3.31E-04
SI51_E	0.75	65	0	1	9.86E-03	9.78E-04	1.64E-04	1.27E-04	1.13E-04	2.30E-05	0.00E+00	9.27E-06	6.57E-06	2.53E-08	6.47E-07	25.3	2.71E-04	4.64E-04
SI51_E	0.75	159	0	1	2.39E-02	2.37E-03	3.98E-04	3.09E-04	2.73E-04	5.57E-05	0.00E+00	2.25E-05	1.60E-05	6.14E-08	1.57E-06	61.5	6.57E-04	1.13E-03
SI51_E	0.75	477	0	1	7.20E-02	7.12E-03	1.20E-03	9.26E-04	8.20E-04	1.67E-04	0.00E+00	6.77E-05	4.79E-05	1.84E-07	4.72E-06	185.7	1.97E-03	3.38E-03
SI51_E	0.75	729	0	1	1.11E-01	1.33E-02	1.88E-03	1.42E-03	1.25E-03	2.57E-04	0.00E+00	1.04E-04	7.37E-05	2.82E-07	7.26E-06	290.9	3.03E-03	5.17E-03
SI51_E	0.75	589	0	1	9.08E-02	1.43E-02	1.57E-03	1.14E-03	1.01E-03	2.09E-04	0.00E+00	8.47E-05	6.00E-05	2.28E-07	5.91E-06	242.9	2.47E-03	4.17E-03
SI51_E	0.75	486	0	1	7.56E-02	1.37E-02	1.33E-03	9.44E-04	8.36E-04	1.74E-04	0.00E+00	7.02E-05	4.97E-05	1.88E-07	4.90E-06	204.8	2.05E-03	3.45E-03
SI51_E	0.75	439	0	1	6.88E-02	1.38E-02	1.22E-03	8.53E-04	7.55E-04	1.58E-04	0.00E+00	6.37E-05	4.51E-05	1.70E-07	4.45E-06	188.3	1.86E-03	3.11E-03
SI51_E	0.75	496	0	1	7.84E-02	1.86E-02	1.42E-03	9.62E-04	8.52E-04	1.79E-04	0.00E+00	7.24E-05	5.13E-05	1.92E-07	5.05E-06	218.8	2.11E-03	3.51E-03
SI51_E	0.75	524	0	1	8.31E-02	2.04E-02	1.51E-03	1.02E-03	9.00E-04	1.90E-04	0.00E+00	7.66E-05	5.43E-05	2.02E-07	5.35E-06	233.0	2.23E-03	3.71E-03
SI51_E	0.75	533	0	1	8.48E-02	2.13E-02	1.54E-03	1.03E-03	9.16E-04	1.93E-04	0.00E+00	7.81E-05	5.53E-05	2.06E-07	5.45E-06	238.2	2.28E-03	3.78E-03
SI51_E	0.75	552	0	1	8.79E-02	2.27E-02	1.60E-03	1.07E-03	9.48E-04	2.00E-04	0.00E+00	8.09E-05	5.73E-05	2.13E-07	5.64E-06	247.8	2.36E-03	3.91E-03
SI51_E	0.75	598	0	1	9.53E-02	2.44E-02	1.74E-03	1.16E-03	1.03E-03	2.17E-04	0.00E+00	8.77E-05	6.21E-05	2.31E-07	6.12E-06	268.2	2.56E-03	4.24E-03
SI51_E	0.75	739	0	1	1.18E-01	3.01E-02	2.14E-03	1.43E-03	1.27E-03	2.68E-04	0.00E+00	1.08E-04	7.67E-05	2.86E-07	7.55E-06	330.8	3.16E-03	5.23E-03
SI51_E	0.75	795	0	1	1.26E-01	3.15E-02	2.29E-03	1.54E-03	1.37E-03	2.88E-04	0.00E+00	1.16E-04	8.24E-05	3.07E-07	8.11E-06	353.8	3.39E-03	5.63E-03
SI51_E	0.75	552	0	1	8.74E-02	2.11E-02	1.58E-03	1.07E-03	9.48E-04	1.99E-04	0.00E+00	8.06E-05	5.71E-05	2.13E-07	5.62E-06	243.9	2.35E-03	3.91E-03
SI51_E	0.75	365	0	1	5.72E-02	1.22E-02	1.02E-03	7.08E-04	6.27E-04	1.31E-04	0.00E+00	5.29E-05	3.75E-05	1.41E-07	3.69E-06	157.2	1.54E-03	2.58E-03
SI51_E	0.75	309	0	1	4.81E-02	9.20E-03	8.46E-04	5.99E-04	5.30E-04	1.10E-04	0.00E+00	4.46E-05	3.16E-05	1.19E-07	3.11E-06	130.7	1.30E-03	2.19E-03
SI51_E	0.75	262	0	1	4.05E-02	6.99E-03	7.06E-04	5.08E-04	4.50E-04	9.33E-05	0.00E+00	3.77E-05	2.67E-05	1.01E-07	2.63E-06	109.1	1.10E-03	1.86E-03
SI51_E	0.75	215	0	1	3.31E-02	5.13E-03	5.72E-04	4.17E-04	3.70E-04	7.64E-05	0.00E+00	3.09E-05	2.19E-05	8.31E-08	2.15E-06	88.3	9.01E-04	1.52E-03
SI51_E	0.75	159	0	1	2.43E-02	3.38E-03	4.17E-04	3.09E-04	2.73E-04	5.63E-05	0.00E+00	2.28E-05	1.61E-05	6.15E-08	1.59E-06	64.4	6.64E-04	1.13E-03
SI51_W	0.75	128	0	1	1.95E-02	2.40E-03	3.31E-04	2.49E-04	2.20E-04	4.52E-05	0.00E+00	1.83E-05	1.29E-05	4.95E-08	1.28E-06	51.2	5.33E-04	9.07E-04
SI51_W	0.75	85	0	1	1.30E-02	1.43E-03	2.19E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.61E-06	3.30E-08	8.48E-07	33.7	3.55E-04	6.05E-04
SI51_W	0.75	75	0	1	1.13E-02	1.12E-03	1.89E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.51E-06	2.89E-08	7.40E-07	29.2	3.09E-04	5.29E-04
SI51_W	0.75	53	0	1	8.04E-03	7.97E-04	1.34E-04	1.04E-04	9.17E-05	1.87E-05	0.00E+00	7.56E-06	5.36E-06	2.06E-08	5.28E-07	20.7	2.21E-04	3.78E-04
SI51_W	0.75	75	0	1	1.13E-02	1.12E-03	1.87E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.89E-08	7.39E-07	28.9	3.09E-04	5.29E-04
SI51_W	0.75	181	0	1	2.73E-02	2.71E-03	4.55E-04	3.52E-04	3.12E-04	6.36E-05	0.00E+00	2.57E-05	1.82E-05	7.01E-08	1.79E-06	70.2	7.50E-04	1.29E-03
SI51_W	0.75	544	0	1	8.21E-02	8.13E-03	1.37E-03	1.06E-03	9.36E-04	1.91E-04	0.00E+00	7.72E-05	5.47E-05	2.10E-07	5.39E-06	211.9	2.25E-03	3.86E-03
SI51_W	0.75	832	0	1	1.27E-01	1.52E-02	2.15E-03	1.62E-03	1.43E-03	2.94E-04	0.00E+00	1.19E-04	8.41E-05	3.22E-07	8.29E-06	332.0	3.46E-03	5.90E-03
SI51_W	0.75	672	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.39E-04	0.00E+00	9.66E-05	6.85E-05	2.60E-07	6.74E-06	277.3	2.82E-03	4.76E-03
SI51_W	0.75	555	0	1	8.63E-02	1.57E-02	1.51E-03	1.08E-03	9.54E-04	1.98E-04	0.00E+00	8.01E-05	5.68E-05	2.15E-07	5.59E-06	233.7	2.34E-03	3.93E-03
SI51_W	0.75	502	0	1	7.85E-02	1.58E-02	1.39E-03	9.74E-04	8.62E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.94E-07	5.07E-06	214.9	2.12E-03	3.55E-03
SI51_W	0.75	566	0	1	8.95E-02	2.12E-02	1.62E-03	1.10E-03	9.72E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.19E-07	5.76E-06	249.7	2.41E-03	4.01E-03
SI51_W	0.75	598	0	1	9.49E-02	2.33E-02	1.72E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.74E-05	6.19E-05	2.31E-07	6.10E-06	265.9	2.55E-03	4.23E-03
SI51_W	0.75	608	0	1	9.68E-02	2.44E-02	1.76E-03	1.18E-03	1.05E-03	2.20E-04	0.00E+00	8.91E-05	6.31E-05	2.35E-07	6.22E-06	271.9	2.60E-03	4.31E-03
SI51_W	0.75	630	0	1	1.00E-01	2.59E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.43E-07	6.44E-06	282.8	2.69E-03	4.46E-03
SI51_W	0.75	683	0	1	1.09E-01	2.79E-02	1.98E-03	1.33E-03	1.17E-03	2.48E-04	0.00E+00	1.00E-04	7.09E-05	2.64E-07	6.98E-06	306.1	2.92E-03	4.84E-03
SI51_W	0.75	843	0	1	1.34E-01	3.43E-02	2.45E-03	1.64E-03	1.45E-03	3.06E-04	0.00E+00	1.24E-04	8.75E-05	3.26E-07	8.62E-06	377.6	3.60E-03	5.97E-03
SI51_W	0.75	907	0	1	1.44E-01	3.59E-02	2.62E-03	1.76E-03	1.56E-03	3.28E-04	0.00E+00	1.33E-04	9.40E-05	3.51E-07	9.26E-06	403.8	3.87E-03	6.43E-03
SI51_W	0.75	630	0	1	9.97E-02	2.41E-02	1.80E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.20E-05	6.52E-05	2.43E-07	6.42E-06	278.3	2.68E-03	4.46E-03
SI51_W	0.75	416	0	1	6.53E-02	1.39E-02	1.16E-03	8.08E-04	7.15E-04	1.50E-04	0.00E+00	6.04E-05	4.28E-05	1.61E-07	4.22E-06	179.4	1.76E-03	2.95E-03
SI51_W	0.75	352	0	1	5.49E-02	1.05E-02	9.66E-04	6.84E-04	6.05E-04	1.26E-04	0.00E+00	5.09E-05	3.61E-05	1.36E-07	3.55E-06	149.1	1.49E-03	2.50E-03
SI51_W	0.75	299	0	1	4.63E-02	7.98E-03	8.06E-04	5.80E-04	5.14E-04	1.07E-04	0.00E+00	4.30E-05	3.05E-05	1.16E-07	3.00E-06	124.5	1.26E-03	2.12E-03
SI51_W	0.75	245	0	1	3.78E-02	5.86E-03	6.53E-04	4.76E-04	4.22E-04	8.72E-05	0.00E+00	3.52E-05	2.50E-05	9.49E-08	2.46E-06	100.8	1.03E-03	1.74E-03
SI51_W	0.75	181	0	1	2.78E-02	3.86E-03	4.76E-04	3.52E-04	3.12E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	7.01E-08	1.81E-06	73.5	7.57E-04	1.29E-03

Table F-12: Dundas BRT - Dundas Street West Vehicle (CAR) Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_E	0.75	128	0	1	1.95E-02	2.40E-03	3.31E-04	2.49E-04	2.20E-04	4.52E-05	0.00E+00	1.83E-05	1.29E-05	4.95E-08	1.28E-06	51.2	5.33E-04	9.07E-04
SI52_E	0.75	85	0	1	1.30E-02	1.43E-03	2.19E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.61E-06	3.30E-08	8.48E-07	33.7	3.55E-04	6.05E-04
SI52_E	0.75	75	0	1	1.13E-02	1.12E-03	1.89E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.51E-06	2.89E-08	7.40E-07	29.2	3.09E-04	5.29E-04
SI52_E	0.75	53	0	1	8.04E-03	7.97E-04	1.34E-04	1.04E-04	9.17E-05	1.87E-05	0.00E+00	7.56E-06	5.36E-06	2.06E-08	5.28E-07	20.7	2.21E-04	3.78E-04
SI52_E	0.75	75	0	1	1.13E-02	1.12E-03	1.87E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.89E-08	7.39E-07	28.9	3.09E-04	5.29E-04
SI52_E	0.75	181	0	1	2.73E-02	2.71E-03	4.55E-04	3.52E-04	3.12E-04	6.36E-05	0.00E+00	2.57E-05	1.82E-05	7.01E-08	1.79E-06	70.2	7.50E-04	1.29E-03
SI52_E	0.75	544	0	1	8.21E-02	8.13E-03	1.37E-03	1.06E-03	9.36E-04	1.91E-04	0.00E+00	7.72E-05	5.47E-05	2.10E-07	5.39E-06	211.9	2.25E-03	3.86E-03
SI52_E	0.75	832	0	1	1.27E-01	1.52E-02	2.15E-03	1.62E-03	1.43E-03	2.94E-04	0.00E+00	1.19E-04	8.41E-05	3.22E-07	8.29E-06	332.0	3.46E-03	5.90E-03
SI52_E	0.75	672	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.39E-04	0.00E+00	9.66E-05	6.85E-05	2.60E-07	6.74E-06	277.3	2.82E-03	4.76E-03
SI52_E	0.75	555	0	1	8.63E-02	1.57E-02	1.51E-03	1.08E-03	9.54E-04	1.98E-04	0.00E+00	8.01E-05	5.68E-05	2.15E-07	5.59E-06	233.7	2.34E-03	3.93E-03
SI52_E	0.75	502	0	1	7.85E-02	1.58E-02	1.39E-03	9.74E-04	8.62E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.94E-07	5.07E-06	214.9	2.12E-03	3.55E-03
SI52_E	0.75	566	0	1	8.95E-02	2.12E-02	1.62E-03	1.10E-03	9.72E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.19E-07	5.76E-06	249.7	2.41E-03	4.01E-03
SI52_E	0.75	598	0	1	9.49E-02	2.33E-02	1.72E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.74E-05	6.19E-05	2.31E-07	6.10E-06	265.9	2.55E-03	4.23E-03
SI52_E	0.75	608	0	1	9.68E-02	2.44E-02	1.76E-03	1.18E-03	1.05E-03	2.20E-04	0.00E+00	8.91E-05	6.31E-05	2.35E-07	6.22E-06	271.9	2.60E-03	4.31E-03
SI52_E	0.75	630	0	1	1.00E-01	2.59E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.43E-07	6.44E-06	282.8	2.69E-03	4.46E-03
SI52_E	0.75	683	0	1	1.09E-01	2.79E-02	1.98E-03	1.33E-03	1.17E-03	2.48E-04	0.00E+00	1.00E-04	7.09E-05	2.64E-07	6.98E-06	306.1	2.92E-03	4.84E-03
SI52_E	0.75	843	0	1	1.34E-01	3.43E-02	2.45E-03	1.64E-03	1.45E-03	3.06E-04	0.00E+00	1.24E-04	8.75E-05	3.26E-07	8.62E-06	377.6	3.60E-03	5.97E-03
SI52_E	0.75	907	0	1	1.44E-01	3.59E-02	2.62E-03	1.76E-03	1.56E-03	3.28E-04	0.00E+00	1.33E-04	9.40E-05	3.51E-07	9.26E-06	403.8	3.87E-03	6.43E-03
SI52_E	0.75	630	0	1	9.97E-02	2.41E-02	1.80E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.20E-05	6.52E-05	2.43E-07	6.42E-06	278.3	2.68E-03	4.46E-03
SI52_E	0.75	416	0	1	6.53E-02	1.39E-02	1.16E-03	8.08E-04	7.15E-04	1.50E-04	0.00E+00	6.04E-05	4.28E-05	1.61E-07	4.22E-06	179.4	1.76E-03	2.95E-03
SI52_E	0.75	352	0	1	5.49E-02	1.05E-02	9.66E-04	6.84E-04	6.05E-04	1.26E-04	0.00E+00	5.09E-05	3.61E-05	1.36E-07	3.55E-06	149.1	1.49E-03	2.50E-03
SI52_E	0.75	299	0	1	4.63E-02	7.98E-03	8.06E-04	5.80E-04	5.14E-04	1.07E-04	0.00E+00	4.30E-05	3.05E-05	1.16E-07	3.00E-06	124.5	1.26E-03	2.12E-03
SI52_E	0.75	245	0	1	3.78E-02	5.86E-03	6.53E-04	4.76E-04	4.22E-04	8.72E-05	0.00E+00	3.52E-05	2.50E-05	9.49E-08	2.46E-06	100.8	1.03E-03	1.74E-03
SI52_E	0.75	181	0	1	2.78E-02	3.86E-03	4.76E-04	3.52E-04	3.12E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	7.01E-08	1.81E-06	73.5	7.57E-04	1.29E-03
SI52_W	0.75	128	0	1	1.95E-02	2.40E-03	3.31E-04	2.49E-04	2.20E-04	4.52E-05	0.00E+00	1.83E-05	1.29E-05	4.95E-08	1.28E-06	51.2	5.33E-04	9.07E-04
SI52_W	0.75	85	0	1	1.30E-02	1.43E-03	2.19E-04	1.66E-04	1.47E-04	3.01E-05	0.00E+00	1.22E-05	8.61E-06	3.30E-08	8.48E-07	33.7	3.55E-04	6.05E-04
SI52_W	0.75	75	0	1	1.13E-02	1.12E-03	1.89E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.51E-06	2.89E-08	7.40E-07	29.2	3.09E-04	5.29E-04
SI52_W	0.75	53	0	1	8.04E-03	7.97E-04	1.34E-04	1.04E-04	9.17E-05	1.87E-05	0.00E+00	7.56E-06	5.36E-06	2.06E-08	5.28E-07	20.7	2.21E-04	3.78E-04
SI52_W	0.75	75	0	1	1.13E-02	1.12E-03	1.87E-04	1.45E-04	1.28E-04	2.62E-05	0.00E+00	1.06E-05	7.50E-06	2.89E-08	7.39E-07	28.9	3.09E-04	5.29E-04
SI52_W	0.75	181	0	1	2.73E-02	2.71E-03	4.55E-04	3.52E-04	3.12E-04	6.36E-05	0.00E+00	2.57E-05	1.82E-05	7.01E-08	1.79E-06	70.2	7.50E-04	1.29E-03
SI52_W	0.75	544	0	1	8.21E-02	8.13E-03	1.37E-03	1.06E-03	9.36E-04	1.91E-04	0.00E+00	7.72E-05	5.47E-05	2.10E-07	5.39E-06	211.9	2.25E-03	3.86E-03
SI52_W	0.75	832	0	1	1.27E-01	1.52E-02	2.15E-03	1.62E-03	1.43E-03	2.94E-04	0.00E+00	1.19E-04	8.41E-05	3.22E-07	8.29E-06	332.0	3.46E-03	5.90E-03
SI52_W	0.75	672	0	1	1.04E-01	1.64E-02	1.80E-03	1.31E-03	1.16E-03	2.39E-04	0.00E+00	9.66E-05	6.85E-05	2.60E-07	6.74E-06	277.3	2.82E-03	4.76E-03
SI52_W	0.75	555	0	1	8.63E-02	1.57E-02	1.51E-03	1.08E-03	9.54E-04	1.98E-04	0.00E+00	8.01E-05	5.68E-05	2.15E-07	5.59E-06	233.7	2.34E-03	3.93E-03
SI52_W	0.75	502	0	1	7.85E-02	1.58E-02	1.39E-03	9.74E-04	8.62E-04	1.80E-04	0.00E+00	7.27E-05	5.15E-05	1.94E-07	5.07E-06	214.9	2.12E-03	3.55E-03
SI52_W	0.75	566	0	1	8.95E-02	2.12E-02	1.62E-03	1.10E-03	9.72E-04	2.04E-04	0.00E+00	8.26E-05	5.85E-05	2.19E-07	5.76E-06	249.7	2.41E-03	4.01E-03
SI52_W	0.75	598	0	1	9.49E-02	2.33E-02	1.72E-03	1.16E-03	1.03E-03	2.16E-04	0.00E+00	8.74E-05	6.19E-05	2.31E-07	6.10E-06	265.9	2.55E-03	4.23E-03
SI52_W	0.75	608	0	1	9.68E-02	2.44E-02	1.76E-03	1.18E-03	1.05E-03	2.20E-04	0.00E+00	8.91E-05	6.31E-05	2.35E-07	6.22E-06	271.9	2.60E-03	4.31E-03
SI52_W	0.75	630	0	1	1.00E-01	2.59E-02	1.83E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.23E-05	6.54E-05	2.43E-07	6.44E-06	282.8	2.69E-03	4.46E-03
SI52_W	0.75	683	0	1	1.09E-01	2.79E-02	1.98E-03	1.33E-03	1.17E-03	2.48E-04	0.00E+00	1.00E-04	7.09E-05	2.64E-07	6.98E-06	306.1	2.92E-03	4.84E-03
SI52_W	0.75	843	0	1	1.34E-01	3.43E-02	2.45E-03	1.64E-03	1.45E-03	3.06E-04	0.00E+00	1.24E-04	8.75E-05	3.26E-07	8.62E-06	377.6	3.60E-03	5.97E-03
SI52_W	0.75	907	0	1	1.44E-01	3.59E-02	2.62E-03	1.76E-03	1.56E-03	3.28E-04	0.00E+00	1.33E-04	9.40E-05	3.51E-07	9.26E-06	403.8	3.87E-03	6.43E-03
SI52_W	0.75	630	0	1	9.97E-02	2.41E-02	1.80E-03	1.22E-03	1.08E-03	2.28E-04	0.00E+00	9.20E-05	6.52E-05	2.43E-07	6.42E-06	278.3	2.68E-03	4.46E-03
SI52_W	0.75	416	0	1	6.53E-02	1.39E-02	1.16E-03	8.08E-04	7.15E-04	1.50E-04	0.00E+00	6.04E-05	4.28E-05	1.61E-07	4.22E-06	179.4	1.76E-03	2.95E-03
SI52_W	0.75	352	0	1	5.49E-02	1.05E-02	9.66E-04	6.84E-04	6.05E-04	1.26E-04	0.00E+00	5.09E-05	3.61E-05	1.36E-07	3.55E-06	149.1	1.49E-03	2.50E-03
SI52_W	0.75	299	0	1	4.63E-02	7.98E-03	8.06E-04	5.80E-04	5.14E-04	1.07E-04	0.00E+00	4.30E-05	3.05E-05	1.16E-07	3.00E-06	124.5	1.26E-03	2.12E-03
SI52_W	0.75	245	0	1	3.78E-02	5.86E-03	6.53E-04	4.76E-04	4.22E-04	8.72E-05	0.00E+00	3.52E-05	2.50E-05	9.49E-08	2.46E-06	100.8	1.03E-03	1.74E-03
SI52_W	0.75	181	0	1	2.78E-02	3.86E-03	4.76E-04	3.52E-04	3.12E-04	6.43E-05	0.00E+00	2.60E-05	1.84E-05	7.01E-08	1.81E-06	73.5	7.57E-04	1.29E-03

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	8	1	5	2.22E-03	1.20E-03	3.84E-06	1.58E-04	2.60E-05	1.11E-06	0.00E+00	2.88E-06	2.67E-06	1.04E-09	8.05E-08	0.9	3.37E-04	3.92E-06
S1	60	8	2	5	1.48E-03	7.98E-04	2.56E-06	1.05E-04	1.74E-05	7.43E-07	0.00E+00	1.92E-06	1.78E-06	6.91E-10	5.37E-08	0.6	2.24E-04	2.62E-06
S1	60	8	3	5	1.29E-03	6.99E-04	2.24E-06	9.19E-05	1.52E-05	6.50E-07	0.00E+00	1.68E-06	1.56E-06	6.05E-10	4.70E-08	0.6	1.96E-04	2.29E-06
S1	60	8	4	5	9.24E-04	4.99E-04	1.60E-06	6.56E-05	1.08E-05	4.64E-07	0.00E+00	1.20E-06	1.11E-06	4.32E-10	3.36E-08	0.4	1.40E-04	1.63E-06
S1	60	8	5	5	1.29E-03	6.99E-04	2.24E-06	9.19E-05	1.52E-05	6.50E-07	0.00E+00	1.68E-06	1.56E-06	6.05E-10	4.70E-08	0.6	1.96E-04	2.29E-06
S1	60	8	6	5	3.14E-03	1.70E-03	5.44E-06	2.23E-04	3.69E-05	1.58E-06	0.00E+00	4.08E-06	3.78E-06	1.47E-09	1.14E-07	1.3	4.77E-04	5.56E-06
S1	60	8	7	5	9.43E-03	5.09E-03	1.63E-05	6.69E-04	1.11E-04	4.74E-06	0.00E+00	1.22E-05	1.13E-05	4.41E-09	3.42E-07	4.0	1.43E-03	1.67E-05
S1	60	8	8	5	1.44E-02	7.78E-03	2.50E-05	1.02E-03	1.69E-04	7.25E-06	0.00E+00	1.87E-05	1.73E-05	6.74E-09	5.24E-07	6.2	2.19E-03	2.55E-05
S1	60	8	9	5	1.16E-02	6.29E-03	2.02E-05	8.27E-04	1.37E-04	5.85E-06	0.00E+00	1.51E-05	1.40E-05	5.44E-09	4.23E-07	5.0	1.77E-03	2.06E-05
S1	60	8	10	5	9.61E-03	5.19E-03	1.67E-05	6.83E-04	1.13E-04	4.83E-06	0.00E+00	1.25E-05	1.16E-05	4.49E-09	3.49E-07	4.1	1.46E-03	1.70E-05
S1	60	8	11	5	8.69E-03	4.69E-03	1.51E-05	6.17E-04	1.02E-04	4.37E-06	0.00E+00	1.13E-05	1.04E-05	4.06E-09	3.15E-07	3.7	1.32E-03	1.54E-05
S1	60	8	12	5	9.79E-03	5.29E-03	1.70E-05	6.96E-04	1.15E-04	4.94E-06	0.00E+00	1.27E-05	1.18E-05	4.58E-09	3.56E-07	4.2	1.49E-03	1.73E-05
S1	60	8	13	5	1.03E-02	5.59E-03	1.79E-05	7.35E-04	1.21E-04	5.22E-06	0.00E+00	1.34E-05	1.24E-05	4.84E-09	3.76E-07	4.4	1.57E-03	1.83E-05
S1	60	8	14	5	1.05E-02	5.69E-03	1.83E-05	7.48E-04	1.24E-04	5.31E-06	0.00E+00	1.37E-05	1.27E-05	4.92E-09	3.83E-07	4.5	1.60E-03	1.86E-05
S1	60	8	15	5	1.09E-02	5.89E-03	1.89E-05	7.75E-04	1.28E-04	5.50E-06	0.00E+00	1.42E-05	1.31E-05	5.10E-09	3.96E-07	4.7	1.66E-03	1.93E-05
S1	60	8	16	5	1.18E-02	6.39E-03	2.05E-05	8.40E-04	1.39E-04	5.96E-06	0.00E+00	1.54E-05	1.42E-05	5.53E-09	4.30E-07	5.1	1.80E-03	2.09E-05
S1	60	8	17	5	1.46E-02	7.88E-03	2.53E-05	1.04E-03	1.71E-04	7.36E-06	0.00E+00	1.90E-05	1.76E-05	6.82E-09	5.30E-07	6.2	2.22E-03	2.58E-05
S1	60	8	18	5	1.57E-02	8.48E-03	2.72E-05	1.12E-03	1.84E-04	7.92E-06	0.00E+00	2.04E-05	1.89E-05	7.34E-09	5.71E-07	6.7	2.38E-03	2.78E-05
S1	60	8	19	5	1.09E-02	5.89E-03	1.89E-05	7.75E-04	1.28E-04	5.49E-06	0.00E+00	1.42E-05	1.31E-05	5.10E-09	3.96E-07	4.7	1.66E-03	1.93E-05
S1	60	8	20	5	7.21E-03	3.89E-03	1.25E-05	5.12E-04	8.46E-05	3.62E-06	0.00E+00	9.37E-06	8.67E-06	3.37E-09	2.62E-07	3.1	1.09E-03	1.28E-05
S1	60	8	21	5	6.10E-03	3.29E-03	1.06E-05	4.33E-04	7.16E-05	3.07E-06	0.00E+00	7.92E-06	7.33E-06	2.85E-09	2.22E-07	2.6	9.26E-04	1.08E-05
S1	60	8	22	5	5.17E-03	2.79E-03	8.97E-06	3.68E-04	6.07E-05	2.60E-06	0.00E+00	6.72E-06	6.22E-06	2.42E-09	1.88E-07	2.2	7.85E-04	9.16E-06
S1	60	8	23	5	4.25E-03	2.30E-03	7.37E-06	3.02E-04	4.99E-05	2.14E-06	0.00E+00	5.52E-06	5.11E-06	1.99E-09	1.54E-07	1.8	6.45E-04	7.52E-06
S1	60	8	24	5	3.14E-03	1.70E-03	5.44E-06	2.23E-04	3.69E-05	1.58E-06	0.00E+00	4.08E-06	3.78E-06	1.47E-09	1.14E-07	1.3	4.77E-04	5.56E-06
S2	60	8	1	5	1.22E-03	6.59E-04	2.12E-06	8.67E-05	1.43E-05	6.13E-07	0.00E+00	1.59E-06	1.47E-06	5.71E-10	4.43E-08	0.5	1.85E-04	2.16E-06
S2	60	8	2	5	8.14E-04	4.40E-04	1.41E-06	5.78E-05	9.55E-06	4.09E-07	0.00E+00	1.06E-06	9.79E-07	3.80E-10	2.96E-08	0.3	1.24E-04	1.44E-06
S2	60	8	3	5	7.12E-04	3.85E-04	1.23E-06	5.06E-05	8.36E-06	3.58E-07	0.00E+00	9.25E-07	8.56E-07	3.33E-10	2.59E-08	0.3	1.08E-04	1.26E-06
S2	60	8	4	5	5.09E-04	2.75E-04	8.82E-07	3.61E-05	5.97E-06	2.56E-07	0.00E+00	6.61E-07	6.12E-07	2.38E-10	1.85E-08	0.2	7.72E-05	9.00E-07
S2	60	8	5	5	7.12E-04	3.85E-04	1.23E-06	5.06E-05	8.36E-06	3.58E-07	0.00E+00	9.25E-07	8.56E-07	3.33E-10	2.59E-08	0.3	1.08E-04	1.26E-06
S2	60	8	6	5	1.73E-03	9.34E-04	3.00E-06	1.23E-04	2.03E-05	8.69E-07	0.00E+00	2.25E-06	2.08E-06	8.08E-10	6.28E-08	0.7	2.62E-04	3.06E-06
S2	60	8	7	5	5.19E-03	2.80E-03	8.99E-06	3.69E-04	6.09E-05	2.61E-06	0.00E+00	6.74E-06	6.24E-06	2.42E-09	1.88E-07	2.2	7.87E-04	9.18E-06
S2	60	8	8	5	7.93E-03	4.29E-03	1.38E-05	5.64E-04	9.31E-05	3.99E-06	0.00E+00	1.03E-05	9.54E-06	3.71E-09	2.88E-07	3.4	1.20E-03	1.40E-05
S2	60	8	9	5	6.41E-03	3.46E-03	1.11E-05	4.55E-04	7.52E-05	3.22E-06	0.00E+00	8.33E-06	7.71E-06	3.00E-09	2.33E-07	2.7	9.73E-04	1.13E-05
S2	60	8	10	5	5.29E-03	2.86E-03	9.17E-06	3.76E-04	6.21E-05	2.66E-06	0.00E+00	6.87E-06	6.36E-06	2.47E-09	1.92E-07	2.3	8.03E-04	9.36E-06
S2	60	8	11	5	4.78E-03	2.58E-03	8.29E-06	3.40E-04	5.61E-05	2.41E-06	0.00E+00	6.21E-06	5.75E-06	2.23E-09	1.74E-07	2.0	7.26E-04	8.46E-06
S2	60	8	12	5	5.39E-03	2.91E-03	9.34E-06	3.83E-04	6.33E-05	2.72E-06	0.00E+00	7.01E-06	6.48E-06	2.52E-09	1.96E-07	2.3	8.18E-04	9.54E-06
S2	60	8	13	5	5.70E-03	3.08E-03	9.87E-06	4.05E-04	6.69E-05	2.87E-06	0.00E+00	7.40E-06	6.85E-06	2.66E-09	2.07E-07	2.4	8.65E-04	1.01E-05
S2	60	8	14	5	5.80E-03	3.13E-03	1.00E-05	4.12E-04	6.81E-05	2.92E-06	0.00E+00	7.54E-06	6.97E-06	2.71E-09	2.11E-07	2.5	8.80E-04	1.03E-05
S2	60	8	15	5	6.00E-03	3.24E-03	1.04E-05	4.26E-04	7.04E-05	3.03E-06	0.00E+00	7.80E-06	7.22E-06	2.81E-09	2.18E-07	2.6	9.11E-04	1.06E-05
S2	60	8	16	5	6.51E-03	3.52E-03	1.13E-05	4.62E-04	7.64E-05	3.28E-06	0.00E+00	8.46E-06	7.83E-06	3.04E-09	2.36E-07	2.8	9.88E-04	1.15E-05
S2	60	8	17	5	8.04E-03	4.34E-03	1.39E-05	5.71E-04	9.43E-05	4.05E-06	0.00E+00	1.04E-05	9.66E-06	3.76E-09	2.92E-07	3.4	1.22E-03	1.42E-05
S2	60	8	18	5	8.65E-03	4.67E-03	1.50E-05	6.14E-04	1.01E-04	4.36E-06	0.00E+00	1.12E-05	1.04E-05	4.04E-09	3.14E-07	3.7	1.31E-03	1.53E-05
S2	60	8	19	5	6.00E-03	3.24E-03	1.04E-05	4.26E-04	7.04E-05	3.02E-06	0.00E+00	7.80E-06	7.22E-06	2.81E-09	2.18E-07	2.6	9.11E-04	1.06E-05
S2	60	8	20	5	3.97E-03	2.14E-03	6.88E-06	2.82E-04	4.66E-05	1.99E-06	0.00E+00	5.16E-06	4.77E-06	1.85E-09	1.44E-07	1.7	6.02E-04	7.02E-06
S2	60	8	21	5	3.36E-03	1.81E-03	5.82E-06	2.38E-04	3.94E-05	1.69E-06	0.00E+00	4.36E-06	4.04E-06	1.57E-09	1.22E-07	1.4	5.10E-04	5.94E-06
S2	60	8	22	5	2.85E-03	1.54E-03	4.94E-06	2.02E-04	3.34E-05	1.43E-06	0.00E+00	3.70E-06	3.42E-06	1.33E-09	1.03E-07	1.2	4.32E-04	5.04E-06
S2	60	8	23	5	2.34E-03	1.26E-03	4.06E-06	1.66E-04	2.75E-05	1.18E-06	0.00E+00	3.04E-06	2.81E-06	1.09E-09	8.50E-08	1.0	3.55E-04	4.14E-06
S2	60	8	24	5	1.73E-03	9.34E-04	3.00E-06	1.23E-04	2.03E-05	8.69E-07	0.00E+00	2.25E-06	2.08E-06	8.08E-10	6.28E-08	0.7	2.62E-04	3.06E-06
S3	60	8	1	5	1.51E-03	8.18E-04	2.62E-06	1.08E-04	1.78E-05	7.61E-07	0.00E+00	1.97E-06	1.82E-06	7.08E-10	5.50E-08	0.6	2.30E-04	2.68E-06
S3	60	8	2	5	1.01E-03	5.45E-04	1.75E-06	7.17E-05	1.18E-05	5.07E-07	0.00E+00	1.31E-06	1.21E-06	4.72E-10	3.67E-08	0.4	1.53E-04	1.79E-06
S3	60	8	3	5	8.83E-04	4.77E-04	1.53E-06	6.27E-05	1.04E-05	4.44E-07	0.00E+00	1.15E-06	1.06E-06	4.13E-10	3.21E-08	0.4	1.34E-04	1.56E-06
S3	60	8	4	5	6.31E-04	3.41E-04	1.09E-06	4.48E-05	7.40E-06	3.17E-07	0.00E+00	8.20E-07	7.59E-07	2.95E-10	2.29E-08	0.3	9.58E-05	1.12E-06
S3	60	8	5	5	8.83E-04	4.77E-04	1.53E-06	6.27E-05	1.04E-05	4.44E-07	0.00E+00	1.15E-06	1.06E-06	4.13E-10	3.21E-08	0.4	1.34E-04	1.56E-06
S3	60	8	6	5	2.15E-03	1.16E-03	3.72E-06	1.52E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.79E-08	0.9	3.26E-04	3.80E-06
S3	60	8	7	5	6.44E-03	3.48E-03	1.12E-05	4.57E-04	7.55E-05	3.23E-06	0.00E+00	8.36E-06	7.74E-06	3.01E-09	2.34E-07	2.7	9.77E-04	1.14E-05
S3	60	8	8	5	9.84E-03	5.32E-03	1.71E-05	6.99E-04	1.16E-04	4.95E-06	0.00E+00	1.28E-05	1.18E-05	4.60E-09	3.57E-07	4.2	1.49E-03	1.74E-05
S3	60	8	9	5	7.95E-03	4.29E-03	1.38E-05	5.65E-04	9.33E-05	4.00E-06	0.00E+00	1.03E-05	9.56E-06	3.72E-09	2.89E-07	3.4	1.21E-03	1.41E-05
S3	60	8	10	5	6.56E-03	3.54E-03	1.14E-05	4.66E-04	7.70E-05	3.30E-06	0.00E+00	8.53E-06	7.89E-06	3.07E-09	2.38E-07	2.8	9.96E-04	1.16E-05
S3	60	8	11	5	5.93E-03	3.20E-03	1.03E-05	4.21E-04	6.96E-05	2.99E-06	0.00E+00	7.71E-06	7.13E-06	2.77E-09	2.15E-07	2.5	9.00E-04	1.05E-05
S3	60	8	12	5	6.69E-03	3.61E-03	1.16E-05	4.75E-04	7.85E-05	3.37E-06	0.00E+00	8.69E-06	8.04E-06	3.13E-09	2.43E-07	2.9	1.02E-03	1.18E-05
S3	60	8	13	5	7.07E-03	3.82E-03	1.22E-05	5.02E-04	8.29E-05	3.56E-06	0.00E+00	9.18E-06	8.50E-06	3.30E-09	2.57E-07	3.0	1.07E-03	1.25E-05
S3	60	8	14	5	7.19E-03	3.88E-03	1.25E-05	5.11E-04	8.44E-05	3.63E-06	0.00E+00	9.35E-06	8.65E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S3	60	8	15	5	7.44E-03	4.02E-03	1.29E-05	5.29E-04	8.74E-05	3.75E-06	0.00E+00	9.67E-06	8.95E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S3	60	8	16	5	8.08E-03	4.36E-03	1.40E-05	5.74E-04	9.48E-05	4.07E-06	0.00E+00	1.05E-05	9.71E-06	3.77E-09	2.93E-07	3.4	1.23E-03	1.43E-05
S3	60	8	17	5	9.97E-03	5.38E-03	1.73E-05	7.08E-04	1.17E-04	5.02E-06	0.00E+00	1.30E-05	1.20E-05	4.66E-09	3.62E-07	4.3	1.51E-03	1.76E-05
S3	60	8	18	5	1.07E-02	5.79E-03	1.86E-05	7.62E-04	1.26E-04	5.41E-06	0.00E+00	1.39E-05	1.29E-05	5.01E-09	3.90E-07	4.6	1.63E-03	1.90E-05
S3	60	8	19	5	7.44E-03	4.02E-03	1.29E-05	5.29E-04	8.74E-05	3.75E-06	0.00E+00	9.67E-06	8.95E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S3	60	8	20	5	4.92E-03	2.66E-03	8.53E-06	3.50E-04	5.78E-05	2.47E-06	0.00E+00	6.39E-06	5.92E-06	2.30E-09	1.79E-07	2.1	7.47E-04	8.71E-06

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S3	60	8	21	5	4.16E-03	2.25E-03	7.22E-06	2.96E-04	4.89E-05	2.09E-06	0.00E+00	5.41E-06	5.01E-06	1.95E-09	1.51E-07	1.8	6.32E-04	7.37E-06
S3	60	8	22	5	3.53E-03	1.91E-03	6.12E-06	2.51E-04	4.15E-05	1.78E-06	0.00E+00	4.59E-06	4.25E-06	1.65E-09	1.28E-07	1.5	5.36E-04	6.25E-06
S3	60	8	23	5	2.90E-03	1.57E-03	5.03E-06	2.06E-04	3.41E-05	1.46E-06	0.00E+00	3.77E-06	3.49E-06	1.36E-09	1.05E-07	1.2	4.40E-04	5.13E-06
S3	60	8	24	5	2.15E-03	1.16E-03	3.72E-06	1.52E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.79E-08	0.9	3.26E-04	3.80E-06
S4	60	8	1	5	3.38E-03	1.82E-03	5.86E-06	2.40E-04	3.97E-05	1.70E-06	0.00E+00	4.39E-06	4.06E-06	1.58E-09	1.23E-07	1.4	5.13E-04	5.98E-06
S4	60	8	2	5	2.25E-03	1.22E-03	3.90E-06	1.60E-04	2.64E-05	1.13E-06	0.00E+00	2.93E-06	2.71E-06	1.05E-09	8.18E-08	1.0	3.42E-04	3.99E-06
S4	60	8	3	5	1.97E-03	1.06E-03	3.42E-06	1.40E-04	2.31E-05	9.91E-07	0.00E+00	2.56E-06	2.37E-06	9.21E-10	7.16E-08	0.8	2.99E-04	3.49E-06
S4	60	8	4	5	1.41E-03	7.60E-04	2.44E-06	1.00E-04	1.65E-05	7.08E-07	0.00E+00	1.83E-06	1.69E-06	6.58E-10	5.11E-08	0.6	2.14E-04	2.49E-06
S4	60	8	5	5	1.97E-03	1.06E-03	3.42E-06	1.40E-04	2.31E-05	9.90E-07	0.00E+00	2.56E-06	2.37E-06	9.21E-10	7.16E-08	0.8	2.99E-04	3.49E-06
S4	60	8	6	5	4.79E-03	2.58E-03	8.30E-06	3.40E-04	5.62E-05	2.41E-06	0.00E+00	6.22E-06	5.75E-06	2.24E-09	1.74E-07	2.0	7.26E-04	8.47E-06
S4	60	8	7	5	1.44E-02	7.75E-03	2.49E-05	1.02E-03	1.69E-04	7.22E-06	0.00E+00	1.87E-05	1.73E-05	6.71E-09	5.22E-07	6.1	2.18E-03	2.54E-05
S4	60	8	8	5	2.20E-02	1.19E-02	3.81E-05	1.56E-03	2.58E-04	1.10E-05	0.00E+00	2.85E-05	2.64E-05	1.03E-08	7.98E-07	9.4	3.33E-03	3.89E-05
S4	60	8	9	5	1.77E-02	9.58E-03	3.07E-05	1.26E-03	2.08E-04	8.92E-06	0.00E+00	2.30E-05	2.13E-05	8.29E-09	6.44E-07	7.6	2.69E-03	3.14E-05
S4	60	8	10	5	1.46E-02	7.91E-03	2.54E-05	1.04E-03	1.72E-04	7.36E-06	0.00E+00	1.90E-05	1.76E-05	6.84E-09	5.32E-07	6.3	2.22E-03	2.59E-05
S4	60	8	11	5	1.32E-02	7.15E-03	2.29E-05	9.40E-04	1.55E-04	6.66E-06	0.00E+00	1.72E-05	1.59E-05	6.18E-09	4.81E-07	5.7	2.01E-03	2.34E-05
S4	60	8	12	5	1.49E-02	8.06E-03	2.59E-05	1.06E-03	1.75E-04	7.52E-06	0.00E+00	1.94E-05	1.79E-05	6.97E-09	5.42E-07	6.4	2.26E-03	2.64E-05
S4	60	8	13	5	1.58E-02	8.51E-03	2.73E-05	1.12E-03	1.85E-04	7.95E-06	0.00E+00	2.05E-05	1.90E-05	7.37E-09	5.73E-07	6.7	2.39E-03	2.79E-05
S4	60	8	14	5	1.60E-02	8.67E-03	2.78E-05	1.14E-03	1.88E-04	8.09E-06	0.00E+00	2.09E-05	1.93E-05	7.50E-09	5.83E-07	6.9	2.44E-03	2.84E-05
S4	60	8	15	5	1.66E-02	8.97E-03	2.88E-05	1.18E-03	1.95E-04	8.38E-06	0.00E+00	2.16E-05	2.00E-05	7.76E-09	6.03E-07	7.1	2.52E-03	2.94E-05
S4	60	8	16	5	1.80E-02	9.73E-03	3.12E-05	1.28E-03	2.11E-04	9.08E-06	0.00E+00	2.34E-05	2.17E-05	8.42E-09	6.54E-07	7.7	2.73E-03	3.19E-05
S4	60	8	17	5	2.22E-02	1.20E-02	3.85E-05	1.58E-03	2.61E-04	1.12E-05	0.00E+00	2.89E-05	2.67E-05	1.04E-08	8.08E-07	9.5	3.38E-03	3.94E-05
S4	60	8	18	5	2.39E-02	1.29E-02	4.15E-05	1.70E-03	2.81E-04	1.21E-05	0.00E+00	3.11E-05	2.88E-05	1.12E-08	8.69E-07	10.2	3.63E-03	4.23E-05
S4	60	8	19	5	1.66E-02	8.97E-03	2.88E-05	1.18E-03	1.95E-04	8.36E-06	0.00E+00	2.16E-05	2.00E-05	7.76E-09	6.03E-07	7.1	2.52E-03	2.94E-05
S4	60	8	20	5	1.10E-02	5.93E-03	1.90E-05	7.80E-04	1.29E-04	5.52E-06	0.00E+00	1.43E-05	1.32E-05	5.13E-09	3.99E-07	4.7	1.67E-03	1.94E-05
S4	60	8	21	5	9.29E-03	5.02E-03	1.61E-05	6.60E-04	1.09E-04	4.67E-06	0.00E+00	1.21E-05	1.12E-05	4.34E-09	3.37E-07	4.0	1.41E-03	1.64E-05
S4	60	8	22	5	7.88E-03	4.26E-03	1.37E-05	5.60E-04	9.25E-05	3.96E-06	0.00E+00	1.02E-05	9.48E-06	3.68E-09	2.86E-07	3.4	1.20E-03	1.39E-05
S4	60	8	23	5	6.48E-03	3.50E-03	1.12E-05	4.60E-04	7.60E-05	3.26E-06	0.00E+00	8.41E-06	7.79E-06	3.03E-09	2.35E-07	2.8	9.83E-04	1.15E-05
S4	60	8	24	5	4.79E-03	2.58E-03	8.30E-06	3.40E-04	5.62E-05	2.41E-06	0.00E+00	6.22E-06	5.75E-06	2.24E-09	1.74E-07	2.0	7.26E-04	8.47E-06
S5	60	8	1	5	1.05E-03	5.65E-04	1.81E-06	7.43E-05	1.23E-05	5.26E-07	0.00E+00	1.36E-06	1.26E-06	4.89E-10	3.80E-08	0.4	1.59E-04	1.85E-06
S5	60	8	2	5	6.97E-04	3.77E-04	1.21E-06	4.95E-05	8.18E-06	3.50E-07	0.00E+00	9.06E-07	8.38E-07	3.26E-10	2.53E-08	0.3	1.06E-04	1.23E-06
S5	60	8	3	5	6.10E-04	3.30E-04	1.06E-06	4.33E-05	7.16E-06	3.07E-07	0.00E+00	7.93E-07	7.34E-07	2.85E-10	2.22E-08	0.3	9.26E-05	1.08E-06
S5	60	8	4	5	4.36E-04	2.35E-04	7.55E-07	3.10E-05	5.11E-06	2.19E-07	0.00E+00	5.66E-07	5.24E-07	2.04E-10	1.58E-08	0.2	6.61E-05	7.71E-07
S5	60	8	5	5	6.10E-04	3.30E-04	1.06E-06	4.33E-05	7.16E-06	3.07E-07	0.00E+00	7.93E-07	7.34E-07	2.85E-10	2.22E-08	0.3	9.26E-05	1.08E-06
S5	60	8	6	5	1.48E-03	8.00E-04	2.57E-06	1.05E-04	1.74E-05	7.45E-07	0.00E+00	1.93E-06	1.78E-06	6.93E-10	5.38E-08	0.6	2.25E-04	2.62E-06
S5	60	8	7	5	4.45E-03	2.40E-03	7.70E-06	3.16E-04	5.22E-05	2.23E-06	0.00E+00	5.78E-06	5.34E-06	2.08E-09	1.61E-07	1.9	6.75E-04	7.87E-06
S5	60	8	8	5	6.80E-03	3.67E-03	1.18E-05	4.83E-04	7.98E-05	3.42E-06	0.00E+00	8.83E-06	8.17E-06	3.18E-09	2.47E-07	2.9	1.03E-03	1.20E-05
S5	60	8	9	5	5.49E-03	2.97E-03	9.52E-06	3.90E-04	6.44E-05	2.76E-06	0.00E+00	7.14E-06	6.60E-06	2.57E-09	1.99E-07	2.3	8.33E-04	9.72E-06
S5	60	8	10	5	4.53E-03	2.45E-03	7.86E-06	3.22E-04	5.32E-05	2.28E-06	0.00E+00	5.89E-06	5.45E-06	2.12E-09	1.65E-07	1.9	6.88E-04	8.02E-06
S5	60	8	11	5	4.10E-03	2.21E-03	7.10E-06	2.91E-04	4.81E-05	2.06E-06	0.00E+00	5.32E-06	4.93E-06	1.91E-09	1.49E-07	1.7	6.22E-04	7.25E-06
S5	60	8	12	5	4.62E-03	2.49E-03	8.01E-06	3.28E-04	5.42E-05	2.33E-06	0.00E+00	6.00E-06	5.55E-06	2.16E-09	1.68E-07	2.0	7.01E-04	8.17E-06
S5	60	8	13	5	4.88E-03	2.64E-03	8.46E-06	3.47E-04	5.73E-05	2.46E-06	0.00E+00	6.34E-06	5.87E-06	2.28E-09	1.77E-07	2.1	7.41E-04	8.64E-06
S5	60	8	14	5	4.97E-03	2.68E-03	8.61E-06	3.53E-04	5.83E-05	2.51E-06	0.00E+00	6.46E-06	5.97E-06	2.32E-09	1.80E-07	2.1	7.54E-04	8.79E-06
S5	60	8	15	5	5.14E-03	2.78E-03	8.91E-06	3.65E-04	6.04E-05	2.59E-06	0.00E+00	6.68E-06	6.18E-06	2.40E-09	1.87E-07	2.2	7.81E-04	9.10E-06
S5	60	8	16	5	5.58E-03	3.01E-03	9.67E-06	3.96E-04	6.55E-05	2.81E-06	0.00E+00	7.25E-06	6.71E-06	2.61E-09	2.03E-07	2.4	8.47E-04	9.87E-06
S5	60	8	17	5	6.89E-03	3.72E-03	1.19E-05	4.89E-04	8.08E-05	3.47E-06	0.00E+00	8.95E-06	8.28E-06	3.22E-09	2.50E-07	2.9	1.05E-03	1.22E-05
S5	60	8	18	5	7.41E-03	4.00E-03	1.28E-05	5.26E-04	8.70E-05	3.73E-06	0.00E+00	9.63E-06	8.91E-06	3.46E-09	2.69E-07	3.2	1.12E-03	1.31E-05
S5	60	8	19	5	5.14E-03	2.78E-03	8.91E-06	3.65E-04	6.04E-05	2.59E-06	0.00E+00	6.68E-06	6.18E-06	2.40E-09	1.87E-07	2.2	7.81E-04	9.10E-06
S5	60	8	20	5	3.40E-03	1.84E-03	5.89E-06	2.41E-04	3.99E-05	1.71E-06	0.00E+00	4.42E-06	4.09E-06	1.59E-09	1.23E-07	1.5	5.16E-04	6.01E-06
S5	60	8	21	5	2.88E-03	1.55E-03	4.99E-06	2.04E-04	3.38E-05	1.45E-06	0.00E+00	3.74E-06	3.46E-06	1.34E-09	1.04E-07	1.2	4.37E-04	5.09E-06
S5	60	8	22	5	2.44E-03	1.32E-03	4.23E-06	1.73E-04	2.86E-05	1.23E-06	0.00E+00	3.17E-06	2.93E-06	1.14E-09	8.86E-08	1.0	3.70E-04	4.32E-06
S5	60	8	23	5	2.00E-03	1.08E-03	3.47E-06	1.42E-04	2.35E-05	1.01E-06	0.00E+00	2.61E-06	2.41E-06	9.37E-10	7.28E-08	0.9	3.04E-04	3.55E-06
S5	60	8	24	5	1.48E-03	8.00E-04	2.57E-06	1.05E-04	1.74E-05	7.45E-07	0.00E+00	1.93E-06	1.78E-06	6.93E-10	5.38E-08	0.6	2.25E-04	2.62E-06
S6	60	8	1	5	1.41E-03	7.62E-04	2.44E-06	1.00E-04	1.66E-05	7.09E-07	0.00E+00	1.83E-06	1.70E-06	6.59E-10	5.12E-08	0.6	2.14E-04	2.50E-06
S6	60	8	2	5	9.40E-04	5.08E-04	1.63E-06	6.68E-05	1.10E-05	4.73E-07	0.00E+00	1.22E-06	1.13E-06	4.40E-10	3.42E-08	0.4	1.43E-04	1.66E-06
S6	60	8	3	5	8.23E-04	4.44E-04	1.43E-06	5.84E-05	9.66E-06	4.14E-07	0.00E+00	1.07E-06	9.89E-07	3.85E-10	2.99E-08	0.4	1.25E-04	1.46E-06
S6	60	8	4	5	5.88E-04	3.17E-04	1.02E-06	4.17E-05	6.90E-06	2.95E-07	0.00E+00	7.64E-07	7.07E-07	2.75E-10	2.13E-08	0.3	8.92E-05	1.04E-06
S6	60	8	5	5	8.23E-04	4.44E-04	1.43E-06	5.84E-05	9.66E-06	4.13E-07	0.00E+00	1.07E-06	9.89E-07	3.85E-10	2.99E-08	0.4	1.25E-04	1.46E-06
S6	60	8	6	5	2.00E-03	1.08E-03	3.46E-06	1.42E-04	2.35E-05	1.00E-06	0.00E+00	2.60E-06	2.40E-06	9.34E-10	7.26E-08	0.9	3.03E-04	3.54E-06
S6	60	8	7	5	6.00E-03	3.24E-03	1.04E-05	4.26E-04	7.04E-05	3.01E-06	0.00E+00	7.79E-06	7.21E-06	2.80E-09	2.18E-07	2.6	9.10E-04	1.06E-05
S6	60	8	8	5	9.17E-03	4.95E-03	1.59E-05	6.51E-04	1.08E-04	4.61E-06	0.00E+00	1.19E-05	1.10E-05	4.29E-09	3.33E-07	3.9	1.39E-03	1.62E-05
S6	60	8	9	5	7.41E-03	4.00E-03	1.28E-05	5.26E-04	8.69E-05	3.72E-06	0.00E+00	9.62E-06	8.90E-06	3.46E-09	2.69E-07	3.2	1.12E-03	1.31E-05
S6	60	8	10	5	6.11E-03	3.30E-03	1.06E-05	4.34E-04	7.17E-05	3.07E-06	0.00E+00	7.94E-06	7.35E-06	2.86E-09	2.22E-07	2.6	9.28E-04	1.08E-05
S6	60	8	11	5	5.52E-03	2.98E-03	9.58E-06	3.92E-04	6.48E-05	2.78E-06	0.00E+00	7.18E-06	6.64E-06	2.58E-09	2.01E-07	2.4	8.39E-04	9.78E-06
S6	60	8	12	5	6.23E-03	3.36E-03	1.08E-05	4.43E-04	7.31E-05	3.14E-06	0.00E+00	8.10E-06	7.49E-06	2.91E-09	2.26E-07	2.7	9.46E-04	1.10E-05
S6	60	8	13	5	6.58E-03	3.55E-03	1.14E-05	4.68E-04	7.73E-05	3.32E-06	0.00E+00	8.55E-06	7.91E-06	3.08E-09	2.39E-07	2.8	9.99E-04	1.16E-05
S6	60	8	14	5	6.70E-03	3.62E-03	1.16E-05	4.76E-04	7.86E-05	3.38E-06	0.00E+00	8.71E-06	8.06E-06	3.13E-09	2.43E-07	2.9	1.02E-03	1.19E-05
S6	60	8	15	5	6.94E-03	3.75E-03	1.20E-05	4.93E-04	8.14E-05	3.50E-06	0.00E+00	9.01E-06	8.34E-06	3.24E-09	2.52E-07	3.0	1.05E-03	1.23E-05
S6	60	8	16	5	7.52E-03	4.06E-03	1.30E-05	5.34E-04	8.83E-05	3.79E-06	0.00E+00	9.78E-06	9.05E-06	3.52E-09	2.73E-07	3.2	1.14E-03	1.33E-05
S6	60	8	17	5	9.29E-03	5.02E-03	1.61E-05	6.60E-04	1.09E-04	4.68E-06	0.00E+00	1.21E-05	1.12E-05	4.34E-09	3.37E-07	4.0	1.41E-03	1.64E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S6	60	8	18	5	9.99E-03	5.40E-03	1.73E-05	7.10E-04	1.17E-04	5.04E-06	0.00E+00	1.30E-05	1.20E-05	4.67E-09	3.63E-07	4.3	1.52E-03	1.77E-05
S6	60	8	19	5	6.94E-03	3.75E-03	1.20E-05	4.93E-04	8.14E-05	3.49E-06	0.00E+00	9.01E-06	8.34E-06	3.24E-09	2.52E-07	3.0	1.05E-03	1.23E-05
S6	60	8	20	5	4.58E-03	2.48E-03	7.95E-06	3.26E-04	5.38E-05	2.31E-06	0.00E+00	5.96E-06	5.51E-06	2.14E-09	1.67E-07	2.0	6.96E-04	8.11E-06
S6	60	8	21	5	3.88E-03	2.09E-03	6.72E-06	2.76E-04	4.55E-05	1.95E-06	0.00E+00	5.04E-06	4.66E-06	1.81E-09	1.41E-07	1.7	5.89E-04	6.86E-06
S6	60	8	22	5	3.29E-03	1.78E-03	5.70E-06	2.34E-04	3.86E-05	1.65E-06	0.00E+00	4.28E-06	3.96E-06	1.54E-09	1.20E-07	1.4	5.00E-04	5.82E-06
S6	60	8	23	5	2.70E-03	1.46E-03	4.69E-06	1.92E-04	3.17E-05	1.36E-06	0.00E+00	3.51E-06	3.25E-06	1.26E-09	9.82E-08	1.2	4.10E-04	4.78E-06
S6	60	8	24	5	2.00E-03	1.08E-03	3.46E-06	1.42E-04	2.35E-05	1.00E-06	0.00E+00	2.60E-06	2.40E-06	9.34E-10	7.26E-08	0.9	3.03E-04	3.54E-06
S7	60	8	1	5	4.29E-03	2.32E-03	7.44E-06	3.05E-04	5.04E-05	2.16E-06	0.00E+00	5.58E-06	5.16E-06	2.01E-09	1.56E-07	1.8	6.52E-04	7.60E-06
S7	60	8	2	5	2.86E-03	1.55E-03	4.96E-06	2.03E-04	3.36E-05	1.44E-06	0.00E+00	3.72E-06	3.44E-06	1.34E-09	1.04E-07	1.2	4.34E-04	5.06E-06
S7	60	8	3	5	2.50E-03	1.35E-03	4.34E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.10E-08	1.1	3.80E-04	4.43E-06
S7	60	8	4	5	1.79E-03	9.66E-04	3.10E-06	1.27E-04	2.10E-05	8.99E-07	0.00E+00	2.32E-06	2.15E-06	8.36E-10	6.50E-08	0.8	2.72E-04	3.16E-06
S7	60	8	5	5	2.50E-03	1.35E-03	4.34E-06	1.78E-04	2.94E-05	1.26E-06	0.00E+00	3.25E-06	3.01E-06	1.17E-09	9.10E-08	1.1	3.80E-04	4.43E-06
S7	60	8	6	5	6.08E-03	3.28E-03	1.05E-05	4.32E-04	7.14E-05	3.06E-06	0.00E+00	7.90E-06	7.31E-06	2.84E-09	2.21E-07	2.6	9.23E-04	1.08E-05
S7	60	8	7	5	1.82E-02	9.85E-03	3.16E-05	1.30E-03	2.14E-04	9.17E-06	0.00E+00	2.37E-05	2.19E-05	8.53E-09	6.63E-07	7.8	2.77E-03	3.23E-05
S7	60	8	8	5	2.79E-02	1.51E-02	4.84E-05	1.98E-03	3.28E-04	1.40E-05	0.00E+00	3.63E-05	3.36E-05	1.30E-08	1.01E-06	11.9	4.24E-03	4.94E-05
S7	60	8	9	5	2.25E-02	1.22E-02	3.91E-05	1.60E-03	2.65E-04	1.13E-05	0.00E+00	2.93E-05	2.71E-05	1.05E-08	8.19E-07	9.6	3.42E-03	3.99E-05
S7	60	8	10	5	1.86E-02	1.00E-02	3.22E-05	1.32E-03	2.18E-04	9.36E-06	0.00E+00	2.42E-05	2.24E-05	8.70E-09	6.76E-07	7.9	2.82E-03	3.29E-05
S7	60	8	11	5	1.68E-02	9.08E-03	2.91E-05	1.19E-03	1.97E-04	8.47E-06	0.00E+00	2.18E-05	2.02E-05	7.86E-09	6.11E-07	7.2	2.55E-03	2.98E-05
S7	60	8	12	5	1.90E-02	1.02E-02	3.29E-05	1.35E-03	2.23E-04	9.55E-06	0.00E+00	2.46E-05	2.28E-05	8.86E-09	6.89E-07	8.1	2.88E-03	3.35E-05
S7	60	8	13	5	2.00E-02	1.08E-02	3.47E-05	1.42E-03	2.35E-04	1.01E-05	0.00E+00	2.60E-05	2.41E-05	9.36E-09	7.28E-07	8.6	3.04E-03	3.54E-05
S7	60	8	14	5	2.04E-02	1.10E-02	3.53E-05	1.45E-03	2.39E-04	1.03E-05	0.00E+00	2.65E-05	2.45E-05	9.53E-09	7.41E-07	8.7	3.10E-03	3.61E-05
S7	60	8	15	5	2.11E-02	1.14E-02	3.66E-05	1.50E-03	2.48E-04	1.06E-05	0.00E+00	2.74E-05	2.54E-05	9.87E-09	7.67E-07	9.0	3.20E-03	3.73E-05
S7	60	8	16	5	2.29E-02	1.24E-02	3.97E-05	1.63E-03	2.69E-04	1.15E-05	0.00E+00	2.98E-05	2.75E-05	1.07E-08	8.32E-07	9.8	3.48E-03	4.05E-05
S7	60	8	17	5	2.83E-02	1.53E-02	4.90E-05	2.01E-03	3.32E-04	1.42E-05	0.00E+00	3.67E-05	3.40E-05	1.32E-08	1.03E-06	12.1	4.29E-03	5.00E-05
S7	60	8	18	5	3.04E-02	1.64E-02	5.27E-05	2.16E-03	3.57E-04	1.53E-05	0.00E+00	3.95E-05	3.66E-05	1.42E-08	1.10E-06	13.0	4.62E-03	5.38E-05
S7	60	8	19	5	2.11E-02	1.14E-02	3.66E-05	1.50E-03	2.48E-04	1.06E-05	0.00E+00	2.74E-05	2.54E-05	9.87E-09	7.67E-07	9.0	3.20E-03	3.73E-05
S7	60	8	20	5	1.40E-02	7.53E-03	2.42E-05	9.91E-04	1.64E-04	7.02E-06	0.00E+00	1.81E-05	1.68E-05	6.52E-09	5.07E-07	6.0	2.12E-03	2.47E-05
S7	60	8	21	5	1.18E-02	6.38E-03	2.05E-05	8.39E-04	1.39E-04	5.94E-06	0.00E+00	1.53E-05	1.42E-05	5.52E-09	4.29E-07	5.0	1.79E-03	2.09E-05
S7	60	8	22	5	1.00E-02	5.41E-03	1.74E-05	7.12E-04	1.18E-04	5.04E-06	0.00E+00	1.30E-05	1.20E-05	4.68E-09	3.64E-07	4.3	1.52E-03	1.77E-05
S7	60	8	23	5	8.23E-03	4.44E-03	1.43E-05	5.84E-04	9.66E-05	4.14E-06	0.00E+00	1.07E-05	9.89E-06	3.85E-09	2.99E-07	3.5	1.25E-03	1.46E-05
S7	60	8	24	5	6.08E-03	3.28E-03	1.05E-05	4.32E-04	7.14E-05	3.06E-06	0.00E+00	7.90E-06	7.31E-06	2.84E-09	2.21E-07	2.6	9.23E-04	1.08E-05
S8	60	8	1	5	3.77E-03	2.03E-03	6.53E-06	2.68E-04	4.42E-05	1.89E-06	0.00E+00	4.90E-06	4.53E-06	1.76E-09	1.37E-07	1.6	5.72E-04	6.67E-06
S8	60	8	2	5	2.51E-03	1.36E-03	4.35E-06	1.78E-04	2.95E-05	1.26E-06	0.00E+00	3.26E-06	3.02E-06	1.17E-09	9.12E-08	1.1	3.81E-04	4.44E-06
S8	60	8	3	5	2.20E-03	1.19E-03	3.81E-06	1.56E-04	2.58E-05	1.10E-06	0.00E+00	2.86E-06	2.64E-06	1.03E-09	7.98E-08	0.9	3.34E-04	3.89E-06
S8	60	8	4	5	1.57E-03	8.48E-04	2.72E-06	1.12E-04	1.84E-05	7.89E-07	0.00E+00	2.04E-06	1.89E-06	7.34E-10	5.70E-08	0.7	2.38E-04	2.78E-06
S8	60	8	5	5	2.20E-03	1.19E-03	3.81E-06	1.56E-04	2.58E-05	1.10E-06	0.00E+00	2.86E-06	2.64E-06	1.03E-09	7.98E-08	0.9	3.34E-04	3.89E-06
S8	60	8	6	5	5.34E-03	2.88E-03	9.25E-06	3.79E-04	6.26E-05	2.68E-06	0.00E+00	6.94E-06	6.42E-06	2.49E-09	1.94E-07	2.3	8.10E-04	9.44E-06
S8	60	8	7	5	1.60E-02	8.65E-03	2.78E-05	1.14E-03	1.88E-04	8.05E-06	0.00E+00	2.08E-05	1.93E-05	7.48E-09	5.82E-07	6.8	2.43E-03	2.83E-05
S8	60	8	8	5	2.45E-02	1.32E-02	4.24E-05	1.74E-03	2.87E-04	1.23E-05	0.00E+00	3.18E-05	2.94E-05	1.14E-08	8.89E-07	10.5	3.72E-03	4.33E-05
S8	60	8	9	5	1.98E-02	1.07E-02	3.43E-05	1.41E-03	2.32E-04	9.94E-06	0.00E+00	2.57E-05	2.38E-05	9.25E-09	7.18E-07	8.4	3.00E-03	3.50E-05
S8	60	8	10	5	1.63E-02	8.82E-03	2.83E-05	1.16E-03	1.92E-04	8.21E-06	0.00E+00	2.12E-05	1.96E-05	7.63E-09	5.93E-07	7.0	2.48E-03	2.89E-05
S8	60	8	11	5	1.48E-02	7.97E-03	2.56E-05	1.05E-03	1.73E-04	7.43E-06	0.00E+00	1.92E-05	1.77E-05	6.90E-09	5.36E-07	6.3	2.24E-03	2.61E-05
S8	60	8	12	5	1.66E-02	8.99E-03	2.88E-05	1.18E-03	1.95E-04	8.38E-06	0.00E+00	2.16E-05	2.00E-05	7.78E-09	6.04E-07	7.1	2.53E-03	2.94E-05
S8	60	8	13	5	1.76E-02	9.50E-03	3.05E-05	1.25E-03	2.06E-04	8.86E-06	0.00E+00	2.28E-05	2.11E-05	8.22E-09	6.39E-07	7.5	2.67E-03	3.11E-05
S8	60	8	14	5	1.79E-02	9.66E-03	3.10E-05	1.27E-03	2.10E-04	9.03E-06	0.00E+00	2.33E-05	2.15E-05	8.36E-09	6.50E-07	7.6	2.72E-03	3.17E-05
S8	60	8	15	5	1.85E-02	1.00E-02	3.21E-05	1.32E-03	2.17E-04	9.34E-06	0.00E+00	2.41E-05	2.23E-05	8.66E-09	6.73E-07	7.9	2.81E-03	3.28E-05
S8	60	8	16	5	2.01E-02	1.09E-02	3.48E-05	1.43E-03	2.36E-04	1.01E-05	0.00E+00	2.61E-05	2.42E-05	9.39E-09	7.30E-07	8.6	3.05E-03	3.56E-05
S8	60	8	17	5	2.48E-02	1.34E-02	4.30E-05	1.76E-03	2.91E-04	1.25E-05	0.00E+00	3.22E-05	2.98E-05	1.16E-08	9.01E-07	10.6	3.76E-03	4.39E-05
S8	60	8	18	5	2.67E-02	1.44E-02	4.63E-05	1.90E-03	3.13E-04	1.34E-05	0.00E+00	3.47E-05	3.21E-05	1.25E-08	9.69E-07	11.4	4.05E-03	4.72E-05
S8	60	8	19	5	1.85E-02	1.00E-02	3.21E-05	1.32E-03	2.17E-04	9.33E-06	0.00E+00	2.41E-05	2.23E-05	8.66E-09	6.73E-07	7.9	2.81E-03	3.28E-05
S8	60	8	20	5	1.22E-02	6.61E-03	2.12E-05	8.70E-04	1.44E-04	6.16E-06	0.00E+00	1.59E-05	1.47E-05	5.72E-09	4.45E-07	5.2	1.86E-03	2.17E-05
S8	60	8	21	5	1.04E-02	5.60E-03	1.80E-05	7.36E-04	1.22E-04	5.21E-06	0.00E+00	1.35E-05	1.25E-05	4.84E-09	3.76E-07	4.4	1.57E-03	1.83E-05
S8	60	8	22	5	8.79E-03	4.75E-03	1.52E-05	6.24E-04	1.03E-04	4.42E-06	0.00E+00	1.14E-05	1.06E-05	4.11E-09	3.19E-07	3.8	1.33E-03	1.56E-05
S8	60	8	23	5	7.22E-03	3.90E-03	1.25E-05	5.13E-04	8.48E-05	3.63E-06	0.00E+00	9.38E-06	8.68E-06	3.38E-09	2.62E-07	3.1	1.10E-03	1.28E-05
S8	60	8	24	5	5.34E-03	2.88E-03	9.25E-06	3.79E-04	6.26E-05	2.68E-06	0.00E+00	6.94E-06	6.42E-06	2.49E-09	1.94E-07	2.3	8.10E-04	9.44E-06
S9	60	8	1	5	2.30E-03	1.24E-03	3.99E-06	1.63E-04	2.70E-05	1.16E-06	0.00E+00	2.99E-06	2.77E-06	1.08E-09	8.36E-08	1.0	3.49E-04	4.07E-06
S9	60	8	2	5	1.53E-03	8.29E-04	2.66E-06	1.09E-04	1.80E-05	7.71E-07	0.00E+00	1.99E-06	1.84E-06	7.17E-10	5.57E-08	0.7	2.33E-04	2.71E-06
S9	60	8	3	5	1.34E-03	7.25E-04	2.33E-06	9.54E-05	1.58E-05	6.75E-07	0.00E+00	1.74E-06	1.61E-06	6.28E-10	4.88E-08	0.6	2.04E-04	2.38E-06
S9	60	8	4	5	9.59E-04	5.18E-04	1.66E-06	6.81E-05	1.13E-05	4.82E-07	0.00E+00	1.25E-06	1.15E-06	4.48E-10	3.48E-08	0.4	1.46E-04	1.70E-06
S9	60	8	5	5	1.34E-03	7.25E-04	2.33E-06	9.54E-05	1.58E-05	6.75E-07	0.00E+00	1.74E-06	1.61E-06	6.28E-10	4.88E-08	0.6	2.04E-04	2.38E-06
S9	60	8	6	5	3.26E-03	1.76E-03	5.65E-06	2.32E-04	3.83E-05	1.64E-06	0.00E+00	4.24E-06	3.92E-06	1.52E-09	1.18E-07	1.4	4.95E-04	5.77E-06
S9	60	8	7	5	9.78E-03	5.28E-03	1.70E-05	6.95E-04	1.15E-04	4.92E-06	0.00E+00	1.27E-05	1.18E-05	4.57E-09	3.55E-07	4.2	1.48E-03	1.73E-05
S9	60	8	8	5	1.50E-02	8.08E-03	2.59E-05	1.06E-03	1.76E-04	7.52E-06	0.00E+00	1.94E-05	1.80E-05	6.99E-09	5.43E-07	6.4	2.27E-03	2.65E-05
S9	60	8	9	5	1.21E-02	6.53E-03	2.09E-05	8.58E-04	1.42E-04	6.07E-06	0.00E+00	1.57E-05	1.45E-05	5.65E-09	4.39E-07	5.2	1.83E-03	2.14E-05
S9	60	8	10	5	9.97E-03	5.39E-03	1.73E-05	7.08E-04	1.17E-04	5.02E-06	0.00E+00	1.30E-05	1.20E-05	4.66E-09	3.62E-07	4.3	1.51E-03	1.76E-05
S9	60	8	11	5	9.01E-03	4.87E-03	1.56E-05	6.40E-04	1.06E-04	4.54E-06	0.00E+00	1.17E-05	1.08E-05	4.21E-09	3.27E-07	3.9	1.37E-03	1.59E-05
S9	60	8	12	5	1.02E-02	5.49E-03	1.76E-05	7.22E-04	1.19E-04	5.12E-06	0.00E+00	1.32E-05	1.22E-05	4.75E-09	3.69E-07	4.3	1.54E-03	1.80E-05
S9	60	8	13	5	1.07E-02	5.80E-03	1.86E-05	7.63E-04	1.26E-04	5.41E-06	0.00E+00	1.40E-05	1.29E-05	5.02E-09	3.90E-07	4.6	1.63E-03	1.90E-05
S9	60	8	14	5	1.09E-02	5.90E-03	1.89E-05	7.77E-04	1.28E-04	5.51E-06	0.00E+00	1.42E-05	1.31E-05	5.11E-09	3.97E-07	4.7	1.66E-03	1.93E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S9	60	8	15	5	1.13E-02	6.11E-03	1.96E-05	8.04E-04	1.33E-04	5.71E-06	0.00E+00	1.47E-05	1.36E-05	5.29E-09	4.11E-07	4.8	1.72E-03	2.00E-05
S9	60	8	16	5	1.23E-02	6.63E-03	2.13E-05	8.72E-04	1.44E-04	6.19E-06	0.00E+00	1.60E-05	1.48E-05	5.74E-09	4.46E-07	5.2	1.86E-03	2.17E-05
S9	60	8	17	5	1.52E-02	8.18E-03	2.63E-05	1.08E-03	1.78E-04	7.63E-06	0.00E+00	1.97E-05	1.82E-05	7.08E-09	5.50E-07	6.5	2.30E-03	2.68E-05
S9	60	8	18	5	1.63E-02	8.80E-03	2.83E-05	1.16E-03	1.91E-04	8.22E-06	0.00E+00	2.12E-05	1.96E-05	7.62E-09	5.92E-07	7.0	2.47E-03	2.88E-05
S9	60	8	19	5	1.13E-02	6.11E-03	1.96E-05	8.04E-04	1.33E-04	5.70E-06	0.00E+00	1.47E-05	1.36E-05	5.29E-09	4.11E-07	4.8	1.72E-03	2.00E-05
S9	60	8	20	5	7.48E-03	4.04E-03	1.30E-05	5.31E-04	8.78E-05	3.76E-06	0.00E+00	9.72E-06	8.99E-06	3.50E-09	2.72E-07	3.2	1.14E-03	1.32E-05
S9	60	8	21	5	6.33E-03	3.42E-03	1.10E-05	4.50E-04	7.43E-05	3.18E-06	0.00E+00	8.22E-06	7.61E-06	2.96E-09	2.30E-07	2.7	9.61E-04	1.12E-05
S9	60	8	22	5	5.37E-03	2.90E-03	9.31E-06	3.81E-04	6.30E-05	2.70E-06	0.00E+00	6.98E-06	6.46E-06	2.51E-09	1.95E-07	2.3	8.15E-04	9.50E-06
S9	60	8	23	5	4.41E-03	2.38E-03	7.65E-06	3.13E-04	5.18E-05	2.22E-06	0.00E+00	5.73E-06	5.30E-06	2.06E-09	1.60E-07	1.9	6.70E-04	7.81E-06
S9	60	8	24	5	3.26E-03	1.76E-03	5.65E-06	2.32E-04	3.83E-05	1.64E-06	0.00E+00	4.24E-06	3.92E-06	1.52E-09	1.18E-07	1.4	4.95E-04	5.77E-06
S10	60	8	1	5	7.70E-03	4.16E-03	1.33E-05	5.47E-04	9.04E-05	3.87E-06	0.00E+00	1.00E-05	9.26E-06	3.60E-09	2.80E-07	3.3	1.17E-03	1.36E-05
S10	60	8	2	5	5.13E-03	2.77E-03	8.90E-06	3.65E-04	6.03E-05	2.58E-06	0.00E+00	6.67E-06	6.17E-06	2.40E-09	1.86E-07	2.2	7.79E-04	9.08E-06
S10	60	8	3	5	4.49E-03	2.43E-03	7.79E-06	3.19E-04	5.27E-05	2.26E-06	0.00E+00	5.84E-06	5.40E-06	2.10E-09	1.63E-07	1.9	6.82E-04	7.95E-06
S10	60	8	4	5	3.21E-03	1.73E-03	5.56E-06	2.28E-04	3.77E-05	1.61E-06	0.00E+00	4.17E-06	3.86E-06	1.50E-09	1.17E-07	1.4	4.87E-04	5.68E-06
S10	60	8	5	5	4.49E-03	2.43E-03	7.79E-06	3.19E-04	5.27E-05	2.26E-06	0.00E+00	5.84E-06	5.40E-06	2.10E-09	1.63E-07	1.9	6.82E-04	7.95E-06
S10	60	8	6	5	1.09E-02	5.89E-03	1.89E-05	7.75E-04	1.28E-04	5.48E-06	0.00E+00	1.42E-05	1.31E-05	5.10E-09	3.96E-07	4.7	1.66E-03	1.93E-05
S10	60	8	7	5	3.27E-02	1.77E-02	5.67E-05	2.32E-03	3.84E-04	1.64E-05	0.00E+00	4.25E-05	3.94E-05	1.53E-08	1.19E-06	14.0	4.97E-03	5.79E-05
S10	60	8	8	5	5.01E-02	2.70E-02	8.68E-05	3.56E-03	5.87E-04	2.52E-05	0.00E+00	6.50E-05	6.02E-05	2.34E-08	1.82E-06	21.4	7.60E-03	8.86E-05
S10	60	8	9	5	4.04E-02	2.18E-02	7.01E-05	2.87E-03	4.74E-04	2.03E-05	0.00E+00	5.25E-05	4.86E-05	1.89E-08	1.47E-06	17.3	6.14E-03	7.15E-05
S10	60	8	10	5	3.34E-02	1.80E-02	5.78E-05	2.37E-03	3.92E-04	1.68E-05	0.00E+00	4.34E-05	4.01E-05	1.56E-08	1.21E-06	14.3	5.07E-03	5.90E-05
S10	60	8	11	5	3.02E-02	1.63E-02	5.23E-05	2.14E-03	3.54E-04	1.52E-05	0.00E+00	3.92E-05	3.63E-05	1.41E-08	1.10E-06	12.9	4.58E-03	5.34E-05
S10	60	8	12	5	3.40E-02	1.84E-02	5.89E-05	2.42E-03	3.99E-04	1.71E-05	0.00E+00	4.42E-05	4.09E-05	1.59E-08	1.24E-06	14.5	5.16E-03	6.02E-05
S10	60	8	13	5	3.59E-02	1.94E-02	6.23E-05	2.55E-03	4.22E-04	1.81E-05	0.00E+00	4.67E-05	4.32E-05	1.68E-08	1.31E-06	15.3	5.45E-03	6.36E-05
S10	60	8	14	5	3.66E-02	1.98E-02	6.34E-05	2.60E-03	4.29E-04	1.85E-05	0.00E+00	4.75E-05	4.40E-05	1.71E-08	1.33E-06	15.6	5.55E-03	6.47E-05
S10	60	8	15	5	3.79E-02	2.04E-02	6.56E-05	2.69E-03	4.44E-04	1.91E-05	0.00E+00	4.92E-05	4.55E-05	1.77E-08	1.38E-06	16.2	5.75E-03	6.70E-05
S10	60	8	16	5	4.11E-02	2.22E-02	7.12E-05	2.92E-03	4.82E-04	2.07E-05	0.00E+00	5.34E-05	4.94E-05	1.92E-08	1.49E-06	17.5	6.23E-03	7.27E-05
S10	60	8	17	5	5.07E-02	2.74E-02	8.79E-05	3.60E-03	5.95E-04	2.55E-05	0.00E+00	6.59E-05	6.10E-05	2.37E-08	1.84E-06	21.7	7.70E-03	8.97E-05
S10	60	8	18	5	5.45E-02	2.95E-02	9.45E-05	3.87E-03	6.40E-04	2.75E-05	0.00E+00	7.09E-05	6.56E-05	2.55E-08	1.98E-06	23.3	8.28E-03	9.65E-05
S10	60	8	19	5	3.79E-02	2.04E-02	6.56E-05	2.69E-03	4.44E-04	1.91E-05	0.00E+00	4.92E-05	4.55E-05	1.77E-08	1.38E-06	16.2	5.75E-03	6.70E-05
S10	60	8	20	5	2.50E-02	1.35E-02	4.34E-05	1.78E-03	2.94E-04	1.26E-05	0.00E+00	3.25E-05	3.01E-05	1.17E-08	9.09E-07	10.7	3.80E-03	4.43E-05
S10	60	8	21	5	2.12E-02	1.14E-02	3.67E-05	1.50E-03	2.49E-04	1.06E-05	0.00E+00	2.75E-05	2.55E-05	9.90E-09	7.69E-07	9.0	3.21E-03	3.75E-05
S10	60	8	22	5	1.80E-02	9.70E-03	3.11E-05	1.28E-03	2.11E-04	9.03E-06	0.00E+00	2.33E-05	2.16E-05	8.40E-09	6.53E-07	7.7	2.73E-03	3.18E-05
S10	60	8	23	5	1.48E-02	7.97E-03	2.56E-05	1.05E-03	1.73E-04	7.42E-06	0.00E+00	1.92E-05	1.77E-05	6.90E-09	5.36E-07	6.3	2.24E-03	2.61E-05
S10	60	8	24	5	1.09E-02	5.89E-03	1.89E-05	7.75E-04	1.28E-04	5.48E-06	0.00E+00	1.42E-05	1.31E-05	5.10E-09	3.96E-07	4.7	1.66E-03	1.93E-05
S11	60	8	1	5	2.02E-03	1.09E-03	3.50E-06	1.44E-04	2.37E-05	1.02E-06	0.00E+00	2.63E-06	2.43E-06	9.44E-10	7.34E-08	0.9	3.07E-04	3.58E-06
S11	60	8	2	5	1.35E-03	7.27E-04	2.33E-06	9.57E-05	1.58E-05	6.77E-07	0.00E+00	1.75E-06	1.62E-06	6.30E-10	4.89E-08	0.6	2.04E-04	2.38E-06
S11	60	8	3	5	1.18E-03	6.37E-04	2.04E-06	8.37E-05	1.38E-05	5.92E-07	0.00E+00	1.53E-06	1.42E-06	5.51E-10	4.28E-08	0.5	1.79E-04	2.09E-06
S11	60	8	4	5	8.42E-04	4.55E-04	1.46E-06	5.98E-05	9.88E-06	4.23E-07	0.00E+00	1.09E-06	1.01E-06	3.94E-10	3.06E-08	0.4	1.28E-04	1.49E-06
S11	60	8	5	5	1.18E-03	6.37E-04	2.04E-06	8.37E-05	1.38E-05	5.92E-07	0.00E+00	1.53E-06	1.42E-06	5.51E-10	4.28E-08	0.5	1.79E-04	2.09E-06
S11	60	8	6	5	2.86E-03	1.55E-03	4.96E-06	2.03E-04	3.36E-05	1.44E-06	0.00E+00	3.72E-06	3.44E-06	1.34E-09	1.04E-07	1.2	4.34E-04	5.06E-06
S11	60	8	7	5	8.59E-03	4.64E-03	1.49E-05	6.10E-04	1.01E-04	4.32E-06	0.00E+00	1.12E-05	1.03E-05	4.01E-09	3.12E-07	3.7	1.30E-03	1.52E-05
S11	60	8	8	5	1.31E-02	7.09E-03	2.28E-05	9.33E-04	1.54E-04	6.60E-06	0.00E+00	1.71E-05	1.58E-05	6.14E-09	4.77E-07	5.6	1.99E-03	2.32E-05
S11	60	8	9	5	1.06E-02	5.73E-03	1.84E-05	7.54E-04	1.24E-04	5.33E-06	0.00E+00	1.38E-05	1.28E-05	4.96E-09	3.85E-07	4.5	1.61E-03	1.88E-05
S11	60	8	10	5	8.76E-03	4.73E-03	1.52E-05	6.22E-04	1.03E-04	4.40E-06	0.00E+00	1.14E-05	1.05E-05	4.09E-09	3.18E-07	3.7	1.33E-03	1.55E-05
S11	60	8	11	5	7.91E-03	4.27E-03	1.37E-05	5.62E-04	9.29E-05	3.98E-06	0.00E+00	1.03E-05	9.52E-06	3.70E-09	2.87E-07	3.4	1.20E-03	1.40E-05
S11	60	8	12	5	8.92E-03	4.82E-03	1.55E-05	6.34E-04	1.05E-04	4.50E-06	0.00E+00	1.16E-05	1.07E-05	4.17E-09	3.24E-07	3.8	1.35E-03	1.58E-05
S11	60	8	13	5	9.43E-03	5.09E-03	1.63E-05	6.70E-04	1.11E-04	4.75E-06	0.00E+00	1.23E-05	1.13E-05	4.41E-09	3.42E-07	4.0	1.43E-03	1.67E-05
S11	60	8	14	5	9.60E-03	5.18E-03	1.66E-05	6.82E-04	1.13E-04	4.84E-06	0.00E+00	1.25E-05	1.15E-05	4.49E-09	3.49E-07	4.1	1.46E-03	1.70E-05
S11	60	8	15	5	9.93E-03	5.37E-03	1.72E-05	7.06E-04	1.17E-04	5.01E-06	0.00E+00	1.29E-05	1.19E-05	4.64E-09	3.61E-07	4.2	1.51E-03	1.76E-05
S11	60	8	16	5	1.08E-02	5.82E-03	1.87E-05	7.65E-04	1.26E-04	5.43E-06	0.00E+00	1.40E-05	1.30E-05	5.04E-09	3.91E-07	4.6	1.64E-03	1.91E-05
S11	60	8	17	5	1.33E-02	7.18E-03	2.31E-05	9.45E-04	1.56E-04	6.70E-06	0.00E+00	1.73E-05	1.60E-05	6.22E-09	4.83E-07	5.7	2.02E-03	2.35E-05
S11	60	8	18	5	1.43E-02	7.73E-03	2.48E-05	1.02E-03	1.68E-04	7.21E-06	0.00E+00	1.86E-05	1.72E-05	6.69E-09	5.20E-07	6.1	2.17E-03	2.53E-05
S11	60	8	19	5	9.93E-03	5.37E-03	1.72E-05	7.06E-04	1.17E-04	5.00E-06	0.00E+00	1.29E-05	1.19E-05	4.64E-09	3.61E-07	4.2	1.51E-03	1.76E-05
S11	60	8	20	5	6.57E-03	3.55E-03	1.14E-05	4.66E-04	7.71E-05	3.30E-06	0.00E+00	8.53E-06	7.90E-06	3.07E-09	2.39E-07	2.8	9.97E-04	1.16E-05
S11	60	8	21	5	5.56E-03	3.00E-03	9.63E-06	3.95E-04	6.52E-05	2.79E-06	0.00E+00	7.22E-06	6.68E-06	2.60E-09	2.02E-07	2.4	8.43E-04	9.83E-06
S11	60	8	22	5	4.71E-03	2.55E-03	8.17E-06	3.35E-04	5.53E-05	2.37E-06	0.00E+00	6.13E-06	5.67E-06	2.20E-09	1.71E-07	2.0	7.16E-04	8.34E-06
S11	60	8	23	5	3.87E-03	2.09E-03	6.71E-06	2.75E-04	4.55E-05	1.95E-06	0.00E+00	5.03E-06	4.66E-06	1.81E-09	1.41E-07	1.7	5.88E-04	6.85E-06
S11	60	8	24	5	2.86E-03	1.55E-03	4.96E-06	2.03E-04	3.36E-05	1.44E-06	0.00E+00	3.72E-06	3.44E-06	1.34E-09	1.04E-07	1.2	4.34E-04	5.06E-06
S12	60	8	1	5	4.87E-03	2.63E-03	8.43E-06	3.46E-04	5.71E-05	2.45E-06	0.00E+00	6.32E-06	5.85E-06	2.27E-09	1.77E-07	2.1	7.38E-04	8.61E-06
S12	60	8	2	5	3.24E-03	1.75E-03	5.62E-06	2.30E-04	3.81E-05	1.63E-06	0.00E+00	4.21E-06	3.90E-06	1.52E-09	1.18E-07	1.4	4.92E-04	5.74E-06
S12	60	8	3	5	2.84E-03	1.53E-03	4.92E-06	2.02E-04	3.33E-05	1.43E-06	0.00E+00	3.69E-06	3.41E-06	1.33E-09	1.03E-07	1.2	4.31E-04	5.02E-06
S12	60	8	4	5	2.03E-03	1.09E-03	3.51E-06	1.44E-04	2.38E-05	1.02E-06	0.00E+00	2.63E-06	2.44E-06	9.48E-10	7.36E-08	0.9	3.08E-04	3.59E-06
S12	60	8	5	5	2.84E-03	1.53E-03	4.92E-06	2.02E-04	3.33E-05	1.43E-06	0.00E+00	3.69E-06	3.41E-06	1.33E-09	1.03E-07	1.2	4.31E-04	5.02E-06
S12	60	8	6	5	6.89E-03	3.72E-03	1.19E-05	4.90E-04	8.09E-05	3.46E-06	0.00E+00	8.96E-06	8.29E-06	3.22E-09	2.50E-07	2.9	1.05E-03	1.22E-05
S12	60	8	7	5	2.07E-02	1.12E-02	3.58E-05	1.47E-03	2.43E-04	1.04E-05	0.00E+00	2.69E-05	2.49E-05	9.66E-09	7.51E-07	8.8	3.14E-03	3.66E-05
S12	60	8	8	5	3.16E-02	1.71E-02	5.48E-05	2.25E-03	3.71E-04	1.59E-05	0.00E+00	4.11E-05	3.80E-05	1.48E-08	1.15E-06	13.5	4.80E-03	5.60E-05
S12	60	8	9	5	2.55E-02	1.38E-02	4.43E-05	1.81E-03	3.00E-04	1.28E-05	0.00E+00	3.32E-05	3.07E-05	1.19E-08	9.28E-07	10.9	3.88E-03	4.52E-05
S12	60	8	10	5	2.11E-02	1.14E-02	3.65E-05	1.50E-03	2.47E-04	1.06E-05	0.00E+00	2.74E-05	2.53E-05	9.85E-09	7.66E-07	9.0	3.20E-03	3.73E-05
S12	60	8	11	5	1.91E-02	1.03E-02	3.30E-05	1.35E-03	2.24E-04	9.59E-06	0.00E+00	2.48E-05	2.29E-05	8.91E-09	6.92E-07	8.1	2.89E-03	3.37E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S12	60	8	12	5	2.15E-02	1.16E-02	3.72E-05	1.53E-03	2.52E-04	1.08E-05	0.00E+00	2.79E-05	2.58E-05	1.00E-08	7.80E-07	9.2	3.26E-03	3.80E-05
S12	60	8	13	5	2.27E-02	1.23E-02	3.93E-05	1.61E-03	2.66E-04	1.14E-05	0.00E+00	2.95E-05	2.73E-05	1.06E-08	8.25E-07	9.7	3.45E-03	4.02E-05
S12	60	8	14	5	2.31E-02	1.25E-02	4.01E-05	1.64E-03	2.71E-04	1.17E-05	0.00E+00	3.00E-05	2.78E-05	1.08E-08	8.39E-07	9.9	3.51E-03	4.09E-05
S12	60	8	15	5	2.39E-02	1.29E-02	4.15E-05	1.70E-03	2.81E-04	1.21E-05	0.00E+00	3.11E-05	2.88E-05	1.12E-08	8.69E-07	10.2	3.63E-03	4.23E-05
S12	60	8	16	5	2.59E-02	1.40E-02	4.50E-05	1.84E-03	3.05E-04	1.31E-05	0.00E+00	3.37E-05	3.12E-05	1.21E-08	9.42E-07	11.1	3.94E-03	4.59E-05
S12	60	8	17	5	3.20E-02	1.73E-02	5.55E-05	2.28E-03	3.76E-04	1.61E-05	0.00E+00	4.16E-05	3.85E-05	1.50E-08	1.16E-06	13.7	4.86E-03	5.67E-05
S12	60	8	18	5	3.45E-02	1.86E-02	5.97E-05	2.45E-03	4.04E-04	1.74E-05	0.00E+00	4.48E-05	4.14E-05	1.61E-08	1.25E-06	14.7	5.23E-03	6.10E-05
S12	60	8	19	5	2.39E-02	1.29E-02	4.15E-05	1.70E-03	2.81E-04	1.20E-05	0.00E+00	3.11E-05	2.88E-05	1.12E-08	8.69E-07	10.2	3.63E-03	4.23E-05
S12	60	8	20	5	1.58E-02	8.54E-03	2.74E-05	1.12E-03	1.86E-04	7.95E-06	0.00E+00	2.05E-05	1.90E-05	7.39E-09	5.74E-07	6.8	2.40E-03	2.80E-05
S12	60	8	21	5	1.34E-02	7.23E-03	2.32E-05	9.50E-04	1.57E-04	6.73E-06	0.00E+00	1.74E-05	1.61E-05	6.25E-09	4.86E-07	5.7	2.03E-03	2.37E-05
S12	60	8	22	5	1.14E-02	6.13E-03	1.97E-05	8.06E-04	1.33E-04	5.71E-06	0.00E+00	1.48E-05	1.36E-05	5.31E-09	4.12E-07	4.8	1.72E-03	2.01E-05
S12	60	8	23	5	9.33E-03	5.04E-03	1.62E-05	6.62E-04	1.09E-04	4.69E-06	0.00E+00	1.21E-05	1.12E-05	4.36E-09	3.39E-07	4.0	1.42E-03	1.65E-05
S12	60	8	24	5	6.89E-03	3.72E-03	1.19E-05	4.90E-04	8.09E-05	3.46E-06	0.00E+00	8.96E-06	8.29E-06	3.22E-09	2.50E-07	2.9	1.05E-03	1.22E-05
S13	60	8	1	5	2.59E-03	1.40E-03	4.50E-06	1.84E-04	3.04E-05	1.30E-06	0.00E+00	3.37E-06	3.12E-06	1.21E-09	9.42E-08	1.1	3.94E-04	4.59E-06
S13	60	8	2	5	1.73E-03	9.34E-04	3.00E-06	1.23E-04	2.03E-05	8.69E-07	0.00E+00	2.25E-06	2.08E-06	8.08E-10	6.28E-08	0.7	2.63E-04	3.06E-06
S13	60	8	3	5	1.51E-03	8.17E-04	2.62E-06	1.07E-04	1.78E-05	7.61E-07	0.00E+00	1.97E-06	1.82E-06	7.07E-10	5.50E-08	0.6	2.30E-04	2.68E-06
S13	60	8	4	5	1.08E-03	5.84E-04	1.87E-06	7.68E-05	1.27E-05	5.43E-07	0.00E+00	1.40E-06	1.30E-06	5.05E-10	3.93E-08	0.5	1.64E-04	1.91E-06
S13	60	8	5	5	1.51E-03	8.17E-04	2.62E-06	1.07E-04	1.78E-05	7.60E-07	0.00E+00	1.97E-06	1.82E-06	7.07E-10	5.50E-08	0.6	2.30E-04	2.68E-06
S13	60	8	6	5	3.68E-03	1.98E-03	6.37E-06	2.61E-04	4.31E-05	1.85E-06	0.00E+00	4.78E-06	4.42E-06	1.72E-09	1.33E-07	1.6	5.58E-04	6.50E-06
S13	60	8	7	5	1.10E-02	5.95E-03	1.91E-05	7.83E-04	1.29E-04	5.54E-06	0.00E+00	1.43E-05	1.33E-05	5.15E-09	4.00E-07	4.7	1.67E-03	1.95E-05
S13	60	8	8	5	1.69E-02	9.11E-03	2.92E-05	1.20E-03	1.98E-04	8.48E-06	0.00E+00	2.19E-05	2.03E-05	7.88E-09	6.12E-07	7.2	2.56E-03	2.98E-05
S13	60	8	9	5	1.36E-02	7.36E-03	2.36E-05	9.67E-04	1.60E-04	6.85E-06	0.00E+00	1.77E-05	1.64E-05	6.37E-09	4.95E-07	5.8	2.07E-03	2.41E-05
S13	60	8	10	5	1.12E-02	6.07E-03	1.95E-05	7.99E-04	1.32E-04	5.65E-06	0.00E+00	1.46E-05	1.35E-05	5.25E-09	4.08E-07	4.8	1.71E-03	1.99E-05
S13	60	8	11	5	1.02E-02	5.49E-03	1.76E-05	7.22E-04	1.19E-04	5.12E-06	0.00E+00	1.32E-05	1.22E-05	4.75E-09	3.69E-07	4.3	1.54E-03	1.80E-05
S13	60	8	12	5	1.15E-02	6.19E-03	1.99E-05	8.14E-04	1.34E-04	5.77E-06	0.00E+00	1.49E-05	1.38E-05	5.36E-09	4.16E-07	4.9	1.74E-03	2.03E-05
S13	60	8	13	5	1.21E-02	6.54E-03	2.10E-05	8.60E-04	1.42E-04	6.10E-06	0.00E+00	1.57E-05	1.46E-05	5.66E-09	4.40E-07	5.2	1.84E-03	2.14E-05
S13	60	8	14	5	1.23E-02	6.65E-03	2.14E-05	8.75E-04	1.45E-04	6.22E-06	0.00E+00	1.60E-05	1.48E-05	5.76E-09	4.48E-07	5.3	1.87E-03	2.18E-05
S13	60	8	15	5	1.28E-02	6.89E-03	2.21E-05	9.06E-04	1.50E-04	6.43E-06	0.00E+00	1.66E-05	1.53E-05	5.96E-09	4.63E-07	5.4	1.94E-03	2.26E-05
S13	60	8	16	5	1.38E-02	7.47E-03	2.40E-05	9.83E-04	1.62E-04	6.97E-06	0.00E+00	1.80E-05	1.66E-05	6.47E-09	5.03E-07	5.9	2.10E-03	2.45E-05
S13	60	8	17	5	1.71E-02	9.22E-03	2.96E-05	1.21E-03	2.00E-04	8.60E-06	0.00E+00	2.22E-05	2.05E-05	7.98E-09	6.20E-07	7.3	2.59E-03	3.02E-05
S13	60	8	18	5	1.84E-02	9.92E-03	3.18E-05	1.31E-03	2.16E-04	9.26E-06	0.00E+00	2.39E-05	2.21E-05	8.59E-09	6.67E-07	7.8	2.79E-03	3.25E-05
S13	60	8	19	5	1.28E-02	6.89E-03	2.21E-05	9.06E-04	1.50E-04	6.42E-06	0.00E+00	1.66E-05	1.53E-05	5.96E-09	4.63E-07	5.4	1.94E-03	2.26E-05
S13	60	8	20	5	8.43E-03	4.55E-03	1.46E-05	5.99E-04	9.90E-05	4.24E-06	0.00E+00	1.10E-05	1.01E-05	3.94E-09	3.06E-07	3.6	1.28E-03	1.49E-05
S13	60	8	21	5	7.13E-03	3.85E-03	1.24E-05	5.07E-04	8.37E-05	3.59E-06	0.00E+00	9.27E-06	8.58E-06	3.33E-09	2.59E-07	3.0	1.08E-03	1.26E-05
S13	60	8	22	5	6.05E-03	3.27E-03	1.05E-05	4.30E-04	7.10E-05	3.04E-06	0.00E+00	7.87E-06	7.28E-06	2.83E-09	2.20E-07	2.6	9.19E-04	1.07E-05
S13	60	8	23	5	4.97E-03	2.69E-03	8.62E-06	3.53E-04	5.84E-05	2.50E-06	0.00E+00	6.46E-06	5.98E-06	2.32E-09	1.81E-07	2.1	7.55E-04	8.80E-06
S13	60	8	24	5	3.68E-03	1.98E-03	6.37E-06	2.61E-04	4.31E-05	1.85E-06	0.00E+00	4.78E-06	4.42E-06	1.72E-09	1.33E-07	1.6	5.58E-04	6.50E-06
S14	60	8	1	5	1.63E-03	8.79E-04	2.82E-06	1.16E-04	1.91E-05	8.18E-07	0.00E+00	2.11E-06	1.96E-06	7.60E-10	5.91E-08	0.7	2.47E-04	2.88E-06
S14	60	8	2	5	1.08E-03	5.86E-04	1.88E-06	7.70E-05	1.27E-05	5.45E-07	0.00E+00	1.41E-06	1.30E-06	5.07E-10	3.94E-08	0.5	1.65E-04	1.92E-06
S14	60	8	3	5	9.49E-04	5.13E-04	1.64E-06	6.74E-05	1.11E-05	4.77E-07	0.00E+00	1.23E-06	1.14E-06	4.44E-10	3.45E-08	0.4	1.44E-04	1.68E-06
S14	60	8	4	5	6.78E-04	3.66E-04	1.17E-06	4.82E-05	7.96E-06	3.41E-07	0.00E+00	8.81E-07	8.15E-07	3.17E-10	2.46E-08	0.3	1.03E-04	1.20E-06
S14	60	8	5	5	9.49E-04	5.13E-04	1.64E-06	6.74E-05	1.11E-05	4.77E-07	0.00E+00	1.23E-06	1.14E-06	4.44E-10	3.45E-08	0.4	1.44E-04	1.68E-06
S14	60	8	6	5	2.30E-03	1.24E-03	3.99E-06	1.64E-04	2.71E-05	1.16E-06	0.00E+00	3.00E-06	2.77E-06	1.08E-09	8.37E-08	1.0	3.50E-04	4.08E-06
S14	60	8	7	5	6.91E-03	3.73E-03	1.20E-05	4.91E-04	8.12E-05	3.48E-06	0.00E+00	8.99E-06	8.31E-06	3.23E-09	2.51E-07	3.0	1.05E-03	1.22E-05
S14	60	8	8	5	1.06E-02	5.71E-03	1.83E-05	7.51E-04	1.24E-04	5.32E-06	0.00E+00	1.37E-05	1.27E-05	4.94E-09	3.84E-07	4.5	1.61E-03	1.87E-05
S14	60	8	9	5	8.54E-03	4.61E-03	1.48E-05	6.07E-04	1.00E-04	4.29E-06	0.00E+00	1.11E-05	1.03E-05	3.99E-09	3.10E-07	3.6	1.30E-03	1.51E-05
S14	60	8	10	5	7.05E-03	3.81E-03	1.22E-05	5.01E-04	8.27E-05	3.55E-06	0.00E+00	9.16E-06	8.48E-06	3.30E-09	2.56E-07	3.0	1.07E-03	1.25E-05
S14	60	8	11	5	6.37E-03	3.44E-03	1.10E-05	4.53E-04	7.48E-05	3.21E-06	0.00E+00	8.28E-06	7.66E-06	2.98E-09	2.31E-07	2.7	9.67E-04	1.13E-05
S14	60	8	12	5	7.19E-03	3.88E-03	1.25E-05	5.10E-04	8.43E-05	3.62E-06	0.00E+00	9.34E-06	8.64E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S14	60	8	13	5	7.59E-03	4.10E-03	1.32E-05	5.39E-04	8.91E-05	3.83E-06	0.00E+00	9.87E-06	9.13E-06	3.55E-09	2.76E-07	3.2	1.15E-03	1.34E-05
S14	60	8	14	5	7.73E-03	4.17E-03	1.34E-05	5.49E-04	9.07E-05	3.90E-06	0.00E+00	1.00E-05	9.29E-06	3.61E-09	2.81E-07	3.3	1.17E-03	1.37E-05
S14	60	8	15	5	8.00E-03	4.32E-03	1.39E-05	5.68E-04	9.39E-05	4.03E-06	0.00E+00	1.04E-05	9.62E-06	3.74E-09	2.91E-07	3.4	1.21E-03	1.42E-05
S14	60	8	16	5	8.68E-03	4.69E-03	1.50E-05	6.16E-04	1.02E-04	4.37E-06	0.00E+00	1.13E-05	1.04E-05	4.06E-09	3.15E-07	3.7	1.32E-03	1.54E-05
S14	60	8	17	5	1.07E-02	5.78E-03	1.86E-05	7.61E-04	1.26E-04	5.40E-06	0.00E+00	1.39E-05	1.29E-05	5.01E-09	3.89E-07	4.6	1.63E-03	1.90E-05
S14	60	8	18	5	1.15E-02	6.22E-03	2.00E-05	8.19E-04	1.35E-04	5.81E-06	0.00E+00	1.50E-05	1.39E-05	5.39E-09	4.19E-07	4.9	1.75E-03	2.04E-05
S14	60	8	19	5	8.00E-03	4.32E-03	1.39E-05	5.68E-04	9.39E-05	4.03E-06	0.00E+00	1.04E-05	9.62E-06	3.74E-09	2.91E-07	3.4	1.21E-03	1.42E-05
S14	60	8	20	5	5.29E-03	2.86E-03	9.16E-06	3.76E-04	6.21E-05	2.66E-06	0.00E+00	6.87E-06	6.36E-06	2.47E-09	1.92E-07	2.3	8.03E-04	9.36E-06
S14	60	8	21	5	4.47E-03	2.42E-03	7.75E-06	3.18E-04	5.25E-05	2.25E-06	0.00E+00	5.81E-06	5.38E-06	2.09E-09	1.63E-07	1.9	6.79E-04	7.92E-06
S14	60	8	22	5	3.80E-03	2.05E-03	6.58E-06	2.70E-04	4.46E-05	1.91E-06	0.00E+00	4.93E-06	4.56E-06	1.77E-09	1.38E-07	1.6	5.76E-04	6.72E-06
S14	60	8	23	5	3.12E-03	1.68E-03	5.40E-06	2.22E-04	3.66E-05	1.57E-06	0.00E+00	4.05E-06	3.75E-06	1.46E-09	1.13E-07	1.3	4.73E-04	5.52E-06
S14	60	8	24	5	2.30E-03	1.24E-03	3.99E-06	1.64E-04	2.71E-05	1.16E-06	0.00E+00	3.00E-06	2.77E-06	1.08E-09	8.37E-08	1.0	3.50E-04	4.08E-06
S15	60	8	1	5	2.15E-03	1.16E-03	3.73E-06	1.53E-04	2.53E-05	1.08E-06	0.00E+00	2.80E-06	2.59E-06	1.01E-09	7.82E-08	0.9	3.27E-04	3.81E-06
S15	60	8	2	5	1.43E-03	7.75E-04	2.49E-06	1.02E-04	1.68E-05	7.21E-07	0.00E+00	1.86E-06	1.72E-06	6.71E-10	5.21E-08	0.6	2.18E-04	2.54E-06
S15	60	8	3	5	1.26E-03	6.78E-04	2.18E-06	8.92E-05	1.47E-05	6.31E-07	0.00E+00	1.63E-06	1.51E-06	5.87E-10	4.56E-08	0.5	1.91E-04	2.22E-06
S15	60	8	4	5	8.97E-04	4.84E-04	1.55E-06	6.37E-05	1.05E-05	4.51E-07	0.00E+00	1.17E-06	1.08E-06	4.19E-10	3.26E-08	0.4	1.36E-04	1.59E-06
S15	60	8	5	5	1.26E-03	6.78E-04	2.18E-06	8.92E-05	1.47E-05	6.31E-07	0.00E+00	1.63E-06	1.51E-06	5.87E-10	4.56E-08	0.5	1.91E-04	2.22E-06
S15	60	8	6	5	3.05E-03	1.65E-03	5.28E-06	2.17E-04	3.58E-05	1.53E-06	0.00E+00	3.96E-06	3.67E-06	1.42E-09	1.11E-07	1.3	4.63E-04	5.39E-06
S15	60	8	7	5	9.15E-03	4.94E-03	1.58E-05	6.50E-04	1.07E-04	4.60E-06	0.00E+00	1.19E-05	1.10E-05	4.27E-09	3.32E-07	3.9	1.39E-03	1.62E-05
S15	60	8	8	5	1.40E-02	7.55E-03	2.42E-05	9.94E-04	1.64E-04	7.03E-06	0.00E+00	1.82E-05	1.68E-05	6.54E-09	5.08E-07	6.0	2.12E-03	2.47E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S15	60	8	9	5	1.13E-02	6.10E-03	1.96E-05	8.02E-04	1.33E-04	5.68E-06	0.00E+00	1.47E-05	1.36E-05	5.28E-09	4.10E-07	4.8	1.71E-03	2.00E-05
S15	60	8	10	5	9.32E-03	5.04E-03	1.62E-05	6.62E-04	1.09E-04	4.69E-06	0.00E+00	1.21E-05	1.12E-05	4.36E-09	3.39E-07	4.0	1.42E-03	1.65E-05
S15	60	8	11	5	8.43E-03	4.55E-03	1.46E-05	5.99E-04	9.89E-05	4.24E-06	0.00E+00	1.10E-05	1.01E-05	3.94E-09	3.06E-07	3.6	1.28E-03	1.49E-05
S15	60	8	12	5	9.50E-03	5.13E-03	1.65E-05	6.75E-04	1.12E-04	4.79E-06	0.00E+00	1.23E-05	1.14E-05	4.44E-09	3.45E-07	4.1	1.44E-03	1.68E-05
S15	60	8	13	5	1.00E-02	5.42E-03	1.74E-05	7.13E-04	1.18E-04	5.06E-06	0.00E+00	1.30E-05	1.21E-05	4.69E-09	3.65E-07	4.3	1.52E-03	1.78E-05
S15	60	8	14	5	1.02E-02	5.52E-03	1.77E-05	7.26E-04	1.20E-04	5.16E-06	0.00E+00	1.33E-05	1.23E-05	4.78E-09	3.71E-07	4.4	1.55E-03	1.81E-05
S15	60	8	15	5	1.06E-02	5.71E-03	1.83E-05	7.52E-04	1.24E-04	5.34E-06	0.00E+00	1.37E-05	1.27E-05	4.94E-09	3.84E-07	4.5	1.61E-03	1.87E-05
S15	60	8	16	5	1.15E-02	6.20E-03	1.99E-05	8.15E-04	1.35E-04	5.78E-06	0.00E+00	1.49E-05	1.38E-05	5.36E-09	4.17E-07	4.9	1.74E-03	2.03E-05
S15	60	8	17	5	1.42E-02	7.65E-03	2.46E-05	1.01E-03	1.66E-04	7.14E-06	0.00E+00	1.84E-05	1.70E-05	6.62E-09	5.15E-07	6.1	2.15E-03	2.51E-05
S15	60	8	18	5	1.52E-02	8.23E-03	2.64E-05	1.08E-03	1.79E-04	7.68E-06	0.00E+00	1.98E-05	1.83E-05	7.12E-09	5.54E-07	6.5	2.31E-03	2.70E-05
S15	60	8	19	5	1.06E-02	5.71E-03	1.83E-05	7.52E-04	1.24E-04	5.33E-06	0.00E+00	1.37E-05	1.27E-05	4.94E-09	3.84E-07	4.5	1.61E-03	1.87E-05
S15	60	8	20	5	6.99E-03	3.78E-03	1.21E-05	4.97E-04	8.21E-05	3.52E-06	0.00E+00	9.09E-06	8.41E-06	3.27E-09	2.54E-07	3.0	1.06E-03	1.24E-05
S15	60	8	21	5	5.92E-03	3.20E-03	1.03E-05	4.20E-04	6.95E-05	2.98E-06	0.00E+00	7.69E-06	7.11E-06	2.77E-09	2.15E-07	2.5	8.98E-04	1.05E-05
S15	60	8	22	5	5.02E-03	2.71E-03	8.70E-06	3.57E-04	5.89E-05	2.52E-06	0.00E+00	6.52E-06	6.04E-06	2.35E-09	1.82E-07	2.1	7.62E-04	8.88E-06
S15	60	8	23	5	4.12E-03	2.23E-03	7.15E-06	2.93E-04	4.84E-05	2.07E-06	0.00E+00	5.36E-06	4.96E-06	1.93E-09	1.50E-07	1.8	6.26E-04	7.30E-06
S15	60	8	24	5	3.05E-03	1.65E-03	5.28E-06	2.17E-04	3.58E-05	1.53E-06	0.00E+00	3.96E-06	3.67E-06	1.42E-09	1.11E-07	1.3	4.63E-04	5.39E-06
S16	60	8	1	5	1.26E-03	6.81E-04	2.19E-06	8.96E-05	1.48E-05	6.34E-07	0.00E+00	1.64E-06	1.52E-06	5.89E-10	4.58E-08	0.5	1.91E-04	2.23E-06
S16	60	8	2	5	8.41E-04	4.54E-04	1.46E-06	5.97E-05	9.87E-06	4.23E-07	0.00E+00	1.09E-06	1.01E-06	3.93E-10	3.05E-08	0.4	1.28E-04	1.49E-06
S16	60	8	3	5	7.36E-04	3.97E-04	1.27E-06	5.23E-05	8.63E-06	3.70E-07	0.00E+00	9.56E-07	8.84E-07	3.44E-10	2.67E-08	0.3	1.12E-04	1.30E-06
S16	60	8	4	5	5.25E-04	2.84E-04	9.11E-07	3.73E-05	6.17E-06	2.64E-07	0.00E+00	6.83E-07	6.32E-07	2.46E-10	1.91E-08	0.2	7.98E-05	9.30E-07
S16	60	8	5	5	7.36E-04	3.97E-04	1.27E-06	5.23E-05	8.63E-06	3.70E-07	0.00E+00	9.56E-07	8.84E-07	3.44E-10	2.67E-08	0.3	1.12E-04	1.30E-06
S16	60	8	6	5	1.79E-03	9.65E-04	3.10E-06	1.27E-04	2.10E-05	8.98E-07	0.00E+00	2.32E-06	2.15E-06	8.35E-10	6.49E-08	0.8	2.71E-04	3.16E-06
S16	60	8	7	5	5.36E-03	2.89E-03	9.29E-06	3.81E-04	6.29E-05	2.69E-06	0.00E+00	6.96E-06	6.44E-06	2.51E-09	1.95E-07	2.3	8.14E-04	9.48E-06
S16	60	8	8	5	8.20E-03	4.43E-03	1.42E-05	5.82E-04	9.62E-05	4.12E-06	0.00E+00	1.07E-05	9.86E-06	3.83E-09	2.98E-07	3.5	1.24E-03	1.45E-05
S16	60	8	9	5	6.62E-03	3.58E-03	1.15E-05	4.70E-04	7.77E-05	3.33E-06	0.00E+00	8.60E-06	7.96E-06	3.09E-09	2.40E-07	2.8	1.00E-03	1.17E-05
S16	60	8	10	5	5.46E-03	2.95E-03	9.47E-06	3.88E-04	6.41E-05	2.75E-06	0.00E+00	7.10E-06	6.57E-06	2.55E-09	1.98E-07	2.3	8.29E-04	9.67E-06
S16	60	8	11	5	4.94E-03	2.67E-03	8.56E-06	3.51E-04	5.80E-05	2.49E-06	0.00E+00	6.42E-06	5.94E-06	2.31E-09	1.79E-07	2.1	7.50E-04	8.74E-06
S16	60	8	12	5	5.57E-03	3.01E-03	9.65E-06	3.96E-04	6.54E-05	2.81E-06	0.00E+00	7.24E-06	6.70E-06	2.60E-09	2.02E-07	2.4	8.45E-04	9.86E-06
S16	60	8	13	5	5.89E-03	3.18E-03	1.02E-05	4.18E-04	6.91E-05	2.97E-06	0.00E+00	7.65E-06	7.08E-06	2.75E-09	2.14E-07	2.5	8.93E-04	1.04E-05
S16	60	8	14	5	5.99E-03	3.24E-03	1.04E-05	4.26E-04	7.03E-05	3.02E-06	0.00E+00	7.78E-06	7.20E-06	2.80E-09	2.18E-07	2.6	9.09E-04	1.06E-05
S16	60	8	15	5	6.20E-03	3.35E-03	1.07E-05	4.40E-04	7.28E-05	3.13E-06	0.00E+00	8.06E-06	7.46E-06	2.90E-09	2.25E-07	2.6	9.41E-04	1.10E-05
S16	60	8	16	5	6.73E-03	3.63E-03	1.17E-05	4.78E-04	7.89E-05	3.39E-06	0.00E+00	8.74E-06	8.09E-06	3.14E-09	2.44E-07	2.9	1.02E-03	1.19E-05
S16	60	8	17	5	8.30E-03	4.48E-03	1.44E-05	5.90E-04	9.74E-05	4.18E-06	0.00E+00	1.08E-05	9.98E-06	3.88E-09	3.02E-07	3.5	1.26E-03	1.47E-05
S16	60	8	18	5	8.93E-03	4.82E-03	1.55E-05	6.35E-04	1.05E-04	4.50E-06	0.00E+00	1.16E-05	1.07E-05	4.18E-09	3.24E-07	3.8	1.36E-03	1.58E-05
S16	60	8	19	5	6.20E-03	3.35E-03	1.07E-05	4.40E-04	7.28E-05	3.12E-06	0.00E+00	8.06E-06	7.46E-06	2.90E-09	2.25E-07	2.6	9.41E-04	1.10E-05
S16	60	8	20	5	4.10E-03	2.21E-03	7.10E-06	2.91E-04	4.81E-05	2.06E-06	0.00E+00	5.33E-06	4.93E-06	1.92E-09	1.49E-07	1.8	6.22E-04	7.25E-06
S16	60	8	21	5	3.47E-03	1.87E-03	6.01E-06	2.46E-04	4.07E-05	1.74E-06	0.00E+00	4.51E-06	4.17E-06	1.62E-09	1.26E-07	1.5	5.26E-04	6.14E-06
S16	60	8	22	5	2.94E-03	1.59E-03	5.10E-06	2.09E-04	3.45E-05	1.48E-06	0.00E+00	3.82E-06	3.54E-06	1.38E-09	1.07E-07	1.3	4.47E-04	5.21E-06
S16	60	8	23	5	2.42E-03	1.31E-03	4.19E-06	1.72E-04	2.84E-05	1.22E-06	0.00E+00	3.14E-06	2.91E-06	1.13E-09	8.78E-08	1.0	3.67E-04	4.28E-06
S16	60	8	24	5	1.79E-03	9.65E-04	3.10E-06	1.27E-04	2.10E-05	8.98E-07	0.00E+00	2.32E-06	2.15E-06	8.35E-10	6.49E-08	0.8	2.71E-04	3.16E-06
S17	60	8	1	5	2.77E-03	1.50E-03	4.80E-06	1.97E-04	3.25E-05	1.39E-06	0.00E+00	3.60E-06	3.33E-06	1.30E-09	1.01E-07	1.2	4.21E-04	4.90E-06
S17	60	8	2	5	1.85E-03	9.98E-04	3.20E-06	1.31E-04	2.17E-05	9.29E-07	0.00E+00	2.40E-06	2.22E-06	8.63E-10	6.71E-08	0.8	2.80E-04	3.27E-06
S17	60	8	3	5	1.62E-03	8.73E-04	2.80E-06	1.15E-04	1.90E-05	8.12E-07	0.00E+00	2.10E-06	1.94E-06	7.56E-10	5.87E-08	0.7	2.45E-04	2.86E-06
S17	60	8	4	5	1.15E-03	6.24E-04	2.00E-06	8.20E-05	1.36E-05	5.80E-07	0.00E+00	1.50E-06	1.39E-06	5.40E-10	4.19E-08	0.5	1.75E-04	2.04E-06
S17	60	8	5	5	1.62E-03	8.73E-04	2.80E-06	1.15E-04	1.90E-05	8.12E-07	0.00E+00	2.10E-06	1.94E-06	7.56E-10	5.87E-08	0.7	2.45E-04	2.86E-06
S17	60	8	6	5	3.93E-03	2.12E-03	6.80E-06	2.79E-04	4.61E-05	1.97E-06	0.00E+00	5.10E-06	4.72E-06	1.83E-09	1.43E-07	1.7	5.96E-04	6.95E-06
S17	60	8	7	5	1.18E-02	6.36E-03	2.04E-05	8.37E-04	1.38E-04	5.92E-06	0.00E+00	1.53E-05	1.42E-05	5.50E-09	4.28E-07	5.0	1.79E-03	2.08E-05
S17	60	8	8	5	1.80E-02	9.73E-03	3.12E-05	1.28E-03	2.11E-04	9.06E-06	0.00E+00	2.34E-05	2.17E-05	8.42E-09	6.54E-07	7.7	2.73E-03	3.19E-05
S17	60	8	9	5	1.45E-02	7.86E-03	2.52E-05	1.03E-03	1.71E-04	7.31E-06	0.00E+00	1.89E-05	1.75E-05	6.80E-09	5.28E-07	6.2	2.21E-03	2.57E-05
S17	60	8	10	5	1.20E-02	6.48E-03	2.08E-05	8.53E-04	1.41E-04	6.04E-06	0.00E+00	1.56E-05	1.44E-05	5.61E-09	4.36E-07	5.1	1.82E-03	2.12E-05
S17	60	8	11	5	1.09E-02	5.86E-03	1.88E-05	7.71E-04	1.27E-04	5.46E-06	0.00E+00	1.41E-05	1.30E-05	5.07E-09	3.94E-07	4.6	1.65E-03	1.92E-05
S17	60	8	12	5	1.22E-02	6.61E-03	2.12E-05	8.69E-04	1.44E-04	6.17E-06	0.00E+00	1.59E-05	1.47E-05	5.72E-09	4.45E-07	5.2	1.86E-03	2.17E-05
S17	60	8	13	5	1.29E-02	6.98E-03	2.24E-05	9.19E-04	1.52E-04	6.52E-06	0.00E+00	1.68E-05	1.55E-05	6.04E-09	4.70E-07	5.5	1.96E-03	2.29E-05
S17	60	8	14	5	1.32E-02	7.11E-03	2.28E-05	9.35E-04	1.54E-04	6.64E-06	0.00E+00	1.71E-05	1.58E-05	6.15E-09	4.78E-07	5.6	2.00E-03	2.33E-05
S17	60	8	15	5	1.36E-02	7.36E-03	2.36E-05	9.68E-04	1.60E-04	6.87E-06	0.00E+00	1.77E-05	1.64E-05	6.37E-09	4.95E-07	5.8	2.07E-03	2.41E-05
S17	60	8	16	5	1.48E-02	7.98E-03	2.56E-05	1.05E-03	1.73E-04	7.45E-06	0.00E+00	1.92E-05	1.78E-05	6.91E-09	5.37E-07	6.3	2.24E-03	2.61E-05
S17	60	8	17	5	1.82E-02	9.85E-03	3.16E-05	1.30E-03	2.14E-04	9.19E-06	0.00E+00	2.37E-05	2.19E-05	8.53E-09	6.63E-07	7.8	2.77E-03	3.23E-05
S17	60	8	18	5	1.96E-02	1.06E-02	3.40E-05	1.39E-03	2.30E-04	9.89E-06	0.00E+00	2.55E-05	2.36E-05	9.17E-09	7.13E-07	8.4	2.98E-03	3.47E-05
S17	60	8	19	5	1.36E-02	7.36E-03	2.36E-05	9.68E-04	1.60E-04	6.86E-06	0.00E+00	1.77E-05	1.64E-05	6.37E-09	4.95E-07	5.8	2.07E-03	2.41E-05
S17	60	8	20	5	9.01E-03	4.86E-03	1.56E-05	6.40E-04	1.06E-04	4.53E-06	0.00E+00	1.17E-05	1.08E-05	4.21E-09	3.27E-07	3.8	1.37E-03	1.59E-05
S17	60	8	21	5	7.62E-03	4.12E-03	1.32E-05	5.41E-04	8.94E-05	3.83E-06	0.00E+00	9.90E-06	9.16E-06	3.56E-09	2.77E-07	3.3	1.16E-03	1.35E-05
S17	60	8	22	5	6.47E-03	3.49E-03	1.12E-05	4.59E-04	7.59E-05	3.25E-06	0.00E+00	8.40E-06	7.77E-06	3.02E-09	2.35E-07	2.8	9.81E-04	1.14E-05
S17	60	8	23	5	5.31E-03	2.87E-03	9.21E-06	3.77E-04	6.23E-05	2.67E-06	0.00E+00	6.90E-06	6.39E-06	2.48E-09	1.93E-07	2.3	8.06E-04	9.40E-06
S17	60	8	24	5	3.93E-03	2.12E-03	6.80E-06	2.79E-04	4.61E-05	1.97E-06	0.00E+00	5.10E-06	4.72E-06	1.83E-09	1.43E-07	1.7	5.96E-04	6.95E-06
S18	65	9	1	5	4.75E-03	2.08E-03	7.95E-06	2.55E-04	4.41E-05	2.06E-06	0.00E+00	5.15E-06	4.73E-06	2.12E-09	1.40E-07	2.0	6.03E-04	7.36E-06
S18	65	9	2	5	3.17E-03	1.39E-03	5.30E-06	1.70E-04	2.94E-05	1.37E-06	0.00E+00	3.43E-06	3.15E-06	1.42E-09	9.34E-08	1.3	4.02E-04	4.90E-06
S18	65	9	3	5	2.77E-03	1.22E-03	4.64E-06	1.49E-04	2.57E-05	1.20E-06	0.00E+00	3.00E-06	2.76E-06	1.24E-09	8.17E-08	1.1	3.52E-04	4.29E-06
S18	65	9	4	5	1.98E-03	8.68E-04	3.31E-06	1.06E-04	1.84E-05	8.58E-07	0.00E+00	2.14E-06	1.97E-06	8.85E-10	5.84E-08	0.8	2.51E-04	3.06E-06
S18	65	9	5	5	2.77E-03	1.22E-03	4.64E-06	1.49E-04	2.57E-05	1.20E-06	0.00E+00	3.00E-06	2.76E-06	1.24E-09	8.17E-08	1.1	3.52E-04	4.29E-06

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S18	65	9	6	5	6.73E-03	2.95E-03	1.13E-05	3.61E-04	6.25E-05	2.92E-06	0.00E+00	7.29E-06	6.70E-06	3.01E-09	1.98E-07	2.8	8.55E-04	1.04E-05
S18	65	9	7	5	2.02E-02	8.86E-03	3.38E-05	1.08E-03	1.87E-04	8.75E-06	0.00E+00	2.19E-05	2.01E-05	9.02E-09	5.95E-07	8.3	2.56E-03	3.13E-05
S18	65	9	8	5	3.09E-02	1.35E-02	5.17E-05	1.66E-03	2.87E-04	1.34E-05	0.00E+00	3.34E-05	3.07E-05	1.38E-08	9.10E-07	12.7	3.92E-03	4.78E-05
S18	65	9	9	5	2.49E-02	1.09E-02	4.17E-05	1.34E-03	2.32E-04	1.08E-05	0.00E+00	2.70E-05	2.48E-05	1.11E-08	7.35E-07	10.3	3.17E-03	3.86E-05
S18	65	9	10	5	2.06E-02	9.03E-03	3.44E-05	1.10E-03	1.91E-04	8.93E-06	0.00E+00	2.23E-05	2.05E-05	9.20E-09	6.07E-07	8.5	2.61E-03	3.19E-05
S18	65	9	11	5	1.86E-02	8.16E-03	3.11E-05	9.99E-04	1.73E-04	8.08E-06	0.00E+00	2.02E-05	1.85E-05	8.32E-09	5.49E-07	7.7	2.36E-03	2.88E-05
S18	65	9	12	5	2.10E-02	9.20E-03	3.51E-05	1.13E-03	1.95E-04	9.12E-06	0.00E+00	2.27E-05	2.09E-05	9.38E-09	6.19E-07	8.6	2.66E-03	3.25E-05
S18	65	9	13	5	2.22E-02	9.73E-03	3.71E-05	1.19E-03	2.06E-04	9.64E-06	0.00E+00	2.40E-05	2.21E-05	9.91E-09	6.54E-07	9.1	2.82E-03	3.43E-05
S18	65	9	14	5	2.26E-02	9.90E-03	3.78E-05	1.21E-03	2.09E-04	9.82E-06	0.00E+00	2.44E-05	2.25E-05	1.01E-08	6.65E-07	9.3	2.87E-03	3.49E-05
S18	65	9	15	5	2.33E-02	1.02E-02	3.91E-05	1.25E-03	2.17E-04	1.02E-05	0.00E+00	2.53E-05	2.33E-05	1.04E-08	6.89E-07	9.6	2.97E-03	3.62E-05
S18	65	9	16	5	2.53E-02	1.11E-02	4.24E-05	1.36E-03	2.35E-04	1.10E-05	0.00E+00	2.74E-05	2.52E-05	1.13E-08	7.47E-07	10.4	3.22E-03	3.92E-05
S18	65	9	17	5	3.13E-02	1.37E-02	5.23E-05	1.68E-03	2.90E-04	1.36E-05	0.00E+00	3.39E-05	3.11E-05	1.40E-08	9.22E-07	12.9	3.97E-03	4.84E-05
S18	65	9	18	5	3.36E-02	1.48E-02	5.63E-05	1.81E-03	3.12E-04	1.46E-05	0.00E+00	3.65E-05	3.35E-05	1.50E-08	9.92E-07	13.9	4.27E-03	5.21E-05
S18	65	9	19	5	2.33E-02	1.02E-02	3.91E-05	1.25E-03	2.17E-04	1.01E-05	0.00E+00	2.53E-05	2.33E-05	1.04E-08	6.89E-07	9.6	2.97E-03	3.62E-05
S18	65	9	20	5	1.54E-02	6.77E-03	2.58E-05	8.29E-04	1.43E-04	6.70E-06	0.00E+00	1.67E-05	1.54E-05	6.90E-09	4.55E-07	6.4	1.96E-03	2.39E-05
S18	65	9	21	5	1.31E-02	5.73E-03	2.19E-05	7.01E-04	1.21E-04	5.67E-06	0.00E+00	1.42E-05	1.30E-05	5.84E-09	3.85E-07	5.4	1.66E-03	2.02E-05
S18	65	9	22	5	1.11E-02	4.86E-03	1.85E-05	5.95E-04	1.03E-04	4.81E-06	0.00E+00	1.20E-05	1.10E-05	4.95E-09	3.27E-07	4.6	1.41E-03	1.72E-05
S18	65	9	23	5	9.10E-03	3.99E-03	1.52E-05	4.89E-04	8.45E-05	3.95E-06	0.00E+00	9.86E-06	9.07E-06	4.07E-09	2.68E-07	3.8	1.16E-03	1.41E-05
S18	65	9	24	5	6.73E-03	2.95E-03	1.13E-05	3.61E-04	6.25E-05	2.92E-06	0.00E+00	7.29E-06	6.70E-06	3.01E-09	1.98E-07	2.8	8.55E-04	1.04E-05
S19	65	9	1	5	4.66E-03	2.05E-03	7.80E-06	2.50E-04	4.33E-05	2.02E-06	0.00E+00	5.05E-06	4.64E-06	2.08E-09	1.38E-07	1.9	5.92E-04	7.22E-06
S19	65	9	2	5	3.11E-03	1.36E-03	5.20E-06	1.67E-04	2.89E-05	1.35E-06	0.00E+00	3.37E-06	3.10E-06	1.39E-09	9.17E-08	1.3	3.95E-04	4.81E-06
S19	65	9	3	5	2.72E-03	1.19E-03	4.55E-06	1.46E-04	2.53E-05	1.18E-06	0.00E+00	2.95E-06	2.71E-06	1.22E-09	8.02E-08	1.1	3.46E-04	4.21E-06
S19	65	9	4	5	1.94E-03	8.53E-04	3.25E-06	1.04E-04	1.80E-05	8.43E-07	0.00E+00	2.11E-06	1.94E-06	8.69E-10	5.73E-08	0.8	2.47E-04	3.01E-06
S19	65	9	5	5	2.72E-03	1.19E-03	4.55E-06	1.46E-04	2.53E-05	1.18E-06	0.00E+00	2.95E-06	2.71E-06	1.22E-09	8.02E-08	1.1	3.46E-04	4.21E-06
S19	65	9	6	5	6.60E-03	2.90E-03	1.11E-05	3.55E-04	6.13E-05	2.86E-06	0.00E+00	7.16E-06	6.58E-06	2.95E-09	1.95E-07	2.7	8.39E-04	1.02E-05
S19	65	9	7	5	1.98E-02	8.70E-03	3.32E-05	1.06E-03	1.84E-04	8.59E-06	0.00E+00	2.15E-05	1.97E-05	8.86E-09	5.84E-07	8.2	2.52E-03	3.07E-05
S19	65	9	8	5	3.03E-02	1.33E-02	5.07E-05	1.63E-03	2.81E-04	1.31E-05	0.00E+00	3.28E-05	3.02E-05	1.36E-08	8.94E-07	12.5	3.85E-03	4.69E-05
S19	65	9	9	5	2.45E-02	1.07E-02	4.10E-05	1.31E-03	2.27E-04	1.06E-05	0.00E+00	2.65E-05	2.44E-05	1.09E-08	7.22E-07	10.1	3.11E-03	3.79E-05
S19	65	9	10	5	2.02E-02	8.87E-03	3.38E-05	1.08E-03	1.88E-04	8.77E-06	0.00E+00	2.19E-05	2.01E-05	9.03E-09	5.96E-07	8.3	2.57E-03	3.13E-05
S19	65	9	11	5	1.83E-02	8.01E-03	3.06E-05	9.80E-04	1.70E-04	7.93E-06	0.00E+00	1.98E-05	1.82E-05	8.16E-09	5.39E-07	7.5	2.32E-03	2.83E-05
S19	65	9	12	5	2.06E-02	9.04E-03	3.45E-05	1.11E-03	1.91E-04	8.95E-06	0.00E+00	2.23E-05	2.05E-05	9.21E-09	6.07E-07	8.5	2.62E-03	3.19E-05
S19	65	9	13	5	2.18E-02	9.55E-03	3.64E-05	1.17E-03	2.02E-04	9.46E-06	0.00E+00	2.36E-05	2.17E-05	9.73E-09	6.42E-07	9.0	2.76E-03	3.37E-05
S19	65	9	14	5	2.21E-02	9.72E-03	3.71E-05	1.19E-03	2.06E-04	9.64E-06	0.00E+00	2.40E-05	2.21E-05	9.90E-09	6.53E-07	9.1	2.81E-03	3.43E-05
S19	65	9	15	5	2.29E-02	1.01E-02	3.84E-05	1.23E-03	2.13E-04	9.98E-06	0.00E+00	2.48E-05	2.28E-05	1.02E-08	6.76E-07	9.5	2.91E-03	3.55E-05
S19	65	9	16	5	2.49E-02	1.09E-02	4.16E-05	1.34E-03	2.31E-04	1.08E-05	0.00E+00	2.69E-05	2.48E-05	1.11E-08	7.33E-07	10.3	3.16E-03	3.85E-05
S19	65	9	17	5	3.07E-02	1.35E-02	5.14E-05	1.65E-03	2.85E-04	1.33E-05	0.00E+00	3.33E-05	3.06E-05	1.37E-08	9.05E-07	12.7	3.90E-03	4.75E-05
S19	65	9	18	5	3.30E-02	1.45E-02	5.53E-05	1.77E-03	3.07E-04	1.44E-05	0.00E+00	3.58E-05	3.29E-05	1.48E-08	9.74E-07	13.6	4.20E-03	5.11E-05
S19	65	9	19	5	2.29E-02	1.01E-02	3.84E-05	1.23E-03	2.13E-04	9.96E-06	0.00E+00	2.48E-05	2.28E-05	1.02E-08	6.76E-07	9.5	2.91E-03	3.55E-05
S19	65	9	20	5	1.51E-02	6.65E-03	2.54E-05	8.14E-04	1.41E-04	6.58E-06	0.00E+00	1.64E-05	1.51E-05	6.78E-09	4.47E-07	6.2	1.93E-03	2.35E-05
S19	65	9	21	5	1.28E-02	5.63E-03	2.15E-05	6.88E-04	1.19E-04	5.56E-06	0.00E+00	1.39E-05	1.28E-05	5.73E-09	3.78E-07	5.3	1.63E-03	1.99E-05
S19	65	9	22	5	1.09E-02	4.77E-03	1.82E-05	5.84E-04	1.01E-04	4.72E-06	0.00E+00	1.18E-05	1.08E-05	4.86E-09	3.21E-07	4.5	1.38E-03	1.68E-05
S19	65	9	23	5	8.93E-03	3.92E-03	1.50E-05	4.80E-04	8.30E-05	3.88E-06	0.00E+00	9.68E-06	8.90E-06	4.00E-09	2.64E-07	3.7	1.14E-03	1.38E-05
S19	65	9	24	5	6.60E-03	2.90E-03	1.11E-05	3.55E-04	6.13E-05	2.87E-06	0.00E+00	7.16E-06	6.58E-06	2.95E-09	1.95E-07	2.7	8.39E-04	1.02E-05
S20	60	8	1	5	4.25E-03	2.29E-03	7.36E-06	3.02E-04	4.99E-05	2.14E-06	0.00E+00	5.52E-06	5.11E-06	1.99E-09	1.54E-07	1.8	6.45E-04	7.52E-06
S20	60	8	2	5	2.83E-03	1.53E-03	4.91E-06	2.01E-04	3.32E-05	1.42E-06	0.00E+00	3.68E-06	3.41E-06	1.32E-09	1.03E-07	1.2	4.30E-04	5.01E-06
S20	60	8	3	5	2.48E-03	1.34E-03	4.30E-06	1.76E-04	2.91E-05	1.25E-06	0.00E+00	3.22E-06	2.98E-06	1.16E-09	9.00E-08	1.1	3.76E-04	4.38E-06
S20	60	8	4	5	1.77E-03	9.56E-04	3.07E-06	1.26E-04	2.08E-05	8.90E-07	0.00E+00	2.30E-06	2.13E-06	8.27E-10	6.43E-08	0.8	2.69E-04	3.13E-06
S20	60	8	5	5	2.48E-03	1.34E-03	4.30E-06	1.76E-04	2.91E-05	1.25E-06	0.00E+00	3.22E-06	2.98E-06	1.16E-09	9.00E-08	1.1	3.76E-04	4.38E-06
S20	60	8	6	5	6.02E-03	3.25E-03	1.04E-05	4.28E-04	7.06E-05	3.02E-06	0.00E+00	7.82E-06	7.24E-06	2.81E-09	2.19E-07	2.6	9.14E-04	1.06E-05
S20	60	8	7	5	1.81E-02	9.75E-03	3.13E-05	1.28E-03	2.12E-04	9.07E-06	0.00E+00	2.35E-05	2.17E-05	8.44E-09	6.56E-07	7.7	2.74E-03	3.19E-05
S20	60	8	8	5	2.76E-02	1.49E-02	4.79E-05	1.96E-03	3.24E-04	1.39E-05	0.00E+00	3.59E-05	3.32E-05	1.29E-08	1.00E-06	11.8	4.19E-03	4.89E-05
S20	60	8	9	5	2.23E-02	1.20E-02	3.87E-05	1.58E-03	2.62E-04	1.12E-05	0.00E+00	2.90E-05	2.68E-05	1.04E-08	8.10E-07	9.5	3.39E-03	3.95E-05
S20	60	8	10	5	1.84E-02	9.94E-03	3.19E-05	1.31E-03	2.16E-04	9.26E-06	0.00E+00	2.39E-05	2.21E-05	8.60E-09	6.69E-07	7.9	2.79E-03	3.26E-05
S20	60	8	11	5	1.66E-02	8.99E-03	2.88E-05	1.18E-03	1.95E-04	8.38E-06	0.00E+00	2.16E-05	2.00E-05	7.78E-09	6.04E-07	7.1	2.53E-03	2.94E-05
S20	60	8	12	5	1.88E-02	1.01E-02	3.25E-05	1.33E-03	2.20E-04	9.45E-06	0.00E+00	2.44E-05	2.26E-05	8.77E-09	6.82E-07	8.0	2.85E-03	3.32E-05
S20	60	8	13	5	1.98E-02	1.07E-02	3.44E-05	1.41E-03	2.33E-04	9.99E-06	0.00E+00	2.58E-05	2.38E-05	9.27E-09	7.20E-07	8.5	3.01E-03	3.51E-05
S20	60	8	14	5	2.02E-02	1.09E-02	3.50E-05	1.43E-03	2.37E-04	1.02E-05	0.00E+00	2.62E-05	2.43E-05	9.43E-09	7.33E-07	8.6	3.06E-03	3.57E-05
S20	60	8	15	5	2.09E-02	1.13E-02	3.62E-05	1.48E-03	2.45E-04	1.05E-05	0.00E+00	2.71E-05	2.51E-05	9.76E-09	7.59E-07	8.9	3.17E-03	3.70E-05
S20	60	8	16	5	2.27E-02	1.22E-02	3.93E-05	1.61E-03	2.66E-04	1.14E-05	0.00E+00	2.94E-05	2.72E-05	1.06E-08	8.23E-07	9.7	3.44E-03	4.01E-05
S20	60	8	17	5	2.80E-02	1.51E-02	4.85E-05	1.99E-03	3.28E-04	1.41E-05	0.00E+00	3.63E-05	3.36E-05	1.31E-08	1.02E-06	11.9	4.25E-03	4.95E-05
S20	60	8	18	5	3.01E-02	1.63E-02	5.22E-05	2.14E-03	3.53E-04	1.52E-05	0.00E+00	3.91E-05	3.62E-05	1.41E-08	1.09E-06	12.9	4.57E-03	5.32E-05
S20	60	8	19	5	2.09E-02	1.13E-02	3.62E-05	1.48E-03	2.45E-04	1.05E-05	0.00E+00	2.71E-05	2.51E-05	9.76E-09	7.59E-07	8.9	3.17E-03	3.70E-05
S20	60	8	20	5	1.38E-02	7.46E-03	2.39E-05	9.81E-04	1.62E-04	6.94E-06	0.00E+00	1.79E-05	1.66E-05	6.45E-09	5.01E-07	5.9	2.10E-03	2.44E-05
S20	60	8	21	5	1.17E-02	6.31E-03	2.02E-05	8.30E-04	1.37E-04	5.88E-06	0.00E+00	1.52E-05	1.40E-05	5.46E-09	4.24E-07	5.0	1.77E-03	2.07E-05
S20	60	8	22	5	9.91E-03	5.35E-03	1.72E-05	7.04E-04	1.16E-04	4.98E-06	0.00E+00	1.29E-05	1.19E-05	4.63E-09	3.60E-07	4.2	1.50E-03	1.75E-05
S20	60	8	23	5	8.14E-03	4.40E-03	1.41E-05	5.78E-04	9.56E-05	4.09E-06	0.00E+00	1.06E-05	9.79E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S20	60	8	24	5	6.02E-03	3.25E-03	1.04E-05	4.28E-04	7.06E-05	3.03E-06	0.00E+00	7.82E-06	7.24E-06	2.81E-09	2.19E-07	2.6	9.14E-04	1.06E-05
S21	60	8	1	5	6.23E-03	3.37E-03	1.08E-05	4.43E-04	7.32E-05	3.13E-06	0.00E+00	8.10E-06	7.50E-06	2.91E-09	2.26E-07	2.7	9.46E-04	1.10E-05
S21	60	8	2	5	4.16E-03	2.24E-03	7.20E-06	2.95E-04	4.88E-05	2.09E-06	0.00E+00	5.40E-06	5.00E-06	1.94E-09	1.51E-07	1.8	6.31E-04	7.35E-06

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S21	60	8	3	5	3.64E-03	1.96E-03	6.30E-06	2.58E-04	4.27E-05	1.83E-06	0.00E+00	4.73E-06	4.37E-06	1.70E-09	1.32E-07	1.6	5.52E-04	6.43E-06
S21	60	8	4	5	2.60E-03	1.40E-03	4.50E-06	1.85E-04	3.05E-05	1.31E-06	0.00E+00	3.38E-06	3.12E-06	1.21E-09	9.43E-08	1.1	3.94E-04	4.60E-06
S21	60	8	5	5	3.64E-03	1.96E-03	6.30E-06	2.58E-04	4.27E-05	1.83E-06	0.00E+00	4.73E-06	4.37E-06	1.70E-09	1.32E-07	1.6	5.52E-04	6.43E-06
S21	60	8	6	5	8.83E-03	4.77E-03	1.53E-05	6.27E-04	1.04E-04	4.44E-06	0.00E+00	1.15E-05	1.06E-05	4.13E-09	3.21E-07	3.8	1.34E-03	1.56E-05
S21	60	8	7	5	2.65E-02	1.43E-02	4.59E-05	1.88E-03	3.11E-04	1.33E-05	0.00E+00	3.44E-05	3.19E-05	1.24E-08	9.62E-07	11.3	4.02E-03	4.69E-05
S21	60	8	8	5	4.05E-02	2.19E-02	7.02E-05	2.88E-03	4.76E-04	2.04E-05	0.00E+00	5.27E-05	4.87E-05	1.89E-08	1.47E-06	17.3	6.15E-03	7.17E-05
S21	60	8	9	5	3.27E-02	1.77E-02	5.67E-05	2.32E-03	3.84E-04	1.65E-05	0.00E+00	4.25E-05	3.93E-05	1.53E-08	1.19E-06	14.0	4.97E-03	5.79E-05
S21	60	8	10	5	2.70E-02	1.46E-02	4.68E-05	1.92E-03	3.17E-04	1.36E-05	0.00E+00	3.51E-05	3.25E-05	1.26E-08	9.81E-07	11.5	4.10E-03	4.78E-05
S21	60	8	11	5	2.44E-02	1.32E-02	4.23E-05	1.73E-03	2.87E-04	1.23E-05	0.00E+00	3.17E-05	2.94E-05	1.14E-08	8.87E-07	10.4	3.71E-03	4.32E-05
S21	60	8	12	5	2.75E-02	1.49E-02	4.77E-05	1.96E-03	3.23E-04	1.39E-05	0.00E+00	3.58E-05	3.31E-05	1.29E-08	1.00E-06	11.8	4.18E-03	4.87E-05
S21	60	8	13	5	2.91E-02	1.57E-02	5.04E-05	2.07E-03	3.41E-04	1.47E-05	0.00E+00	3.78E-05	3.50E-05	1.36E-08	1.06E-06	12.4	4.42E-03	5.15E-05
S21	60	8	14	5	2.96E-02	1.60E-02	5.13E-05	2.10E-03	3.48E-04	1.49E-05	0.00E+00	3.85E-05	3.56E-05	1.38E-08	1.08E-06	12.6	4.49E-03	5.24E-05
S21	60	8	15	5	3.06E-02	1.66E-02	5.31E-05	2.18E-03	3.60E-04	1.55E-05	0.00E+00	3.98E-05	3.69E-05	1.43E-08	1.11E-06	13.1	4.65E-03	5.42E-05
S21	60	8	16	5	3.32E-02	1.80E-02	5.76E-05	2.36E-03	3.90E-04	1.68E-05	0.00E+00	4.32E-05	4.00E-05	1.55E-08	1.21E-06	14.2	5.05E-03	5.88E-05
S21	60	8	17	5	4.10E-02	2.22E-02	7.11E-05	2.92E-03	4.82E-04	2.07E-05	0.00E+00	5.33E-05	4.93E-05	1.92E-08	1.49E-06	17.5	6.23E-03	7.26E-05
S21	60	8	18	5	4.42E-02	2.38E-02	7.65E-05	3.14E-03	5.18E-04	2.23E-05	0.00E+00	5.74E-05	5.31E-05	2.06E-08	1.60E-06	18.9	6.70E-03	7.81E-05
S21	60	8	19	5	3.06E-02	1.66E-02	5.31E-05	2.18E-03	3.60E-04	1.54E-05	0.00E+00	3.98E-05	3.69E-05	1.43E-08	1.11E-06	13.1	4.65E-03	5.42E-05
S21	60	8	20	5	2.03E-02	1.09E-02	3.51E-05	1.44E-03	2.38E-04	1.02E-05	0.00E+00	2.63E-05	2.44E-05	9.47E-09	7.36E-07	8.7	3.08E-03	3.58E-05
S21	60	8	21	5	1.71E-02	9.26E-03	2.97E-05	1.22E-03	2.01E-04	8.62E-06	0.00E+00	2.23E-05	2.06E-05	8.01E-09	6.23E-07	7.3	2.60E-03	3.03E-05
S21	60	8	22	5	1.45E-02	7.86E-03	2.52E-05	1.03E-03	1.71E-04	7.31E-06	0.00E+00	1.89E-05	1.75E-05	6.80E-09	5.28E-07	6.2	2.21E-03	2.57E-05
S21	60	8	23	5	1.19E-02	6.45E-03	2.07E-05	8.49E-04	1.40E-04	6.01E-06	0.00E+00	1.55E-05	1.44E-05	5.58E-09	4.34E-07	5.1	1.81E-03	2.11E-05
S21	60	8	24	5	8.83E-03	4.77E-03	1.53E-05	6.27E-04	1.04E-04	4.44E-06	0.00E+00	1.15E-05	1.06E-05	4.13E-09	3.21E-07	3.8	1.34E-03	1.56E-05
S22	60	8	1	5	6.28E-03	3.39E-03	1.09E-05	4.46E-04	7.37E-05	3.16E-06	0.00E+00	8.16E-06	7.55E-06	2.93E-09	2.28E-07	2.7	9.53E-04	1.11E-05
S22	60	8	2	5	4.19E-03	2.26E-03	7.26E-06	2.97E-04	4.91E-05	2.10E-06	0.00E+00	5.44E-06	5.03E-06	1.96E-09	1.52E-07	1.8	6.35E-04	7.41E-06
S22	60	8	3	5	3.66E-03	1.98E-03	6.35E-06	2.60E-04	4.30E-05	1.84E-06	0.00E+00	4.76E-06	4.40E-06	1.71E-09	1.33E-07	1.6	5.56E-04	6.48E-06
S22	60	8	4	5	2.62E-03	1.41E-03	4.53E-06	1.86E-04	3.07E-05	1.31E-06	0.00E+00	3.40E-06	3.15E-06	1.22E-09	9.50E-08	1.1	3.97E-04	4.63E-06
S22	60	8	5	5	3.66E-03	1.98E-03	6.35E-06	2.60E-04	4.30E-05	1.84E-06	0.00E+00	4.76E-06	4.40E-06	1.71E-09	1.33E-07	1.6	5.56E-04	6.48E-06
S22	60	8	6	5	8.90E-03	4.80E-03	1.54E-05	6.32E-04	1.04E-04	4.47E-06	0.00E+00	1.16E-05	1.07E-05	4.16E-09	3.23E-07	3.8	1.35E-03	1.57E-05
S22	60	8	7	5	2.67E-02	1.44E-02	4.63E-05	1.90E-03	3.13E-04	1.34E-05	0.00E+00	3.47E-05	3.21E-05	1.25E-08	9.69E-07	11.4	4.05E-03	4.72E-05
S22	60	8	8	5	4.08E-02	2.20E-02	7.07E-05	2.90E-03	4.79E-04	2.05E-05	0.00E+00	5.30E-05	4.91E-05	1.91E-08	1.48E-06	17.4	6.20E-03	7.22E-05
S22	60	8	9	5	3.30E-02	1.78E-02	5.71E-05	2.34E-03	3.87E-04	1.66E-05	0.00E+00	4.28E-05	3.96E-05	1.54E-08	1.20E-06	14.1	5.00E-03	5.83E-05
S22	60	8	10	5	2.72E-02	1.47E-02	4.72E-05	1.93E-03	3.19E-04	1.37E-05	0.00E+00	3.54E-05	3.27E-05	1.27E-08	9.88E-07	11.6	4.13E-03	4.81E-05
S22	60	8	11	5	2.46E-02	1.33E-02	4.26E-05	1.75E-03	2.89E-04	1.24E-05	0.00E+00	3.20E-05	2.96E-05	1.15E-08	8.93E-07	10.5	3.73E-03	4.35E-05
S22	60	8	12	5	2.77E-02	1.50E-02	4.81E-05	1.97E-03	3.25E-04	1.40E-05	0.00E+00	3.60E-05	3.33E-05	1.30E-08	1.01E-06	11.8	4.21E-03	4.91E-05
S22	60	8	13	5	2.93E-02	1.58E-02	5.08E-05	2.08E-03	3.44E-04	1.48E-05	0.00E+00	3.81E-05	3.52E-05	1.37E-08	1.06E-06	12.5	4.45E-03	5.18E-05
S22	60	8	14	5	2.98E-02	1.61E-02	5.17E-05	2.12E-03	3.50E-04	1.50E-05	0.00E+00	3.88E-05	3.59E-05	1.39E-08	1.08E-06	12.7	4.53E-03	5.28E-05
S22	60	8	15	5	3.09E-02	1.67E-02	5.35E-05	2.19E-03	3.62E-04	1.56E-05	0.00E+00	4.01E-05	3.71E-05	1.44E-08	1.12E-06	13.2	4.69E-03	5.46E-05
S22	60	8	16	5	3.35E-02	1.81E-02	5.80E-05	2.38E-03	3.93E-04	1.69E-05	0.00E+00	4.35E-05	4.03E-05	1.57E-08	1.22E-06	14.3	5.08E-03	5.93E-05
S22	60	8	17	5	4.13E-02	2.23E-02	7.16E-05	2.94E-03	4.85E-04	2.08E-05	0.00E+00	5.37E-05	4.97E-05	1.93E-08	1.50E-06	17.7	6.27E-03	7.31E-05
S22	60	8	18	5	4.45E-02	2.40E-02	7.71E-05	3.16E-03	5.22E-04	2.24E-05	0.00E+00	5.78E-05	5.35E-05	2.08E-08	1.62E-06	19.0	6.75E-03	7.87E-05
S22	60	8	19	5	3.09E-02	1.67E-02	5.35E-05	2.19E-03	3.62E-04	1.55E-05	0.00E+00	4.01E-05	3.71E-05	1.44E-08	1.12E-06	13.2	4.69E-03	5.46E-05
S22	60	8	20	5	2.04E-02	1.10E-02	3.54E-05	1.45E-03	2.40E-04	1.03E-05	0.00E+00	2.65E-05	2.45E-05	9.54E-09	7.41E-07	8.7	3.10E-03	3.61E-05
S22	60	8	21	5	1.73E-02	9.33E-03	2.99E-05	1.23E-03	2.03E-04	8.68E-06	0.00E+00	2.24E-05	2.08E-05	8.07E-09	6.27E-07	7.4	2.62E-03	3.06E-05
S22	60	8	22	5	1.47E-02	7.91E-03	2.54E-05	1.04E-03	1.72E-04	7.37E-06	0.00E+00	1.90E-05	1.76E-05	6.85E-09	5.32E-07	6.3	2.22E-03	2.59E-05
S22	60	8	23	5	1.20E-02	6.50E-03	2.09E-05	8.55E-04	1.41E-04	6.05E-06	0.00E+00	1.56E-05	1.45E-05	5.63E-09	4.37E-07	5.1	1.83E-03	2.13E-05
S22	60	8	24	5	8.90E-03	4.80E-03	1.54E-05	6.32E-04	1.04E-04	4.47E-06	0.00E+00	1.16E-05	1.07E-05	4.16E-09	3.23E-07	3.8	1.35E-03	1.57E-05
S23	60	8	1	5	1.95E-03	1.05E-03	3.37E-06	1.38E-04	2.28E-05	9.78E-07	0.00E+00	2.53E-06	2.34E-06	9.10E-10	7.07E-08	0.8	2.95E-04	3.44E-06
S23	60	8	2	5	1.30E-03	7.01E-04	2.25E-06	9.22E-05	1.52E-05	6.52E-07	0.00E+00	1.69E-06	1.56E-06	6.07E-10	4.71E-08	0.6	1.97E-04	2.30E-06
S23	60	8	3	5	1.14E-03	6.13E-04	1.97E-06	8.07E-05	1.33E-05	5.71E-07	0.00E+00	1.48E-06	1.37E-06	5.31E-10	4.12E-08	0.5	1.72E-04	2.01E-06
S23	60	8	4	5	8.11E-04	4.38E-04	1.41E-06	5.76E-05	9.52E-06	4.08E-07	0.00E+00	1.05E-06	9.75E-07	3.79E-10	2.95E-08	0.3	1.23E-04	1.44E-06
S23	60	8	5	5	1.14E-03	6.13E-04	1.97E-06	8.07E-05	1.33E-05	5.71E-07	0.00E+00	1.48E-06	1.37E-06	5.31E-10	4.12E-08	0.5	1.72E-04	2.01E-06
S23	60	8	6	5	2.76E-03	1.49E-03	4.78E-06	1.96E-04	3.24E-05	1.39E-06	0.00E+00	3.58E-06	3.32E-06	1.29E-09	1.00E-07	1.2	4.19E-04	4.88E-06
S23	60	8	7	5	8.27E-03	4.47E-03	1.43E-05	5.88E-04	9.71E-05	4.16E-06	0.00E+00	1.07E-05	9.95E-06	3.87E-09	3.00E-07	3.5	1.26E-03	1.46E-05
S23	60	8	8	5	1.27E-02	6.83E-03	2.19E-05	8.99E-04	1.48E-04	6.36E-06	0.00E+00	1.64E-05	1.52E-05	5.91E-09	4.60E-07	5.4	1.92E-03	2.24E-05
S23	60	8	9	5	1.02E-02	5.52E-03	1.77E-05	7.26E-04	1.20E-04	5.14E-06	0.00E+00	1.33E-05	1.23E-05	4.78E-09	3.71E-07	4.4	1.55E-03	1.81E-05
S23	60	8	10	5	8.43E-03	4.56E-03	1.46E-05	5.99E-04	9.90E-05	4.24E-06	0.00E+00	1.10E-05	1.01E-05	3.94E-09	3.06E-07	3.6	1.28E-03	1.49E-05
S23	60	8	11	5	7.62E-03	4.12E-03	1.32E-05	5.42E-04	8.95E-05	3.84E-06	0.00E+00	9.91E-06	9.17E-06	3.56E-09	2.77E-07	3.3	1.16E-03	1.35E-05
S23	60	8	12	5	8.60E-03	4.64E-03	1.49E-05	6.11E-04	1.01E-04	4.33E-06	0.00E+00	1.12E-05	1.03E-05	4.02E-09	3.12E-07	3.7	1.30E-03	1.52E-05
S23	60	8	13	5	9.08E-03	4.91E-03	1.57E-05	6.45E-04	1.07E-04	4.58E-06	0.00E+00	1.18E-05	1.09E-05	4.25E-09	3.30E-07	3.9	1.38E-03	1.61E-05
S23	60	8	14	5	9.25E-03	4.99E-03	1.60E-05	6.57E-04	1.09E-04	4.66E-06	0.00E+00	1.20E-05	1.11E-05	4.32E-09	3.36E-07	3.9	1.40E-03	1.64E-05
S23	60	8	15	5	9.57E-03	5.17E-03	1.66E-05	6.80E-04	1.12E-04	4.83E-06	0.00E+00	1.24E-05	1.15E-05	4.47E-09	3.48E-07	4.1	1.45E-03	1.69E-05
S23	60	8	16	5	1.04E-02	5.61E-03	1.80E-05	7.37E-04	1.22E-04	5.23E-06	0.00E+00	1.35E-05	1.25E-05	4.85E-09	3.77E-07	4.4	1.58E-03	1.84E-05
S23	60	8	17	5	1.28E-02	6.92E-03	2.22E-05	9.10E-04	1.50E-04	6.46E-06	0.00E+00	1.67E-05	1.54E-05	5.99E-09	4.65E-07	5.5	1.95E-03	2.27E-05
S23	60	8	18	5	1.38E-02	7.45E-03	2.39E-05	9.79E-04	1.62E-04	6.95E-06	0.00E+00	1.79E-05	1.66E-05	6.44E-09	5.01E-07	5.9	2.09E-03	2.44E-05
S23	60	8	19	5	9.57E-03	5.17E-03	1.66E-05	6.80E-04	1.12E-04	4.82E-06	0.00E+00	1.24E-05	1.15E-05	4.47E-09	3.48E-07	4.1	1.45E-03	1.69E-05
S23	60	8	20	5	6.33E-03	3.42E-03	1.10E-05	4.49E-04	7.42E-05	3.18E-06	0.00E+00	8.22E-06	7.61E-06	2.96E-09	2.30E-07	2.7	9.60E-04	1.12E-05
S23	60	8	21	5	5.35E-03	2.89E-03	9.28E-06	3.80E-04	6.28E-05	2.69E-06	0.00E+00	6.96E-06	6.44E-06	2.50E-09	1.94E-07	2.3	8.12E-04	9.47E-06
S23	60	8	22	5	4.54E-03	2.45E-03	7.87E-06	3.23E-04	5.33E-05	2.28E-06	0.00E+00	5.90E-06	5.46E-06	2.12E-09	1.65E-07	1.9	6.89E-04	8.04E-06
S23	60	8	23	5	3.73E-03	2.01E-03	6.47E-06	2.65E-04	4.38E-05	1.88E-06	0.00E+00	4.85E-06	4.49E-06	1.74E-09	1.36E-07	1.6	5.66E-04	6.60E-06

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S23	60	8	24	5	2.76E-03	1.49E-03	4.78E-06	1.96E-04	3.24E-05	1.39E-06	0.00E+00	3.58E-06	3.32E-06	1.29E-09	1.00E-07	1.2	4.19E-04	4.88E-06
S24	60	8	1	5	2.39E-03	1.29E-03	4.15E-06	1.70E-04	2.81E-05	1.20E-06	0.00E+00	3.11E-06	2.88E-06	1.12E-09	8.69E-08	1.0	3.63E-04	4.23E-06
S24	60	8	2	5	1.60E-03	8.62E-04	2.77E-06	1.13E-04	1.87E-05	8.02E-07	0.00E+00	2.07E-06	1.92E-06	7.46E-10	5.80E-08	0.7	2.42E-04	2.82E-06
S24	60	8	3	5	1.40E-03	7.54E-04	2.42E-06	9.92E-05	1.64E-05	7.02E-07	0.00E+00	1.81E-06	1.68E-06	6.53E-10	5.07E-08	0.6	2.12E-04	2.47E-06
S24	60	8	4	5	9.97E-04	5.39E-04	1.73E-06	7.08E-05	1.17E-05	5.01E-07	0.00E+00	1.30E-06	1.20E-06	4.66E-10	3.62E-08	0.4	1.51E-04	1.76E-06
S24	60	8	5	5	1.40E-03	7.54E-04	2.42E-06	9.92E-05	1.64E-05	7.02E-07	0.00E+00	1.81E-06	1.68E-06	6.53E-10	5.07E-08	0.6	2.12E-04	2.47E-06
S24	60	8	6	5	3.39E-03	1.83E-03	5.88E-06	2.41E-04	3.98E-05	1.70E-06	0.00E+00	4.41E-06	4.08E-06	1.58E-09	1.23E-07	1.4	5.15E-04	6.00E-06
S24	60	8	7	5	1.02E-02	5.49E-03	1.76E-05	7.23E-04	1.19E-04	5.11E-06	0.00E+00	1.32E-05	1.22E-05	4.75E-09	3.69E-07	4.3	1.54E-03	1.80E-05
S24	60	8	8	5	1.56E-02	8.40E-03	2.70E-05	1.11E-03	1.83E-04	7.82E-06	0.00E+00	2.02E-05	1.87E-05	7.27E-09	5.65E-07	6.6	2.36E-03	2.75E-05
S24	60	8	9	5	1.26E-02	6.79E-03	2.18E-05	8.93E-04	1.47E-04	6.32E-06	0.00E+00	1.63E-05	1.51E-05	5.87E-09	4.56E-07	5.4	1.91E-03	2.22E-05
S24	60	8	10	5	1.04E-02	5.60E-03	1.80E-05	7.37E-04	1.22E-04	5.22E-06	0.00E+00	1.35E-05	1.25E-05	4.85E-09	3.77E-07	4.4	1.57E-03	1.84E-05
S24	60	8	11	5	9.37E-03	5.06E-03	1.62E-05	6.66E-04	1.10E-04	4.72E-06	0.00E+00	1.22E-05	1.13E-05	4.38E-09	3.40E-07	4.0	1.42E-03	1.66E-05
S24	60	8	12	5	1.06E-02	5.71E-03	1.83E-05	7.51E-04	1.24E-04	5.33E-06	0.00E+00	1.37E-05	1.27E-05	4.94E-09	3.84E-07	4.5	1.60E-03	1.87E-05
S24	60	8	13	5	1.12E-02	6.03E-03	1.94E-05	7.93E-04	1.31E-04	5.63E-06	0.00E+00	1.45E-05	1.34E-05	5.22E-09	4.06E-07	4.8	1.70E-03	1.98E-05
S24	60	8	14	5	1.14E-02	6.14E-03	1.97E-05	8.08E-04	1.33E-04	5.73E-06	0.00E+00	1.48E-05	1.37E-05	5.31E-09	4.13E-07	4.9	1.73E-03	2.01E-05
S24	60	8	15	5	1.18E-02	6.36E-03	2.04E-05	8.36E-04	1.38E-04	5.94E-06	0.00E+00	1.53E-05	1.41E-05	5.50E-09	4.27E-07	5.0	1.79E-03	2.08E-05
S24	60	8	16	5	1.28E-02	6.89E-03	2.21E-05	9.07E-04	1.50E-04	6.43E-06	0.00E+00	1.66E-05	1.53E-05	5.97E-09	4.64E-07	5.5	1.94E-03	2.26E-05
S24	60	8	17	5	1.58E-02	8.51E-03	2.73E-05	1.12E-03	1.85E-04	7.94E-06	0.00E+00	2.05E-05	1.89E-05	7.36E-09	5.72E-07	6.7	2.39E-03	2.79E-05
S24	60	8	18	5	1.70E-02	9.16E-03	2.94E-05	1.20E-03	1.99E-04	8.54E-06	0.00E+00	2.20E-05	2.04E-05	7.92E-09	6.16E-07	7.2	2.57E-03	3.00E-05
S24	60	8	19	5	1.18E-02	6.36E-03	2.04E-05	8.36E-04	1.38E-04	5.93E-06	0.00E+00	1.53E-05	1.41E-05	5.50E-09	4.27E-07	5.0	1.79E-03	2.08E-05
S24	60	8	20	5	7.78E-03	4.20E-03	1.35E-05	5.53E-04	9.13E-05	3.91E-06	0.00E+00	1.01E-05	9.35E-06	3.64E-09	2.83E-07	3.3	1.18E-03	1.38E-05
S24	60	8	21	5	6.58E-03	3.55E-03	1.14E-05	4.68E-04	7.72E-05	3.31E-06	0.00E+00	8.55E-06	7.91E-06	3.08E-09	2.39E-07	2.8	9.99E-04	1.16E-05
S24	60	8	22	5	5.58E-03	3.02E-03	9.68E-06	3.97E-04	6.55E-05	2.81E-06	0.00E+00	7.26E-06	6.71E-06	2.61E-09	2.03E-07	2.4	8.48E-04	9.88E-06
S24	60	8	23	5	4.59E-03	2.48E-03	7.95E-06	3.26E-04	5.38E-05	2.31E-06	0.00E+00	5.96E-06	5.52E-06	2.14E-09	1.67E-07	2.0	6.96E-04	8.12E-06
S24	60	8	24	5	3.39E-03	1.83E-03	5.88E-06	2.41E-04	3.98E-05	1.70E-06	0.00E+00	4.41E-06	4.08E-06	1.58E-09	1.23E-07	1.4	5.15E-04	6.00E-06
S25	60	8	1	5	1.88E-03	1.02E-03	3.26E-06	1.34E-04	2.21E-05	9.46E-07	0.00E+00	2.45E-06	2.26E-06	8.80E-10	6.84E-08	0.8	2.86E-04	3.33E-06
S25	60	8	2	5	1.26E-03	6.78E-04	2.18E-06	8.92E-05	1.47E-05	6.31E-07	0.00E+00	1.63E-06	1.51E-06	5.87E-10	4.56E-08	0.5	1.91E-04	2.22E-06
S25	60	8	3	5	1.10E-03	5.93E-04	1.90E-06	7.80E-05	1.29E-05	5.52E-07	0.00E+00	1.43E-06	1.32E-06	5.13E-10	3.99E-08	0.5	1.67E-04	1.94E-06
S25	60	8	4	5	7.84E-04	4.24E-04	1.36E-06	5.57E-05	9.21E-06	3.94E-07	0.00E+00	1.02E-06	9.43E-07	3.67E-10	2.85E-08	0.3	1.19E-04	1.39E-06
S25	60	8	5	5	1.10E-03	5.93E-04	1.90E-06	7.80E-05	1.29E-05	5.52E-07	0.00E+00	1.43E-06	1.32E-06	5.13E-10	3.99E-08	0.5	1.67E-04	1.94E-06
S25	60	8	6	5	2.67E-03	1.44E-03	4.62E-06	1.89E-04	3.13E-05	1.34E-06	0.00E+00	3.47E-06	3.21E-06	1.25E-09	9.69E-08	1.1	4.05E-04	4.72E-06
S25	60	8	7	5	8.00E-03	4.32E-03	1.39E-05	5.68E-04	9.39E-05	4.02E-06	0.00E+00	1.04E-05	9.62E-06	3.74E-09	2.91E-07	3.4	1.21E-03	1.42E-05
S25	60	8	8	5	1.22E-02	6.61E-03	2.12E-05	8.69E-04	1.44E-04	6.15E-06	0.00E+00	1.59E-05	1.47E-05	5.72E-09	4.44E-07	5.2	1.86E-03	2.17E-05
S25	60	8	9	5	9.88E-03	5.34E-03	1.71E-05	7.02E-04	1.16E-04	4.97E-06	0.00E+00	1.28E-05	1.19E-05	4.62E-09	3.59E-07	4.2	1.50E-03	1.75E-05
S25	60	8	10	5	8.16E-03	4.41E-03	1.41E-05	5.79E-04	9.57E-05	4.10E-06	0.00E+00	1.06E-05	9.81E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S25	60	8	11	5	7.37E-03	3.98E-03	1.28E-05	5.24E-04	8.65E-05	3.71E-06	0.00E+00	9.58E-06	8.87E-06	3.45E-09	2.68E-07	3.1	1.12E-03	1.30E-05
S25	60	8	12	5	8.31E-03	4.49E-03	1.44E-05	5.91E-04	9.76E-05	4.19E-06	0.00E+00	1.08E-05	1.00E-05	3.89E-09	3.02E-07	3.6	1.26E-03	1.47E-05
S25	60	8	13	5	8.79E-03	4.74E-03	1.52E-05	6.24E-04	1.03E-04	4.43E-06	0.00E+00	1.14E-05	1.06E-05	4.11E-09	3.19E-07	3.8	1.33E-03	1.55E-05
S25	60	8	14	5	8.94E-03	4.83E-03	1.55E-05	6.35E-04	1.05E-04	4.51E-06	0.00E+00	1.16E-05	1.08E-05	4.18E-09	3.25E-07	3.8	1.36E-03	1.58E-05
S25	60	8	15	5	9.26E-03	5.00E-03	1.60E-05	6.57E-04	1.09E-04	4.67E-06	0.00E+00	1.20E-05	1.11E-05	4.33E-09	3.36E-07	4.0	1.40E-03	1.64E-05
S25	60	8	16	5	1.00E-02	5.42E-03	1.74E-05	7.13E-04	1.18E-04	5.06E-06	0.00E+00	1.30E-05	1.21E-05	4.69E-09	3.65E-07	4.3	1.52E-03	1.78E-05
S25	60	8	17	5	1.24E-02	6.69E-03	2.15E-05	8.80E-04	1.45E-04	6.24E-06	0.00E+00	1.61E-05	1.49E-05	5.79E-09	4.50E-07	5.3	1.88E-03	2.19E-05
S25	60	8	18	5	1.33E-02	7.20E-03	2.31E-05	9.47E-04	1.57E-04	6.72E-06	0.00E+00	1.73E-05	1.60E-05	6.23E-09	4.84E-07	5.7	2.02E-03	2.36E-05
S25	60	8	19	5	9.26E-03	5.00E-03	1.60E-05	6.57E-04	1.09E-04	4.66E-06	0.00E+00	1.20E-05	1.11E-05	4.33E-09	3.36E-07	4.0	1.40E-03	1.64E-05
S25	60	8	20	5	6.12E-03	3.30E-03	1.06E-05	4.35E-04	7.18E-05	3.08E-06	0.00E+00	7.95E-06	7.36E-06	2.86E-09	2.22E-07	2.6	9.29E-04	1.08E-05
S25	60	8	21	5	5.18E-03	2.80E-03	8.97E-06	3.68E-04	6.08E-05	2.60E-06	0.00E+00	6.73E-06	6.22E-06	2.42E-09	1.88E-07	2.2	7.86E-04	9.16E-06
S25	60	8	22	5	4.39E-03	2.37E-03	7.61E-06	3.12E-04	5.16E-05	2.21E-06	0.00E+00	5.71E-06	5.28E-06	2.05E-09	1.60E-07	1.9	6.67E-04	7.77E-06
S25	60	8	23	5	3.61E-03	1.95E-03	6.25E-06	2.56E-04	4.23E-05	1.81E-06	0.00E+00	4.69E-06	4.34E-06	1.69E-09	1.31E-07	1.5	5.48E-04	6.38E-06
S25	60	8	24	5	2.67E-03	1.44E-03	4.62E-06	1.89E-04	3.13E-05	1.34E-06	0.00E+00	3.47E-06	3.21E-06	1.25E-09	9.69E-08	1.1	4.05E-04	4.72E-06
S26	60	8	1	5	3.50E-03	1.89E-03	6.06E-06	2.48E-04	4.10E-05	1.76E-06	0.00E+00	4.54E-06	4.20E-06	1.63E-09	1.27E-07	1.5	5.31E-04	6.19E-06
S26	60	8	2	5	2.33E-03	1.26E-03	4.04E-06	1.66E-04	2.74E-05	1.17E-06	0.00E+00	3.03E-06	2.80E-06	1.09E-09	8.47E-08	1.0	3.54E-04	4.12E-06
S26	60	8	3	5	2.04E-03	1.10E-03	3.54E-06	1.45E-04	2.39E-05	1.03E-06	0.00E+00	2.65E-06	2.45E-06	9.53E-10	7.41E-08	0.9	3.10E-04	3.61E-06
S26	60	8	4	5	1.46E-03	7.87E-04	2.53E-06	1.04E-04	1.71E-05	7.32E-07	0.00E+00	1.89E-06	1.75E-06	6.81E-10	5.29E-08	0.6	2.21E-04	2.58E-06
S26	60	8	5	5	2.04E-03	1.10E-03	3.54E-06	1.45E-04	2.39E-05	1.03E-06	0.00E+00	2.65E-06	2.45E-06	9.53E-10	7.41E-08	0.9	3.10E-04	3.61E-06
S26	60	8	6	5	4.95E-03	2.68E-03	8.59E-06	3.52E-04	5.81E-05	2.49E-06	0.00E+00	6.44E-06	5.96E-06	2.32E-09	1.80E-07	2.1	7.52E-04	8.77E-06
S26	60	8	7	5	1.49E-02	8.03E-03	2.58E-05	1.06E-03	1.74E-04	7.47E-06	0.00E+00	1.93E-05	1.79E-05	6.95E-09	5.40E-07	6.3	2.26E-03	2.63E-05
S26	60	8	8	5	2.27E-02	1.23E-02	3.94E-05	1.61E-03	2.67E-04	1.14E-05	0.00E+00	2.95E-05	2.73E-05	1.06E-08	8.26E-07	9.7	3.45E-03	4.02E-05
S26	60	8	9	5	1.84E-02	9.91E-03	3.18E-05	1.30E-03	2.15E-04	9.23E-06	0.00E+00	2.39E-05	2.21E-05	8.58E-09	6.67E-07	7.8	2.79E-03	3.25E-05
S26	60	8	10	5	1.52E-02	8.18E-03	2.63E-05	1.08E-03	1.78E-04	7.62E-06	0.00E+00	1.97E-05	1.82E-05	7.08E-09	5.50E-07	6.5	2.30E-03	2.68E-05
S26	60	8	11	5	1.37E-02	7.40E-03	2.37E-05	9.73E-04	1.61E-04	6.90E-06	0.00E+00	1.78E-05	1.65E-05	6.40E-09	4.97E-07	5.9	2.08E-03	2.42E-05
S26	60	8	12	5	1.54E-02	8.34E-03	2.68E-05	1.10E-03	1.81E-04	7.78E-06	0.00E+00	2.01E-05	1.86E-05	7.22E-09	5.61E-07	6.6	2.34E-03	2.73E-05
S26	60	8	13	5	1.63E-02	8.81E-03	2.83E-05	1.16E-03	1.92E-04	8.22E-06	0.00E+00	2.12E-05	1.96E-05	7.63E-09	5.93E-07	7.0	2.48E-03	2.89E-05
S26	60	8	14	5	1.66E-02	8.97E-03	2.88E-05	1.18E-03	1.95E-04	8.38E-06	0.00E+00	2.16E-05	2.00E-05	7.76E-09	6.03E-07	7.1	2.52E-03	2.94E-05
S26	60	8	15	5	1.72E-02	9.29E-03	2.98E-05	1.22E-03	2.02E-04	8.67E-06	0.00E+00	2.23E-05	2.07E-05	8.04E-09	6.24E-07	7.3	2.61E-03	3.04E-05
S26	60	8	16	5	1.87E-02	1.01E-02	3.23E-05	1.32E-03	2.19E-04	9.40E-06	0.00E+00	2.42E-05	2.24E-05	8.72E-09	6.77E-07	8.0	2.83E-03	3.30E-05
S26	60	8	17	5	2.30E-02	1.24E-02	3.99E-05	1.64E-03	2.70E-04	1.16E-05	0.00E+00	2.99E-05	2.77E-05	1.08E-08	8.36E-07	9.8	3.49E-03	4.07E-05
S26	60	8	18	5	2.48E-02	1.34E-02	4.29E-05	1.76E-03	2.91E-04	1.25E-05	0.00E+00	3.22E-05	2.98E-05	1.16E-08	9.00E-07	10.6	3.76E-03	4.38E-05
S26	60	8	19	5	1.72E-02	9.29E-03	2.98E-05	1.22E-03	2.02E-04	8.66E-06	0.00E+00	2.23E-05	2.07E-05	8.04E-09	6.24E-07	7.3	2.61E-03	3.04E-05
S26	60	8	20	5	1.14E-02	6.14E-03	1.97E-05	8.07E-04	1.33E-04	5.71E-06	0.00E+00	1.48E-05	1.37E-05	5.31E-09	4.13E-07	4.9	1.73E-03	2.01E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	60	8	21	5	9.62E-03	5.19E-03	1.67E-05	6.83E-04	1.13E-04	4.84E-06	0.00E+00	1.25E-05	1.16E-05	4.49E-09	3.49E-07	4.1	1.46E-03	1.70E-05
S26	60	8	22	5	8.16E-03	4.41E-03	1.41E-05	5.80E-04	9.58E-05	4.10E-06	0.00E+00	1.06E-05	9.81E-06	3.81E-09	2.96E-07	3.5	1.24E-03	1.44E-05
S26	60	8	23	5	6.70E-03	3.62E-03	1.16E-05	4.76E-04	7.87E-05	3.37E-06	0.00E+00	8.71E-06	8.06E-06	3.13E-09	2.43E-07	2.9	1.02E-03	1.19E-05
S26	60	8	24	5	4.95E-03	2.68E-03	8.59E-06	3.52E-04	5.81E-05	2.49E-06	0.00E+00	6.44E-06	5.96E-06	2.32E-09	1.80E-07	2.1	7.52E-04	8.77E-06
S27	50	7	1	5	3.89E-03	2.58E-03	7.31E-06	3.39E-04	5.59E-05	2.19E-06	0.00E+00	5.48E-06	5.17E-06	1.97E-09	1.76E-07	1.8	6.15E-04	7.64E-06
S27	50	7	2	5	2.59E-03	1.72E-03	4.87E-06	2.26E-04	3.73E-05	1.46E-06	0.00E+00	3.65E-06	3.45E-06	1.32E-09	1.17E-07	1.2	4.10E-04	5.09E-06
S27	50	7	3	5	2.27E-03	1.50E-03	4.26E-06	1.98E-04	3.26E-05	1.28E-06	0.00E+00	3.20E-06	3.02E-06	1.15E-09	1.02E-07	1.1	3.59E-04	4.46E-06
S27	50	7	4	5	1.62E-03	1.07E-03	3.05E-06	1.41E-04	2.33E-05	9.13E-07	0.00E+00	2.28E-06	2.16E-06	8.23E-10	7.32E-08	0.8	2.56E-04	3.18E-06
S27	50	7	5	5	2.27E-03	1.50E-03	4.26E-06	1.98E-04	3.26E-05	1.28E-06	0.00E+00	3.20E-06	3.02E-06	1.15E-09	1.02E-07	1.1	3.59E-04	4.46E-06
S27	50	7	6	5	5.51E-03	3.65E-03	1.04E-05	4.80E-04	7.92E-05	3.10E-06	0.00E+00	7.76E-06	7.33E-06	2.80E-09	2.49E-07	2.6	8.72E-04	1.08E-05
S27	50	7	7	5	1.65E-02	1.10E-02	3.11E-05	1.44E-03	2.37E-04	9.31E-06	0.00E+00	2.33E-05	2.20E-05	8.39E-09	7.46E-07	7.7	2.61E-03	3.25E-05
S27	50	7	8	5	2.53E-02	1.67E-02	4.75E-05	2.20E-03	3.63E-04	1.43E-05	0.00E+00	3.56E-05	3.36E-05	1.28E-08	1.14E-06	11.8	4.00E-03	4.97E-05
S27	50	7	9	5	2.04E-02	1.35E-02	3.84E-05	1.78E-03	2.93E-04	1.15E-05	0.00E+00	2.88E-05	2.72E-05	1.04E-08	9.22E-07	9.5	3.23E-03	4.01E-05
S27	50	7	10	5	1.69E-02	1.12E-02	3.17E-05	1.47E-03	2.42E-04	9.50E-06	0.00E+00	2.37E-05	2.24E-05	8.56E-09	7.61E-07	7.9	2.67E-03	3.31E-05
S27	50	7	11	5	1.52E-02	1.01E-02	2.86E-05	1.33E-03	2.19E-04	8.60E-06	0.00E+00	2.15E-05	2.03E-05	7.73E-09	6.88E-07	7.1	2.41E-03	2.99E-05
S27	50	7	12	5	1.72E-02	1.14E-02	3.23E-05	1.50E-03	2.47E-04	9.70E-06	0.00E+00	2.42E-05	2.28E-05	8.72E-09	7.76E-07	8.0	2.72E-03	3.37E-05
S27	50	7	13	5	1.82E-02	1.20E-02	3.41E-05	1.58E-03	2.61E-04	1.03E-05	0.00E+00	2.56E-05	2.41E-05	9.22E-09	8.19E-07	8.5	2.87E-03	3.56E-05
S27	50	7	14	5	1.85E-02	1.22E-02	3.47E-05	1.61E-03	2.65E-04	1.04E-05	0.00E+00	2.60E-05	2.46E-05	9.38E-09	8.34E-07	8.6	2.92E-03	3.63E-05
S27	50	7	15	5	1.91E-02	1.27E-02	3.59E-05	1.66E-03	2.75E-04	1.08E-05	0.00E+00	2.69E-05	2.54E-05	9.71E-09	8.63E-07	8.9	3.02E-03	3.76E-05
S27	50	7	16	5	2.08E-02	1.37E-02	3.90E-05	1.81E-03	2.98E-04	1.17E-05	0.00E+00	2.92E-05	2.76E-05	1.05E-08	9.36E-07	9.7	3.28E-03	4.07E-05
S27	50	7	17	5	2.56E-02	1.70E-02	4.81E-05	2.23E-03	3.68E-04	1.45E-05	0.00E+00	3.61E-05	3.41E-05	1.30E-08	1.16E-06	11.9	4.05E-03	5.03E-05
S27	50	7	18	5	2.76E-02	1.83E-02	5.18E-05	2.40E-03	3.96E-04	1.56E-05	0.00E+00	3.88E-05	3.66E-05	1.40E-08	1.24E-06	12.8	4.36E-03	5.41E-05
S27	50	7	19	5	1.91E-02	1.27E-02	3.59E-05	1.66E-03	2.75E-04	1.08E-05	0.00E+00	2.69E-05	2.54E-05	9.71E-09	8.63E-07	8.9	3.02E-03	3.76E-05
S27	50	7	20	5	1.26E-02	8.37E-03	2.38E-05	1.10E-03	1.82E-04	7.13E-06	0.00E+00	1.78E-05	1.68E-05	6.42E-09	5.71E-07	5.9	2.00E-03	2.48E-05
S27	50	7	21	5	1.07E-02	7.09E-03	2.01E-05	9.31E-04	1.54E-04	6.03E-06	0.00E+00	1.51E-05	1.42E-05	5.43E-09	4.83E-07	5.0	1.69E-03	2.10E-05
S27	50	7	22	5	9.08E-03	6.01E-03	1.71E-05	7.90E-04	1.30E-04	5.12E-06	0.00E+00	1.28E-05	1.21E-05	4.61E-09	4.10E-07	4.2	1.44E-03	1.78E-05
S27	50	7	23	5	7.46E-03	4.94E-03	1.40E-05	6.49E-04	1.07E-04	4.20E-06	0.00E+00	1.05E-05	9.92E-06	3.78E-09	3.37E-07	3.5	1.18E-03	1.46E-05
S27	50	7	24	5	5.51E-03	3.65E-03	1.04E-05	4.80E-04	7.92E-05	3.11E-06	0.00E+00	7.76E-06	7.33E-06	2.80E-09	2.49E-07	2.6	8.72E-04	1.08E-05
S28	50	7	1	5	1.68E-03	1.11E-03	3.16E-06	1.46E-04	2.41E-05	9.47E-07	0.00E+00	2.37E-06	2.23E-06	8.53E-10	7.58E-08	0.8	2.66E-04	3.30E-06
S28	50	7	2	5	1.12E-03	7.42E-04	2.10E-06	9.75E-05	1.61E-05	6.31E-07	0.00E+00	1.58E-06	1.49E-06	5.69E-10	5.06E-08	0.5	1.77E-04	2.20E-06
S28	50	7	3	5	9.80E-04	6.49E-04	1.84E-06	8.53E-05	1.41E-05	5.52E-07	0.00E+00	1.38E-06	1.30E-06	4.98E-10	4.42E-08	0.5	1.55E-04	1.92E-06
S28	50	7	4	5	7.00E-04	4.64E-04	1.32E-06	6.09E-05	1.01E-05	3.94E-07	0.00E+00	9.86E-07	9.31E-07	3.55E-10	3.16E-08	0.3	1.11E-04	1.37E-06
S28	50	7	5	5	9.80E-04	6.49E-04	1.84E-06	8.53E-05	1.41E-05	5.52E-07	0.00E+00	1.38E-06	1.30E-06	4.98E-10	4.42E-08	0.5	1.55E-04	1.92E-06
S28	50	7	6	5	2.38E-03	1.58E-03	4.47E-06	2.07E-04	3.42E-05	1.34E-06	0.00E+00	3.35E-06	3.17E-06	1.21E-09	1.07E-07	1.1	3.76E-04	4.67E-06
S28	50	7	7	5	7.14E-03	4.73E-03	1.34E-05	6.21E-04	1.03E-04	4.02E-06	0.00E+00	1.01E-05	9.50E-06	3.62E-09	3.22E-07	3.3	1.13E-03	1.40E-05
S28	50	7	8	5	1.09E-02	7.23E-03	2.05E-05	9.51E-04	1.57E-04	6.15E-06	0.00E+00	1.54E-05	1.45E-05	5.54E-09	4.93E-07	5.1	1.73E-03	2.14E-05
S28	50	7	9	5	8.82E-03	5.84E-03	1.66E-05	7.68E-04	1.27E-04	4.97E-06	0.00E+00	1.24E-05	1.17E-05	4.48E-09	3.98E-07	4.1	1.40E-03	1.73E-05
S28	50	7	10	5	7.28E-03	4.82E-03	1.37E-05	6.34E-04	1.05E-04	4.11E-06	0.00E+00	1.03E-05	9.68E-06	3.70E-09	3.29E-07	3.4	1.15E-03	1.43E-05
S28	50	7	11	5	6.58E-03	4.36E-03	1.24E-05	5.73E-04	9.45E-05	3.71E-06	0.00E+00	9.27E-06	8.75E-06	3.34E-09	2.97E-07	3.1	1.04E-03	1.29E-05
S28	50	7	12	5	7.42E-03	4.91E-03	1.39E-05	6.46E-04	1.07E-04	4.19E-06	0.00E+00	1.05E-05	9.87E-06	3.77E-09	3.35E-07	3.5	1.17E-03	1.46E-05
S28	50	7	13	5	7.84E-03	5.19E-03	1.47E-05	6.82E-04	1.13E-04	4.43E-06	0.00E+00	1.10E-05	1.04E-05	3.98E-09	3.54E-07	3.7	1.24E-03	1.54E-05
S28	50	7	14	5	7.98E-03	5.29E-03	1.50E-05	6.95E-04	1.15E-04	4.51E-06	0.00E+00	1.12E-05	1.06E-05	4.05E-09	3.60E-07	3.7	1.26E-03	1.57E-05
S28	50	7	15	5	8.26E-03	5.47E-03	1.55E-05	7.19E-04	1.19E-04	4.67E-06	0.00E+00	1.16E-05	1.10E-05	4.19E-09	3.73E-07	3.9	1.31E-03	1.62E-05
S28	50	7	16	5	8.96E-03	5.93E-03	1.68E-05	7.80E-04	1.29E-04	5.06E-06	0.00E+00	1.26E-05	1.19E-05	4.55E-09	4.04E-07	4.2	1.42E-03	1.76E-05
S28	50	7	17	5	1.11E-02	7.33E-03	2.08E-05	9.63E-04	1.59E-04	6.25E-06	0.00E+00	1.56E-05	1.47E-05	5.61E-09	4.99E-07	5.2	1.75E-03	2.17E-05
S28	50	7	18	5	1.19E-02	7.88E-03	2.24E-05	1.04E-03	1.71E-04	6.72E-06	0.00E+00	1.68E-05	1.58E-05	6.04E-09	5.37E-07	5.5	1.88E-03	2.34E-05
S28	50	7	19	5	8.26E-03	5.47E-03	1.55E-05	7.19E-04	1.19E-04	4.66E-06	0.00E+00	1.16E-05	1.10E-05	4.19E-09	3.73E-07	3.9	1.31E-03	1.62E-05
S28	50	7	20	5	5.46E-03	3.62E-03	1.03E-05	4.75E-04	7.84E-05	3.08E-06	0.00E+00	7.69E-06	7.26E-06	2.77E-09	2.46E-07	2.5	8.64E-04	1.07E-05
S28	50	7	21	5	4.62E-03	3.06E-03	8.68E-06	4.02E-04	6.64E-05	2.60E-06	0.00E+00	6.51E-06	6.14E-06	2.35E-09	2.09E-07	2.2	7.31E-04	9.07E-06
S28	50	7	22	5	3.92E-03	2.60E-03	7.37E-06	3.41E-04	5.63E-05	2.21E-06	0.00E+00	5.52E-06	5.21E-06	1.99E-09	1.77E-07	1.8	6.20E-04	7.70E-06
S28	50	7	23	5	3.22E-03	2.13E-03	6.05E-06	2.80E-04	4.63E-05	1.82E-06	0.00E+00	4.54E-06	4.28E-06	1.63E-09	1.45E-07	1.5	5.09E-04	6.32E-06
S28	50	7	24	5	2.38E-03	1.58E-03	4.47E-06	2.07E-04	3.42E-05	1.34E-06	0.00E+00	3.35E-06	3.17E-06	1.21E-09	1.07E-07	1.1	3.76E-04	4.67E-06
S29	60	8	1	5	3.68E-03	1.99E-03	6.38E-06	2.62E-04	4.32E-05	1.85E-06	0.00E+00	4.78E-06	4.43E-06	1.72E-09	1.34E-07	1.6	5.59E-04	6.51E-06
S29	60	8	2	5	2.45E-03	1.33E-03	4.25E-06	1.74E-04	2.88E-05	1.23E-06	0.00E+00	3.19E-06	2.95E-06	1.15E-09	8.91E-08	1.0	3.73E-04	4.34E-06
S29	60	8	3	5	2.15E-03	1.16E-03	3.72E-06	1.53E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.80E-08	0.9	3.26E-04	3.80E-06
S29	60	8	4	5	1.53E-03	8.28E-04	2.66E-06	1.09E-04	1.80E-05	7.71E-07	0.00E+00	1.99E-06	1.84E-06	7.17E-10	5.57E-08	0.7	2.33E-04	2.71E-06
S29	60	8	5	5	2.15E-03	1.16E-03	3.72E-06	1.53E-04	2.52E-05	1.08E-06	0.00E+00	2.79E-06	2.58E-06	1.00E-09	7.80E-08	0.9	3.26E-04	3.80E-06
S29	60	8	6	5	5.22E-03	2.82E-03	9.04E-06	3.70E-04	6.12E-05	2.62E-06	0.00E+00	6.78E-06	6.27E-06	2.44E-09	1.89E-07	2.2	7.92E-04	9.23E-06
S29	60	8	7	5	1.56E-02	8.45E-03	2.71E-05	1.11E-03	1.84E-04	7.86E-06	0.00E+00	2.03E-05	1.88E-05	7.31E-09	5.68E-07	6.7	2.37E-03	2.77E-05
S29	60	8	8	5	2.39E-02	1.29E-02	4.15E-05	1.70E-03	2.81E-04	1.20E-05	0.00E+00	3.11E-05	2.88E-05	1.12E-08	8.69E-07	10.2	3.63E-03	4.23E-05
S29	60	8	9	5	1.93E-02	1.04E-02	3.35E-05	1.37E-03	2.27E-04	9.72E-06	0.00E+00	2.51E-05	2.32E-05	9.03E-09	7.02E-07	8.3	2.93E-03	3.42E-05
S29	60	8	10	5	1.60E-02	8.62E-03	2.76E-05	1.13E-03	1.87E-04	8.02E-06	0.00E+00	2.07E-05	1.92E-05	7.46E-09	5.79E-07	6.8	2.42E-03	2.82E-05
S29	60	8	11	5	1.44E-02	7.79E-03	2.50E-05	1.02E-03	1.69E-04	7.26E-06	0.00E+00	1.87E-05	1.73E-05	6.74E-09	5.24E-07	6.2	2.19E-03	2.55E-05
S29	60	8	12	5	1.63E-02	8.78E-03	2.82E-05	1.15E-03	1.91E-04	8.19E-06	0.00E+00	2.11E-05	1.96E-05	7.60E-09	5.91E-07	6.9	2.47E-03	2.88E-05
S29	60	8	13	5	1.72E-02	9.28E-03	2.98E-05	1.22E-03	2.02E-04	8.66E-06	0.00E+00	2.23E-05	2.07E-05	8.03E-09	6.24E-07	7.3	2.61E-03	3.04E-05
S29	60	8	14	5	1.75E-02	9.44E-03	3.03E-05	1.24E-03	2.05E-04	8.82E-06	0.00E+00	2.27E-05	2.10E-05	8.17E-09	6.35E-07	7.5	2.65E-03	3.09E-05
S29	60	8	15	5	1.81E-02	9.78E-03	3.14E-05	1.29E-03	2.12E-04	9.13E-06	0.00E+00	2.35E-05	2.18E-05	8.46E-09	6.57E-07	7.7	2.75E-03	3.20E-05
S29	60	8	16	5	1.96E-02	1.06E-02	3.40E-05	1.39E-03	2.30E-04	9.90E-06	0.00E+00	2.55E-05	2.36E-05	9.18E-09	7.13E-07	8.4	2.98E-03	3.47E-05
S29	60	8	17	5	2.42E-02	1.31E-02	4.20E-05	1.72E-03	2.84E-04	1.22E-05	0.00E+00	3.15E-05	2.91E-05	1.13E-08	8.80E-07	10.4	3.68E-03	4.29E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S29	60	8	18	5	2.61E-02	1.41E-02	4.52E-05	1.85E-03	3.06E-04	1.31E-05	0.00E+00	3.39E-05	3.14E-05	1.22E-08	9.47E-07	11.1	3.96E-03	4.61E-05
S29	60	8	19	5	1.81E-02	9.78E-03	3.14E-05	1.29E-03	2.12E-04	9.11E-06	0.00E+00	2.35E-05	2.18E-05	8.46E-09	6.57E-07	7.7	2.75E-03	3.20E-05
S29	60	8	20	5	1.20E-02	6.46E-03	2.07E-05	8.50E-04	1.40E-04	6.02E-06	0.00E+00	1.55E-05	1.44E-05	5.59E-09	4.35E-07	5.1	1.82E-03	2.12E-05
S29	60	8	21	5	1.01E-02	5.47E-03	1.75E-05	7.19E-04	1.19E-04	5.09E-06	0.00E+00	1.32E-05	1.22E-05	4.73E-09	3.68E-07	4.3	1.54E-03	1.79E-05
S29	60	8	22	5	8.59E-03	4.64E-03	1.49E-05	6.10E-04	1.01E-04	4.32E-06	0.00E+00	1.12E-05	1.03E-05	4.02E-09	3.12E-07	3.7	1.30E-03	1.52E-05
S29	60	8	23	5	7.06E-03	3.81E-03	1.22E-05	5.01E-04	8.28E-05	3.55E-06	0.00E+00	9.17E-06	8.48E-06	3.30E-09	2.56E-07	3.0	1.07E-03	1.25E-05
S29	60	8	24	5	5.22E-03	2.82E-03	9.04E-06	3.70E-04	6.12E-05	2.62E-06	0.00E+00	6.78E-06	6.27E-06	2.44E-09	1.89E-07	2.2	7.92E-04	9.23E-06
S30	60	8	1	5	2.84E-03	1.53E-03	4.92E-06	2.02E-04	3.33E-05	1.43E-06	0.00E+00	3.69E-06	3.41E-06	1.33E-09	1.03E-07	1.2	4.31E-04	5.02E-06
S30	60	8	2	5	1.89E-03	1.02E-03	3.28E-06	1.34E-04	2.22E-05	9.51E-07	0.00E+00	2.46E-06	2.27E-06	8.84E-10	6.87E-08	0.8	2.87E-04	3.35E-06
S30	60	8	3	5	1.66E-03	8.94E-04	2.87E-06	1.18E-04	1.94E-05	8.32E-07	0.00E+00	2.15E-06	1.99E-06	7.74E-10	6.01E-08	0.7	2.51E-04	2.93E-06
S30	60	8	4	5	1.18E-03	6.38E-04	2.05E-06	8.40E-05	1.39E-05	5.94E-07	0.00E+00	1.54E-06	1.42E-06	5.53E-10	4.29E-08	0.5	1.79E-04	2.09E-06
S30	60	8	5	5	1.66E-03	8.94E-04	2.87E-06	1.18E-04	1.94E-05	8.32E-07	0.00E+00	2.15E-06	1.99E-06	7.74E-10	6.01E-08	0.7	2.51E-04	2.93E-06
S30	60	8	6	5	4.02E-03	2.17E-03	6.97E-06	2.86E-04	4.72E-05	2.02E-06	0.00E+00	5.22E-06	4.83E-06	1.88E-09	1.46E-07	1.7	6.10E-04	7.11E-06
S30	60	8	7	5	1.21E-02	6.51E-03	2.09E-05	8.57E-04	1.42E-04	6.06E-06	0.00E+00	1.57E-05	1.45E-05	5.64E-09	4.38E-07	5.2	1.83E-03	2.13E-05
S30	60	8	8	5	1.84E-02	9.96E-03	3.20E-05	1.31E-03	2.16E-04	9.27E-06	0.00E+00	2.40E-05	2.22E-05	8.62E-09	6.70E-07	7.9	2.80E-03	3.26E-05
S30	60	8	9	5	1.49E-02	8.04E-03	2.58E-05	1.06E-03	1.75E-04	7.49E-06	0.00E+00	1.94E-05	1.79E-05	6.96E-09	5.41E-07	6.4	2.26E-03	2.64E-05
S30	60	8	10	5	1.23E-02	6.64E-03	2.13E-05	8.73E-04	1.44E-04	6.18E-06	0.00E+00	1.60E-05	1.48E-05	5.75E-09	4.47E-07	5.3	1.87E-03	2.18E-05
S30	60	8	11	5	1.11E-02	6.00E-03	1.93E-05	7.89E-04	1.30E-04	5.59E-06	0.00E+00	1.44E-05	1.34E-05	5.19E-09	4.04E-07	4.7	1.69E-03	1.97E-05
S30	60	8	12	5	1.25E-02	6.77E-03	2.17E-05	8.90E-04	1.47E-04	6.31E-06	0.00E+00	1.63E-05	1.51E-05	5.86E-09	4.55E-07	5.4	1.90E-03	2.22E-05
S30	60	8	13	5	1.32E-02	7.15E-03	2.29E-05	9.41E-04	1.55E-04	6.67E-06	0.00E+00	1.72E-05	1.59E-05	6.19E-09	4.81E-07	5.7	2.01E-03	2.34E-05
S30	60	8	14	5	1.35E-02	7.28E-03	2.34E-05	9.57E-04	1.58E-04	6.80E-06	0.00E+00	1.75E-05	1.62E-05	6.30E-09	4.89E-07	5.8	2.05E-03	2.38E-05
S30	60	8	15	5	1.40E-02	7.53E-03	2.42E-05	9.91E-04	1.64E-04	7.04E-06	0.00E+00	1.81E-05	1.68E-05	6.52E-09	5.07E-07	6.0	2.12E-03	2.47E-05
S30	60	8	16	5	1.51E-02	8.17E-03	2.62E-05	1.07E-03	1.78E-04	7.63E-06	0.00E+00	1.97E-05	1.82E-05	7.07E-09	5.50E-07	6.5	2.30E-03	2.68E-05
S30	60	8	17	5	1.87E-02	1.01E-02	3.24E-05	1.33E-03	2.19E-04	9.41E-06	0.00E+00	2.43E-05	2.25E-05	8.73E-09	6.78E-07	8.0	2.84E-03	3.31E-05
S30	60	8	18	5	2.01E-02	1.09E-02	3.48E-05	1.43E-03	2.36E-04	1.01E-05	0.00E+00	2.61E-05	2.42E-05	9.39E-09	7.30E-07	8.6	3.05E-03	3.56E-05
S30	60	8	19	5	1.40E-02	7.53E-03	2.42E-05	9.91E-04	1.64E-04	7.02E-06	0.00E+00	1.81E-05	1.68E-05	6.52E-09	5.07E-07	6.0	2.12E-03	2.47E-05
S30	60	8	20	5	9.22E-03	4.98E-03	1.60E-05	6.55E-04	1.08E-04	4.64E-06	0.00E+00	1.20E-05	1.11E-05	4.31E-09	3.35E-07	3.9	1.40E-03	1.63E-05
S30	60	8	21	5	7.80E-03	4.21E-03	1.35E-05	5.54E-04	9.16E-05	3.92E-06	0.00E+00	1.01E-05	9.38E-06	3.65E-09	2.83E-07	3.3	1.18E-03	1.38E-05
S30	60	8	22	5	6.62E-03	3.58E-03	1.15E-05	4.70E-04	7.77E-05	3.33E-06	0.00E+00	8.60E-06	7.96E-06	3.09E-09	2.40E-07	2.8	1.00E-03	1.17E-05
S30	60	8	23	5	5.44E-03	2.94E-03	9.43E-06	3.86E-04	6.38E-05	2.73E-06	0.00E+00	7.07E-06	6.54E-06	2.54E-09	1.98E-07	2.3	8.25E-04	9.62E-06
S30	60	8	24	5	4.02E-03	2.17E-03	6.97E-06	2.86E-04	4.72E-05	2.02E-06	0.00E+00	5.22E-06	4.83E-06	1.88E-09	1.46E-07	1.7	6.10E-04	7.11E-06
S31	60	8	1	5	4.48E-03	2.42E-03	7.76E-06	3.18E-04	5.25E-05	2.25E-06	0.00E+00	5.82E-06	5.38E-06	2.09E-09	1.63E-07	1.9	6.80E-04	7.92E-06
S31	60	8	2	5	2.98E-03	1.61E-03	5.17E-06	2.12E-04	3.50E-05	1.50E-06	0.00E+00	3.88E-06	3.59E-06	1.40E-09	1.08E-07	1.3	4.53E-04	5.28E-06
S31	60	8	3	5	2.61E-03	1.41E-03	4.53E-06	1.86E-04	3.07E-05	1.31E-06	0.00E+00	3.39E-06	3.14E-06	1.22E-09	9.49E-08	1.1	3.96E-04	4.62E-06
S31	60	8	4	5	1.87E-03	1.01E-03	3.23E-06	1.33E-04	2.19E-05	9.38E-07	0.00E+00	2.42E-06	2.24E-06	8.72E-10	6.78E-08	0.8	2.83E-04	3.30E-06
S31	60	8	5	5	2.61E-03	1.41E-03	4.53E-06	1.86E-04	3.07E-05	1.31E-06	0.00E+00	3.39E-06	3.14E-06	1.22E-09	9.49E-08	1.1	3.96E-04	4.62E-06
S31	60	8	6	5	6.34E-03	3.43E-03	1.10E-05	4.51E-04	7.44E-05	3.19E-06	0.00E+00	8.24E-06	7.63E-06	2.96E-09	2.30E-07	2.7	9.63E-04	1.12E-05
S31	60	8	7	5	1.90E-02	1.03E-02	3.30E-05	1.35E-03	2.23E-04	9.56E-06	0.00E+00	2.47E-05	2.29E-05	8.89E-09	6.91E-07	8.1	2.89E-03	3.37E-05
S31	60	8	8	5	2.91E-02	1.57E-02	5.04E-05	2.07E-03	3.42E-04	1.46E-05	0.00E+00	3.78E-05	3.50E-05	1.36E-08	1.06E-06	12.4	4.42E-03	5.15E-05
S31	60	8	9	5	2.35E-02	1.27E-02	4.07E-05	1.67E-03	2.76E-04	1.18E-05	0.00E+00	3.05E-05	2.83E-05	1.10E-08	8.54E-07	10.0	3.57E-03	4.16E-05
S31	60	8	10	5	1.94E-02	1.05E-02	3.36E-05	1.38E-03	2.28E-04	9.76E-06	0.00E+00	2.52E-05	2.33E-05	9.07E-09	7.05E-07	8.3	2.94E-03	3.43E-05
S31	60	8	11	5	1.75E-02	9.47E-03	3.04E-05	1.25E-03	2.06E-04	8.83E-06	0.00E+00	2.28E-05	2.11E-05	8.20E-09	6.37E-07	7.5	2.66E-03	3.10E-05
S31	60	8	12	5	1.98E-02	1.07E-02	3.43E-05	1.40E-03	2.32E-04	9.96E-06	0.00E+00	2.57E-05	2.38E-05	9.24E-09	7.18E-07	8.4	3.00E-03	3.50E-05
S31	60	8	13	5	2.09E-02	1.13E-02	3.62E-05	1.48E-03	2.45E-04	1.05E-05	0.00E+00	2.71E-05	2.51E-05	9.77E-09	7.59E-07	8.9	3.17E-03	3.70E-05
S31	60	8	14	5	2.13E-02	1.15E-02	3.69E-05	1.51E-03	2.50E-04	1.07E-05	0.00E+00	2.76E-05	2.56E-05	9.94E-09	7.72E-07	9.1	3.23E-03	3.76E-05
S31	60	8	15	5	2.20E-02	1.19E-02	3.81E-05	1.56E-03	2.58E-04	1.11E-05	0.00E+00	2.86E-05	2.65E-05	1.03E-08	7.99E-07	9.4	3.34E-03	3.89E-05
S31	60	8	16	5	2.39E-02	1.29E-02	4.14E-05	1.70E-03	2.80E-04	1.20E-05	0.00E+00	3.10E-05	2.87E-05	1.12E-08	8.67E-07	10.2	3.62E-03	4.22E-05
S31	60	8	17	5	2.95E-02	1.59E-02	5.11E-05	2.09E-03	3.46E-04	1.48E-05	0.00E+00	3.83E-05	3.54E-05	1.38E-08	1.07E-06	12.6	4.47E-03	5.21E-05
S31	60	8	18	5	3.17E-02	1.71E-02	5.50E-05	2.25E-03	3.72E-04	1.60E-05	0.00E+00	4.12E-05	3.81E-05	1.48E-08	1.15E-06	13.5	4.81E-03	5.61E-05
S31	60	8	19	5	2.20E-02	1.19E-02	3.81E-05	1.56E-03	2.58E-04	1.11E-05	0.00E+00	2.86E-05	2.65E-05	1.03E-08	7.99E-07	9.4	3.34E-03	3.89E-05
S31	60	8	20	5	1.46E-02	7.86E-03	2.52E-05	1.03E-03	1.71E-04	7.32E-06	0.00E+00	1.89E-05	1.75E-05	6.80E-09	5.28E-07	6.2	2.21E-03	2.57E-05
S31	60	8	21	5	1.23E-02	6.65E-03	2.13E-05	8.75E-04	1.44E-04	6.19E-06	0.00E+00	1.60E-05	1.48E-05	5.75E-09	4.47E-07	5.3	1.87E-03	2.18E-05
S31	60	8	22	5	1.04E-02	5.64E-03	1.81E-05	7.42E-04	1.23E-04	5.25E-06	0.00E+00	1.36E-05	1.26E-05	4.88E-09	3.79E-07	4.5	1.59E-03	1.85E-05
S31	60	8	23	5	8.58E-03	4.63E-03	1.49E-05	6.10E-04	1.01E-04	4.31E-06	0.00E+00	1.12E-05	1.03E-05	4.01E-09	3.12E-07	3.7	1.30E-03	1.52E-05
S31	60	8	24	5	6.34E-03	3.43E-03	1.10E-05	4.51E-04	7.44E-05	3.19E-06	0.00E+00	8.24E-06	7.63E-06	2.96E-09	2.30E-07	2.7	9.63E-04	1.12E-05
S32	50	7	1	5	2.50E-03	1.65E-03	4.69E-06	2.17E-04	3.59E-05	1.41E-06	0.00E+00	3.52E-06	3.32E-06	1.27E-09	1.13E-07	1.2	3.95E-04	4.90E-06
S32	50	7	2	5	1.67E-03	1.10E-03	3.13E-06	1.45E-04	2.39E-05	9.38E-07	0.00E+00	2.35E-06	2.21E-06	8.45E-10	7.52E-08	0.8	2.63E-04	3.27E-06
S32	50	7	3	5	1.46E-03	9.65E-04	2.74E-06	1.27E-04	2.09E-05	8.21E-07	0.00E+00	2.05E-06	1.94E-06	7.40E-10	6.58E-08	0.7	2.30E-04	2.86E-06
S32	50	7	4	5	1.04E-03	6.89E-04	1.96E-06	9.06E-05	1.50E-05	5.86E-07	0.00E+00	1.47E-06	1.38E-06	5.28E-10	4.70E-08	0.5	1.65E-04	2.04E-06
S32	50	7	5	5	1.46E-03	9.65E-04	2.74E-06	1.27E-04	2.09E-05	8.21E-07	0.00E+00	2.05E-06	1.94E-06	7.40E-10	6.58E-08	0.7	2.30E-04	2.86E-06
S32	50	7	6	5	3.54E-03	2.34E-03	6.65E-06	3.08E-04	5.08E-05	1.99E-06	0.00E+00	4.98E-06	4.71E-06	1.80E-09	1.60E-07	1.6	5.60E-04	6.95E-06
S32	50	7	7	5	1.06E-02	7.03E-03	1.99E-05	9.24E-04	1.52E-04	5.98E-06	0.00E+00	1.50E-05	1.41E-05	5.39E-09	4.79E-07	4.9	1.68E-03	2.08E-05
S32	50	7	8	5	1.62E-02	1.08E-02	3.05E-05	1.41E-03	2.33E-04	9.15E-06	0.00E+00	2.29E-05	2.16E-05	8.24E-09	7.33E-07	7.6	2.57E-03	3.19E-05
S32	50	7	9	5	1.31E-02	8.69E-03	2.46E-05	1.14E-03	1.88E-04	7.39E-06	0.00E+00	1.85E-05	1.74E-05	6.66E-09	5.92E-07	6.1	2.07E-03	2.58E-05
S32	50	7	10	5	1.08E-02	7.17E-03	2.03E-05	9.42E-04	1.55E-04	6.10E-06	0.00E+00	1.52E-05	1.44E-05	5.49E-09	4.89E-07	5.0	1.71E-03	2.13E-05
S32	50	7	11	5	9.79E-03	6.48E-03	1.84E-05	8.52E-04	1.41E-04	5.52E-06	0.00E+00	1.38E-05	1.30E-05	4.97E-09	4.42E-07	4.6	1.55E-03	1.92E-05
S32	50	7	12	5	1.10E-02	7.31E-03	2.07E-05	9.60E-04	1.58E-04	6.23E-06	0.00E+00	1.55E-05	1.47E-05	5.60E-09	4.98E-07	5.1	1.74E-03	2.17E-05
S32	50	7	13	5	1.17E-02	7.72E-03	2.19E-05	1.01E-03	1.67E-04	6.59E-06	0.00E+00	1.64E-05	1.55E-05	5.92E-09	5.26E-07	5.4	1.84E-03	2.29E-05
S32	50	7	14	5	1.19E-02	7.86E-03	2.23E-05	1.03E-03	1.70E-04	6.71E-06	0.00E+00	1.67E-05	1.58E-05	6.02E-09	5.36E-07	5.5	1.88E-03	2.33E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S32	50	7	15	5	1.23E-02	8.13E-03	2.31E-05	1.07E-03	1.76E-04	6.94E-06	0.00E+00	1.73E-05	1.63E-05	6.23E-09	5.54E-07	5.7	1.94E-03	2.41E-05
S32	50	7	16	5	1.33E-02	8.82E-03	2.50E-05	1.16E-03	1.91E-04	7.53E-06	0.00E+00	1.88E-05	1.77E-05	6.76E-09	6.01E-07	6.2	2.11E-03	2.62E-05
S32	50	7	17	5	1.65E-02	1.09E-02	3.09E-05	1.43E-03	2.36E-04	9.29E-06	0.00E+00	2.32E-05	2.19E-05	8.35E-09	7.42E-07	7.7	2.60E-03	3.23E-05
S32	50	7	18	5	1.77E-02	1.17E-02	3.32E-05	1.54E-03	2.54E-04	1.00E-05	0.00E+00	2.49E-05	2.35E-05	8.98E-09	7.99E-07	8.2	2.80E-03	3.47E-05
S32	50	7	19	5	1.23E-02	8.13E-03	2.31E-05	1.07E-03	1.76E-04	6.93E-06	0.00E+00	1.73E-05	1.63E-05	6.23E-09	5.54E-07	5.7	1.94E-03	2.41E-05
S32	50	7	20	5	8.12E-03	5.38E-03	1.53E-05	7.07E-04	1.17E-04	4.58E-06	0.00E+00	1.14E-05	1.08E-05	4.12E-09	3.66E-07	3.8	1.28E-03	1.59E-05
S32	50	7	21	5	6.87E-03	4.55E-03	1.29E-05	5.98E-04	9.87E-05	3.87E-06	0.00E+00	9.68E-06	9.14E-06	3.49E-09	3.10E-07	3.2	1.09E-03	1.35E-05
S32	50	7	22	5	5.83E-03	3.86E-03	1.10E-05	5.07E-04	8.37E-05	3.29E-06	0.00E+00	8.21E-06	7.75E-06	2.96E-09	2.63E-07	2.7	9.22E-04	1.14E-05
S32	50	7	23	5	4.79E-03	3.17E-03	9.00E-06	4.17E-04	6.88E-05	2.70E-06	0.00E+00	6.74E-06	6.37E-06	2.43E-09	2.16E-07	2.2	7.57E-04	9.40E-06
S32	50	7	24	5	3.54E-03	2.34E-03	6.65E-06	3.08E-04	5.08E-05	1.99E-06	0.00E+00	4.98E-06	4.71E-06	1.80E-09	1.60E-07	1.6	5.60E-04	6.95E-06
S33	50	7	1	5	2.11E-03	1.39E-03	3.96E-06	1.83E-04	3.02E-05	1.19E-06	0.00E+00	2.97E-06	2.80E-06	1.07E-09	9.50E-08	1.0	3.33E-04	4.13E-06
S33	50	7	2	5	1.40E-03	9.30E-04	2.64E-06	1.22E-04	2.02E-05	7.91E-07	0.00E+00	1.98E-06	1.87E-06	7.13E-10	6.34E-08	0.7	2.22E-04	2.76E-06
S33	50	7	3	5	1.23E-03	8.14E-04	2.31E-06	1.07E-04	1.76E-05	6.92E-07	0.00E+00	1.73E-06	1.63E-06	6.24E-10	5.54E-08	0.6	1.94E-04	2.41E-06
S33	50	7	4	5	8.78E-04	5.81E-04	1.65E-06	7.64E-05	1.26E-05	4.94E-07	0.00E+00	1.24E-06	1.17E-06	4.45E-10	3.96E-08	0.4	1.39E-04	1.72E-06
S33	50	7	5	5	1.23E-03	8.14E-04	2.31E-06	1.07E-04	1.76E-05	6.92E-07	0.00E+00	1.73E-06	1.63E-06	6.24E-10	5.54E-08	0.6	1.94E-04	2.41E-06
S33	50	7	6	5	2.98E-03	1.98E-03	5.60E-06	2.60E-04	4.29E-05	1.68E-06	0.00E+00	4.20E-06	3.97E-06	1.51E-09	1.35E-07	1.4	4.72E-04	5.86E-06
S33	50	7	7	5	8.95E-03	5.93E-03	1.68E-05	7.79E-04	1.29E-04	5.04E-06	0.00E+00	1.26E-05	1.19E-05	4.54E-09	4.04E-07	4.2	1.42E-03	1.76E-05
S33	50	7	8	5	1.37E-02	9.07E-03	2.57E-05	1.19E-03	1.97E-04	7.71E-06	0.00E+00	1.93E-05	1.82E-05	6.95E-09	6.18E-07	6.4	2.16E-03	2.69E-05
S33	50	7	9	5	1.11E-02	7.32E-03	2.08E-05	9.62E-04	1.59E-04	6.23E-06	0.00E+00	1.56E-05	1.47E-05	5.61E-09	4.99E-07	5.2	1.75E-03	2.17E-05
S33	50	7	10	5	9.13E-03	6.04E-03	1.71E-05	7.94E-04	1.31E-04	5.15E-06	0.00E+00	1.29E-05	1.21E-05	4.63E-09	4.12E-07	4.3	1.44E-03	1.79E-05
S33	50	7	11	5	8.25E-03	5.46E-03	1.55E-05	7.18E-04	1.18E-04	4.65E-06	0.00E+00	1.16E-05	1.10E-05	4.19E-09	3.72E-07	3.8	1.30E-03	1.62E-05
S33	50	7	12	5	9.30E-03	6.16E-03	1.75E-05	8.10E-04	1.34E-04	5.25E-06	0.00E+00	1.31E-05	1.24E-05	4.72E-09	4.20E-07	4.3	1.47E-03	1.83E-05
S33	50	7	13	5	9.83E-03	6.51E-03	1.85E-05	8.55E-04	1.41E-04	5.55E-06	0.00E+00	1.38E-05	1.31E-05	4.99E-09	4.44E-07	4.6	1.55E-03	1.93E-05
S33	50	7	14	5	1.00E-02	6.62E-03	1.88E-05	8.71E-04	1.44E-04	5.66E-06	0.00E+00	1.41E-05	1.33E-05	5.08E-09	4.51E-07	4.7	1.58E-03	1.96E-05
S33	50	7	15	5	1.04E-02	6.86E-03	1.95E-05	9.01E-04	1.49E-04	5.85E-06	0.00E+00	1.46E-05	1.38E-05	5.26E-09	4.67E-07	4.8	1.64E-03	2.03E-05
S33	50	7	16	5	1.12E-02	7.44E-03	2.11E-05	9.78E-04	1.61E-04	6.35E-06	0.00E+00	1.58E-05	1.49E-05	5.70E-09	5.07E-07	5.2	1.78E-03	2.21E-05
S33	50	7	17	5	1.39E-02	9.18E-03	2.60E-05	1.21E-03	1.99E-04	7.83E-06	0.00E+00	1.95E-05	1.84E-05	7.04E-09	6.26E-07	6.5	2.19E-03	2.72E-05
S33	50	7	18	5	1.49E-02	9.88E-03	2.80E-05	1.30E-03	2.14E-04	8.43E-06	0.00E+00	2.10E-05	1.98E-05	7.57E-09	6.73E-07	7.0	2.36E-03	2.93E-05
S33	50	7	19	5	1.04E-02	6.86E-03	1.95E-05	9.01E-04	1.49E-04	5.84E-06	0.00E+00	1.46E-05	1.38E-05	5.26E-09	4.67E-07	4.8	1.64E-03	2.03E-05
S33	50	7	20	5	6.85E-03	4.53E-03	1.29E-05	5.96E-04	9.83E-05	3.86E-06	0.00E+00	9.64E-06	9.10E-06	3.47E-09	3.09E-07	3.2	1.08E-03	1.34E-05
S33	50	7	21	5	5.79E-03	3.84E-03	1.09E-05	5.04E-04	8.32E-05	3.26E-06	0.00E+00	8.16E-06	7.70E-06	2.94E-09	2.61E-07	2.7	9.16E-04	1.14E-05
S33	50	7	22	5	4.92E-03	3.25E-03	9.23E-06	4.28E-04	7.06E-05	2.77E-06	0.00E+00	6.92E-06	6.53E-06	2.49E-09	2.22E-07	2.3	7.77E-04	9.65E-06
S33	50	7	23	5	4.04E-03	2.67E-03	7.58E-06	3.51E-04	5.80E-05	2.27E-06	0.00E+00	5.69E-06	5.37E-06	2.05E-09	1.82E-07	1.9	6.38E-04	7.93E-06
S33	50	7	24	5	2.98E-03	1.98E-03	5.60E-06	2.60E-04	4.29E-05	1.68E-06	0.00E+00	4.20E-06	3.97E-06	1.51E-09	1.35E-07	1.4	4.72E-04	5.86E-06
S34	60	8	1	5	1.40E-03	7.54E-04	2.42E-06	9.92E-05	1.64E-05	7.02E-07	0.00E+00	1.81E-06	1.68E-06	6.53E-10	5.07E-08	0.6	2.12E-04	2.47E-06
S34	60	8	2	5	9.31E-04	5.03E-04	1.61E-06	6.61E-05	1.09E-05	4.68E-07	0.00E+00	1.21E-06	1.12E-06	4.35E-10	3.38E-08	0.4	1.41E-04	1.65E-06
S34	60	8	3	5	8.14E-04	4.40E-04	1.41E-06	5.79E-05	9.56E-06	4.09E-07	0.00E+00	1.06E-06	9.79E-07	3.81E-10	2.96E-08	0.3	1.24E-04	1.44E-06
S34	60	8	4	5	5.82E-04	3.14E-04	1.01E-06	4.13E-05	6.83E-06	2.92E-07	0.00E+00	7.56E-07	6.99E-07	2.72E-10	2.11E-08	0.2	8.83E-05	1.03E-06
S34	60	8	5	5	8.14E-04	4.40E-04	1.41E-06	5.79E-05	9.56E-06	4.09E-07	0.00E+00	1.06E-06	9.79E-07	3.81E-10	2.96E-08	0.3	1.24E-04	1.44E-06
S34	60	8	6	5	1.98E-03	1.07E-03	3.43E-06	1.41E-04	2.32E-05	9.94E-07	0.00E+00	2.57E-06	2.38E-06	9.25E-10	7.18E-08	0.8	3.00E-04	3.50E-06
S34	60	8	7	5	5.93E-03	3.20E-03	1.03E-05	4.22E-04	6.96E-05	2.98E-06	0.00E+00	7.71E-06	7.13E-06	2.77E-09	2.16E-07	2.5	9.01E-04	1.05E-05
S34	60	8	8	5	9.08E-03	4.90E-03	1.57E-05	6.45E-04	1.07E-04	4.56E-06	0.00E+00	1.18E-05	1.09E-05	4.24E-09	3.30E-07	3.9	1.38E-03	1.61E-05
S34	60	8	9	5	7.33E-03	3.96E-03	1.27E-05	5.21E-04	8.60E-05	3.69E-06	0.00E+00	9.53E-06	8.81E-06	3.43E-09	2.66E-07	3.1	1.11E-03	1.30E-05
S34	60	8	10	5	6.05E-03	3.27E-03	1.05E-05	4.30E-04	7.10E-05	3.04E-06	0.00E+00	7.86E-06	7.27E-06	2.83E-09	2.20E-07	2.6	9.18E-04	1.07E-05
S34	60	8	11	5	5.47E-03	2.95E-03	9.48E-06	3.88E-04	6.42E-05	2.75E-06	0.00E+00	7.11E-06	6.58E-06	2.56E-09	1.99E-07	2.3	8.30E-04	9.68E-06
S34	60	8	12	5	6.17E-03	3.33E-03	1.07E-05	4.38E-04	7.24E-05	3.11E-06	0.00E+00	8.01E-06	7.41E-06	2.88E-09	2.24E-07	2.6	9.36E-04	1.09E-05
S34	60	8	13	5	6.52E-03	3.52E-03	1.13E-05	4.63E-04	7.65E-05	3.28E-06	0.00E+00	8.47E-06	7.83E-06	3.05E-09	2.37E-07	2.8	9.89E-04	1.15E-05
S34	60	8	14	5	6.63E-03	3.58E-03	1.15E-05	4.71E-04	7.78E-05	3.35E-06	0.00E+00	8.62E-06	7.97E-06	3.10E-09	2.41E-07	2.8	1.01E-03	1.17E-05
S34	60	8	15	5	6.86E-03	3.71E-03	1.19E-05	4.88E-04	8.06E-05	3.46E-06	0.00E+00	8.92E-06	8.25E-06	3.21E-09	2.49E-07	2.9	1.04E-03	1.21E-05
S34	60	8	16	5	7.45E-03	4.02E-03	1.29E-05	5.29E-04	8.74E-05	3.75E-06	0.00E+00	9.68E-06	8.95E-06	3.48E-09	2.70E-07	3.2	1.13E-03	1.32E-05
S34	60	8	17	5	9.19E-03	4.96E-03	1.59E-05	6.53E-04	1.08E-04	4.63E-06	0.00E+00	1.19E-05	1.11E-05	4.30E-09	3.34E-07	3.9	1.40E-03	1.63E-05
S34	60	8	18	5	9.89E-03	5.34E-03	1.71E-05	7.03E-04	1.16E-04	4.98E-06	0.00E+00	1.29E-05	1.19E-05	4.62E-09	3.59E-07	4.2	1.50E-03	1.75E-05
S34	60	8	19	5	6.86E-03	3.71E-03	1.19E-05	4.88E-04	8.06E-05	3.46E-06	0.00E+00	8.92E-06	8.25E-06	3.21E-09	2.49E-07	2.9	1.04E-03	1.21E-05
S34	60	8	20	5	4.54E-03	2.45E-03	7.86E-06	3.22E-04	5.33E-05	2.28E-06	0.00E+00	5.90E-06	5.46E-06	2.12E-09	1.65E-07	1.9	6.89E-04	8.03E-06
S34	60	8	21	5	3.84E-03	2.07E-03	6.65E-06	2.73E-04	4.51E-05	1.93E-06	0.00E+00	4.99E-06	4.62E-06	1.79E-09	1.39E-07	1.6	5.83E-04	6.79E-06
S34	60	8	22	5	3.26E-03	1.76E-03	5.65E-06	2.31E-04	3.82E-05	1.64E-06	0.00E+00	4.23E-06	3.92E-06	1.52E-09	1.18E-07	1.4	4.94E-04	5.76E-06
S34	60	8	23	5	2.68E-03	1.45E-03	4.64E-06	1.90E-04	3.14E-05	1.35E-06	0.00E+00	3.48E-06	3.22E-06	1.25E-09	9.72E-08	1.1	4.06E-04	4.73E-06
S34	60	8	24	5	1.98E-03	1.07E-03	3.43E-06	1.41E-04	2.32E-05	9.94E-07	0.00E+00	2.57E-06	2.38E-06	9.25E-10	7.18E-08	0.8	3.00E-04	3.50E-06
S35	60	8	1	5	1.35E-03	7.28E-04	2.34E-06	9.57E-05	1.58E-05	6.77E-07	0.00E+00	1.75E-06	1.62E-06	6.30E-10	4.90E-08	0.6	2.05E-04	2.38E-06
S35	60	8	2	5	8.99E-04	4.85E-04	1.56E-06	6.38E-05	1.05E-05	4.52E-07	0.00E+00	1.17E-06	1.08E-06	4.20E-10	3.26E-08	0.4	1.36E-04	1.59E-06
S35	60	8	3	5	7.86E-04	4.25E-04	1.36E-06	5.59E-05	9.23E-06	3.95E-07	0.00E+00	1.02E-06	9.45E-07	3.67E-10	2.86E-08	0.3	1.19E-04	1.39E-06
S35	60	8	4	5	5.62E-04	3.03E-04	9.73E-07	3.99E-05	6.59E-06	2.82E-07	0.00E+00	7.30E-07	6.75E-07	2.62E-10	2.04E-08	0.2	8.52E-05	9.94E-07
S35	60	8	5	5	7.86E-04	4.25E-04	1.36E-06	5.59E-05	9.23E-06	3.95E-07	0.00E+00	1.02E-06	9.45E-07	3.67E-10	2.86E-08	0.3	1.19E-04	1.39E-06
S35	60	8	6	5	1.91E-03	1.03E-03	3.31E-06	1.36E-04	2.24E-05	9.60E-07	0.00E+00	2.48E-06	2.30E-06	8.92E-10	6.94E-08	0.8	2.90E-04	3.38E-06
S35	60	8	7	5	5.73E-03	3.09E-03	9.93E-06	4.07E-04	6.72E-05	2.88E-06	0.00E+00	7.44E-06	6.89E-06	2.68E-09	2.08E-07	2.4	8.69E-04	1.01E-05
S35	60	8	8	5	8.76E-03	4.73E-03	1.52E-05	6.22E-04	1.03E-04	4.40E-06	0.00E+00	1.14E-05	1.05E-05	4.09E-09	3.18E-07	3.7	1.33E-03	1.55E-05
S35	60	8	9	5	7.08E-03	3.82E-03	1.23E-05	5.03E-04	8.31E-05	3.56E-06	0.00E+00	9.20E-06	8.51E-06	3.31E-09	2.57E-07	3.0	1.07E-03	1.25E-05
S35	60	8	10	5	5.84E-03	3.15E-03	1.01E-05	4.15E-04	6.86E-05	2.94E-06	0.00E+00	7.59E-06	7.02E-06	2.73E-09	2.12E-07	2.5	8.87E-04	1.03E-05
S35	60	8	11	5	5.28E-03	2.85E-03	9.15E-06	3.75E-04	6.20E-05	2.66E-06	0.00E+00	6.86E-06	6.35E-06	2.47E-09	1.92E-07	2.3	8.01E-04	9.34E-06

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	60	8	12	5	5.95E-03	3.21E-03	1.03E-05	4.23E-04	6.99E-05	3.00E-06	0.00E+00	7.74E-06	7.16E-06	2.78E-09	2.16E-07	2.5	9.04E-04	1.05E-05
S35	60	8	13	5	6.29E-03	3.40E-03	1.09E-05	4.47E-04	7.38E-05	3.17E-06	0.00E+00	8.17E-06	7.56E-06	2.94E-09	2.28E-07	2.7	9.55E-04	1.11E-05
S35	60	8	14	5	6.40E-03	3.46E-03	1.11E-05	4.55E-04	7.51E-05	3.23E-06	0.00E+00	8.32E-06	7.70E-06	2.99E-09	2.33E-07	2.7	9.72E-04	1.13E-05
S35	60	8	15	5	6.63E-03	3.58E-03	1.15E-05	4.71E-04	7.78E-05	3.34E-06	0.00E+00	8.61E-06	7.97E-06	3.10E-09	2.41E-07	2.8	1.01E-03	1.17E-05
S35	60	8	16	5	7.19E-03	3.88E-03	1.25E-05	5.11E-04	8.44E-05	3.62E-06	0.00E+00	9.34E-06	8.64E-06	3.36E-09	2.61E-07	3.1	1.09E-03	1.27E-05
S35	60	8	17	5	8.87E-03	4.79E-03	1.54E-05	6.30E-04	1.04E-04	4.47E-06	0.00E+00	1.15E-05	1.07E-05	4.15E-09	3.22E-07	3.8	1.35E-03	1.57E-05
S35	60	8	18	5	9.55E-03	5.16E-03	1.65E-05	6.78E-04	1.12E-04	4.81E-06	0.00E+00	1.24E-05	1.15E-05	4.46E-09	3.47E-07	4.1	1.45E-03	1.69E-05
S35	60	8	19	5	6.63E-03	3.58E-03	1.15E-05	4.71E-04	7.78E-05	3.34E-06	0.00E+00	8.61E-06	7.97E-06	3.10E-09	2.41E-07	2.8	1.01E-03	1.17E-05
S35	60	8	20	5	4.38E-03	2.37E-03	7.59E-06	3.11E-04	5.14E-05	2.20E-06	0.00E+00	5.69E-06	5.27E-06	2.05E-09	1.59E-07	1.9	6.65E-04	7.75E-06
S35	60	8	21	5	3.71E-03	2.00E-03	6.42E-06	2.63E-04	4.35E-05	1.86E-06	0.00E+00	4.82E-06	4.46E-06	1.73E-09	1.35E-07	1.6	5.63E-04	6.56E-06
S35	60	8	22	5	3.15E-03	1.70E-03	5.45E-06	2.23E-04	3.69E-05	1.58E-06	0.00E+00	4.09E-06	3.78E-06	1.47E-09	1.14E-07	1.3	4.77E-04	5.56E-06
S35	60	8	23	5	2.58E-03	1.40E-03	4.48E-06	1.84E-04	3.03E-05	1.30E-06	0.00E+00	3.36E-06	3.11E-06	1.21E-09	9.38E-08	1.1	3.92E-04	4.57E-06
S35	60	8	24	5	1.91E-03	1.03E-03	3.31E-06	1.36E-04	2.24E-05	9.60E-07	0.00E+00	2.48E-06	2.30E-06	8.92E-10	6.94E-08	0.8	2.90E-04	3.38E-06
S36	60	8	1	5	2.17E-03	1.17E-03	3.76E-06	1.54E-04	2.55E-05	1.09E-06	0.00E+00	2.82E-06	2.61E-06	1.01E-09	7.88E-08	0.9	3.29E-04	3.84E-06
S36	60	8	2	5	1.45E-03	7.81E-04	2.51E-06	1.03E-04	1.70E-05	7.27E-07	0.00E+00	1.88E-06	1.74E-06	6.76E-10	5.25E-08	0.6	2.19E-04	2.56E-06
S36	60	8	3	5	1.27E-03	6.83E-04	2.19E-06	8.99E-05	1.48E-05	6.36E-07	0.00E+00	1.64E-06	1.52E-06	5.91E-10	4.59E-08	0.5	1.92E-04	2.24E-06
S36	60	8	4	5	9.04E-04	4.88E-04	1.57E-06	6.42E-05	1.06E-05	4.54E-07	0.00E+00	1.17E-06	1.09E-06	4.22E-10	3.28E-08	0.4	1.37E-04	1.60E-06
S36	60	8	5	5	1.27E-03	6.83E-04	2.19E-06	8.99E-05	1.48E-05	6.36E-07	0.00E+00	1.64E-06	1.52E-06	5.91E-10	4.59E-08	0.5	1.92E-04	2.24E-06
S36	60	8	6	5	3.07E-03	1.66E-03	5.32E-06	2.18E-04	3.61E-05	1.54E-06	0.00E+00	3.99E-06	3.69E-06	1.44E-09	1.12E-07	1.3	4.66E-04	5.44E-06
S36	60	8	7	5	9.22E-03	4.98E-03	1.60E-05	6.55E-04	1.08E-04	4.63E-06	0.00E+00	1.20E-05	1.11E-05	4.31E-09	3.35E-07	3.9	1.40E-03	1.63E-05
S36	60	8	8	5	1.41E-02	7.61E-03	2.44E-05	1.00E-03	1.65E-04	7.09E-06	0.00E+00	1.83E-05	1.69E-05	6.59E-09	5.12E-07	6.0	2.14E-03	2.49E-05
S36	60	8	9	5	1.14E-02	6.15E-03	1.97E-05	8.09E-04	1.34E-04	5.72E-06	0.00E+00	1.48E-05	1.37E-05	5.32E-09	4.14E-07	4.9	1.73E-03	2.01E-05
S36	60	8	10	5	9.40E-03	5.07E-03	1.63E-05	6.68E-04	1.10E-04	4.73E-06	0.00E+00	1.22E-05	1.13E-05	4.39E-09	3.41E-07	4.0	1.43E-03	1.66E-05
S36	60	8	11	5	8.49E-03	4.59E-03	1.47E-05	6.03E-04	9.97E-05	4.28E-06	0.00E+00	1.10E-05	1.02E-05	3.97E-09	3.08E-07	3.6	1.29E-03	1.50E-05
S36	60	8	12	5	9.58E-03	5.17E-03	1.66E-05	6.80E-04	1.12E-04	4.83E-06	0.00E+00	1.24E-05	1.15E-05	4.48E-09	3.48E-07	4.1	1.45E-03	1.69E-05
S36	60	8	13	5	1.01E-02	5.47E-03	1.75E-05	7.19E-04	1.19E-04	5.10E-06	0.00E+00	1.32E-05	1.22E-05	4.73E-09	3.68E-07	4.3	1.54E-03	1.79E-05
S36	60	8	14	5	1.03E-02	5.56E-03	1.79E-05	7.32E-04	1.21E-04	5.20E-06	0.00E+00	1.34E-05	1.24E-05	4.81E-09	3.74E-07	4.4	1.56E-03	1.82E-05
S36	60	8	15	5	1.07E-02	5.76E-03	1.85E-05	7.57E-04	1.25E-04	5.38E-06	0.00E+00	1.39E-05	1.28E-05	4.98E-09	3.87E-07	4.6	1.62E-03	1.89E-05
S36	60	8	16	5	1.16E-02	6.25E-03	2.00E-05	8.22E-04	1.36E-04	5.83E-06	0.00E+00	1.50E-05	1.39E-05	5.41E-09	4.20E-07	4.9	1.76E-03	2.05E-05
S36	60	8	17	5	1.43E-02	7.71E-03	2.47E-05	1.01E-03	1.68E-04	7.19E-06	0.00E+00	1.86E-05	1.72E-05	6.67E-09	5.19E-07	6.1	2.17E-03	2.53E-05
S36	60	8	18	5	1.54E-02	8.30E-03	2.66E-05	1.09E-03	1.80E-04	7.74E-06	0.00E+00	2.00E-05	1.85E-05	7.18E-09	5.58E-07	6.6	2.33E-03	2.72E-05
S36	60	8	19	5	1.07E-02	5.76E-03	1.85E-05	7.57E-04	1.25E-04	5.37E-06	0.00E+00	1.39E-05	1.28E-05	4.98E-09	3.87E-07	4.6	1.62E-03	1.89E-05
S36	60	8	20	5	7.05E-03	3.81E-03	1.22E-05	5.01E-04	8.27E-05	3.54E-06	0.00E+00	9.16E-06	8.47E-06	3.29E-09	2.56E-07	3.0	1.07E-03	1.25E-05
S36	60	8	21	5	5.96E-03	3.22E-03	1.03E-05	4.24E-04	7.00E-05	3.00E-06	0.00E+00	7.75E-06	7.17E-06	2.79E-09	2.17E-07	2.5	9.05E-04	1.06E-05
S36	60	8	22	5	5.06E-03	2.73E-03	8.77E-06	3.59E-04	5.94E-05	2.54E-06	0.00E+00	6.58E-06	6.08E-06	2.37E-09	1.84E-07	2.2	7.68E-04	8.95E-06
S36	60	8	23	5	4.16E-03	2.24E-03	7.20E-06	2.95E-04	4.88E-05	2.09E-06	0.00E+00	5.40E-06	5.00E-06	1.94E-09	1.51E-07	1.8	6.31E-04	7.35E-06
S36	60	8	24	5	3.07E-03	1.66E-03	5.32E-06	2.18E-04	3.61E-05	1.54E-06	0.00E+00	3.99E-06	3.69E-06	1.44E-09	1.12E-07	1.3	4.66E-04	5.44E-06
S37	60	8	1	5	8.51E-04	4.59E-04	1.47E-06	6.04E-05	9.98E-06	4.28E-07	0.00E+00	1.11E-06	1.02E-06	3.98E-10	3.09E-08	0.4	1.29E-04	1.51E-06
S37	60	8	2	5	5.67E-04	3.06E-04	9.83E-07	4.03E-05	6.66E-06	2.85E-07	0.00E+00	7.37E-07	6.82E-07	2.65E-10	2.06E-08	0.2	8.61E-05	1.00E-06
S37	60	8	3	5	4.96E-04	2.68E-04	8.60E-07	3.52E-05	5.82E-06	2.49E-07	0.00E+00	6.45E-07	5.97E-07	2.32E-10	1.80E-08	0.2	7.53E-05	8.78E-07
S37	60	8	4	5	3.54E-04	1.91E-04	6.14E-07	2.52E-05	4.16E-06	1.78E-07	0.00E+00	4.61E-07	4.26E-07	1.66E-10	1.29E-08	0.2	5.38E-05	6.27E-07
S37	60	8	5	5	4.96E-04	2.68E-04	8.60E-07	3.52E-05	5.82E-06	2.49E-07	0.00E+00	6.45E-07	5.97E-07	2.32E-10	1.80E-08	0.2	7.53E-05	8.78E-07
S37	60	8	6	5	1.21E-03	6.51E-04	2.09E-06	8.56E-05	1.41E-05	6.06E-07	0.00E+00	1.57E-06	1.45E-06	5.63E-10	4.38E-08	0.5	1.83E-04	2.13E-06
S37	60	8	7	5	3.62E-03	1.95E-03	6.27E-06	2.57E-04	4.24E-05	1.82E-06	0.00E+00	4.70E-06	4.35E-06	1.69E-09	1.31E-07	1.5	5.49E-04	6.40E-06
S37	60	8	8	5	5.53E-03	2.99E-03	9.58E-06	3.93E-04	6.49E-05	2.78E-06	0.00E+00	7.19E-06	6.65E-06	2.58E-09	2.01E-07	2.4	8.39E-04	9.78E-06
S37	60	8	9	5	4.47E-03	2.41E-03	7.74E-06	3.17E-04	5.24E-05	2.25E-06	0.00E+00	5.80E-06	5.37E-06	2.09E-09	1.62E-07	1.9	6.78E-04	7.90E-06
S37	60	8	10	5	3.69E-03	1.99E-03	6.39E-06	2.62E-04	4.33E-05	1.85E-06	0.00E+00	4.79E-06	4.43E-06	1.72E-09	1.34E-07	1.6	5.60E-04	6.52E-06
S37	60	8	11	5	3.33E-03	1.80E-03	5.77E-06	2.37E-04	3.91E-05	1.68E-06	0.00E+00	4.33E-06	4.01E-06	1.56E-09	1.21E-07	1.4	5.06E-04	5.90E-06
S37	60	8	12	5	3.76E-03	2.03E-03	6.51E-06	2.67E-04	4.41E-05	1.89E-06	0.00E+00	4.88E-06	4.52E-06	1.76E-09	1.36E-07	1.6	5.70E-04	6.65E-06
S37	60	8	13	5	3.97E-03	2.14E-03	6.88E-06	2.82E-04	4.66E-05	2.00E-06	0.00E+00	5.16E-06	4.77E-06	1.86E-09	1.44E-07	1.7	6.03E-04	7.02E-06
S37	60	8	14	5	4.04E-03	2.18E-03	7.00E-06	2.87E-04	4.74E-05	2.04E-06	0.00E+00	5.25E-06	4.86E-06	1.89E-09	1.47E-07	1.7	6.13E-04	7.15E-06
S37	60	8	15	5	4.18E-03	2.26E-03	7.25E-06	2.97E-04	4.91E-05	2.11E-06	0.00E+00	5.44E-06	5.03E-06	1.95E-09	1.52E-07	1.8	6.35E-04	7.40E-06
S37	60	8	16	5	4.54E-03	2.45E-03	7.86E-06	3.22E-04	5.33E-05	2.29E-06	0.00E+00	5.90E-06	5.46E-06	2.12E-09	1.65E-07	1.9	6.89E-04	8.03E-06
S37	60	8	17	5	5.60E-03	3.02E-03	9.71E-06	3.98E-04	6.57E-05	2.82E-06	0.00E+00	7.28E-06	6.73E-06	2.62E-09	2.03E-07	2.4	8.50E-04	9.91E-06
S37	60	8	18	5	6.03E-03	3.25E-03	1.04E-05	4.28E-04	7.07E-05	3.04E-06	0.00E+00	7.83E-06	7.25E-06	2.82E-09	2.19E-07	2.6	9.15E-04	1.07E-05
S37	60	8	19	5	4.18E-03	2.26E-03	7.25E-06	2.97E-04	4.91E-05	2.11E-06	0.00E+00	5.44E-06	5.03E-06	1.95E-09	1.52E-07	1.8	6.35E-04	7.40E-06
S37	60	8	20	5	2.76E-03	1.49E-03	4.79E-06	1.96E-04	3.24E-05	1.39E-06	0.00E+00	3.59E-06	3.32E-06	1.29E-09	1.00E-07	1.2	4.20E-04	4.89E-06
S37	60	8	21	5	2.34E-03	1.26E-03	4.05E-06	1.66E-04	2.75E-05	1.18E-06	0.00E+00	3.04E-06	2.81E-06	1.09E-09	8.50E-08	1.0	3.55E-04	4.14E-06
S37	60	8	22	5	1.99E-03	1.07E-03	3.44E-06	1.41E-04	2.33E-05	9.98E-07	0.00E+00	2.58E-06	2.39E-06	9.28E-10	7.21E-08	0.8	3.01E-04	3.51E-06
S37	60	8	23	5	1.63E-03	8.81E-04	2.83E-06	1.16E-04	1.91E-05	8.20E-07	0.00E+00	2.12E-06	1.96E-06	7.62E-10	5.92E-08	0.7	2.47E-04	2.88E-06
S37	60	8	24	5	1.21E-03	6.51E-04	2.09E-06	8.56E-05	1.41E-05	6.06E-07	0.00E+00	1.57E-06	1.45E-06	5.63E-10	4.38E-08	0.5	1.83E-04	2.13E-06
S38	60	8	1	5	1.19E-03	6.42E-04	2.06E-06	8.45E-05	1.40E-05	5.98E-07	0.00E+00	1.55E-06	1.43E-06	5.56E-10	4.32E-08	0.5	1.81E-04	2.10E-06
S38	60	8	2	5	7.93E-04	4.28E-04	1.37E-06	5.63E-05	9.31E-06	3.99E-07	0.00E+00	1.03E-06	9.53E-07	3.71E-10	2.88E-08	0.3	1.20E-04	1.40E-06
S38	60	8	3	5	6.94E-04	3.75E-04	1.20E-06	4.93E-05	8.14E-06	3.49E-07	0.00E+00	9.02E-07	8.34E-07	3.24E-10	2.52E-08	0.3	1.05E-04	1.23E-06
S38	60	8	4	5	4.96E-04	2.68E-04	8.59E-07	3.52E-05	5.82E-06	2.49E-07	0.00E+00	6.44E-07	5.96E-07	2.32E-10	1.80E-08	0.2	7.52E-05	8.77E-07
S38	60	8	5	5	6.94E-04	3.75E-04	1.20E-06	4.93E-05	8.14E-06	3.49E-07	0.00E+00	9.02E-07	8.34E-07	3.24E-10	2.52E-08	0.3	1.05E-04	1.23E-06
S38	60	8	6	5	1.68E-03	9.10E-04	2.92E-06	1.20E-04	1.98E-05	8.47E-07	0.00E+00	2.19E-06	2.03E-06	7.88E-10	6.12E-08	0.7	2.56E-04	2.98E-06
S38	60	8	7	5	5.05E-03	2.73E-03	8.76E-06	3.59E-04	5.93E-05	2.54E-06	0.00E+00	6.57E-06	6.08E-06	2.36E-09	1.84E-07	2.2	7.67E-04	8.94E-06
S38	60	8	8	5	7.73E-03	4.18E-03	1.34E-05	5.49E-04	9.07E-05	3.89E-06	0.00E+00	1.00E-05	9.30E-06	3.61E-09	2.81E-07	3.3	1.17E-03	1.37E-05

Table F-13: Dundas BRT - Dundas Street West Vehicle (TRUCK) Emission Rate Summary Table: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Modeling ID	Speed Limit	Speed Bin	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	60	8	9	5	6.24E-03	3.37E-03	1.08E-05	4.44E-04	7.33E-05	3.14E-06	0.00E+00	8.11E-06	7.51E-06	2.92E-09	2.27E-07	2.7	9.48E-04	1.10E-05
S38	60	8	10	5	5.15E-03	2.78E-03	8.93E-06	3.66E-04	6.05E-05	2.59E-06	0.00E+00	6.70E-06	6.20E-06	2.41E-09	1.87E-07	2.2	7.82E-04	9.12E-06
S38	60	8	11	5	4.66E-03	2.52E-03	8.07E-06	3.31E-04	5.47E-05	2.35E-06	0.00E+00	6.05E-06	5.60E-06	2.18E-09	1.69E-07	2.0	7.07E-04	8.24E-06
S38	60	8	12	5	5.25E-03	2.84E-03	9.10E-06	3.73E-04	6.17E-05	2.65E-06	0.00E+00	6.83E-06	6.32E-06	2.46E-09	1.91E-07	2.2	7.97E-04	9.29E-06
S38	60	8	13	5	5.55E-03	3.00E-03	9.62E-06	3.94E-04	6.51E-05	2.80E-06	0.00E+00	7.21E-06	6.67E-06	2.59E-09	2.02E-07	2.4	8.42E-04	9.82E-06
S38	60	8	14	5	5.65E-03	3.05E-03	9.79E-06	4.01E-04	6.63E-05	2.85E-06	0.00E+00	7.34E-06	6.79E-06	2.64E-09	2.05E-07	2.4	8.58E-04	1.00E-05
S38	60	8	15	5	5.85E-03	3.16E-03	1.01E-05	4.15E-04	6.86E-05	2.95E-06	0.00E+00	7.60E-06	7.03E-06	2.73E-09	2.12E-07	2.5	8.88E-04	1.03E-05
S38	60	8	16	5	6.34E-03	3.43E-03	1.10E-05	4.51E-04	7.44E-05	3.20E-06	0.00E+00	8.24E-06	7.63E-06	2.96E-09	2.30E-07	2.7	9.63E-04	1.12E-05
S38	60	8	17	5	7.83E-03	4.23E-03	1.36E-05	5.56E-04	9.19E-05	3.94E-06	0.00E+00	1.02E-05	9.41E-06	3.66E-09	2.84E-07	3.3	1.19E-03	1.39E-05
S38	60	8	18	5	8.42E-03	4.55E-03	1.46E-05	5.98E-04	9.89E-05	4.25E-06	0.00E+00	1.09E-05	1.01E-05	3.94E-09	3.06E-07	3.6	1.28E-03	1.49E-05
S38	60	8	19	5	5.85E-03	3.16E-03	1.01E-05	4.15E-04	6.86E-05	2.94E-06	0.00E+00	7.60E-06	7.03E-06	2.73E-09	2.12E-07	2.5	8.88E-04	1.03E-05
S38	60	8	20	5	3.87E-03	2.09E-03	6.70E-06	2.75E-04	4.54E-05	1.94E-06	0.00E+00	5.02E-06	4.65E-06	1.81E-09	1.40E-07	1.7	5.87E-04	6.84E-06
S38	60	8	21	5	3.27E-03	1.77E-03	5.67E-06	2.32E-04	3.84E-05	1.64E-06	0.00E+00	4.25E-06	3.93E-06	1.53E-09	1.19E-07	1.4	4.96E-04	5.79E-06
S38	60	8	22	5	2.78E-03	1.50E-03	4.81E-06	1.97E-04	3.26E-05	1.40E-06	0.00E+00	3.61E-06	3.34E-06	1.30E-09	1.01E-07	1.2	4.21E-04	4.91E-06
S38	60	8	23	5	2.28E-03	1.23E-03	3.95E-06	1.62E-04	2.68E-05	1.15E-06	0.00E+00	2.96E-06	2.74E-06	1.07E-09	8.28E-08	1.0	3.46E-04	4.03E-06
S38	60	8	24	5	1.68E-03	9.10E-04	2.92E-06	1.20E-04	1.98E-05	8.47E-07	0.00E+00	2.19E-06	2.03E-06	7.88E-10	6.12E-08	0.7	2.56E-04	2.98E-06
S39	60	8	1	5	4.52E-03	2.44E-03	7.84E-06	3.21E-04	5.31E-05	2.27E-06	0.00E+00	5.88E-06	5.44E-06	2.11E-09	1.64E-07	1.9	6.86E-04	8.00E-06
S39	60	8	2	5	3.01E-03	1.63E-03	5.22E-06	2.14E-04	3.54E-05	1.51E-06	0.00E+00	3.92E-06	3.62E-06	1.41E-09	1.09E-07	1.3	4.58E-04	5.33E-06
S39	60	8	3	5	2.64E-03	1.42E-03	4.57E-06	1.87E-04	3.10E-05	1.33E-06	0.00E+00	3.43E-06	3.17E-06	1.23E-09	9.58E-08	1.1	4.00E-04	4.67E-06
S39	60	8	4	5	1.88E-03	1.02E-03	3.27E-06	1.34E-04	2.21E-05	9.47E-07	0.00E+00	2.45E-06	2.27E-06	8.81E-10	6.84E-08	0.8	2.86E-04	3.33E-06
S39	60	8	5	5	2.64E-03	1.42E-03	4.57E-06	1.87E-04	3.10E-05	1.33E-06	0.00E+00	3.43E-06	3.17E-06	1.23E-09	9.58E-08	1.1	4.00E-04	4.67E-06
S39	60	8	6	5	6.41E-03	3.46E-03	1.11E-05	4.55E-04	7.52E-05	3.22E-06	0.00E+00	8.32E-06	7.70E-06	2.99E-09	2.33E-07	2.7	9.72E-04	1.13E-05
S39	60	8	7	5	1.92E-02	1.04E-02	3.33E-05	1.36E-03	2.26E-04	9.66E-06	0.00E+00	2.50E-05	2.31E-05	8.98E-09	6.98E-07	8.2	2.92E-03	3.40E-05
S39	60	8	8	5	2.94E-02	1.59E-02	5.09E-05	2.09E-03	3.45E-04	1.48E-05	0.00E+00	3.82E-05	3.53E-05	1.37E-08	1.07E-06	12.6	4.46E-03	5.20E-05
S39	60	8	9	5	2.37E-02	1.28E-02	4.11E-05	1.69E-03	2.79E-04	1.19E-05	0.00E+00	3.08E-05	2.85E-05	1.11E-08	8.62E-07	10.1	3.60E-03	4.20E-05
S39	60	8	10	5	1.96E-02	1.06E-02	3.40E-05	1.39E-03	2.30E-04	9.85E-06	0.00E+00	2.55E-05	2.36E-05	9.16E-09	7.12E-07	8.4	2.97E-03	3.47E-05
S39	60	8	11	5	1.77E-02	9.56E-03	3.07E-05	1.26E-03	2.08E-04	8.92E-06	0.00E+00	2.30E-05	2.13E-05	8.28E-09	6.43E-07	7.6	2.69E-03	3.13E-05
S39	60	8	12	5	2.00E-02	1.08E-02	3.46E-05	1.42E-03	2.34E-04	1.01E-05	0.00E+00	2.59E-05	2.40E-05	9.33E-09	7.25E-07	8.5	3.03E-03	3.53E-05
S39	60	8	13	5	2.11E-02	1.14E-02	3.66E-05	1.50E-03	2.48E-04	1.06E-05	0.00E+00	2.74E-05	2.54E-05	9.86E-09	7.66E-07	9.0	3.20E-03	3.73E-05
S39	60	8	14	5	2.15E-02	1.16E-02	3.72E-05	1.53E-03	2.52E-04	1.08E-05	0.00E+00	2.79E-05	2.58E-05	1.00E-08	7.80E-07	9.2	3.26E-03	3.80E-05
S39	60	8	15	5	2.22E-02	1.20E-02	3.85E-05	1.58E-03	2.61E-04	1.12E-05	0.00E+00	2.89E-05	2.67E-05	1.04E-08	8.07E-07	9.5	3.37E-03	3.93E-05
S39	60	8	16	5	2.41E-02	1.30E-02	4.18E-05	1.71E-03	2.83E-04	1.22E-05	0.00E+00	3.13E-05	2.90E-05	1.13E-08	8.76E-07	10.3	3.66E-03	4.27E-05
S39	60	8	17	5	2.98E-02	1.61E-02	5.16E-05	2.11E-03	3.49E-04	1.50E-05	0.00E+00	3.87E-05	3.58E-05	1.39E-08	1.08E-06	12.7	4.52E-03	5.27E-05
S39	60	8	18	5	3.20E-02	1.73E-02	5.55E-05	2.27E-03	3.76E-04	1.61E-05	0.00E+00	4.16E-05	3.85E-05	1.50E-08	1.16E-06	13.7	4.86E-03	5.67E-05
S39	60	8	19	5	2.22E-02	1.20E-02	3.85E-05	1.58E-03	2.61E-04	1.12E-05	0.00E+00	2.89E-05	2.67E-05	1.04E-08	8.07E-07	9.5	3.37E-03	3.93E-05
S39	60	8	20	5	1.47E-02	7.94E-03	2.55E-05	1.04E-03	1.72E-04	7.39E-06	0.00E+00	1.91E-05	1.77E-05	6.87E-09	5.34E-07	6.3	2.23E-03	2.60E-05
S39	60	8	21	5	1.24E-02	6.71E-03	2.15E-05	8.83E-04	1.46E-04	6.25E-06	0.00E+00	1.62E-05	1.49E-05	5.81E-09	4.52E-07	5.3	1.89E-03	2.20E-05
S39	60	8	22	5	1.05E-02	5.70E-03	1.83E-05	7.49E-04	1.24E-04	5.30E-06	0.00E+00	1.37E-05	1.27E-05	4.93E-09	3.83E-07	4.5	1.60E-03	1.87E-05
S39	60	8	23	5	8.67E-03	4.68E-03	1.50E-05	6.16E-04	1.02E-04	4.36E-06	0.00E+00	1.13E-05	1.04E-05	4.05E-09	3.15E-07	3.7	1.32E-03	1.53E-05
S39	60	8	24	5	6.41E-03	3.46E-03	1.11E-05	4.55E-04	7.52E-05	3.22E-06	0.00E+00	8.32E-06	7.70E-06	2.99E-09	2.33E-07	2.7	9.72E-04	1.13E-05
S40	80	11	1	5	2.62E-03	7.67E-04	4.17E-06	7.76E-05	1.54E-05	8.68E-07	0.00E+00	2.00E-06	1.80E-06	1.10E-09	5.01E-08	1.0	2.37E-04	3.21E-06
S40	80	11	2	5	1.74E-03	5.11E-04	2.78E-06	5.17E-05	1.03E-05	5.79E-07	0.00E+00	1.33E-06	1.20E-06	7.33E-10	3.34E-08	0.7	1.58E-04	2.14E-06
S40	80	11	3	5	1.53E-03	4.47E-04	2.43E-06	4.53E-05	9.00E-06	5.06E-07	0.00E+00	1.16E-06	1.05E-06	6.42E-10	2.92E-08	0.6	1.38E-04	1.88E-06
S40	80	11	4	5	1.09E-03	3.20E-04	1.74E-06	3.23E-05	6.43E-06	3.62E-07	0.00E+00	8.32E-07	7.51E-07	4.58E-10	2.09E-08	0.4	9.87E-05	1.34E-06
S40	80	11	5	5	1.53E-03	4.47E-04	2.43E-06	4.53E-05	9.00E-06	5.06E-07	0.00E+00	1.16E-06	1.05E-06	6.42E-10	2.92E-08	0.6	1.38E-04	1.88E-06
S40	80	11	6	5	3.71E-03	1.09E-03	5.91E-06	1.10E-04	2.18E-05	1.23E-06	0.00E+00	2.83E-06	2.55E-06	1.56E-09	7.10E-08	1.5	3.36E-04	4.55E-06
S40	80	11	7	5	1.11E-02	3.26E-03	1.77E-05	3.30E-04	6.55E-05	3.69E-06	0.00E+00	8.49E-06	7.66E-06	4.67E-09	2.13E-07	4.4	1.01E-03	1.37E-05
S40	80	11	8	5	1.70E-02	4.98E-03	2.71E-05	5.04E-04	1.00E-04	5.64E-06	0.00E+00	1.30E-05	1.17E-05	7.15E-09	3.26E-07	6.7	1.54E-03	2.09E-05
S40	80	11	9	5	1.37E-02	4.03E-03	2.19E-05	4.07E-04	8.10E-05	4.56E-06	0.00E+00	1.05E-05	9.46E-06	5.77E-09	2.63E-07	5.4	1.24E-03	1.69E-05
S40	80	11	10	5	1.13E-02	3.32E-03	1.81E-05	3.36E-04	6.68E-05	3.76E-06	0.00E+00	8.65E-06	7.81E-06	4.77E-09	2.17E-07	4.4	1.03E-03	1.39E-05
S40	80	11	11	5	1.02E-02	3.00E-03	1.63E-05	3.04E-04	6.04E-05	3.41E-06	0.00E+00	7.82E-06	7.06E-06	4.31E-09	1.96E-07	4.0	9.28E-04	1.26E-05
S40	80	11	12	5	1.16E-02	3.39E-03	1.84E-05	3.43E-04	6.81E-05	3.84E-06	0.00E+00	8.82E-06	7.96E-06	4.86E-09	2.21E-07	4.5	1.05E-03	1.42E-05
S40	80	11	13	5	1.22E-02	3.58E-03	1.95E-05	3.62E-04	7.20E-05	4.06E-06	0.00E+00	9.32E-06	8.41E-06	5.13E-09	2.34E-07	4.8	1.11E-03	1.50E-05
S40	80	11	14	5	1.24E-02	3.64E-03	1.98E-05	3.69E-04	7.33E-05	4.14E-06	0.00E+00	9.48E-06	8.56E-06	5.22E-09	2.38E-07	4.9	1.13E-03	1.53E-05
S40	80	11	15	5	1.29E-02	3.77E-03	2.05E-05	3.82E-04	7.58E-05	4.28E-06	0.00E+00	9.82E-06	8.86E-06	5.41E-09	2.46E-07	5.0	1.16E-03	1.58E-05
S40	80	11	16	5	1.40E-02	4.09E-03	2.23E-05	4.14E-04	8.23E-05	4.64E-06	0.00E+00	1.06E-05	9.61E-06	5.87E-09	2.67E-07	5.5	1.26E-03	1.71E-05
S40	80	11	17	5	1.72E-02	5.05E-03	2.75E-05	5.11E-04	1.02E-04	5.73E-06	0.00E+00	1.31E-05	1.19E-05	7.24E-09	3.30E-07	6.8	1.56E-03	2.12E-05
S40	80	11	18	5	1.85E-02	5.43E-03	2.96E-05	5.50E-04	1.09E-04	6.17E-06	0.00E+00	1.41E-05	1.28E-05	7.79E-09	3.55E-07	7.3	1.68E-03	2.28E-05
S40	80	11	19	5	1.29E-02	3.77E-03	2.05E-05	3.82E-04	7.58E-05	4.28E-06	0.00E+00	9.82E-06	8.86E-06	5.41E-09	2.46E-07	5.0	1.16E-03	1.58E-05
S40	80	11	20	5	8.50E-03	2.49E-03	1.36E-05	2.52E-04	5.01E-05	2.82E-06	0.00E+00	6.49E-06	5.86E-06	3.57E-09	1.63E-07	3.3	7.70E-04	1.04E-05
S40	80	11	21	5	7.19E-03	2.11E-03	1.15E-05	2.13E-04	4.24E-05	2.39E-06	0.00E+00	5.49E-06	4.96E-06	3.02E-09	1.38E-07	2.8	6.51E-04	8.84E-06
S40	80	11	22	5	6.10E-03	1.79E-03	9.74E-06	1.81E-04	3.60E-05	2.03E-06	0.00E+00	4.66E-06	4.21E-06	2.57E-09	1.17E-07	2.4	5.53E-04	7.50E-06
S40	80	11	23	5	5.01E-03	1.47E-03	8.00E-06	1.49E-04	2.96E-05	1.66E-06	0.00E+00	3.83E-06	3.45E-06	2.11E-09	9.60E-08	2.0	4.54E-04	6.16E-06
S40	80	11	24	5	3.71E-03	1.09E-03	5.91E-06	1.10E-04	2.18E-05	1.23E-06	0.00E+00	2.83E-06	2.55E-06	1.56E-09	7.10E-08	1.5	3.36E-04	4.55E-06

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI1_E	0.59	13	0	1	2.76E-02	3.67E-02	4.69E-05	6.34E-05	5.75E-05	1.44E-05	0.00E+00	8.37E-05	8.38E-05	1.02E-08	2.92E-06	11.1	9.65E-03	2.51E-04
SI1_E	0.59	8	0	1	1.84E-02	2.44E-02	3.13E-05	4.23E-05	3.84E-05	9.58E-06	0.00E+00	5.58E-05	5.58E-05	6.81E-09	1.95E-06	7.4	6.43E-03	1.67E-04
SI1_E	0.59	7	0	1	1.61E-02	2.14E-02	2.74E-05	3.70E-05	3.36E-05	8.38E-06	0.00E+00	4.88E-05	4.89E-05	5.95E-09	1.70E-06	6.5	5.63E-03	1.47E-04
SI1_E	0.59	5	0	1	1.15E-02	1.53E-02	1.96E-05	2.64E-05	2.40E-05	5.99E-06	0.00E+00	3.49E-05	3.49E-05	4.25E-09	1.22E-06	4.6	4.02E-03	1.05E-04
SI1_E	0.59	7	0	1	1.61E-02	2.14E-02	2.74E-05	3.70E-05	3.36E-05	8.38E-06	0.00E+00	4.88E-05	4.89E-05	5.95E-09	1.70E-06	6.5	5.63E-03	1.47E-04
SI1_E	0.59	18	0	1	3.91E-02	5.20E-02	6.65E-05	8.99E-05	8.15E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.14E-06	15.7	1.37E-02	3.56E-04
SI1_E	0.59	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.70E-04	2.45E-04	6.11E-05	0.00E+00	3.56E-04	3.56E-04	4.34E-08	1.24E-05	47.1	4.10E-02	1.07E-03
SI1_E	0.59	82	0	1	1.79E-01	2.38E-01	3.05E-04	4.12E-04	3.74E-04	9.34E-05	0.00E+00	5.44E-04	5.44E-04	6.63E-08	1.90E-05	72.0	6.27E-02	1.63E-03
SI1_E	0.59	67	0	1	1.45E-01	1.93E-01	2.46E-04	3.33E-04	3.02E-04	7.55E-05	0.00E+00	4.39E-04	4.40E-04	5.36E-08	1.53E-05	58.1	5.07E-02	1.32E-03
SI1_E	0.59	55	0	1	1.20E-01	1.59E-01	2.03E-04	2.75E-04	2.49E-04	6.23E-05	0.00E+00	3.63E-04	3.63E-04	4.42E-08	1.26E-05	48.0	4.18E-02	1.09E-03
SI1_E	0.59	50	0	1	1.08E-01	1.44E-01	1.84E-04	2.48E-04	2.25E-04	5.63E-05	0.00E+00	3.28E-04	3.28E-04	4.00E-08	1.14E-05	43.4	3.78E-02	9.84E-04
SI1_E	0.59	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.35E-05	0.00E+00	3.70E-04	3.70E-04	4.51E-08	1.29E-05	48.9	4.26E-02	1.11E-03
SI1_E	0.59	59	0	1	1.29E-01	1.71E-01	2.19E-04	2.96E-04	2.69E-04	6.71E-05	0.00E+00	3.90E-04	3.91E-04	4.76E-08	1.36E-05	51.7	4.50E-02	1.17E-03
SI1_E	0.59	60	0	1	1.31E-01	1.74E-01	2.23E-04	3.01E-04	2.73E-04	6.83E-05	0.00E+00	3.97E-04	3.98E-04	4.85E-08	1.39E-05	52.6	4.58E-02	1.19E-03
SI1_E	0.59	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.74E-02	1.23E-03
SI1_E	0.59	68	0	1	1.47E-01	1.96E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.47E-04	5.44E-08	1.56E-05	59.1	5.15E-02	1.34E-03
SI1_E	0.59	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.18E-04	3.79E-04	9.46E-05	0.00E+00	5.51E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI1_E	0.59	90	0	1	1.96E-01	2.60E-01	3.32E-04	4.49E-04	4.08E-04	1.02E-04	0.00E+00	5.93E-04	5.93E-04	7.23E-08	2.07E-05	78.5	6.83E-02	1.78E-03
SI1_E	0.59	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.74E-02	1.23E-03
SI1_E	0.59	41	0	1	8.97E-02	1.19E-01	1.53E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.32E-08	9.49E-06	36.0	3.14E-02	8.16E-04
SI1_E	0.59	35	0	1	7.59E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.81E-08	8.03E-06	30.5	2.65E-02	6.91E-04
SI1_E	0.59	30	0	1	6.44E-02	8.56E-02	1.10E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.81E-06	25.8	2.25E-02	5.86E-04
SI1_E	0.59	24	0	1	5.29E-02	7.03E-02	9.00E-05	1.22E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.61E-04	1.96E-08	5.59E-06	21.2	1.85E-02	4.81E-04
SI1_E	0.59	18	0	1	3.91E-02	5.20E-02	6.65E-05	8.99E-05	8.15E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.14E-06	15.7	1.37E-02	3.56E-04
SI1_W	0.59	11	0	1	2.33E-02	3.10E-02	3.96E-05	5.36E-05	4.86E-05	1.21E-05	0.00E+00	7.07E-05	7.08E-05	8.62E-09	2.47E-06	9.4	8.15E-03	2.12E-04
SI1_W	0.59	7	0	1	1.55E-02	2.07E-02	2.64E-05	3.57E-05	3.24E-05	8.09E-06	0.00E+00	4.71E-05	4.72E-05	5.75E-09	1.64E-06	6.2	5.43E-03	1.41E-04
SI1_W	0.59	6	0	1	1.36E-02	1.81E-02	2.31E-05	3.13E-05	2.84E-05	7.08E-06	0.00E+00	4.12E-05	4.13E-05	5.03E-09	1.44E-06	5.5	4.75E-03	1.24E-04
SI1_W	0.59	4	0	1	9.72E-03	1.29E-02	1.65E-05	2.23E-05	2.03E-05	5.06E-06	0.00E+00	2.95E-05	2.95E-05	3.59E-09	1.03E-06	3.9	3.40E-03	8.84E-05
SI1_W	0.59	6	0	1	1.36E-02	1.81E-02	2.31E-05	3.13E-05	2.84E-05	7.08E-06	0.00E+00	4.12E-05	4.13E-05	5.03E-09	1.44E-06	5.5	4.75E-03	1.24E-04
SI1_W	0.59	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI1_W	0.59	46	0	1	9.91E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.16E-05	0.00E+00	3.00E-04	3.01E-04	3.66E-08	1.05E-05	39.8	3.46E-02	9.02E-04
SI1_W	0.59	70	0	1	1.52E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.60E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI1_W	0.59	56	0	1	1.22E-01	1.63E-01	2.08E-04	2.81E-04	2.55E-04	6.37E-05	0.00E+00	3.71E-04	3.71E-04	4.53E-08	1.29E-05	49.1	4.28E-02	1.11E-03
SI1_W	0.59	46	0	1	1.01E-01	1.34E-01	1.72E-04	2.32E-04	2.11E-04	5.26E-05	0.00E+00	3.06E-04	3.07E-04	3.74E-08	1.07E-05	40.5	3.53E-02	9.19E-04
SI1_W	0.59	42	0	1	9.13E-02	1.21E-01	1.55E-04	2.10E-04	1.90E-04	4.76E-05	0.00E+00	2.77E-04	2.77E-04	3.38E-08	9.66E-06	36.6	3.19E-02	8.31E-04
SI1_W	0.59	47	0	1	1.03E-01	1.37E-01	1.75E-04	2.37E-04	2.15E-04	5.36E-05	0.00E+00	3.12E-04	3.12E-04	3.81E-08	1.09E-05	41.3	3.60E-02	9.37E-04
SI1_W	0.59	50	0	1	1.09E-01	1.45E-01	1.85E-04	2.50E-04	2.27E-04	5.67E-05	0.00E+00	3.30E-04	3.30E-04	4.02E-08	1.15E-05	43.7	3.80E-02	9.90E-04
SI1_W	0.59	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.55E-04	2.31E-04	5.77E-05	0.00E+00	3.36E-04	3.36E-04	4.10E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI1_W	0.59	53	0	1	1.15E-01	1.52E-01	1.95E-04	2.63E-04	2.39E-04	5.97E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.0	4.01E-02	1.04E-03
SI1_W	0.59	57	0	1	1.24E-01	1.65E-01	2.11E-04	2.86E-04	2.59E-04	6.48E-05	0.00E+00	3.77E-04	3.77E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI1_W	0.59	71	0	1	1.54E-01	2.04E-01	2.61E-04	3.53E-04	3.20E-04	7.99E-05	0.00E+00	4.65E-04	4.66E-04	5.68E-08	1.62E-05	61.6	5.37E-02	1.40E-03
SI1_W	0.59	76	0	1	1.65E-01	2.19E-01	2.81E-04	3.80E-04	3.44E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.77E-02	1.50E-03
SI1_W	0.59	53	0	1	1.15E-01	1.52E-01	1.95E-04	2.63E-04	2.39E-04	5.97E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.0	4.01E-02	1.04E-03
SI1_W	0.59	35	0	1	7.58E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.95E-05	0.00E+00	2.30E-04	2.30E-04	2.80E-08	8.01E-06	30.4	2.65E-02	6.90E-04
SI1_W	0.59	29	0	1	6.41E-02	8.52E-02	1.09E-04	1.47E-04	1.34E-04	3.34E-05	0.00E+00	1.94E-04	1.95E-04	2.37E-08	6.78E-06	25.7	2.24E-02	5.83E-04
SI1_W	0.59	25	0	1	5.44E-02	7.23E-02	9.25E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.75E-06	21.8	1.90E-02	4.95E-04
SI1_W	0.59	21	0	1	4.47E-02	5.94E-02	7.60E-05	1.03E-04	9.32E-05	2.33E-05	0.00E+00	1.35E-04	1.36E-04	1.65E-08	4.73E-06	17.9	1.56E-02	4.07E-04
SI1_W	0.59	15	0	1	3.30E-02	4.39E-02	5.62E-05	7.59E-05	6.89E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.49E-06	13.3	1.15E-02	3.01E-04
SI2_E	0.51	8	0	1	1.81E-02	2.41E-02	3.08E-05	4.16E-05	3.78E-05	9.43E-06	0.00E+00	5.49E-05	5.50E-05	6.70E-09	1.92E-06	7.3	6.33E-03	1.65E-04
SI2_E	0.51	6	0	1	1.21E-02	1.60E-02	2.05E-05	2.78E-05	2.52E-05	6.29E-06	0.00E+00	3.66E-05	3.66E-05	4.47E-09	1.28E-06	4.8	4.22E-03	1.10E-04
SI2_E	0.51	5	0	1	1.06E-02	1.40E-02	1.80E-05	2.43E-05	2.20E-05	5.50E-06	0.00E+00	3.20E-05	3.21E-05	3.91E-09	1.12E-06	4.2	3.69E-03	9.61E-05
SI2_E	0.51	3	0	1	7.55E-03	1.00E-02	1.28E-05	1.73E-05	1.57E-05	3.93E-06	0.00E+00	2.29E-05	2.29E-05	2.79E-09	7.98E-07	3.0	2.64E-03	6.87E-05
SI2_E	0.51	5	0	1	1.06E-02	1.40E-02	1.80E-05	2.43E-05	2.20E-05	5.50E-06	0.00E+00	3.20E-05	3.21E-05	3.91E-09	1.12E-06	4.2	3.69E-03	9.61E-05
SI2_E	0.51	12	0	1	2.57E-02	3.41E-02	4.36E-05	5.90E-05	5.35E-05	1.34E-05	0.00E+00	7.78E-05	7.79E-05	9.49E-09	2.71E-06	10.3	8.97E-03	2.33E-04
SI2_E	0.51	35	0	1	7.70E-02	1.02E-01	1.31E-04	1.77E-04	1.61E-04	4.01E-05	0.00E+00	2.33E-04	2.34E-04	2.85E-08	8.14E-06	30.9	2.69E-02	7.00E-04
SI2_E	0.51	54	0	1	1.18E-01	1.56E-01	2.00E-04	2.71E-04	2.45E-04	6.13E-05	0.00E+00	3.57E-04	3.57E-04	4.35E-08	1.25E-05	47.2	4.12E-02	1.07E-03
SI2_E	0.51	44	0	1	9.51E-02	1.26E-01	1.62E-04	2.19E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.89E-04	3.52E-08	1.01E-05	38.2	3.32E-02	8.65E-04
SI2_E	0.51	36	0	1	7.85E-02	1.04E-01	1.33E-04	1.80E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.90E-08	8.30E-06	31.5	2.74E-02	7.14E-04
SI2_E	0.51	33	0	1	7.10E-02	9.43E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.50E-06	28.5	2.48E-02	6.46E-04
SI2_E	0.51	37	0	1	8.00E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.17E-05	0.00E+00	2.43E-04	2.43E-04	2.96E-08	8.46E-06	32.1	2.80E-02	7.28E-04
SI2_E	0.51	39	0	1	8.45E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.57E-04	3.13E-08	8.94E-06	33.9	2.96E-02	7.69E-04
SI2_E	0.51	40	0	1	8.61E-02	1.14E-01	1.46E-04	1.98E-04	1.79E-04	4.48E-05	0.00E+00	2.61E-04	2.61E-04	3.18E-08	9.10E-06	34.5	3.01E-02	7.83E-04
SI2_E	0.51	41	0	1	8.91E-02	1.18E-01	1.51E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.29E-08	9.42E-06	35.7	3.11E-02	8.10E-04
SI2_E	0.51	44	0	1	9.66E-02	1.28E-01	1.64E-04	2.22E-04	2.01E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.57E-08	1.02E-05	38.8	3.38E-02	8.79E-04
SI2_E	0.51	55	0	1	1.19E-01	1.58E-01	2.03E-04	2.74E-04	2.49E-04	6.21E-05	0.00E+00	3.61E-04	3.62E-04	4.41E-08	1.26E-05	47.8	4.17E-02	1.09E-03
SI2_E	0.51	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.74E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI2_E	0.51	41	0	1	8.91E-02	1.18E-01	1.51E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.29E-08	9.42E-06	35.7	3.11E-02	8.10E-04
SI2_E	0.51	27	0	1	5.89E-02	7.82E-02	1.00E-04	1.35E-04	1.23E-04	3.07E-05	0.00E+00	1.78E-04	1.79E-04	2.18E-08	6.23E-06	23.6	2.06E-02	5.36E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI2_E	0.51	23	0	1	4.98E-02	6.62E-02	8.47E-05	1.14E-04	1.04E-04	2.59E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.27E-06	20.0	1.74E-02	4.53E-04
SI2_E	0.51	19	0	1	4.23E-02	5.62E-02	7.19E-05	9.71E-05	8.81E-05	2.20E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.47E-06	17.0	1.48E-02	3.85E-04
SI2_E	0.51	16	0	1	3.47E-02	4.61E-02	5.90E-05	7.98E-05	7.24E-05	1.81E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.67E-06	13.9	1.21E-02	3.16E-04
SI2_E	0.51	12	0	1	2.57E-02	3.41E-02	4.36E-05	5.90E-05	5.35E-05	1.34E-05	0.00E+00	7.78E-05	7.79E-05	9.49E-09	2.71E-06	10.3	8.97E-03	2.33E-04
SI2_W	0.42	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.56E-05	8.89E-06	0.00E+00	5.18E-05	5.18E-05	6.31E-09	1.81E-06	6.9	5.97E-03	1.55E-04
SI2_W	0.42	5	0	1	1.14E-02	1.51E-02	1.94E-05	2.62E-05	2.37E-05	5.93E-06	0.00E+00	3.45E-05	3.45E-05	4.21E-09	1.20E-06	4.6	3.98E-03	1.04E-04
SI2_W	0.42	5	0	1	9.96E-03	1.32E-02	1.69E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.02E-05	3.68E-09	1.05E-06	4.0	3.48E-03	9.06E-05
SI2_W	0.42	3	0	1	7.12E-03	9.45E-03	1.21E-05	1.64E-05	1.48E-05	3.70E-06	0.00E+00	2.16E-05	2.16E-05	2.63E-09	7.52E-07	2.9	2.49E-03	6.47E-05
SI2_W	0.42	5	0	1	9.96E-03	1.32E-02	1.69E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.02E-05	3.68E-09	1.05E-06	4.0	3.48E-03	9.06E-05
SI2_W	0.42	11	0	1	2.42E-02	3.21E-02	4.11E-05	5.56E-05	5.04E-05	1.26E-05	0.00E+00	7.33E-05	7.34E-05	8.95E-09	2.56E-06	9.7	8.46E-03	2.20E-04
SI2_W	0.42	33	0	1	7.26E-02	9.64E-02	1.23E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.68E-08	7.67E-06	29.1	2.54E-02	6.60E-04
SI2_W	0.42	51	0	1	1.11E-01	1.47E-01	1.89E-04	2.55E-04	2.31E-04	5.78E-05	0.00E+00	3.36E-04	3.37E-04	4.10E-08	1.17E-05	44.5	3.88E-02	1.01E-03
SI2_W	0.42	41	0	1	8.97E-02	1.19E-01	1.52E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.32E-08	9.48E-06	36.0	3.13E-02	8.16E-04
SI2_W	0.42	34	0	1	7.40E-02	9.83E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.82E-06	29.7	2.59E-02	6.73E-04
SI2_W	0.42	31	0	1	6.69E-02	8.89E-02	1.14E-04	1.54E-04	1.39E-04	3.48E-05	0.00E+00	2.03E-04	2.03E-04	2.47E-08	7.07E-06	26.8	2.34E-02	6.09E-04
SI2_W	0.42	35	0	1	7.54E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.93E-05	0.00E+00	2.29E-04	2.29E-04	2.79E-08	7.98E-06	30.3	2.64E-02	6.86E-04
SI2_W	0.42	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.25E-04
SI2_W	0.42	37	0	1	8.11E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.22E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.58E-06	32.5	2.84E-02	7.38E-04
SI2_W	0.42	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.54E-04	2.55E-04	3.10E-08	8.88E-06	33.7	2.93E-02	7.64E-04
SI2_W	0.42	42	0	1	9.11E-02	1.21E-01	1.55E-04	2.09E-04	1.90E-04	4.74E-05	0.00E+00	2.76E-04	2.76E-04	3.37E-08	9.63E-06	36.5	3.18E-02	8.29E-04
SI2_W	0.42	52	0	1	1.12E-01	1.49E-01	1.91E-04	2.58E-04	2.34E-04	5.85E-05	0.00E+00	3.41E-04	3.41E-04	4.16E-08	1.19E-05	45.1	3.93E-02	1.02E-03
SI2_W	0.42	56	0	1	1.21E-01	1.61E-01	2.06E-04	2.78E-04	2.52E-04	6.30E-05	0.00E+00	3.67E-04	3.67E-04	4.47E-08	1.28E-05	48.5	4.23E-02	1.10E-03
SI2_W	0.42	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.54E-04	2.55E-04	3.10E-08	8.88E-06	33.7	2.93E-02	7.64E-04
SI2_W	0.42	25	0	1	5.55E-02	7.37E-02	9.44E-05	1.28E-04	1.16E-04	2.89E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.87E-06	22.3	1.94E-02	5.05E-04
SI2_W	0.42	22	0	1	4.70E-02	6.24E-02	7.98E-05	1.08E-04	9.79E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.74E-08	4.97E-06	18.8	1.64E-02	4.27E-04
SI2_W	0.42	18	0	1	3.98E-02	5.29E-02	6.77E-05	9.16E-05	8.31E-05	2.07E-05	0.00E+00	1.21E-04	1.21E-04	1.47E-08	4.21E-06	16.0	1.39E-02	3.63E-04
SI2_W	0.42	15	0	1	3.27E-02	4.35E-02	5.57E-05	7.52E-05	6.82E-05	1.70E-05	0.00E+00	9.92E-05	9.93E-05	1.21E-08	3.46E-06	13.1	1.14E-02	2.98E-04
SI2_W	0.42	11	0	1	2.42E-02	3.21E-02	4.11E-05	5.56E-05	5.04E-05	1.26E-05	0.00E+00	7.33E-05	7.34E-05	8.95E-09	2.56E-06	9.7	8.46E-03	2.20E-04
SI3_E	0.50	9	0	1	2.05E-02	2.72E-02	3.48E-05	4.71E-05	4.27E-05	1.07E-05	0.00E+00	6.21E-05	6.22E-05	7.58E-09	2.17E-06	8.2	7.16E-03	1.86E-04
SI3_E	0.50	6	0	1	1.37E-02	1.82E-02	2.32E-05	3.14E-05	2.85E-05	7.11E-06	0.00E+00	4.14E-05	4.15E-05	5.05E-09	1.44E-06	5.5	4.78E-03	1.24E-04
SI3_E	0.50	5	0	1	1.20E-02	1.59E-02	2.03E-05	2.75E-05	2.49E-05	6.22E-06	0.00E+00	3.62E-05	3.63E-05	4.42E-09	1.26E-06	4.8	4.18E-03	1.09E-04
SI3_E	0.50	4	0	1	8.54E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.45E-06	0.00E+00	2.59E-05	2.59E-05	3.16E-09	9.03E-07	3.4	2.98E-03	7.77E-05
SI3_E	0.50	5	0	1	1.20E-02	1.59E-02	2.03E-05	2.75E-05	2.49E-05	6.22E-06	0.00E+00	3.62E-05	3.63E-05	4.42E-09	1.26E-06	4.8	4.18E-03	1.09E-04
SI3_E	0.50	13	0	1	2.90E-02	3.86E-02	4.94E-05	6.67E-05	6.05E-05	1.51E-05	0.00E+00	8.80E-05	8.81E-05	1.07E-08	3.07E-06	11.6	1.01E-02	2.64E-04
SI3_E	0.50	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	34.9	3.04E-02	7.92E-04
SI3_E	0.50	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.78E-04	6.93E-05	0.00E+00	4.04E-04	4.04E-04	4.93E-08	1.41E-05	53.4	4.66E-02	1.21E-03
SI3_E	0.50	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.98E-08	1.14E-05	43.2	3.76E-02	9.79E-04
SI3_E	0.50	41	0	1	8.88E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.39E-06	35.6	3.10E-02	8.08E-04
SI3_E	0.50	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI3_E	0.50	42	0	1	9.05E-02	1.20E-01	1.54E-04	2.08E-04	1.89E-04	4.71E-05	0.00E+00	2.74E-04	2.75E-04	3.35E-08	9.57E-06	36.3	3.16E-02	8.23E-04
SI3_E	0.50	44	0	1	9.56E-02	1.27E-01	1.63E-04	2.20E-04	1.99E-04	4.98E-05	0.00E+00	2.90E-04	2.90E-04	3.54E-08	1.01E-05	38.4	3.34E-02	8.70E-04
SI3_E	0.50	45	0	1	9.73E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.95E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI3_E	0.50	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.05E-04	3.06E-04	3.73E-08	1.07E-05	40.4	3.52E-02	9.17E-04
SI3_E	0.50	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.51E-04	2.28E-04	5.69E-05	0.00E+00	3.31E-04	3.32E-04	4.04E-08	1.16E-05	43.9	3.82E-02	9.94E-04
SI3_E	0.50	62	0	1	1.35E-01	1.79E-01	2.29E-04	3.10E-04	2.81E-04	7.02E-05	0.00E+00	4.09E-04	4.09E-04	4.99E-08	1.43E-05	54.1	4.72E-02	1.23E-03
SI3_E	0.50	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.56E-05	0.00E+00	4.40E-04	4.40E-04	5.37E-08	1.53E-05	58.2	5.07E-02	1.32E-03
SI3_E	0.50	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.05E-04	3.06E-04	3.73E-08	1.07E-05	40.4	3.52E-02	9.17E-04
SI3_E	0.50	31	0	1	6.66E-02	8.85E-02	1.13E-04	1.53E-04	1.39E-04	3.47E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.04E-06	26.7	2.33E-02	6.06E-04
SI3_E	0.50	26	0	1	5.64E-02	7.49E-02	9.58E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.71E-04	1.71E-04	2.08E-08	5.96E-06	22.6	1.97E-02	5.13E-04
SI3_E	0.50	22	0	1	4.78E-02	6.35E-02	8.13E-05	1.10E-04	9.97E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.06E-06	19.2	1.67E-02	4.35E-04
SI3_E	0.50	18	0	1	3.93E-02	5.22E-02	6.68E-05	9.03E-05	8.19E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.15E-06	15.8	1.37E-02	3.57E-04
SI3_E	0.50	13	0	1	2.90E-02	3.86E-02	4.94E-05	6.67E-05	6.05E-05	1.51E-05	0.00E+00	8.80E-05	8.81E-05	1.07E-08	3.07E-06	11.6	1.01E-02	2.64E-04
SI3_W	0.38	6	0	1	1.39E-02	1.85E-02	2.37E-05	3.20E-05	2.90E-05	7.25E-06	0.00E+00	4.22E-05	4.23E-05	5.15E-09	1.47E-06	5.6	4.87E-03	1.27E-04
SI3_W	0.38	4	0	1	9.29E-03	1.23E-02	1.58E-05	2.13E-05	1.94E-05	4.83E-06	0.00E+00	2.81E-05	2.82E-05	3.43E-09	9.82E-07	3.7	3.25E-03	8.45E-05
SI3_W	0.38	4	0	1	8.12E-03	1.08E-02	1.38E-05	1.87E-05	1.69E-05	4.23E-06	0.00E+00	2.46E-05	2.46E-05	3.00E-09	8.59E-07	3.3	2.84E-03	7.39E-05
SI3_W	0.38	3	0	1	5.80E-03	7.71E-03	9.87E-06	1.33E-05	1.21E-05	3.02E-06	0.00E+00	1.76E-05	1.76E-05	2.15E-09	6.14E-07	2.3	2.03E-03	5.28E-05
SI3_W	0.38	4	0	1	8.12E-03	1.08E-02	1.38E-05	1.87E-05	1.69E-05	4.23E-06	0.00E+00	2.46E-05	2.46E-05	3.00E-09	8.59E-07	3.3	2.84E-03	7.39E-05
SI3_W	0.38	9	0	1	1.97E-02	2.62E-02	3.35E-05	4.53E-05	4.11E-05	1.03E-05	0.00E+00	5.98E-05	5.99E-05	7.30E-09	2.09E-06	7.9	6.90E-03	1.80E-04
SI3_W	0.38	27	0	1	5.92E-02	7.86E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.7	2.07E-02	5.39E-04
SI3_W	0.38	42	0	1	9.05E-02	1.20E-01	1.54E-04	2.08E-04	1.89E-04	4.71E-05	0.00E+00	2.74E-04	2.75E-04	3.35E-08	9.57E-06	36.3	3.16E-02	8.24E-04
SI3_W	0.38	34	0	1	7.31E-02	9.71E-02	1.24E-04	1.68E-04	1.52E-04	3.81E-05	0.00E+00	2.22E-04	2.22E-04	2.70E-08	7.73E-06	29.3	2.56E-02	6.65E-04
SI3_W	0.38	28	0	1	6.04E-02	8.02E-02	1.03E-04	1.39E-04	1.26E-04	3.14E-05	0.00E+00	1.83E-04	1.83E-04	2.23E-08	6.38E-06	24.2	2.11E-02	5.49E-04
SI3_W	0.38	25	0	1	5.46E-02	7.25E-02	9.27E-05	1.25E-04	1.14E-04	2.84E-05	0.00E+00	1.65E-04	1.66E-04	2.02E-08	5.77E-06	21.9	1.91E-02	4.96E-04
SI3_W	0.38	28	0	1	6.15E-02	8.17E-02	1.05E-04	1.41E-04	1.28E-04	3.20E-05	0.00E+00	1.86E-04	1.87E-04	2.27E-08	6.50E-06	24.7	2.15E-02	5.60E-04
SI3_W	0.38	30	0	1	6.50E-02	8.63E-02	1.11E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.87E-06	26.1	2.27E-02	5.91E-04
SI3_W	0.38	30	0	1	6.62E-02	8.79E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.01E-04	2.01E-04	2.45E-08	6.99E-06	26.5	2.31E-02	6.02E-04
SI3_W	0.38	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.56E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI3_W	0.38	34	0	1	7.43E-02	9.87E-02	1.26E-04	1.71E-04	1.55E-04	3.87E-05	0.00E+00	2.25E-04	2.25E-04	2.75E-08	7.85E-06	29.8	2.60E-02	6.76E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI3_W	0.38	42	0	1	9.17E-02	1.22E-01	1.56E-04	2.11E-04	1.91E-04	4.77E-05	0.00E+00	2.78E-04	2.78E-04	3.39E-08	9.69E-06	36.8	3.20E-02	8.34E-04
SI3_W	0.38	45	0	1	9.87E-02	1.31E-01	1.68E-04	2.27E-04	2.06E-04	5.14E-05	0.00E+00	2.99E-04	2.99E-04	3.65E-08	1.04E-05	39.6	3.45E-02	8.98E-04
SI3_W	0.38	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.56E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI3_W	0.38	21	0	1	4.53E-02	6.01E-02	7.70E-05	1.04E-04	9.44E-05	2.36E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.79E-06	18.2	1.58E-02	4.12E-04
SI3_W	0.38	18	0	1	3.83E-02	5.09E-02	6.51E-05	8.80E-05	7.98E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.42E-08	4.05E-06	15.4	1.34E-02	3.48E-04
SI3_W	0.38	15	0	1	3.25E-02	4.32E-02	5.53E-05	7.47E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.44E-06	13.0	1.14E-02	2.96E-04
SI3_W	0.38	12	0	1	2.67E-02	3.55E-02	4.54E-05	6.13E-05	5.56E-05	1.39E-05	0.00E+00	8.09E-05	8.10E-05	9.87E-09	2.82E-06	10.7	9.33E-03	2.43E-04
SI3_W	0.38	9	0	1	1.97E-02	2.62E-02	3.35E-05	4.53E-05	4.11E-05	1.03E-05	0.00E+00	5.98E-05	5.99E-05	7.30E-09	2.09E-06	7.9	6.90E-03	1.80E-04
SI4_E	0.32	5	0	1	1.18E-02	1.56E-02	2.00E-05	2.70E-05	2.45E-05	6.12E-06	0.00E+00	3.56E-05	3.57E-05	4.35E-09	1.24E-06	4.7	4.11E-03	1.07E-04
SI4_E	0.32	4	0	1	7.84E-03	1.04E-02	1.33E-05	1.80E-05	1.63E-05	4.08E-06	0.00E+00	2.38E-05	2.38E-05	2.90E-09	8.29E-07	3.1	2.74E-03	7.13E-05
SI4_E	0.32	3	0	1	6.86E-03	9.11E-03	1.17E-05	1.58E-05	1.43E-05	3.57E-06	0.00E+00	2.08E-05	2.08E-05	2.54E-09	7.25E-07	2.8	2.40E-03	6.24E-05
SI4_E	0.32	2	0	1	4.90E-03	6.51E-03	8.33E-06	1.13E-05	1.02E-05	2.55E-06	0.00E+00	1.49E-05	1.49E-05	1.81E-09	5.18E-07	2.0	1.71E-03	4.46E-05
SI4_E	0.32	3	0	1	6.86E-03	9.11E-03	1.17E-05	1.58E-05	1.43E-05	3.57E-06	0.00E+00	2.08E-05	2.08E-05	2.54E-09	7.25E-07	2.8	2.40E-03	6.24E-05
SI4_E	0.32	8	0	1	1.67E-02	2.21E-02	2.83E-05	3.83E-05	3.47E-05	8.67E-06	0.00E+00	5.05E-05	5.06E-05	6.16E-09	1.76E-06	6.7	5.82E-03	1.52E-04
SI4_E	0.32	23	0	1	5.00E-02	6.64E-02	8.50E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.51E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI4_E	0.32	35	0	1	7.64E-02	1.02E-01	1.30E-04	1.76E-04	1.59E-04	3.98E-05	0.00E+00	2.32E-04	2.32E-04	2.83E-08	8.08E-06	30.7	2.67E-02	6.95E-04
SI4_E	0.32	28	0	1	6.17E-02	8.20E-02	1.05E-04	1.42E-04	1.29E-04	3.21E-05	0.00E+00	1.87E-04	1.87E-04	2.28E-08	6.53E-06	24.8	2.16E-02	5.62E-04
SI4_E	0.32	23	0	1	5.10E-02	6.77E-02	8.66E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.55E-04	1.88E-08	5.39E-06	20.4	1.78E-02	4.64E-04
SI4_E	0.32	21	0	1	4.61E-02	6.12E-02	7.83E-05	1.06E-04	9.60E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.70E-08	4.87E-06	18.5	1.61E-02	4.19E-04
SI4_E	0.32	24	0	1	5.19E-02	6.90E-02	8.83E-05	1.19E-04	1.08E-04	2.70E-05	0.00E+00	1.57E-04	1.58E-04	1.92E-08	5.49E-06	20.8	1.82E-02	4.73E-04
SI4_E	0.32	25	0	1	5.49E-02	7.29E-02	9.33E-05	1.26E-04	1.14E-04	2.86E-05	0.00E+00	1.66E-04	1.67E-04	2.03E-08	5.80E-06	22.0	1.92E-02	4.99E-04
SI4_E	0.32	26	0	1	5.59E-02	7.42E-02	9.50E-05	1.28E-04	1.16E-04	2.91E-05	0.00E+00	1.69E-04	1.69E-04	2.07E-08	5.91E-06	22.4	1.95E-02	5.08E-04
SI4_E	0.32	27	0	1	5.78E-02	7.68E-02	9.83E-05	1.33E-04	1.21E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI4_E	0.32	29	0	1	6.27E-02	8.33E-02	1.07E-04	1.44E-04	1.31E-04	3.27E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.2	2.19E-02	5.71E-04
SI4_E	0.32	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.35E-04	2.35E-04	2.86E-08	8.19E-06	31.1	2.71E-02	7.04E-04
SI4_E	0.32	38	0	1	8.33E-02	1.11E-01	1.42E-04	1.91E-04	1.74E-04	4.34E-05	0.00E+00	2.52E-04	2.53E-04	3.08E-08	8.81E-06	33.4	2.91E-02	7.58E-04
SI4_E	0.32	27	0	1	5.78E-02	7.68E-02	9.83E-05	1.33E-04	1.21E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI4_E	0.32	18	0	1	3.82E-02	5.08E-02	6.50E-05	8.78E-05	7.97E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.41E-08	4.04E-06	15.3	1.34E-02	3.48E-04
SI4_E	0.32	15	0	1	3.23E-02	4.30E-02	5.50E-05	7.43E-05	6.74E-05	1.68E-05	0.00E+00	9.80E-05	9.81E-05	1.20E-08	3.42E-06	13.0	1.13E-02	2.94E-04
SI4_E	0.32	13	0	1	2.74E-02	3.65E-02	4.67E-05	6.31E-05	5.72E-05	1.43E-05	0.00E+00	8.32E-05	8.33E-05	1.01E-08	2.90E-06	11.0	9.59E-03	2.50E-04
SI4_E	0.32	10	0	1	2.25E-02	2.99E-02	3.83E-05	5.18E-05	4.70E-05	1.17E-05	0.00E+00	6.83E-05	6.84E-05	8.34E-09	2.38E-06	9.0	7.88E-03	2.05E-04
SI4_E	0.32	8	0	1	1.67E-02	2.21E-02	2.83E-05	3.83E-05	3.47E-05	8.67E-06	0.00E+00	5.05E-05	5.06E-05	6.16E-09	1.76E-06	6.7	5.82E-03	1.52E-04
SI4_W	0.32	6	0	1	1.39E-02	1.84E-02	2.36E-05	3.19E-05	2.89E-05	7.23E-06	0.00E+00	4.21E-05	4.21E-05	5.13E-09	1.47E-06	5.6	4.85E-03	1.26E-04
SI4_W	0.32	4	0	1	9.26E-03	1.23E-02	1.57E-05	2.13E-05	1.93E-05	4.82E-06	0.00E+00	2.81E-05	2.81E-05	3.42E-09	9.79E-07	3.7	3.24E-03	8.42E-05
SI4_W	0.32	4	0	1	8.10E-03	1.08E-02	1.38E-05	1.86E-05	1.69E-05	4.22E-06	0.00E+00	2.45E-05	2.46E-05	2.99E-09	8.56E-07	3.2	2.83E-03	7.37E-05
SI4_W	0.32	3	0	1	5.79E-03	7.69E-03	9.84E-06	1.33E-05	1.21E-05	3.01E-06	0.00E+00	1.75E-05	1.76E-05	2.14E-09	6.12E-07	2.3	2.02E-03	5.26E-05
SI4_W	0.32	4	0	1	8.10E-03	1.08E-02	1.38E-05	1.86E-05	1.69E-05	4.22E-06	0.00E+00	2.45E-05	2.46E-05	2.99E-09	8.56E-07	3.2	2.83E-03	7.37E-05
SI4_W	0.32	9	0	1	1.97E-02	2.61E-02	3.34E-05	4.52E-05	4.10E-05	1.02E-05	0.00E+00	5.96E-05	5.97E-05	7.27E-09	2.08E-06	7.9	6.87E-03	1.79E-04
SI4_W	0.32	27	0	1	5.90E-02	7.84E-02	1.00E-04	1.36E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.24E-06	23.7	2.06E-02	5.37E-04
SI4_W	0.32	41	0	1	9.02E-02	1.20E-01	1.53E-04	2.07E-04	1.88E-04	4.70E-05	0.00E+00	2.74E-04	2.74E-04	3.34E-08	9.54E-06	36.2	3.15E-02	8.21E-04
SI4_W	0.32	33	0	1	7.29E-02	9.68E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.21E-04	2.21E-04	2.70E-08	7.71E-06	29.2	2.55E-02	6.63E-04
SI4_W	0.32	28	0	1	6.02E-02	7.99E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.83E-04	2.22E-08	6.36E-06	24.1	2.10E-02	5.47E-04
SI4_W	0.32	25	0	1	5.44E-02	7.22E-02	9.25E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.75E-06	21.8	1.90E-02	4.95E-04
SI4_W	0.32	28	0	1	6.13E-02	8.15E-02	1.04E-04	1.41E-04	1.28E-04	3.19E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.48E-06	24.6	2.14E-02	5.58E-04
SI4_W	0.32	30	0	1	6.48E-02	8.61E-02	1.10E-04	1.49E-04	1.35E-04	3.37E-05	0.00E+00	1.96E-04	1.97E-04	2.40E-08	6.85E-06	26.0	2.26E-02	5.89E-04
SI4_W	0.32	30	0	1	6.60E-02	8.76E-02	1.12E-04	1.52E-04	1.37E-04	3.43E-05	0.00E+00	2.00E-04	2.00E-04	2.44E-08	6.97E-06	26.5	2.31E-02	6.00E-04
SI4_W	0.32	31	0	1	6.83E-02	9.07E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.22E-06	27.4	2.39E-02	6.21E-04
SI4_W	0.32	34	0	1	7.40E-02	9.84E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.83E-06	29.7	2.59E-02	6.74E-04
SI4_W	0.32	42	0	1	9.14E-02	1.21E-01	1.55E-04	2.10E-04	1.91E-04	4.76E-05	0.00E+00	2.77E-04	2.77E-04	3.38E-08	9.66E-06	36.7	3.19E-02	8.32E-04
SI4_W	0.32	45	0	1	9.83E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.12E-05	0.00E+00	2.98E-04	2.98E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.95E-04
SI4_W	0.32	31	0	1	6.83E-02	9.07E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.22E-06	27.4	2.39E-02	6.21E-04
SI4_W	0.32	21	0	1	4.51E-02	5.99E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI4_W	0.32	18	0	1	3.82E-02	5.07E-02	6.49E-05	8.77E-05	7.96E-05	1.99E-05	0.00E+00	1.16E-04	1.16E-04	1.41E-08	4.04E-06	15.3	1.33E-02	3.47E-04
SI4_W	0.32	15	0	1	3.24E-02	4.30E-02	5.51E-05	7.44E-05	6.75E-05	1.69E-05	0.00E+00	9.82E-05	9.83E-05	1.20E-08	3.43E-06	13.0	1.13E-02	2.95E-04
SI4_W	0.32	12	0	1	2.66E-02	3.54E-02	4.52E-05	6.11E-05	5.55E-05	1.39E-05	0.00E+00	8.07E-05	8.07E-05	9.84E-09	2.81E-06	10.7	9.30E-03	2.42E-04
SI4_W	0.32	9	0	1	1.97E-02	2.61E-02	3.34E-05	4.52E-05	4.10E-05	1.02E-05	0.00E+00	5.96E-05	5.97E-05	7.27E-09	2.08E-06	7.9	6.87E-03	1.79E-04
SI5_E	0.58	12	0	1	2.56E-02	3.40E-02	4.35E-05	5.88E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.76E-05	9.46E-09	2.70E-06	10.3	8.94E-03	2.33E-04
SI5_E	0.58	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.55E-05	8.88E-06	0.00E+00	5.17E-05	5.17E-05	6.30E-09	1.80E-06	6.8	5.96E-03	1.55E-04
SI5_E	0.58	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.21E-03	1.36E-04
SI5_E	0.58	5	0	1	1.07E-02	1.42E-02	1.81E-05	2.45E-05	2.22E-05	5.55E-06	0.00E+00	3.23E-05	3.23E-05	3.94E-09	1.13E-06	4.3	3.72E-03	9.69E-05
SI5_E	0.58	7	0	1	1.49E-02	1.98E-02	2.54E-05	3.43E-05	3.11E-05	7.77E-06	0.00E+00	4.52E-05	4.53E-05	5.52E-09	1.58E-06	6.0	5.21E-03	1.36E-04
SI5_E	0.58	17	0	1	3.62E-02	4.81E-02	6.16E-05	8.33E-05	7.55E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI5_E	0.58	50	0	1	1.09E-01	1.44E-01	1.85E-04	2.50E-04	2.27E-04	5.66E-05	0.00E+00	3.29E-04	3.30E-04	4.02E-08	1.15E-05	43.6	3.80E-02	9.89E-04
SI5_E	0.58	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI5_E	0.58	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.09E-04	2.80E-04	6.99E-05	0.00E+00	4.07E-04	4.07E-04	4.96E-08	1.42E-05	53.9	4.69E-02	1.22E-03
SI5_E	0.58	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.55E-04	2.31E-04	5.77E-05	0.00E+00	3.36E-04	3.36E-04	4.10E-08	1.17E-05	44.5	3.87E-02	1.01E-03
SI5_E	0.58	46	0	1	1.00E-01	1.33E-01	1.70E-04	2.30E-04	2.09E-04	5.21E-05	0.00E+00	3.04E-04	3.04E-04	3.70E-08	1.06E-05	40.2	3.50E-02	9.11E-04
SI5_E	0.58	52	0	1	1.13E-01	1.50E-01	1.92E-04	2.60E-04	2.35E-04	5.88E-05	0.00E+00	3.42E-04	3.43E-04	4.18E-08	1.19E-05	45.3	3.95E-02	1.03E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI5_E	0.58	55	0	1	1.19E-01	1.59E-01	2.03E-04	2.74E-04	2.49E-04	6.21E-05	0.00E+00	3.62E-04	3.62E-04	4.41E-08	1.26E-05	47.9	4.17E-02	1.09E-03
SI5_E	0.58	56	0	1	1.21E-01	1.61E-01	2.07E-04	2.79E-04	2.53E-04	6.32E-05	0.00E+00	3.68E-04	3.69E-04	4.49E-08	1.28E-05	48.7	4.25E-02	1.11E-03
SI5_E	0.58	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.4	4.40E-02	1.14E-03
SI5_E	0.58	63	0	1	1.36E-01	1.81E-01	2.32E-04	3.13E-04	2.84E-04	7.10E-05	0.00E+00	4.13E-04	4.14E-04	5.04E-08	1.44E-05	54.7	4.77E-02	1.24E-03
SI5_E	0.58	77	0	1	1.68E-01	2.24E-01	2.86E-04	3.87E-04	3.51E-04	8.77E-05	0.00E+00	5.10E-04	5.11E-04	6.23E-08	1.78E-05	67.6	5.89E-02	1.53E-03
SI5_E	0.58	83	0	1	1.81E-01	2.41E-01	3.08E-04	4.16E-04	3.78E-04	9.43E-05	0.00E+00	5.49E-04	5.50E-04	6.70E-08	1.92E-05	72.7	6.33E-02	1.65E-03
SI5_E	0.58	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.89E-04	2.62E-04	6.55E-05	0.00E+00	3.81E-04	3.82E-04	4.65E-08	1.33E-05	50.4	4.40E-02	1.14E-03
SI5_E	0.58	38	0	1	8.31E-02	1.10E-01	1.41E-04	1.91E-04	1.73E-04	4.33E-05	0.00E+00	2.52E-04	2.52E-04	3.07E-08	8.79E-06	33.3	2.91E-02	7.56E-04
SI5_E	0.58	32	0	1	7.03E-02	9.34E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI5_E	0.58	27	0	1	5.97E-02	7.93E-02	1.01E-04	1.37E-04	1.24E-04	3.11E-05	0.00E+00	1.81E-04	1.81E-04	2.21E-08	6.31E-06	23.9	2.09E-02	5.43E-04
SI5_E	0.58	23	0	1	4.90E-02	6.51E-02	8.33E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.18E-06	19.7	1.71E-02	4.46E-04
SI5_E	0.58	17	0	1	3.62E-02	4.81E-02	6.16E-05	8.33E-05	7.55E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI5_W	0.59	19	0	1	4.18E-02	5.55E-02	7.10E-05	9.60E-05	8.71E-05	2.17E-05	0.00E+00	1.27E-04	1.27E-04	1.54E-08	4.42E-06	16.8	1.46E-02	3.80E-04
SI5_W	0.59	13	0	1	2.78E-02	3.70E-02	4.73E-05	6.40E-05	5.80E-05	1.45E-05	0.00E+00	8.44E-05	8.45E-05	1.03E-08	2.94E-06	11.2	9.73E-03	2.53E-04
SI5_W	0.59	11	0	1	2.44E-02	3.24E-02	4.14E-05	5.60E-05	5.08E-05	1.27E-05	0.00E+00	7.38E-05	7.39E-05	9.01E-09	2.58E-06	9.8	8.52E-03	2.22E-04
SI5_W	0.59	8	0	1	1.74E-02	2.31E-02	2.96E-05	4.00E-05	3.63E-05	9.06E-06	0.00E+00	5.27E-05	5.28E-05	6.43E-09	1.84E-06	7.0	6.08E-03	1.58E-04
SI5_W	0.59	11	0	1	2.44E-02	3.24E-02	4.14E-05	5.60E-05	5.08E-05	1.27E-05	0.00E+00	7.38E-05	7.39E-05	9.01E-09	2.58E-06	9.8	8.52E-03	2.22E-04
SI5_W	0.59	27	0	1	5.92E-02	7.86E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.7	2.07E-02	5.38E-04
SI5_W	0.59	82	0	1	1.77E-01	2.36E-01	3.02E-04	4.08E-04	3.70E-04	9.24E-05	0.00E+00	5.38E-04	5.39E-04	6.56E-08	1.88E-05	71.2	6.20E-02	1.61E-03
SI5_W	0.59	125	0	1	2.71E-01	3.61E-01	4.62E-04	6.24E-04	5.66E-04	1.41E-04	0.00E+00	8.23E-04	8.24E-04	1.00E-07	2.87E-05	108.9	9.49E-02	2.47E-03
SI5_W	0.59	101	0	1	2.19E-01	2.91E-01	3.73E-04	5.04E-04	4.57E-04	1.14E-04	0.00E+00	6.65E-04	6.65E-04	8.11E-08	2.32E-05	88.0	7.66E-02	1.99E-03
SI5_W	0.59	83	0	1	1.81E-01	2.40E-01	3.08E-04	4.16E-04	3.77E-04	9.42E-05	0.00E+00	5.49E-04	5.49E-04	6.69E-08	1.91E-05	72.6	6.33E-02	1.65E-03
SI5_W	0.59	75	0	1	1.64E-01	2.17E-01	2.78E-04	3.76E-04	3.41E-04	8.52E-05	0.00E+00	4.96E-04	4.96E-04	6.05E-08	1.73E-05	65.6	5.72E-02	1.49E-03
SI5_W	0.59	85	0	1	1.84E-01	2.45E-01	3.14E-04	4.24E-04	3.85E-04	9.60E-05	0.00E+00	5.59E-04	5.60E-04	6.82E-08	1.95E-05	74.0	6.45E-02	1.68E-03
SI5_W	0.59	90	0	1	1.95E-01	2.59E-01	3.31E-04	4.48E-04	4.06E-04	1.01E-04	0.00E+00	5.91E-04	5.91E-04	7.21E-08	2.06E-05	78.2	6.81E-02	1.77E-03
SI5_W	0.59	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.93E-02	1.80E-03
SI5_W	0.59	94	0	1	2.05E-01	2.73E-01	3.49E-04	4.72E-04	4.28E-04	1.07E-04	0.00E+00	6.22E-04	6.23E-04	7.59E-08	2.17E-05	82.4	7.18E-02	1.87E-03
SI5_W	0.59	102	0	1	2.23E-01	2.96E-01	3.79E-04	5.12E-04	4.64E-04	1.16E-04	0.00E+00	6.75E-04	6.76E-04	8.24E-08	2.36E-05	89.4	7.79E-02	2.03E-03
SI5_W	0.59	126	0	1	2.75E-01	3.65E-01	4.67E-04	6.32E-04	5.73E-04	1.43E-04	0.00E+00	8.33E-04	8.34E-04	1.02E-07	2.91E-05	110.3	9.61E-02	2.50E-03
SI5_W	0.59	136	0	1	2.96E-01	3.93E-01	5.03E-04	6.80E-04	6.17E-04	1.54E-04	0.00E+00	8.97E-04	8.98E-04	1.09E-07	3.13E-05	118.7	1.03E-01	2.69E-03
SI5_W	0.59	94	0	1	2.05E-01	2.73E-01	3.49E-04	4.72E-04	4.28E-04	1.07E-04	0.00E+00	6.22E-04	6.23E-04	7.59E-08	2.17E-05	82.4	7.18E-02	1.87E-03
SI5_W	0.59	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.11E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.74E-02	1.23E-03
SI5_W	0.59	53	0	1	1.15E-01	1.53E-01	1.95E-04	2.64E-04	2.39E-04	5.98E-05	0.00E+00	3.48E-04	3.48E-04	4.25E-08	1.21E-05	46.1	4.01E-02	1.04E-03
SI5_W	0.59	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI5_W	0.59	37	0	1	8.00E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.17E-05	0.00E+00	2.43E-04	2.43E-04	2.96E-08	8.46E-06	32.1	2.80E-02	7.28E-04
SI5_W	0.59	27	0	1	5.92E-02	7.86E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.7	2.07E-02	5.38E-04
SI6_E	0.43	14	0	1	3.06E-02	4.06E-02	5.20E-05	7.03E-05	6.38E-05	1.59E-05	0.00E+00	9.27E-05	9.28E-05	1.13E-08	3.23E-06	12.3	1.07E-02	2.78E-04
SI6_E	0.43	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.25E-05	1.06E-05	0.00E+00	6.18E-05	6.19E-05	7.54E-09	2.16E-06	8.2	7.13E-03	1.86E-04
SI6_E	0.43	8	0	1	1.78E-02	2.37E-02	3.03E-05	4.10E-05	3.72E-05	9.29E-06	0.00E+00	5.41E-05	5.41E-05	6.60E-09	1.89E-06	7.2	6.24E-03	1.62E-04
SI6_E	0.43	6	0	1	1.27E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.63E-06	0.00E+00	3.86E-05	3.87E-05	4.71E-09	1.35E-06	5.1	4.45E-03	1.16E-04
SI6_E	0.43	8	0	1	1.78E-02	2.37E-02	3.03E-05	4.10E-05	3.72E-05	9.29E-06	0.00E+00	5.41E-05	5.41E-05	6.60E-09	1.89E-06	7.2	6.24E-03	1.62E-04
SI6_E	0.43	20	0	1	4.33E-02	5.76E-02	7.37E-05	9.96E-05	9.03E-05	2.26E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI6_E	0.43	60	0	1	1.30E-01	1.73E-01	2.21E-04	2.99E-04	2.71E-04	6.77E-05	0.00E+00	3.94E-04	3.94E-04	4.81E-08	1.37E-05	52.2	4.54E-02	1.18E-03
SI6_E	0.43	91	0	1	1.99E-01	2.64E-01	3.38E-04	4.57E-04	4.14E-04	1.04E-04	0.00E+00	6.03E-04	6.03E-04	7.35E-08	2.10E-05	79.8	6.95E-02	1.81E-03
SI6_E	0.43	74	0	1	1.61E-01	2.13E-01	2.73E-04	3.69E-04	3.35E-04	8.36E-05	0.00E+00	4.87E-04	4.87E-04	5.94E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI6_E	0.43	61	0	1	1.33E-01	1.76E-01	2.25E-04	3.05E-04	2.76E-04	6.90E-05	0.00E+00	4.02E-04	4.02E-04	4.90E-08	1.40E-05	53.2	4.63E-02	1.21E-03
SI6_E	0.43	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.75E-04	2.50E-04	6.24E-05	0.00E+00	3.63E-04	3.63E-04	4.43E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI6_E	0.43	62	0	1	1.35E-01	1.79E-01	2.30E-04	3.10E-04	2.82E-04	7.03E-05	0.00E+00	4.09E-04	4.10E-04	5.00E-08	1.43E-05	54.2	4.72E-02	1.23E-03
SI6_E	0.43	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.28E-04	2.98E-04	7.43E-05	0.00E+00	4.33E-04	4.33E-04	5.28E-08	1.51E-05	57.3	4.99E-02	1.30E-03
SI6_E	0.43	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.56E-05	0.00E+00	4.40E-04	4.41E-04	5.37E-08	1.54E-05	58.3	5.08E-02	1.32E-03
SI6_E	0.43	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI6_E	0.43	75	0	1	1.63E-01	2.17E-01	2.77E-04	3.75E-04	3.40E-04	8.49E-05	0.00E+00	4.94E-04	4.95E-04	6.03E-08	1.72E-05	65.4	5.70E-02	1.48E-03
SI6_E	0.43	93	0	1	2.01E-01	2.68E-01	3.42E-04	4.63E-04	4.20E-04	1.05E-04	0.00E+00	6.10E-04	6.11E-04	7.45E-08	2.13E-05	80.8	7.04E-02	1.83E-03
SI6_E	0.43	100	0	1	2.17E-01	2.88E-01	3.68E-04	4.98E-04	4.52E-04	1.13E-04	0.00E+00	6.57E-04	6.57E-04	8.01E-08	2.29E-05	86.9	7.57E-02	1.97E-03
SI6_E	0.43	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI6_E	0.43	46	0	1	9.94E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.18E-05	0.00E+00	3.01E-04	3.02E-04	3.68E-08	1.05E-05	39.9	3.47E-02	9.04E-04
SI6_E	0.43	39	0	1	8.41E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.89E-06	33.7	2.94E-02	7.65E-04
SI6_E	0.43	33	0	1	7.14E-02	9.48E-02	1.21E-04	1.64E-04	1.49E-04	3.72E-05	0.00E+00	2.16E-04	2.17E-04	2.64E-08	7.55E-06	28.6	2.49E-02	6.49E-04
SI6_E	0.43	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI6_E	0.43	20	0	1	4.33E-02	5.76E-02	7.37E-05	9.96E-05	9.03E-05	2.26E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI6_W	0.43	16	0	1	3.56E-02	4.73E-02	6.05E-05	8.18E-05	7.42E-05	1.85E-05	0.00E+00	1.08E-04	1.08E-04	1.32E-08	3.76E-06	14.3	1.24E-02	3.24E-04
SI6_W	0.43	11	0	1	2.37E-02	3.15E-02	4.03E-05	5.45E-05	4.95E-05	1.24E-05	0.00E+00	7.19E-05	7.20E-05	8.77E-09	2.51E-06	9.5	8.29E-03	2.16E-04
SI6_W	0.43	10	0	1	2.08E-02	2.76E-02	3.53E-05	4.77E-05	4.33E-05	1.08E-05	0.00E+00	6.29E-05	6.30E-05	7.68E-09	2.20E-06	8.3	7.26E-03	1.89E-04
SI6_W	0.43	7	0	1	1.48E-02	1.97E-02	2.52E-05	3.41E-05	3.09E-05	7.72E-06	0.00E+00	4.50E-05	4.50E-05	5.48E-09	1.57E-06	6.0	5.18E-03	1.35E-04
SI6_W	0.43	10	0	1	2.08E-02	2.76E-02	3.53E-05	4.77E-05	4.33E-05	1.08E-05	0.00E+00	6.29E-05	6.30E-05	7.68E-09	2.20E-06	8.3	7.26E-03	1.89E-04
SI6_W	0.43	23	0	1	5.04E-02	6.70E-02	8.57E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.86E-08	5.33E-06	20.2	1.76E-02	4.59E-04
SI6_W	0.43	69	0	1	1.51E-01	2.01E-01	2.57E-04	3.48E-04	3.15E-04	7.88E-05	0.00E+00	4.59E-04	4.59E-04	5.59E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI6_W	0.43	106	0	1	2.31E-01	3.07E-01	3.93E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.01E-04	7.02E-04	8.56E-08	2.45E-05	92.8	8.09E-02	2.11E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI6_W	0.43	86	0	1	1.87E-01	2.48E-01	3.18E-04	4.29E-04	3.90E-04	9.73E-05	0.00E+00	5.66E-04	5.67E-04	6.91E-08	1.98E-05	75.0	6.53E-02	1.70E-03
SI6_W	0.43	71	0	1	1.54E-01	2.05E-01	2.62E-04	3.54E-04	3.22E-04	8.03E-05	0.00E+00	4.68E-04	4.68E-04	5.70E-08	1.63E-05	61.9	5.39E-02	1.40E-03
SI6_W	0.43	64	0	1	1.39E-01	1.85E-01	2.37E-04	3.20E-04	2.91E-04	7.26E-05	0.00E+00	4.23E-04	4.23E-04	5.16E-08	1.47E-05	55.9	4.87E-02	1.27E-03
SI6_W	0.43	72	0	1	1.57E-01	2.09E-01	2.67E-04	3.61E-04	3.28E-04	8.19E-05	0.00E+00	4.77E-04	4.77E-04	5.81E-08	1.66E-05	63.1	5.50E-02	1.43E-03
SI6_W	0.43	76	0	1	1.66E-01	2.21E-01	2.82E-04	3.82E-04	3.46E-04	8.65E-05	0.00E+00	5.03E-04	5.04E-04	6.14E-08	1.76E-05	66.6	5.81E-02	1.51E-03
SI6_W	0.43	78	0	1	1.69E-01	2.25E-01	2.87E-04	3.89E-04	3.52E-04	8.80E-05	0.00E+00	5.12E-04	5.13E-04	6.25E-08	1.79E-05	67.8	5.91E-02	1.54E-03
SI6_W	0.43	80	0	1	1.75E-01	2.33E-01	2.98E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.12E-02	1.59E-03
SI6_W	0.43	87	0	1	1.90E-01	2.52E-01	3.23E-04	4.36E-04	3.96E-04	9.88E-05	0.00E+00	5.75E-04	5.76E-04	7.02E-08	2.01E-05	76.2	6.64E-02	1.73E-03
SI6_W	0.43	108	0	1	2.34E-01	3.11E-01	3.98E-04	5.38E-04	4.89E-04	1.22E-04	0.00E+00	7.10E-04	7.11E-04	8.67E-08	2.48E-05	94.0	8.19E-02	2.13E-03
SI6_W	0.43	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.79E-04	5.26E-04	1.31E-04	0.00E+00	7.64E-04	7.65E-04	9.32E-08	2.67E-05	101.2	8.81E-02	2.29E-03
SI6_W	0.43	80	0	1	1.75E-01	2.33E-01	2.98E-04	4.02E-04	3.65E-04	9.11E-05	0.00E+00	5.30E-04	5.31E-04	6.47E-08	1.85E-05	70.2	6.12E-02	1.59E-03
SI6_W	0.43	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI6_W	0.43	45	0	1	9.79E-02	1.30E-01	1.66E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI6_W	0.43	38	0	1	8.31E-02	1.10E-01	1.41E-04	1.91E-04	1.73E-04	4.32E-05	0.00E+00	2.52E-04	2.52E-04	3.07E-08	8.78E-06	33.3	2.90E-02	7.56E-04
SI6_W	0.43	31	0	1	6.82E-02	9.06E-02	1.16E-04	1.57E-04	1.42E-04	3.55E-05	0.00E+00	2.07E-04	2.07E-04	2.52E-08	7.21E-06	27.4	2.38E-02	6.21E-04
SI6_W	0.43	23	0	1	5.04E-02	6.70E-02	8.57E-05	1.16E-04	1.05E-04	2.63E-05	0.00E+00	1.53E-04	1.53E-04	1.86E-08	5.33E-06	20.2	1.76E-02	4.59E-04
SI7_E	0.47	18	0	1	3.83E-02	5.09E-02	6.52E-05	8.81E-05	7.99E-05	2.00E-05	0.00E+00	1.16E-04	1.16E-04	1.42E-08	4.05E-06	15.4	1.34E-02	3.49E-04
SI7_E	0.47	12	0	1	2.56E-02	3.40E-02	4.35E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.33E-04
SI7_E	0.47	10	0	1	2.24E-02	2.97E-02	3.80E-05	5.14E-05	4.66E-05	1.16E-05	0.00E+00	6.78E-05	6.78E-05	8.27E-09	2.36E-06	9.0	7.82E-03	2.03E-04
SI7_E	0.47	7	0	1	1.60E-02	2.12E-02	2.72E-05	3.67E-05	3.33E-05	8.32E-06	0.00E+00	4.84E-05	4.85E-05	5.91E-09	1.69E-06	6.4	5.58E-03	1.45E-04
SI7_E	0.47	10	0	1	2.24E-02	2.97E-02	3.80E-05	5.14E-05	4.66E-05	1.16E-05	0.00E+00	6.78E-05	6.78E-05	8.27E-09	2.36E-06	9.0	7.82E-03	2.03E-04
SI7_E	0.47	25	0	1	5.43E-02	7.21E-02	9.23E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.74E-06	21.8	1.90E-02	4.94E-04
SI7_E	0.47	75	0	1	1.63E-01	2.16E-01	2.77E-04	3.74E-04	3.40E-04	8.48E-05	0.00E+00	4.94E-04	4.94E-04	6.02E-08	1.72E-05	65.4	5.69E-02	1.48E-03
SI7_E	0.47	114	0	1	2.49E-01	3.31E-01	4.24E-04	5.73E-04	5.19E-04	1.30E-04	0.00E+00	7.55E-04	7.56E-04	9.21E-08	2.63E-05	100.0	8.71E-02	2.27E-03
SI7_E	0.47	92	0	1	2.01E-01	2.67E-01	3.42E-04	4.62E-04	4.20E-04	1.05E-04	0.00E+00	6.10E-04	6.11E-04	7.44E-08	2.13E-05	80.7	7.03E-02	1.83E-03
SI7_E	0.47	76	0	1	1.66E-01	2.21E-01	2.82E-04	3.82E-04	3.46E-04	8.65E-05	0.00E+00	5.03E-04	5.04E-04	6.14E-08	1.76E-05	66.6	5.81E-02	1.51E-03
SI7_E	0.47	69	0	1	1.50E-01	1.99E-01	2.55E-04	3.45E-04	3.13E-04	7.82E-05	0.00E+00	4.55E-04	4.56E-04	5.55E-08	1.59E-05	60.2	5.25E-02	1.37E-03
SI7_E	0.47	78	0	1	1.69E-01	2.25E-01	2.88E-04	3.89E-04	3.53E-04	8.81E-05	0.00E+00	5.13E-04	5.14E-04	6.26E-08	1.79E-05	67.9	5.92E-02	1.54E-03
SI7_E	0.47	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.43E-04	6.61E-08	1.89E-05	71.8	6.25E-02	1.63E-03
SI7_E	0.47	84	0	1	1.82E-01	2.42E-01	3.10E-04	4.18E-04	3.80E-04	9.48E-05	0.00E+00	5.52E-04	5.52E-04	6.73E-08	1.93E-05	73.1	6.36E-02	1.66E-03
SI7_E	0.47	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.59E-02	1.71E-03
SI7_E	0.47	94	0	1	2.04E-01	2.72E-01	3.48E-04	4.70E-04	4.26E-04	1.06E-04	0.00E+00	6.20E-04	6.20E-04	7.56E-08	2.16E-05	82.0	7.15E-02	1.86E-03
SI7_E	0.47	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI7_E	0.47	125	0	1	2.72E-01	3.61E-01	4.62E-04	6.24E-04	5.66E-04	1.41E-04	0.00E+00	8.23E-04	8.24E-04	1.00E-07	2.87E-05	108.9	9.49E-02	2.47E-03
SI7_E	0.47	87	0	1	1.88E-01	2.50E-01	3.20E-04	4.33E-04	3.93E-04	9.81E-05	0.00E+00	5.71E-04	5.72E-04	6.97E-08	1.99E-05	75.6	6.59E-02	1.71E-03
SI7_E	0.47	57	0	1	1.25E-01	1.66E-01	2.12E-04	2.86E-04	2.60E-04	6.49E-05	0.00E+00	3.78E-04	3.78E-04	4.61E-08	1.32E-05	50.0	4.35E-02	1.13E-03
SI7_E	0.47	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.20E-04	3.20E-04	3.90E-08	1.11E-05	42.3	3.68E-02	9.59E-04
SI7_E	0.47	41	0	1	8.95E-02	1.19E-01	1.52E-04	2.06E-04	1.86E-04	4.66E-05	0.00E+00	2.71E-04	2.71E-04	3.31E-08	9.46E-06	35.9	3.13E-02	8.14E-04
SI7_E	0.47	34	0	1	7.35E-02	9.76E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.77E-06	29.5	2.57E-02	6.68E-04
SI7_E	0.47	25	0	1	5.43E-02	7.21E-02	9.23E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.74E-06	21.8	1.90E-02	4.94E-04
SI7_W	0.47	14	0	1	3.08E-02	4.09E-02	5.23E-05	7.07E-05	6.41E-05	1.60E-05	0.00E+00	9.32E-05	9.33E-05	1.14E-08	3.25E-06	12.3	1.08E-02	2.80E-04
SI7_W	0.47	9	0	1	2.05E-02	2.72E-02	3.49E-05	4.71E-05	4.27E-05	1.07E-05	0.00E+00	6.22E-05	6.22E-05	7.58E-09	2.17E-06	8.2	7.17E-03	1.87E-04
SI7_W	0.47	8	0	1	1.79E-02	2.38E-02	3.05E-05	4.12E-05	3.74E-05	9.34E-06	0.00E+00	5.44E-05	5.44E-05	6.63E-09	1.90E-06	7.2	6.27E-03	1.63E-04
SI7_W	0.47	6	0	1	1.28E-02	1.70E-02	2.18E-05	2.94E-05	2.67E-05	6.67E-06	0.00E+00	3.88E-05	3.89E-05	4.74E-09	1.36E-06	5.1	4.48E-03	1.17E-04
SI7_W	0.47	8	0	1	1.79E-02	2.38E-02	3.05E-05	4.12E-05	3.74E-05	9.34E-06	0.00E+00	5.44E-05	5.44E-05	6.63E-09	1.90E-06	7.2	6.27E-03	1.63E-04
SI7_W	0.47	20	0	1	4.36E-02	5.79E-02	7.41E-05	1.00E-04	9.08E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.96E-04
SI7_W	0.47	60	0	1	1.31E-01	1.74E-01	2.22E-04	3.00E-04	2.73E-04	6.81E-05	0.00E+00	3.96E-04	3.97E-04	4.83E-08	1.38E-05	52.4	4.57E-02	1.19E-03
SI7_W	0.47	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.59E-04	4.17E-04	1.04E-04	0.00E+00	6.06E-04	6.07E-04	7.39E-08	2.11E-05	80.2	6.99E-02	1.82E-03
SI7_W	0.47	74	0	1	1.61E-01	2.15E-01	2.75E-04	3.71E-04	3.37E-04	8.41E-05	0.00E+00	4.89E-04	4.90E-04	5.97E-08	1.71E-05	64.8	5.64E-02	1.47E-03
SI7_W	0.47	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.04E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI7_W	0.47	55	0	1	1.20E-01	1.60E-01	2.05E-04	2.77E-04	2.51E-04	6.27E-05	0.00E+00	3.65E-04	3.66E-04	4.45E-08	1.27E-05	48.3	4.21E-02	1.10E-03
SI7_W	0.47	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI7_W	0.47	66	0	1	1.44E-01	1.91E-01	2.44E-04	3.30E-04	2.99E-04	7.47E-05	0.00E+00	4.35E-04	4.35E-04	5.31E-08	1.52E-05	57.6	5.02E-02	1.31E-03
SI7_W	0.47	67	0	1	1.46E-01	1.94E-01	2.48E-04	3.36E-04	3.05E-04	7.61E-05	0.00E+00	4.43E-04	4.43E-04	5.40E-08	1.54E-05	58.6	5.11E-02	1.33E-03
SI7_W	0.47	69	0	1	1.51E-01	2.01E-01	2.57E-04	3.47E-04	3.15E-04	7.87E-05	0.00E+00	4.58E-04	4.59E-04	5.59E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI7_W	0.47	75	0	1	1.64E-01	2.18E-01	2.79E-04	3.77E-04	3.42E-04	8.54E-05	0.00E+00	4.97E-04	4.98E-04	6.07E-08	1.73E-05	65.8	5.73E-02	1.49E-03
SI7_W	0.47	93	0	1	2.02E-01	2.69E-01	3.44E-04	4.65E-04	4.22E-04	1.05E-04	0.00E+00	6.14E-04	6.14E-04	7.49E-08	2.14E-05	81.2	7.08E-02	1.84E-03
SI7_W	0.47	100	0	1	2.18E-01	2.89E-01	3.70E-04	5.01E-04	4.54E-04	1.13E-04	0.00E+00	6.60E-04	6.61E-04	8.06E-08	2.30E-05	87.4	7.62E-02	1.98E-03
SI7_W	0.47	69	0	1	1.51E-01	2.01E-01	2.57E-04	3.47E-04	3.15E-04	7.87E-05	0.00E+00	4.58E-04	4.59E-04	5.59E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI7_W	0.47	46	0	1	1.00E-01	1.33E-01	1.70E-04	2.30E-04	2.08E-04	5.20E-05	0.00E+00	3.03E-04	3.03E-04	3.70E-08	1.06E-05	40.1	3.49E-02	9.09E-04
SI7_W	0.47	39	0	1	8.46E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.57E-04	3.13E-08	8.94E-06	33.9	2.96E-02	7.70E-04
SI7_W	0.47	33	0	1	7.18E-02	9.53E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.65E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI7_W	0.47	27	0	1	5.90E-02	7.83E-02	1.00E-04	1.35E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.23E-06	23.7	2.06E-02	5.36E-04
SI7_W	0.47	20	0	1	4.36E-02	5.79E-02	7.41E-05	1.00E-04	9.08E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.96E-04
SI8_E	0.55	17	0	1	3.63E-02	4.82E-02	6.16E-05	8.33E-05	7.56E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI8_E	0.55	11	0	1	2.42E-02	3.21E-02	4.11E-05	5.55E-05	5.04E-05	1.26E-05	0.00E+00	7.32E-05	7.33E-05	8.94E-09	2.56E-06	9.7	8.45E-03	2.20E-04
SI8_E	0.55	10	0	1	2.11E-02	2.81E-02	3.60E-05	4.86E-05	4.41E-05	1.10E-05	0.00E+00	6.41E-05	6.42E-05	7.82E-09	2.24E-06	8.5	7.39E-03	1.92E-04
SI8_E	0.55	7	0	1	1.51E-02	2.01E-02	2.57E-05	3.47E-05	3.15E-05	7.86E-06	0.00E+00	4.58E-05	4.58E-05	5.59E-09	1.60E-06	6.1	5.28E-03	1.37E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI8_E	0.55	10	0	1	2.11E-02	2.81E-02	3.60E-05	4.86E-05	4.41E-05	1.10E-05	0.00E+00	6.41E-05	6.42E-05	7.82E-09	2.24E-06	8.5	7.39E-03	1.92E-04
SI8_E	0.55	24	0	1	5.14E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.80E-02	4.67E-04
SI8_E	0.55	71	0	1	1.54E-01	2.05E-01	2.62E-04	3.54E-04	3.21E-04	8.02E-05	0.00E+00	4.67E-04	4.67E-04	5.70E-08	1.63E-05	61.8	5.39E-02	1.40E-03
SI8_E	0.55	108	0	1	2.36E-01	3.13E-01	4.01E-04	5.41E-04	4.91E-04	1.23E-04	0.00E+00	7.14E-04	7.15E-04	8.71E-08	2.49E-05	94.5	8.24E-02	2.14E-03
SI8_E	0.55	87	0	1	1.90E-01	2.53E-01	3.24E-04	4.37E-04	3.97E-04	9.91E-05	0.00E+00	5.77E-04	5.77E-04	7.04E-08	2.01E-05	76.4	6.65E-02	1.73E-03
SI8_E	0.55	72	0	1	1.57E-01	2.09E-01	2.67E-04	3.61E-04	3.27E-04	8.18E-05	0.00E+00	4.76E-04	4.77E-04	5.81E-08	1.66E-05	63.0	5.49E-02	1.43E-03
SI8_E	0.55	65	0	1	1.42E-01	1.89E-01	2.41E-04	3.26E-04	2.96E-04	7.39E-05	0.00E+00	4.30E-04	4.31E-04	5.25E-08	1.50E-05	57.0	4.96E-02	1.29E-03
SI8_E	0.55	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.85E-04	4.86E-04	5.92E-08	1.69E-05	64.2	5.60E-02	1.46E-03
SI8_E	0.55	78	0	1	1.69E-01	2.25E-01	2.88E-04	3.89E-04	3.53E-04	8.81E-05	0.00E+00	5.13E-04	5.13E-04	6.26E-08	1.79E-05	67.9	5.91E-02	1.54E-03
SI8_E	0.55	79	0	1	1.72E-01	2.29E-01	2.93E-04	3.96E-04	3.59E-04	8.96E-05	0.00E+00	5.22E-04	5.22E-04	6.37E-08	1.82E-05	69.1	6.02E-02	1.57E-03
SI8_E	0.55	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.88E-05	71.5	6.23E-02	1.62E-03
SI8_E	0.55	89	0	1	1.93E-01	2.57E-01	3.29E-04	4.44E-04	4.03E-04	1.01E-04	0.00E+00	5.86E-04	5.87E-04	7.15E-08	2.04E-05	77.6	6.76E-02	1.76E-03
SI8_E	0.55	110	0	1	2.39E-01	3.17E-01	4.06E-04	5.48E-04	4.98E-04	1.24E-04	0.00E+00	7.23E-04	7.24E-04	8.82E-08	2.52E-05	95.7	8.34E-02	2.17E-03
SI8_E	0.55	118	0	1	2.57E-01	3.41E-01	4.37E-04	5.90E-04	5.35E-04	1.34E-04	0.00E+00	7.78E-04	7.79E-04	9.49E-08	2.71E-05	103.0	8.98E-02	2.34E-03
SI8_E	0.55	82	0	1	1.78E-01	2.37E-01	3.03E-04	4.10E-04	3.72E-04	9.28E-05	0.00E+00	5.40E-04	5.41E-04	6.59E-08	1.88E-05	71.5	6.23E-02	1.62E-03
SI8_E	0.55	54	0	1	1.18E-01	1.57E-01	2.00E-04	2.71E-04	2.46E-04	6.13E-05	0.00E+00	3.57E-04	3.57E-04	4.36E-08	1.25E-05	47.3	4.12E-02	1.07E-03
SI8_E	0.55	46	0	1	9.97E-02	1.32E-01	1.69E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.02E-04	3.69E-08	1.05E-05	40.0	3.48E-02	9.07E-04
SI8_E	0.55	39	0	1	8.46E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.57E-04	3.13E-08	8.94E-06	33.9	2.96E-02	7.70E-04
SI8_E	0.55	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI8_E	0.55	24	0	1	5.14E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.80E-02	4.67E-04
SI8_W	0.48	21	0	1	4.59E-02	6.10E-02	7.81E-05	1.06E-04	9.57E-05	2.39E-05	0.00E+00	1.39E-04	1.39E-04	1.70E-08	4.85E-06	18.4	1.60E-02	4.18E-04
SI8_W	0.48	14	0	1	3.06E-02	4.07E-02	5.20E-05	7.03E-05	6.38E-05	1.59E-05	0.00E+00	9.28E-05	9.29E-05	1.13E-08	3.24E-06	12.3	1.07E-02	2.78E-04
SI8_W	0.48	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.15E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.90E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI8_W	0.48	9	0	1	1.91E-02	2.54E-02	3.25E-05	4.40E-05	3.99E-05	9.96E-06	0.00E+00	5.80E-05	5.80E-05	7.07E-09	2.02E-06	7.7	6.69E-03	1.74E-04
SI8_W	0.48	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.15E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.90E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI8_W	0.48	30	0	1	6.50E-02	8.64E-02	1.11E-04	1.49E-04	1.36E-04	3.39E-05	0.00E+00	1.97E-04	1.97E-04	2.41E-08	6.88E-06	26.1	2.27E-02	5.92E-04
SI8_W	0.48	90	0	1	1.95E-01	2.59E-01	3.32E-04	4.48E-04	4.07E-04	1.02E-04	0.00E+00	5.91E-04	5.92E-04	7.22E-08	2.06E-05	78.3	6.82E-02	1.78E-03
SI8_W	0.48	137	0	1	2.98E-01	3.96E-01	5.07E-04	6.86E-04	6.22E-04	1.55E-04	0.00E+00	9.05E-04	9.05E-04	1.10E-07	3.16E-05	119.7	1.04E-01	2.72E-03
SI8_W	0.48	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.25E-04	0.00E+00	7.31E-04	7.31E-04	8.91E-08	2.55E-05	96.7	8.43E-02	2.19E-03
SI8_W	0.48	91	0	1	1.99E-01	2.64E-01	3.38E-04	4.57E-04	4.15E-04	1.04E-04	0.00E+00	6.03E-04	6.04E-04	7.36E-08	2.10E-05	79.8	6.95E-02	1.81E-03
SI8_W	0.48	83	0	1	1.80E-01	2.39E-01	3.06E-04	4.13E-04	3.75E-04	9.36E-05	0.00E+00	5.45E-04	5.46E-04	6.65E-08	1.90E-05	72.1	6.29E-02	1.64E-03
SI8_W	0.48	93	0	1	2.03E-01	2.69E-01	3.45E-04	4.66E-04	4.23E-04	1.06E-04	0.00E+00	6.15E-04	6.15E-04	7.50E-08	2.14E-05	81.4	7.09E-02	1.84E-03
SI8_W	0.48	98	0	1	2.14E-01	2.85E-01	3.64E-04	4.92E-04	4.47E-04	1.12E-04	0.00E+00	6.49E-04	6.50E-04	7.92E-08	2.27E-05	86.0	7.49E-02	1.95E-03
SI8_W	0.48	100	0	1	2.18E-01	2.90E-01	3.71E-04	5.01E-04	4.55E-04	1.14E-04	0.00E+00	6.61E-04	6.62E-04	8.06E-08	2.31E-05	87.5	7.62E-02	1.98E-03
SI8_W	0.48	104	0	1	2.26E-01	3.00E-01	3.84E-04	5.19E-04	4.71E-04	1.18E-04	0.00E+00	6.84E-04	6.85E-04	8.35E-08	2.39E-05	90.6	7.89E-02	2.05E-03
SI8_W	0.48	112	0	1	2.45E-01	3.25E-01	4.16E-04	5.63E-04	5.10E-04	1.27E-04	0.00E+00	7.42E-04	7.43E-04	9.05E-08	2.59E-05	98.2	8.56E-02	2.23E-03
SI8_W	0.48	139	0	1	3.02E-01	4.02E-01	5.14E-04	6.95E-04	6.30E-04	1.57E-04	0.00E+00	9.16E-04	9.17E-04	1.12E-07	3.20E-05	121.3	1.06E-01	2.75E-03
SI8_W	0.48	149	0	1	3.25E-01	4.32E-01	5.53E-04	7.47E-04	6.78E-04	1.69E-04	0.00E+00	9.86E-04	9.87E-04	1.20E-07	3.44E-05	130.5	1.14E-01	2.96E-03
SI8_W	0.48	104	0	1	2.26E-01	3.00E-01	3.84E-04	5.19E-04	4.71E-04	1.18E-04	0.00E+00	6.84E-04	6.85E-04	8.35E-08	2.39E-05	90.6	7.89E-02	2.05E-03
SI8_W	0.48	69	0	1	1.49E-01	1.98E-01	2.54E-04	3.43E-04	3.11E-04	7.77E-05	0.00E+00	4.52E-04	4.53E-04	5.52E-08	1.58E-05	59.9	5.22E-02	1.36E-03
SI8_W	0.48	58	0	1	1.26E-01	1.68E-01	2.15E-04	2.90E-04	2.63E-04	6.57E-05	0.00E+00	3.83E-04	3.83E-04	4.67E-08	1.34E-05	50.7	4.41E-02	1.15E-03
SI8_W	0.48	49	0	1	1.07E-01	1.42E-01	1.82E-04	2.46E-04	2.23E-04	5.58E-05	0.00E+00	3.25E-04	3.25E-04	3.96E-08	1.13E-05	43.0	3.74E-02	9.75E-04
SI8_W	0.48	40	0	1	8.80E-02	1.17E-01	1.50E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.67E-04	2.67E-04	3.25E-08	9.30E-06	35.3	3.08E-02	8.01E-04
SI8_W	0.48	30	0	1	6.50E-02	8.64E-02	1.11E-04	1.49E-04	1.36E-04	3.39E-05	0.00E+00	1.97E-04	1.97E-04	2.41E-08	6.88E-06	26.1	2.27E-02	5.92E-04
SI9_E	0.75	33	0	1	7.12E-02	9.47E-02	1.21E-04	1.64E-04	1.49E-04	3.71E-05	0.00E+00	2.16E-04	2.16E-04	2.63E-08	7.53E-06	28.6	2.49E-02	6.48E-04
SI9_E	0.75	22	0	1	4.75E-02	6.31E-02	8.08E-05	1.09E-04	9.90E-05	2.47E-05	0.00E+00	1.44E-04	1.44E-04	1.76E-08	5.02E-06	19.1	1.66E-02	4.32E-04
SI9_E	0.75	19	0	1	4.16E-02	5.52E-02	7.07E-05	9.55E-05	8.66E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.39E-06	16.7	1.45E-02	3.78E-04
SI9_E	0.75	14	0	1	2.97E-02	3.94E-02	5.05E-05	6.82E-05	6.19E-05	1.55E-05	0.00E+00	9.00E-05	9.01E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI9_E	0.75	19	0	1	4.16E-02	5.52E-02	7.07E-05	9.55E-05	8.66E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.39E-06	16.7	1.45E-02	3.78E-04
SI9_E	0.75	46	0	1	1.01E-01	1.34E-01	1.72E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.06E-04	3.06E-04	3.73E-08	1.07E-05	40.5	3.53E-02	9.18E-04
SI9_E	0.75	139	0	1	3.03E-01	4.02E-01	5.15E-04	6.96E-04	6.31E-04	1.58E-04	0.00E+00	9.18E-04	9.19E-04	1.12E-07	3.20E-05	121.5	1.06E-01	2.75E-03
SI9_E	0.75	213	0	1	4.63E-01	6.15E-01	7.87E-04	1.06E-03	9.65E-04	2.41E-04	0.00E+00	1.40E-03	1.41E-03	1.71E-07	4.90E-05	185.8	1.62E-01	4.21E-03
SI9_E	0.75	172	0	1	3.74E-01	4.97E-01	6.36E-04	8.59E-04	7.80E-04	1.95E-04	0.00E+00	1.13E-03	1.13E-03	1.38E-07	3.95E-05	150.1	1.31E-01	3.40E-03
SI9_E	0.75	142	0	1	3.09E-01	4.10E-01	5.25E-04	7.09E-04	6.44E-04	1.61E-04	0.00E+00	9.36E-04	9.37E-04	1.14E-07	3.26E-05	123.9	1.08E-01	2.81E-03
SI9_E	0.75	128	0	1	2.79E-01	3.71E-01	4.74E-04	6.41E-04	5.82E-04	1.45E-04	0.00E+00	8.46E-04	8.47E-04	1.03E-07	2.95E-05	112.0	9.75E-02	2.54E-03
SI9_E	0.75	145	0	1	3.15E-01	4.18E-01	5.35E-04	7.23E-04	6.56E-04	1.64E-04	0.00E+00	9.54E-04	9.55E-04	1.16E-07	3.33E-05	126.2	1.10E-01	2.86E-03
SI9_E	0.75	153	0	1	3.32E-01	4.42E-01	5.65E-04	7.64E-04	6.93E-04	1.73E-04	0.00E+00	1.01E-03	1.01E-03	1.23E-07	3.52E-05	133.4	1.16E-01	3.02E-03
SI9_E	0.75	155	0	1	3.38E-01	4.50E-01	5.75E-04	7.78E-04	7.06E-04	1.76E-04	0.00E+00	1.03E-03	1.03E-03	1.25E-07	3.58E-05	135.8	1.18E-01	3.08E-03
SI9_E	0.75	161	0	1	3.50E-01	4.65E-01	5.96E-04	8.05E-04	7.30E-04	1.82E-04	0.00E+00	1.06E-03	1.06E-03	1.30E-07	3.70E-05	140.5	1.22E-01	3.19E-03
SI9_E	0.75	175	0	1	3.80E-01	5.05E-01	6.46E-04	8.73E-04	7.92E-04	1.98E-04	0.00E+00	1.15E-03	1.15E-03	1.41E-07	4.02E-05	152.5	1.33E-01	3.46E-03
SI9_E	0.75	215	0	1	4.69E-01	6.23E-01	7.97E-04	1.08E-03	9.78E-04	2.44E-04	0.00E+00	1.42E-03	1.42E-03	1.73E-07	4.96E-05	188.2	1.64E-01	4.27E-03
SI9_E	0.75	232	0	1	5.05E-01	6.70E-01	8.58E-04	1.16E-03	1.05E-03	2.63E-04	0.00E+00	1.53E-03	1.53E-03	1.87E-07	5.34E-05	202.5	1.76E-01	4.59E-03
SI9_E	0.75	161	0	1	3.50E-01	4.65E-01	5.96E-04	8.05E-04	7.30E-04	1.82E-04	0.00E+00	1.06E-03	1.06E-03	1.30E-07	3.70E-05	140.5	1.22E-01	3.19E-03
SI9_E	0.75	106	0	1	2.32E-01	3.08E-01	3.94E-04	5.32E-04	4.83E-04	1.21E-04	0.00E+00	7.02E-04	7.03E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI9_E	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.94E-04	7.24E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI9_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.65E-05	0.00E+00	5.04E-04	5.04E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI9_E	0.75	63	0	1	1.37E-01	1.81E-01	2.32E-04	3.14E-04	2.85E-04	7.11E-05	0.00E+00	4.14E-04	4.14E-04	5.05E-08	1.44E-05	54.8	4.77E-02	1.24E-03
SI9_E	0.75	46	0	1	1.01E-01	1.34E-01	1.72E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.06E-04	3.06E-04	3.73E-08	1.07E-05	40.5	3.53E-02	9.18E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI9_W	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI9_W	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI9_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI9_W	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI9_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI9_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI9_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI9_W	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI9_W	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI9_W	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI9_W	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI9_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI9_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI9_W	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI9_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI9_W	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03
SI9_W	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI9_W	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI9_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI9_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03
SI9_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI9_W	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI9_W	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI9_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI10_E	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI10_E	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI10_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI10_E	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI10_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI10_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI10_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI10_E	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI10_E	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI10_E	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI10_E	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI10_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI10_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI10_E	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI10_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI10_E	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03
SI10_E	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI10_E	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI10_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI10_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03
SI10_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI10_E	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI10_E	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI10_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI10_W	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI10_W	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI10_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI10_W	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI10_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI10_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI10_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI10_W	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI10_W	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI10_W	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI10_W	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI10_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI10_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI10_W	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI10_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI10_W	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03
SI10_W	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI10_W	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI10_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI10_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI10_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI10_W	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI10_W	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI10_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI11_E	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI11_E	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI11_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI11_E	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI11_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI11_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI11_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI11_E	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI11_E	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI11_E	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI11_E	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI11_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI11_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI11_E	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI11_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI11_E	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03
SI11_E	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI11_E	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI11_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI11_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03
SI11_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI11_E	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI11_E	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI11_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI11_W	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI11_W	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI11_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI11_W	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI11_W	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI11_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI11_W	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI11_W	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI11_W	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI11_W	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI11_W	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI11_W	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI11_W	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI11_W	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI11_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI11_W	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03
SI11_W	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI11_W	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI11_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI11_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03
SI11_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI11_W	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI11_W	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI11_W	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI12_E	0.75	22	0	1	4.87E-02	6.47E-02	8.28E-05	1.12E-04	1.02E-04	2.54E-05	0.00E+00	1.48E-04	1.48E-04	1.80E-08	5.15E-06	19.5	1.70E-02	4.43E-04
SI12_E	0.75	15	0	1	3.25E-02	4.32E-02	5.52E-05	7.46E-05	6.77E-05	1.69E-05	0.00E+00	9.85E-05	9.86E-05	1.20E-08	3.43E-06	13.0	1.14E-02	2.96E-04
SI12_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI12_E	0.75	9	0	1	2.03E-02	2.70E-02	3.45E-05	4.67E-05	4.23E-05	1.06E-05	0.00E+00	6.15E-05	6.16E-05	7.51E-09	2.15E-06	8.1	7.10E-03	1.85E-04
SI12_E	0.75	13	0	1	2.84E-02	3.78E-02	4.83E-05	6.53E-05	5.93E-05	1.48E-05	0.00E+00	8.62E-05	8.62E-05	1.05E-08	3.01E-06	11.4	9.93E-03	2.59E-04
SI12_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI12_E	0.75	95	0	1	2.07E-01	2.75E-01	3.52E-04	4.76E-04	4.32E-04	1.08E-04	0.00E+00	6.28E-04	6.28E-04	7.66E-08	2.19E-05	83.1	7.24E-02	1.88E-03
SI12_E	0.75	145	0	1	3.17E-01	4.21E-01	5.38E-04	7.28E-04	6.60E-04	1.65E-04	0.00E+00	9.60E-04	9.61E-04	1.17E-07	3.35E-05	127.1	1.11E-01	2.88E-03
SI12_E	0.75	118	0	1	2.56E-01	3.40E-01	4.35E-04	5.88E-04	5.33E-04	1.33E-04	0.00E+00	7.75E-04	7.76E-04	9.46E-08	2.70E-05	102.6	8.94E-02	2.33E-03
SI12_E	0.75	97	0	1	2.11E-01	2.81E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.41E-04	7.81E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI12_E	0.75	88	0	1	1.91E-01	2.54E-01	3.24E-04	4.39E-04	3.98E-04	9.94E-05	0.00E+00	5.78E-04	5.79E-04	7.06E-08	2.02E-05	76.6	6.67E-02	1.74E-03
SI12_E	0.75	99	0	1	2.15E-01	2.86E-01	3.66E-04	4.95E-04	4.49E-04	1.12E-04	0.00E+00	6.52E-04	6.53E-04	7.96E-08	2.28E-05	86.3	7.52E-02	1.96E-03
SI12_E	0.75	104	0	1	2.27E-01	3.02E-01	3.87E-04	5.23E-04	4.74E-04	1.18E-04	0.00E+00	6.89E-04	6.90E-04	8.41E-08	2.40E-05	91.2	7.95E-02	2.07E-03
SI12_E	0.75	106	0	1	2.31E-01	3.07E-01	3.94E-04	5.32E-04	4.82E-04	1.20E-04	0.00E+00	7.02E-04	7.02E-04	8.56E-08	2.45E-05	92.9	8.09E-02	2.11E-03
SI12_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI12_E	0.75	119	0	1	2.60E-01	3.45E-01	4.42E-04	5.97E-04	5.42E-04	1.35E-04	0.00E+00	7.88E-04	7.88E-04	9.61E-08	2.75E-05	104.3	9.08E-02	2.36E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI12_E	0.75	147	0	1	3.21E-01	4.26E-01	5.45E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.72E-04	9.73E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI12_E	0.75	159	0	1	3.45E-01	4.59E-01	5.87E-04	7.93E-04	7.20E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.65E-05	138.5	1.21E-01	3.14E-03
SI12_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI12_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.86E-08	1.67E-05	63.5	5.54E-02	1.44E-03
SI12_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.98E-05	0.00E+00	4.06E-04	4.07E-04	4.95E-08	1.42E-05	53.8	4.68E-02	1.22E-03
SI12_E	0.75	52	0	1	1.14E-01	1.51E-01	1.93E-04	2.61E-04	2.37E-04	5.92E-05	0.00E+00	3.45E-04	3.45E-04	4.20E-08	1.20E-05	45.6	3.97E-02	1.03E-03
SI12_E	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.87E-06	37.5	3.26E-02	8.50E-04
SI12_E	0.75	32	0	1	6.90E-02	9.17E-02	1.17E-04	1.59E-04	1.44E-04	3.59E-05	0.00E+00	2.09E-04	2.09E-04	2.55E-08	7.30E-06	27.7	2.41E-02	6.28E-04
SI12_W	0.75	17	0	1	3.71E-02	4.93E-02	6.31E-05	8.53E-05	7.74E-05	1.93E-05	0.00E+00	1.13E-04	1.13E-04	1.37E-08	3.93E-06	14.9	1.30E-02	3.38E-04
SI12_W	0.75	11	0	1	2.48E-02	3.29E-02	4.21E-05	5.69E-05	5.16E-05	1.29E-05	0.00E+00	7.50E-05	7.51E-05	9.15E-09	2.62E-06	9.9	8.65E-03	2.25E-04
SI12_W	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI12_W	0.75	7	0	1	1.55E-02	2.06E-02	2.63E-05	3.56E-05	3.23E-05	8.05E-06	0.00E+00	4.69E-05	4.69E-05	5.72E-09	1.64E-06	6.2	5.41E-03	1.41E-04
SI12_W	0.75	10	0	1	2.17E-02	2.88E-02	3.68E-05	4.98E-05	4.52E-05	1.13E-05	0.00E+00	6.57E-05	6.57E-05	8.01E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI12_W	0.75	24	0	1	5.26E-02	6.99E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.60E-04	1.95E-08	5.56E-06	21.1	1.84E-02	4.79E-04
SI12_W	0.75	72	0	1	1.58E-01	2.10E-01	2.68E-04	3.63E-04	3.29E-04	8.22E-05	0.00E+00	4.78E-04	4.79E-04	5.84E-08	1.67E-05	63.3	5.52E-02	1.44E-03
SI12_W	0.75	111	0	1	2.41E-01	3.21E-01	4.10E-04	5.55E-04	5.03E-04	1.26E-04	0.00E+00	7.32E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.44E-02	2.20E-03
SI12_W	0.75	90	0	1	1.95E-01	2.59E-01	3.31E-04	4.48E-04	4.06E-04	1.01E-04	0.00E+00	5.91E-04	5.91E-04	7.21E-08	2.06E-05	78.2	6.81E-02	1.77E-03
SI12_W	0.75	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.35E-04	8.38E-05	0.00E+00	4.88E-04	4.88E-04	5.95E-08	1.70E-05	64.6	5.62E-02	1.46E-03
SI12_W	0.75	67	0	1	1.45E-01	1.93E-01	2.47E-04	3.34E-04	3.03E-04	7.57E-05	0.00E+00	4.41E-04	4.41E-04	5.38E-08	1.54E-05	58.3	5.08E-02	1.32E-03
SI12_W	0.75	75	0	1	1.64E-01	2.18E-01	2.79E-04	3.77E-04	3.42E-04	8.54E-05	0.00E+00	4.97E-04	4.98E-04	6.06E-08	1.73E-05	65.8	5.73E-02	1.49E-03
SI12_W	0.75	80	0	1	1.73E-01	2.30E-01	2.95E-04	3.98E-04	3.61E-04	9.02E-05	0.00E+00	5.25E-04	5.26E-04	6.41E-08	1.83E-05	69.5	6.06E-02	1.58E-03
SI12_W	0.75	81	0	1	1.76E-01	2.34E-01	3.00E-04	4.05E-04	3.68E-04	9.18E-05	0.00E+00	5.35E-04	5.35E-04	6.52E-08	1.86E-05	70.8	6.16E-02	1.60E-03
SI12_W	0.75	84	0	1	1.83E-01	2.43E-01	3.10E-04	4.19E-04	3.81E-04	9.50E-05	0.00E+00	5.53E-04	5.54E-04	6.75E-08	1.93E-05	73.2	6.38E-02	1.66E-03
SI12_W	0.75	91	0	1	1.98E-01	2.63E-01	3.37E-04	4.55E-04	4.13E-04	1.03E-04	0.00E+00	6.00E-04	6.01E-04	7.32E-08	2.09E-05	79.5	6.92E-02	1.80E-03
SI12_W	0.75	112	0	1	2.44E-01	3.25E-01	4.16E-04	5.62E-04	5.10E-04	1.27E-04	0.00E+00	7.41E-04	7.42E-04	9.04E-08	2.58E-05	98.1	8.54E-02	2.22E-03
SI12_W	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.97E-04	7.98E-04	9.73E-08	2.78E-05	105.5	9.19E-02	2.39E-03
SI12_W	0.75	84	0	1	1.83E-01	2.43E-01	3.10E-04	4.19E-04	3.81E-04	9.50E-05	0.00E+00	5.53E-04	5.54E-04	6.75E-08	1.93E-05	73.2	6.38E-02	1.66E-03
SI12_W	0.75	55	0	1	1.21E-01	1.60E-01	2.05E-04	2.77E-04	2.52E-04	6.28E-05	0.00E+00	3.66E-04	3.66E-04	4.46E-08	1.28E-05	48.4	4.22E-02	1.10E-03
SI12_W	0.75	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.09E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.29E-04
SI12_W	0.75	40	0	1	8.66E-02	1.15E-01	1.47E-04	1.99E-04	1.81E-04	4.51E-05	0.00E+00	2.63E-04	2.63E-04	3.20E-08	9.16E-06	34.8	3.03E-02	7.88E-04
SI12_W	0.75	33	0	1	7.12E-02	9.45E-02	1.21E-04	1.64E-04	1.48E-04	3.71E-05	0.00E+00	2.16E-04	2.16E-04	2.63E-08	7.52E-06	28.6	2.49E-02	6.47E-04
SI12_W	0.75	24	0	1	5.26E-02	6.99E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.60E-04	1.95E-08	5.56E-06	21.1	1.84E-02	4.79E-04
SI13_E	0.75	23	0	1	5.00E-02	6.65E-02	8.51E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.52E-04	1.52E-04	1.85E-08	5.29E-06	20.1	1.75E-02	4.55E-04
SI13_E	0.75	15	0	1	3.34E-02	4.43E-02	5.67E-05	7.66E-05	6.95E-05	1.74E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.53E-06	13.4	1.17E-02	3.03E-04
SI13_E	0.75	13	0	1	2.92E-02	3.88E-02	4.96E-05	6.71E-05	6.08E-05	1.52E-05	0.00E+00	8.85E-05	8.85E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI13_E	0.75	10	0	1	2.08E-02	2.77E-02	3.54E-05	4.79E-05	4.35E-05	1.09E-05	0.00E+00	6.32E-05	6.32E-05	7.71E-09	2.20E-06	8.4	7.29E-03	1.90E-04
SI13_E	0.75	13	0	1	2.92E-02	3.88E-02	4.96E-05	6.71E-05	6.08E-05	1.52E-05	0.00E+00	8.85E-05	8.85E-05	1.08E-08	3.09E-06	11.7	1.02E-02	2.66E-04
SI13_E	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.49E-06	28.4	2.48E-02	6.45E-04
SI13_E	0.75	98	0	1	2.13E-01	2.82E-01	3.62E-04	4.89E-04	4.43E-04	1.11E-04	0.00E+00	6.44E-04	6.45E-04	7.86E-08	2.25E-05	85.3	7.43E-02	1.93E-03
SI13_E	0.75	149	0	1	3.25E-01	4.32E-01	5.53E-04	7.47E-04	6.78E-04	1.69E-04	0.00E+00	9.86E-04	9.87E-04	1.20E-07	3.44E-05	130.5	1.14E-01	2.96E-03
SI13_E	0.75	121	0	1	2.63E-01	3.49E-01	4.47E-04	6.04E-04	5.48E-04	1.37E-04	0.00E+00	7.96E-04	7.97E-04	9.71E-08	2.78E-05	105.4	9.18E-02	2.39E-03
SI13_E	0.75	100	0	1	2.17E-01	2.88E-01	3.69E-04	4.98E-04	4.52E-04	1.13E-04	0.00E+00	6.57E-04	6.58E-04	8.02E-08	2.29E-05	87.0	7.58E-02	1.97E-03
SI13_E	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.95E-04	7.25E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI13_E	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.08E-04	4.61E-04	1.15E-04	0.00E+00	6.70E-04	6.70E-04	8.17E-08	2.34E-05	88.7	7.72E-02	2.01E-03
SI13_E	0.75	107	0	1	2.33E-01	3.10E-01	3.97E-04	5.36E-04	4.87E-04	1.22E-04	0.00E+00	7.08E-04	7.08E-04	8.63E-08	2.47E-05	93.7	8.16E-02	2.12E-03
SI13_E	0.75	109	0	1	2.38E-01	3.16E-01	4.04E-04	5.46E-04	4.95E-04	1.24E-04	0.00E+00	7.20E-04	7.21E-04	8.79E-08	2.51E-05	95.3	8.31E-02	2.16E-03
SI13_E	0.75	113	0	1	2.46E-01	3.27E-01	4.18E-04	5.65E-04	5.13E-04	1.28E-04	0.00E+00	7.46E-04	7.46E-04	9.10E-08	2.60E-05	98.7	8.60E-02	2.24E-03
SI13_E	0.75	123	0	1	2.67E-01	3.54E-01	4.54E-04	6.13E-04	5.56E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI13_E	0.75	151	0	1	3.29E-01	4.38E-01	5.60E-04	7.57E-04	6.87E-04	1.71E-04	0.00E+00	9.98E-04	9.99E-04	1.22E-07	3.48E-05	132.1	1.15E-01	3.00E-03
SI13_E	0.75	163	0	1	3.54E-01	4.71E-01	6.03E-04	8.14E-04	7.39E-04	1.84E-04	0.00E+00	1.07E-03	1.08E-03	1.31E-07	3.75E-05	142.2	1.24E-01	3.22E-03
SI13_E	0.75	113	0	1	2.46E-01	3.27E-01	4.18E-04	5.65E-04	5.13E-04	1.28E-04	0.00E+00	7.46E-04	7.46E-04	9.10E-08	2.60E-05	98.7	8.60E-02	2.24E-03
SI13_E	0.75	75	0	1	1.63E-01	2.16E-01	2.76E-04	3.74E-04	3.39E-04	8.46E-05	0.00E+00	4.93E-04	4.93E-04	6.01E-08	1.72E-05	65.2	5.68E-02	1.48E-03
SI13_E	0.75	63	0	1	1.38E-01	1.83E-01	2.34E-04	3.16E-04	2.87E-04	7.16E-05	0.00E+00	4.17E-04	4.17E-04	5.09E-08	1.45E-05	55.2	4.81E-02	1.25E-03
SI13_E	0.75	54	0	1	1.17E-01	1.55E-01	1.98E-04	2.68E-04	2.43E-04	6.08E-05	0.00E+00	3.54E-04	3.54E-04	4.32E-08	1.23E-05	46.8	4.08E-02	1.06E-03
SI13_E	0.75	44	0	1	9.59E-02	1.27E-01	1.63E-04	2.20E-04	2.00E-04	4.99E-05	0.00E+00	2.91E-04	2.91E-04	3.55E-08	1.01E-05	38.5	3.35E-02	8.72E-04
SI13_E	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.49E-06	28.4	2.48E-02	6.45E-04
SI13_W	0.75	20	0	1	4.42E-02	5.88E-02	7.52E-05	1.02E-04	9.22E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.64E-08	4.68E-06	17.7	1.55E-02	4.02E-04
SI13_W	0.75	14	0	1	2.95E-02	3.92E-02	5.01E-05	6.78E-05	6.15E-05	1.54E-05	0.00E+00	8.94E-05	8.95E-05	1.09E-08	3.12E-06	11.8	1.03E-02	2.68E-04
SI13_W	0.75	12	0	1	2.58E-02	3.43E-02	4.39E-05	5.93E-05	5.38E-05	1.34E-05	0.00E+00	7.82E-05	7.83E-05	9.54E-09	2.73E-06	10.4	9.02E-03	2.35E-04
SI13_W	0.75	8	0	1	1.84E-02	2.45E-02	3.13E-05	4.23E-05	3.84E-05	9.59E-06	0.00E+00	5.59E-05	5.59E-05	6.81E-09	1.95E-06	7.4	6.44E-03	1.68E-04
SI13_W	0.75	12	0	1	2.58E-02	3.43E-02	4.39E-05	5.93E-05	5.38E-05	1.34E-05	0.00E+00	7.82E-05	7.83E-05	9.54E-09	2.73E-06	10.4	9.02E-03	2.35E-04
SI13_W	0.75	29	0	1	6.27E-02	8.32E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.1	2.19E-02	5.70E-04
SI13_W	0.75	86	0	1	1.88E-01	2.50E-01	3.20E-04	4.32E-04	3.92E-04	9.79E-05	0.00E+00	5.70E-04	5.70E-04	6.95E-08	1.99E-05	75.4	6.57E-02	1.71E-03
SI13_W	0.75	132	0	1	2.88E-01	3.82E-01	4.89E-04	6.61E-04	5.99E-04	1.50E-04	0.00E+00	8.71E-04	8.72E-04	1.06E-07	3.04E-05	115.4	1.00E-01	2.62E-03
SI13_W	0.75	107	0	1	2.32E-01	3.09E-01	3.95E-04	5.34E-04	4.84E-04	1.21E-04	0.00E+00	7.04E-04	7.05E-04	8.59E-08	2.46E-05	93.2	8.12E-02	2.11E-03
SI13_W	0.75	88	0	1	1.92E-01	2.55E-01	3.26E-04	4.40E-04	4.00E-04	9.98E-05	0.00E+00	5.81E-04	5.82E-04	7.09E-08	2.03E-05	76.9	6.70E-02	1.74E-03
SI13_W	0.75	80	0	1	1.73E-01	2.30E-01	2.95E-04	3.98E-04	3.61E-04	9.02E-05	0.00E+00	5.25E-04	5.26E-04	6.41E-08	1.83E-05	69.5	6.06E-02	1.58E-03
SI13_W	0.75	90	0	1	1.95E-01	2.60E-01	3.32E-04	4.49E-04	4.07E-04	1.02E-04	0.00E+00	5.92E-04	5.93E-04	7.22E-08	2.07E-05	78.4	6.83E-02	1.78E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI13_W	0.75	95	0	1	2.06E-01	2.74E-01	3.51E-04	4.74E-04	4.30E-04	1.07E-04	0.00E+00	6.26E-04	6.26E-04	7.63E-08	2.18E-05	82.8	7.21E-02	1.88E-03
SI13_W	0.75	97	0	1	2.10E-01	2.79E-01	3.57E-04	4.83E-04	4.38E-04	1.09E-04	0.00E+00	6.37E-04	6.37E-04	7.77E-08	2.22E-05	84.3	7.34E-02	1.91E-03
SI13_W	0.75	100	0	1	2.17E-01	2.89E-01	3.70E-04	5.00E-04	4.53E-04	1.13E-04	0.00E+00	6.59E-04	6.60E-04	8.04E-08	2.30E-05	87.3	7.60E-02	1.98E-03
SI13_W	0.75	108	0	1	2.36E-01	3.13E-01	4.01E-04	5.42E-04	4.92E-04	1.23E-04	0.00E+00	7.15E-04	7.16E-04	8.72E-08	2.49E-05	94.6	8.25E-02	2.15E-03
SI13_W	0.75	134	0	1	2.91E-01	3.87E-01	4.95E-04	6.69E-04	6.07E-04	1.52E-04	0.00E+00	8.83E-04	8.84E-04	1.08E-07	3.08E-05	116.8	1.02E-01	2.65E-03
SI13_W	0.75	144	0	1	3.13E-01	4.16E-01	5.33E-04	7.20E-04	6.53E-04	1.63E-04	0.00E+00	9.50E-04	9.51E-04	1.16E-07	3.31E-05	125.7	1.10E-01	2.85E-03
SI13_W	0.75	100	0	1	2.17E-01	2.89E-01	3.70E-04	5.00E-04	4.53E-04	1.13E-04	0.00E+00	6.59E-04	6.60E-04	8.04E-08	2.30E-05	87.3	7.60E-02	1.98E-03
SI13_W	0.75	66	0	1	1.44E-01	1.91E-01	2.44E-04	3.30E-04	3.00E-04	7.48E-05	0.00E+00	4.36E-04	4.36E-04	5.32E-08	1.52E-05	57.7	5.02E-02	1.31E-03
SI13_W	0.75	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.33E-05	0.00E+00	3.69E-04	3.69E-04	4.50E-08	1.29E-05	48.8	4.25E-02	1.11E-03
SI13_W	0.75	47	0	1	1.03E-01	1.37E-01	1.75E-04	2.37E-04	2.15E-04	5.37E-05	0.00E+00	3.13E-04	3.13E-04	3.82E-08	1.09E-05	41.4	3.61E-02	9.39E-04
SI13_W	0.75	39	0	1	8.48E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.41E-05	0.00E+00	2.57E-04	2.57E-04	3.13E-08	8.96E-06	34.0	2.96E-02	7.71E-04
SI13_W	0.75	29	0	1	6.27E-02	8.32E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.1	2.19E-02	5.70E-04
SI14_E	0.75	24	0	1	5.13E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.79E-02	4.67E-04
SI14_E	0.75	16	0	1	3.42E-02	4.55E-02	5.82E-05	7.86E-05	7.13E-05	1.78E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.62E-06	13.7	1.20E-02	3.11E-04
SI14_E	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI14_E	0.75	10	0	1	2.14E-02	2.84E-02	3.64E-05	4.91E-05	4.46E-05	1.11E-05	0.00E+00	6.48E-05	6.49E-05	7.91E-09	2.26E-06	8.6	7.48E-03	1.95E-04
SI14_E	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI14_E	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI14_E	0.75	100	0	1	2.18E-01	2.90E-01	3.71E-04	5.01E-04	4.55E-04	1.14E-04	0.00E+00	6.61E-04	6.62E-04	8.07E-08	2.31E-05	87.5	7.63E-02	1.98E-03
SI14_E	0.75	153	0	1	3.34E-01	4.43E-01	5.67E-04	7.67E-04	6.96E-04	1.74E-04	0.00E+00	1.01E-03	1.01E-03	1.23E-07	3.53E-05	133.9	1.17E-01	3.04E-03
SI14_E	0.75	124	0	1	2.70E-01	3.58E-01	4.58E-04	6.19E-04	5.62E-04	1.40E-04	0.00E+00	8.17E-04	8.18E-04	9.97E-08	2.85E-05	108.1	9.42E-02	2.45E-03
SI14_E	0.75	102	0	1	2.22E-01	2.96E-01	3.78E-04	5.11E-04	4.64E-04	1.16E-04	0.00E+00	6.74E-04	6.75E-04	8.23E-08	2.35E-05	89.2	7.78E-02	2.02E-03
SI14_E	0.75	92	0	1	2.01E-01	2.67E-01	3.42E-04	4.62E-04	4.19E-04	1.05E-04	0.00E+00	6.09E-04	6.10E-04	7.43E-08	2.13E-05	80.7	7.03E-02	1.83E-03
SI14_E	0.75	104	0	1	2.27E-01	3.01E-01	3.85E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.87E-04	6.88E-04	8.38E-08	2.40E-05	91.0	7.92E-02	2.06E-03
SI14_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI14_E	0.75	112	0	1	2.44E-01	3.24E-01	4.15E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.40E-04	9.02E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI14_E	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI14_E	0.75	126	0	1	2.74E-01	3.64E-01	4.65E-04	6.29E-04	5.71E-04	1.43E-04	0.00E+00	8.30E-04	8.31E-04	1.01E-07	2.89E-05	109.8	9.57E-02	2.49E-03
SI14_E	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.07E-03
SI14_E	0.75	167	0	1	3.64E-01	4.83E-01	6.18E-04	8.36E-04	7.58E-04	1.89E-04	0.00E+00	1.10E-03	1.10E-03	1.34E-07	3.84E-05	145.9	1.27E-01	3.31E-03
SI14_E	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI14_E	0.75	77	0	1	1.67E-01	2.22E-01	2.84E-04	3.83E-04	3.48E-04	8.69E-05	0.00E+00	5.06E-04	5.06E-04	6.17E-08	1.76E-05	66.9	5.83E-02	1.52E-03
SI14_E	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.6	4.93E-02	1.28E-03
SI14_E	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.75E-04	2.50E-04	6.24E-05	0.00E+00	3.63E-04	3.63E-04	4.43E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI14_E	0.75	45	0	1	9.84E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.12E-05	0.00E+00	2.98E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.95E-04
SI14_E	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI14_W	0.75	24	0	1	5.13E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.79E-02	4.67E-04
SI14_W	0.75	16	0	1	3.42E-02	4.55E-02	5.82E-05	7.86E-05	7.13E-05	1.78E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.62E-06	13.7	1.20E-02	3.11E-04
SI14_W	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI14_W	0.75	10	0	1	2.14E-02	2.84E-02	3.64E-05	4.91E-05	4.46E-05	1.11E-05	0.00E+00	6.48E-05	6.49E-05	7.91E-09	2.26E-06	8.6	7.48E-03	1.95E-04
SI14_W	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI14_W	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI14_W	0.75	100	0	1	2.18E-01	2.90E-01	3.71E-04	5.01E-04	4.55E-04	1.14E-04	0.00E+00	6.61E-04	6.62E-04	8.07E-08	2.31E-05	87.5	7.63E-02	1.98E-03
SI14_W	0.75	153	0	1	3.34E-01	4.43E-01	5.67E-04	7.67E-04	6.96E-04	1.74E-04	0.00E+00	1.01E-03	1.01E-03	1.23E-07	3.53E-05	133.9	1.17E-01	3.04E-03
SI14_W	0.75	124	0	1	2.70E-01	3.58E-01	4.58E-04	6.19E-04	5.62E-04	1.40E-04	0.00E+00	8.17E-04	8.18E-04	9.97E-08	2.85E-05	108.1	9.42E-02	2.45E-03
SI14_W	0.75	102	0	1	2.22E-01	2.96E-01	3.78E-04	5.11E-04	4.64E-04	1.16E-04	0.00E+00	6.74E-04	6.75E-04	8.23E-08	2.35E-05	89.2	7.78E-02	2.02E-03
SI14_W	0.75	92	0	1	2.01E-01	2.67E-01	3.42E-04	4.62E-04	4.19E-04	1.05E-04	0.00E+00	6.09E-04	6.10E-04	7.43E-08	2.13E-05	80.7	7.03E-02	1.83E-03
SI14_W	0.75	104	0	1	2.27E-01	3.01E-01	3.85E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.87E-04	6.88E-04	8.38E-08	2.40E-05	91.0	7.92E-02	2.06E-03
SI14_W	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI14_W	0.75	112	0	1	2.44E-01	3.24E-01	4.15E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.40E-04	9.02E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI14_W	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI14_W	0.75	126	0	1	2.74E-01	3.64E-01	4.65E-04	6.29E-04	5.71E-04	1.43E-04	0.00E+00	8.30E-04	8.31E-04	1.01E-07	2.89E-05	109.8	9.57E-02	2.49E-03
SI14_W	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.07E-03
SI14_W	0.75	167	0	1	3.64E-01	4.83E-01	6.18E-04	8.36E-04	7.58E-04	1.89E-04	0.00E+00	1.10E-03	1.10E-03	1.34E-07	3.84E-05	145.9	1.27E-01	3.31E-03
SI14_W	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI14_W	0.75	77	0	1	1.67E-01	2.22E-01	2.84E-04	3.83E-04	3.48E-04	8.69E-05	0.00E+00	5.06E-04	5.06E-04	6.17E-08	1.76E-05	66.9	5.83E-02	1.52E-03
SI14_W	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.6	4.93E-02	1.28E-03
SI14_W	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.75E-04	2.50E-04	6.24E-05	0.00E+00	3.63E-04	3.63E-04	4.43E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI14_W	0.75	45	0	1	9.84E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.12E-05	0.00E+00	2.98E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.95E-04
SI14_W	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI15_E	0.75	24	0	1	5.13E-02	6.82E-02	8.73E-05	1.18E-04	1.07E-04	2.67E-05	0.00E+00	1.56E-04	1.56E-04	1.90E-08	5.43E-06	20.6	1.79E-02	4.67E-04
SI15_E	0.75	16	0	1	3.42E-02	4.55E-02	5.82E-05	7.86E-05	7.13E-05	1.78E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.62E-06	13.7	1.20E-02	3.11E-04
SI15_E	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI15_E	0.75	10	0	1	2.14E-02	2.84E-02	3.64E-05	4.91E-05	4.46E-05	1.11E-05	0.00E+00	6.48E-05	6.49E-05	7.91E-09	2.26E-06	8.6	7.48E-03	1.95E-04
SI15_E	0.75	14	0	1	2.99E-02	3.98E-02	5.09E-05	6.88E-05	6.24E-05	1.56E-05	0.00E+00	9.08E-05	9.09E-05	1.11E-08	3.17E-06	12.0	1.05E-02	2.72E-04
SI15_E	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI15_E	0.75	100	0	1	2.18E-01	2.90E-01	3.71E-04	5.01E-04	4.55E-04	1.14E-04	0.00E+00	6.61E-04	6.62E-04	8.07E-08	2.31E-05	87.5	7.63E-02	1.98E-03
SI15_E	0.75	153	0	1	3.34E-01	4.43E-01	5.67E-04	7.67E-04	6.96E-04	1.74E-04	0.00E+00	1.01E-03	1.01E-03	1.23E-07	3.53E-05	133.9	1.17E-01	3.04E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI15_E	0.75	124	0	1	2.70E-01	3.58E-01	4.58E-04	6.19E-04	5.62E-04	1.40E-04	0.00E+00	8.17E-04	8.18E-04	9.97E-08	2.85E-05	108.1	9.42E-02	2.45E-03
SI15_E	0.75	102	0	1	2.22E-01	2.96E-01	3.78E-04	5.11E-04	4.64E-04	1.16E-04	0.00E+00	6.74E-04	6.75E-04	8.23E-08	2.35E-05	89.2	7.78E-02	2.02E-03
SI15_E	0.75	92	0	1	2.01E-01	2.67E-01	3.42E-04	4.62E-04	4.19E-04	1.05E-04	0.00E+00	6.09E-04	6.10E-04	7.43E-08	2.13E-05	80.7	7.03E-02	1.83E-03
SI15_E	0.75	104	0	1	2.27E-01	3.01E-01	3.85E-04	5.21E-04	4.73E-04	1.18E-04	0.00E+00	6.87E-04	6.88E-04	8.38E-08	2.40E-05	91.0	7.92E-02	2.06E-03
SI15_E	0.75	110	0	1	2.40E-01	3.18E-01	4.07E-04	5.50E-04	4.99E-04	1.25E-04	0.00E+00	7.26E-04	7.27E-04	8.86E-08	2.53E-05	96.1	8.37E-02	2.18E-03
SI15_E	0.75	112	0	1	2.44E-01	3.24E-01	4.15E-04	5.60E-04	5.08E-04	1.27E-04	0.00E+00	7.39E-04	7.40E-04	9.02E-08	2.58E-05	97.8	8.52E-02	2.22E-03
SI15_E	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI15_E	0.75	126	0	1	2.74E-01	3.64E-01	4.65E-04	6.29E-04	5.71E-04	1.43E-04	0.00E+00	8.30E-04	8.31E-04	1.01E-07	2.89E-05	109.8	9.57E-02	2.49E-03
SI15_E	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.07E-03
SI15_E	0.75	167	0	1	3.64E-01	4.83E-01	6.18E-04	8.36E-04	7.58E-04	1.89E-04	0.00E+00	1.10E-03	1.10E-03	1.34E-07	3.84E-05	145.9	1.27E-01	3.31E-03
SI15_E	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.80E-04	5.26E-04	1.31E-04	0.00E+00	7.65E-04	7.66E-04	9.33E-08	2.67E-05	101.3	8.82E-02	2.30E-03
SI15_E	0.75	77	0	1	1.67E-01	2.22E-01	2.84E-04	3.83E-04	3.48E-04	8.69E-05	0.00E+00	5.06E-04	5.06E-04	6.17E-08	1.76E-05	66.9	5.83E-02	1.52E-03
SI15_E	0.75	65	0	1	1.41E-01	1.88E-01	2.40E-04	3.24E-04	2.94E-04	7.35E-05	0.00E+00	4.28E-04	4.28E-04	5.22E-08	1.49E-05	56.6	4.93E-02	1.28E-03
SI15_E	0.75	55	0	1	1.20E-01	1.59E-01	2.04E-04	2.75E-04	2.50E-04	6.24E-05	0.00E+00	3.63E-04	3.63E-04	4.43E-08	1.27E-05	48.1	4.19E-02	1.09E-03
SI15_E	0.75	45	0	1	9.84E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.12E-05	0.00E+00	2.98E-04	2.99E-04	3.64E-08	1.04E-05	39.5	3.44E-02	8.95E-04
SI15_E	0.75	33	0	1	7.27E-02	9.66E-02	1.24E-04	1.67E-04	1.52E-04	3.79E-05	0.00E+00	2.20E-04	2.21E-04	2.69E-08	7.69E-06	29.2	2.54E-02	6.62E-04
SI15_W	0.75	30	0	1	6.49E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.91E-04
SI15_W	0.75	20	0	1	4.33E-02	5.75E-02	7.36E-05	9.95E-05	9.02E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI15_W	0.75	17	0	1	3.79E-02	5.03E-02	6.44E-05	8.70E-05	7.90E-05	1.97E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.00E-06	15.2	1.32E-02	3.45E-04
SI15_W	0.75	12	0	1	2.71E-02	3.59E-02	4.60E-05	6.22E-05	5.64E-05	1.41E-05	0.00E+00	8.20E-05	8.21E-05	1.00E-08	2.86E-06	10.9	9.46E-03	2.46E-04
SI15_W	0.75	17	0	1	3.79E-02	5.03E-02	6.44E-05	8.70E-05	7.90E-05	1.97E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.00E-06	15.2	1.32E-02	3.45E-04
SI15_W	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.73E-06	36.9	3.21E-02	8.37E-04
SI15_W	0.75	127	0	1	2.76E-01	3.67E-01	4.69E-04	6.34E-04	5.75E-04	1.44E-04	0.00E+00	8.36E-04	8.37E-04	1.02E-07	2.92E-05	110.7	9.64E-02	2.51E-03
SI15_W	0.75	194	0	1	4.22E-01	5.61E-01	7.18E-04	9.70E-04	8.80E-04	2.20E-04	0.00E+00	1.28E-03	1.28E-03	1.56E-07	4.46E-05	169.3	1.48E-01	3.84E-03
SI15_W	0.75	157	0	1	3.41E-01	4.53E-01	5.80E-04	7.83E-04	7.11E-04	1.77E-04	0.00E+00	1.03E-03	1.03E-03	1.26E-07	3.60E-05	136.8	1.19E-01	3.10E-03
SI15_W	0.75	129	0	1	2.81E-01	3.74E-01	4.78E-04	6.46E-04	5.87E-04	1.46E-04	0.00E+00	8.53E-04	8.54E-04	1.04E-07	2.97E-05	112.9	9.83E-02	2.56E-03
SI15_W	0.75	117	0	1	2.54E-01	3.38E-01	4.32E-04	5.84E-04	5.30E-04	1.32E-04	0.00E+00	7.71E-04	7.72E-04	9.40E-08	2.69E-05	102.0	8.89E-02	2.31E-03
SI15_W	0.75	132	0	1	2.87E-01	3.81E-01	4.88E-04	6.59E-04	5.98E-04	1.49E-04	0.00E+00	8.69E-04	8.70E-04	1.06E-07	3.03E-05	115.0	1.00E-01	2.61E-03
SI15_W	0.75	139	0	1	3.03E-01	4.03E-01	5.15E-04	6.96E-04	6.32E-04	1.58E-04	0.00E+00	9.18E-04	9.19E-04	1.12E-07	3.20E-05	121.6	1.06E-01	2.76E-03
SI15_W	0.75	142	0	1	3.08E-01	4.10E-01	5.24E-04	7.09E-04	6.43E-04	1.61E-04	0.00E+00	9.35E-04	9.36E-04	1.14E-07	3.26E-05	123.7	1.08E-01	2.81E-03
SI15_W	0.75	147	0	1	3.19E-01	4.24E-01	5.43E-04	7.34E-04	6.65E-04	1.66E-04	0.00E+00	9.68E-04	9.69E-04	1.18E-07	3.38E-05	128.1	1.12E-01	2.90E-03
SI15_W	0.75	159	0	1	3.46E-01	4.60E-01	5.89E-04	7.96E-04	7.22E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.66E-05	138.9	1.21E-01	3.15E-03
SI15_W	0.75	196	0	1	4.27E-01	5.68E-01	7.27E-04	9.82E-04	8.91E-04	2.23E-04	0.00E+00	1.30E-03	1.30E-03	1.58E-07	4.52E-05	171.5	1.49E-01	3.89E-03
SI15_W	0.75	211	0	1	4.60E-01	6.11E-01	7.82E-04	1.06E-03	9.59E-04	2.39E-04	0.00E+00	1.39E-03	1.40E-03	1.70E-07	4.86E-05	184.5	1.61E-01	4.18E-03
SI15_W	0.75	147	0	1	3.19E-01	4.24E-01	5.43E-04	7.34E-04	6.65E-04	1.66E-04	0.00E+00	9.68E-04	9.69E-04	1.18E-07	3.38E-05	128.1	1.12E-01	2.90E-03
SI15_W	0.75	97	0	1	2.11E-01	2.80E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.40E-04	7.80E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI15_W	0.75	82	0	1	1.79E-01	2.37E-01	3.04E-04	4.10E-04	3.72E-04	9.30E-05	0.00E+00	5.41E-04	5.42E-04	6.60E-08	1.89E-05	71.6	6.24E-02	1.62E-03
SI15_W	0.75	70	0	1	1.51E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.60E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI15_W	0.75	57	0	1	1.24E-01	1.65E-01	2.12E-04	2.86E-04	2.59E-04	6.48E-05	0.00E+00	3.77E-04	3.78E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI15_W	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.73E-06	36.9	3.21E-02	8.37E-04
SI16_E	0.75	30	0	1	6.49E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.86E-06	26.0	2.27E-02	5.91E-04
SI16_E	0.75	20	0	1	4.33E-02	5.75E-02	7.36E-05	9.95E-05	9.02E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.58E-06	17.4	1.51E-02	3.94E-04
SI16_E	0.75	17	0	1	3.79E-02	5.03E-02	6.44E-05	8.70E-05	7.90E-05	1.97E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.00E-06	15.2	1.32E-02	3.45E-04
SI16_E	0.75	12	0	1	2.71E-02	3.59E-02	4.60E-05	6.22E-05	5.64E-05	1.41E-05	0.00E+00	8.20E-05	8.21E-05	1.00E-08	2.86E-06	10.9	9.46E-03	2.46E-04
SI16_E	0.75	17	0	1	3.79E-02	5.03E-02	6.44E-05	8.70E-05	7.90E-05	1.97E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.00E-06	15.2	1.32E-02	3.45E-04
SI16_E	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.73E-06	36.9	3.21E-02	8.37E-04
SI16_E	0.75	127	0	1	2.76E-01	3.67E-01	4.69E-04	6.34E-04	5.75E-04	1.44E-04	0.00E+00	8.36E-04	8.37E-04	1.02E-07	2.92E-05	110.7	9.64E-02	2.51E-03
SI16_E	0.75	194	0	1	4.22E-01	5.61E-01	7.18E-04	9.70E-04	8.80E-04	2.20E-04	0.00E+00	1.28E-03	1.28E-03	1.56E-07	4.46E-05	169.3	1.48E-01	3.84E-03
SI16_E	0.75	157	0	1	3.41E-01	4.53E-01	5.80E-04	7.83E-04	7.11E-04	1.77E-04	0.00E+00	1.03E-03	1.03E-03	1.26E-07	3.60E-05	136.8	1.19E-01	3.10E-03
SI16_E	0.75	129	0	1	2.81E-01	3.74E-01	4.78E-04	6.46E-04	5.87E-04	1.46E-04	0.00E+00	8.53E-04	8.54E-04	1.04E-07	2.97E-05	112.9	9.83E-02	2.56E-03
SI16_E	0.75	117	0	1	2.54E-01	3.38E-01	4.32E-04	5.84E-04	5.30E-04	1.32E-04	0.00E+00	7.71E-04	7.72E-04	9.40E-08	2.69E-05	102.0	8.89E-02	2.31E-03
SI16_E	0.75	132	0	1	2.87E-01	3.81E-01	4.88E-04	6.59E-04	5.98E-04	1.49E-04	0.00E+00	8.69E-04	8.70E-04	1.06E-07	3.03E-05	115.0	1.00E-01	2.61E-03
SI16_E	0.75	139	0	1	3.03E-01	4.03E-01	5.15E-04	6.96E-04	6.32E-04	1.58E-04	0.00E+00	9.18E-04	9.19E-04	1.12E-07	3.20E-05	121.6	1.06E-01	2.76E-03
SI16_E	0.75	142	0	1	3.08E-01	4.10E-01	5.24E-04	7.09E-04	6.43E-04	1.61E-04	0.00E+00	9.35E-04	9.36E-04	1.14E-07	3.26E-05	123.7	1.08E-01	2.81E-03
SI16_E	0.75	147	0	1	3.19E-01	4.24E-01	5.43E-04	7.34E-04	6.65E-04	1.66E-04	0.00E+00	9.68E-04	9.69E-04	1.18E-07	3.38E-05	128.1	1.12E-01	2.90E-03
SI16_E	0.75	159	0	1	3.46E-01	4.60E-01	5.89E-04	7.96E-04	7.22E-04	1.80E-04	0.00E+00	1.05E-03	1.05E-03	1.28E-07	3.66E-05	138.9	1.21E-01	3.15E-03
SI16_E	0.75	196	0	1	4.27E-01	5.68E-01	7.27E-04	9.82E-04	8.91E-04	2.23E-04	0.00E+00	1.30E-03	1.30E-03	1.58E-07	4.52E-05	171.5	1.49E-01	3.89E-03
SI16_E	0.75	211	0	1	4.60E-01	6.11E-01	7.82E-04	1.06E-03	9.59E-04	2.39E-04	0.00E+00	1.39E-03	1.40E-03	1.70E-07	4.86E-05	184.5	1.61E-01	4.18E-03
SI16_E	0.75	147	0	1	3.19E-01	4.24E-01	5.43E-04	7.34E-04	6.65E-04	1.66E-04	0.00E+00	9.68E-04	9.69E-04	1.18E-07	3.38E-05	128.1	1.12E-01	2.90E-03
SI16_E	0.75	97	0	1	2.11E-01	2.80E-01	3.59E-04	4.85E-04	4.40E-04	1.10E-04	0.00E+00	6.40E-04	6.40E-04	7.80E-08	2.23E-05	84.7	7.38E-02	1.92E-03
SI16_E	0.75	82	0	1	1.79E-01	2.37E-01	3.04E-04	4.10E-04	3.72E-04	9.30E-05	0.00E+00	5.41E-04	5.42E-04	6.60E-08	1.89E-05	71.6	6.24E-02	1.62E-03
SI16_E	0.75	70	0	1	1.51E-01	2.01E-01	2.58E-04	3.48E-04	3.16E-04	7.89E-05	0.00E+00	4.59E-04	4.60E-04	5.60E-08	1.60E-05	60.8	5.30E-02	1.38E-03
SI16_E	0.75	57	0	1	1.24E-01	1.65E-01	2.12E-04	2.86E-04	2.59E-04	6.48E-05	0.00E+00	3.77E-04	3.78E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI16_E	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.73E-06	36.9	3.21E-02	8.37E-04
SI16_W	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.34E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI16_W	0.75	24	0	1	5.16E-02	6.85E-02	8.77E-05	1.19E-04	1.08E-04	2.69E-05	0.00E+00	1.56E-04	1.56E-04	1.91E-08	5.45E-06	20.7	1.80E-02	4.69E-04
SI16_W	0.75	21	0	1	4.51E-02	6.00E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI16_W	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI16_W	0.75	21	0	1	4.51E-02	6.00E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI16_W	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.71E-05	0.00E+00	3.32E-04	3.33E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI16_W	0.75	151	0	1	3.29E-01	4.37E-01	5.59E-04	7.56E-04	6.85E-04	1.71E-04	0.00E+00	9.97E-04	9.98E-04	1.22E-07	3.48E-05	131.9	1.15E-01	2.99E-03
SI16_W	0.75	231	0	1	5.03E-01	6.68E-01	8.55E-04	1.16E-03	1.05E-03	2.62E-04	0.00E+00	1.52E-03	1.53E-03	1.86E-07	5.32E-05	201.8	1.76E-01	4.58E-03
SI16_W	0.75	187	0	1	4.06E-01	5.40E-01	6.91E-04	9.33E-04	8.47E-04	2.11E-04	0.00E+00	1.23E-03	1.23E-03	1.50E-07	4.29E-05	163.0	1.42E-01	3.70E-03
SI16_W	0.75	154	0	1	3.35E-01	4.45E-01	5.70E-04	7.70E-04	6.99E-04	1.75E-04	0.00E+00	1.02E-03	1.02E-03	1.24E-07	3.54E-05	134.5	1.17E-01	3.05E-03
SI16_W	0.75	139	0	1	3.03E-01	4.03E-01	5.15E-04	6.96E-04	6.32E-04	1.58E-04	0.00E+00	9.18E-04	9.19E-04	1.12E-07	3.20E-05	121.6	1.06E-01	2.76E-03
SI16_W	0.75	157	0	1	3.42E-01	4.54E-01	5.81E-04	7.85E-04	7.12E-04	1.78E-04	0.00E+00	1.04E-03	1.04E-03	1.26E-07	3.61E-05	137.1	1.19E-01	3.11E-03
SI16_W	0.75	166	0	1	3.61E-01	4.80E-01	6.14E-04	8.30E-04	7.53E-04	1.88E-04	0.00E+00	1.09E-03	1.10E-03	1.34E-07	3.82E-05	144.9	1.26E-01	3.28E-03
SI16_W	0.75	169	0	1	3.68E-01	4.88E-01	6.25E-04	8.44E-04	7.66E-04	1.91E-04	0.00E+00	1.11E-03	1.11E-03	1.36E-07	3.89E-05	147.4	1.28E-01	3.34E-03
SI16_W	0.75	175	0	1	3.80E-01	5.05E-01	6.47E-04	8.74E-04	7.93E-04	1.98E-04	0.00E+00	1.15E-03	1.15E-03	1.41E-07	4.02E-05	152.6	1.33E-01	3.46E-03
SI16_W	0.75	190	0	1	4.13E-01	5.48E-01	7.02E-04	9.48E-04	8.60E-04	2.15E-04	0.00E+00	1.25E-03	1.25E-03	1.53E-07	4.36E-05	165.5	1.44E-01	3.75E-03
SI16_W	0.75	234	0	1	5.09E-01	6.77E-01	8.66E-04	1.17E-03	1.06E-03	2.65E-04	0.00E+00	1.54E-03	1.55E-03	1.88E-07	5.39E-05	204.3	1.78E-01	4.63E-03
SI16_W	0.75	252	0	1	5.48E-01	7.28E-01	9.32E-04	1.26E-03	1.14E-03	2.85E-04	0.00E+00	1.66E-03	1.66E-03	2.03E-07	5.79E-05	219.9	1.92E-01	4.99E-03
SI16_W	0.75	175	0	1	3.80E-01	5.05E-01	6.47E-04	8.74E-04	7.93E-04	1.98E-04	0.00E+00	1.15E-03	1.15E-03	1.41E-07	4.02E-05	152.6	1.33E-01	3.46E-03
SI16_W	0.75	116	0	1	2.51E-01	3.34E-01	4.27E-04	5.78E-04	5.24E-04	1.31E-04	0.00E+00	7.62E-04	7.63E-04	9.30E-08	2.66E-05	100.9	8.79E-02	2.29E-03
SI16_W	0.75	98	0	1	2.13E-01	2.83E-01	3.62E-04	4.89E-04	4.44E-04	1.11E-04	0.00E+00	6.45E-04	6.46E-04	7.87E-08	2.25E-05	85.4	7.44E-02	1.94E-03
SI16_W	0.75	83	0	1	1.81E-01	2.40E-01	3.07E-04	4.15E-04	3.76E-04	9.40E-05	0.00E+00	5.47E-04	5.48E-04	6.68E-08	1.91E-05	72.4	6.31E-02	1.64E-03
SI16_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.72E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI16_W	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.71E-05	0.00E+00	3.32E-04	3.33E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI17_E	0.75	36	0	1	7.74E-02	1.03E-01	1.32E-04	1.78E-04	1.61E-04	4.03E-05	0.00E+00	2.34E-04	2.35E-04	2.86E-08	8.18E-06	31.0	2.70E-02	7.04E-04
SI17_E	0.75	24	0	1	5.16E-02	6.85E-02	8.77E-05	1.19E-04	1.08E-04	2.69E-05	0.00E+00	1.56E-04	1.56E-04	1.91E-08	5.45E-06	20.7	1.80E-02	4.69E-04
SI17_E	0.75	21	0	1	4.51E-02	6.00E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI17_E	0.75	15	0	1	3.22E-02	4.28E-02	5.48E-05	7.41E-05	6.72E-05	1.68E-05	0.00E+00	9.77E-05	9.78E-05	1.19E-08	3.41E-06	12.9	1.13E-02	2.93E-04
SI17_E	0.75	21	0	1	4.51E-02	6.00E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.11E-04
SI17_E	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.71E-05	0.00E+00	3.32E-04	3.33E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI17_E	0.75	151	0	1	3.29E-01	4.37E-01	5.59E-04	7.56E-04	6.85E-04	1.71E-04	0.00E+00	9.97E-04	9.98E-04	1.22E-07	3.48E-05	131.9	1.15E-01	2.99E-03
SI17_E	0.75	231	0	1	5.03E-01	6.68E-01	8.55E-04	1.16E-03	1.05E-03	2.62E-04	0.00E+00	1.52E-03	1.53E-03	1.86E-07	5.32E-05	201.8	1.76E-01	4.58E-03
SI17_E	0.75	187	0	1	4.06E-01	5.40E-01	6.91E-04	9.33E-04	8.47E-04	2.11E-04	0.00E+00	1.23E-03	1.23E-03	1.50E-07	4.29E-05	163.0	1.42E-01	3.70E-03
SI17_E	0.75	154	0	1	3.35E-01	4.45E-01	5.70E-04	7.70E-04	6.99E-04	1.75E-04	0.00E+00	1.02E-03	1.02E-03	1.24E-07	3.54E-05	134.5	1.17E-01	3.05E-03
SI17_E	0.75	139	0	1	3.03E-01	4.03E-01	5.15E-04	6.96E-04	6.32E-04	1.58E-04	0.00E+00	9.18E-04	9.19E-04	1.12E-07	3.20E-05	121.6	1.06E-01	2.76E-03
SI17_E	0.75	157	0	1	3.42E-01	4.54E-01	5.81E-04	7.85E-04	7.12E-04	1.78E-04	0.00E+00	1.04E-03	1.04E-03	1.26E-07	3.61E-05	137.1	1.19E-01	3.11E-03
SI17_E	0.75	166	0	1	3.61E-01	4.80E-01	6.14E-04	8.30E-04	7.53E-04	1.88E-04	0.00E+00	1.09E-03	1.10E-03	1.34E-07	3.82E-05	144.9	1.26E-01	3.28E-03
SI17_E	0.75	169	0	1	3.68E-01	4.88E-01	6.25E-04	8.44E-04	7.66E-04	1.91E-04	0.00E+00	1.11E-03	1.11E-03	1.36E-07	3.89E-05	147.4	1.28E-01	3.34E-03
SI17_E	0.75	175	0	1	3.80E-01	5.05E-01	6.47E-04	8.74E-04	7.93E-04	1.98E-04	0.00E+00	1.15E-03	1.15E-03	1.41E-07	4.02E-05	152.6	1.33E-01	3.46E-03
SI17_E	0.75	190	0	1	4.13E-01	5.48E-01	7.02E-04	9.48E-04	8.60E-04	2.15E-04	0.00E+00	1.25E-03	1.25E-03	1.53E-07	4.36E-05	165.5	1.44E-01	3.75E-03
SI17_E	0.75	234	0	1	5.09E-01	6.77E-01	8.66E-04	1.17E-03	1.06E-03	2.65E-04	0.00E+00	1.54E-03	1.55E-03	1.88E-07	5.39E-05	204.3	1.78E-01	4.63E-03
SI17_E	0.75	252	0	1	5.48E-01	7.28E-01	9.32E-04	1.26E-03	1.14E-03	2.85E-04	0.00E+00	1.66E-03	1.66E-03	2.03E-07	5.79E-05	219.9	1.92E-01	4.99E-03
SI17_E	0.75	175	0	1	3.80E-01	5.05E-01	6.47E-04	8.74E-04	7.93E-04	1.98E-04	0.00E+00	1.15E-03	1.15E-03	1.41E-07	4.02E-05	152.6	1.33E-01	3.46E-03
SI17_E	0.75	116	0	1	2.51E-01	3.34E-01	4.27E-04	5.78E-04	5.24E-04	1.31E-04	0.00E+00	7.62E-04	7.63E-04	9.30E-08	2.66E-05	100.9	8.79E-02	2.29E-03
SI17_E	0.75	98	0	1	2.13E-01	2.83E-01	3.62E-04	4.89E-04	4.44E-04	1.11E-04	0.00E+00	6.45E-04	6.46E-04	7.87E-08	2.25E-05	85.4	7.44E-02	1.94E-03
SI17_E	0.75	83	0	1	1.81E-01	2.40E-01	3.07E-04	4.15E-04	3.76E-04	9.40E-05	0.00E+00	5.47E-04	5.48E-04	6.68E-08	1.91E-05	72.4	6.31E-02	1.64E-03
SI17_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.72E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI17_E	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.71E-05	0.00E+00	3.32E-04	3.33E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI17_W	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI17_W	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI17_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI17_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI17_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI17_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI17_W	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI17_W	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI17_W	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI17_W	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI17_W	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI17_W	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI17_W	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI17_W	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI17_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI17_W	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI17_W	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI17_W	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI17_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI17_W	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI17_W	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI17_W	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI17_W	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI17_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI18_E	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI18_E	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI18_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI18_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI18_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI18_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI18_E	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI18_E	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI18_E	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI18_E	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI18_E	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI18_E	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI18_E	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI18_E	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI18_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI18_E	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI18_E	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI18_E	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI18_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI18_E	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI18_E	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI18_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI18_E	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI18_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI18_W	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI18_W	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI18_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI18_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI18_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI18_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI18_W	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI18_W	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI18_W	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI18_W	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI18_W	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI18_W	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI18_W	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI18_W	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI18_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI18_W	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI18_W	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI18_W	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI18_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI18_W	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI18_W	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI18_W	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI18_W	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI18_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI19_E	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI19_E	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI19_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI19_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI19_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI19_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI19_E	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI19_E	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI19_E	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI19_E	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI19_E	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI19_E	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI19_E	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI19_E	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI19_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI19_E	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI19_E	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI19_E	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI19_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI19_E	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI19_E	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI19_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI19_E	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI19_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI19_W	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI19_W	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI19_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI19_W	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI19_W	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI19_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI19_W	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI19_W	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI19_W	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI19_W	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI19_W	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI19_W	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI19_W	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI19_W	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI19_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI19_W	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI19_W	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI19_W	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI19_W	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI19_W	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI19_W	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI19_W	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI19_W	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI19_W	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI20_E	0.75	23	0	1	5.09E-02	6.76E-02	8.65E-05	1.17E-04	1.06E-04	2.65E-05	0.00E+00	1.54E-04	1.54E-04	1.88E-08	5.38E-06	20.4	1.78E-02	4.63E-04
SI20_E	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.79E-05	7.07E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.19E-02	3.08E-04
SI20_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI20_E	0.75	10	0	1	2.12E-02	2.82E-02	3.60E-05	4.87E-05	4.42E-05	1.10E-05	0.00E+00	6.42E-05	6.43E-05	7.84E-09	2.24E-06	8.5	7.41E-03	1.93E-04
SI20_E	0.75	14	0	1	2.97E-02	3.94E-02	5.04E-05	6.82E-05	6.18E-05	1.54E-05	0.00E+00	8.99E-05	9.00E-05	1.10E-08	3.14E-06	11.9	1.04E-02	2.70E-04
SI20_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI20_E	0.75	99	0	1	2.16E-01	2.87E-01	3.67E-04	4.97E-04	4.51E-04	1.13E-04	0.00E+00	6.55E-04	6.56E-04	7.99E-08	2.29E-05	86.7	7.55E-02	1.97E-03
SI20_E	0.75	152	0	1	3.31E-01	4.39E-01	5.62E-04	7.60E-04	6.89E-04	1.72E-04	0.00E+00	1.00E-03	1.00E-03	1.22E-07	3.50E-05	132.6	1.16E-01	3.01E-03
SI20_E	0.75	123	0	1	2.67E-01	3.55E-01	4.54E-04	6.14E-04	5.57E-04	1.39E-04	0.00E+00	8.09E-04	8.10E-04	9.87E-08	2.82E-05	107.1	9.33E-02	2.43E-03
SI20_E	0.75	101	0	1	2.20E-01	2.93E-01	3.75E-04	5.06E-04	4.59E-04	1.15E-04	0.00E+00	6.68E-04	6.69E-04	8.15E-08	2.33E-05	88.4	7.70E-02	2.00E-03
SI20_E	0.75	92	0	1	1.99E-01	2.65E-01	3.39E-04	4.58E-04	4.15E-04	1.04E-04	0.00E+00	6.04E-04	6.04E-04	7.37E-08	2.11E-05	79.9	6.96E-02	1.81E-03
SI20_E	0.75	103	0	1	2.25E-01	2.98E-01	3.82E-04	5.16E-04	4.68E-04	1.17E-04	0.00E+00	6.81E-04	6.81E-04	8.31E-08	2.37E-05	90.1	7.85E-02	2.04E-03
SI20_E	0.75	109	0	1	2.37E-01	3.15E-01	4.04E-04	5.45E-04	4.95E-04	1.24E-04	0.00E+00	7.19E-04	7.20E-04	8.78E-08	2.51E-05	95.2	8.30E-02	2.16E-03
SI20_E	0.75	111	0	1	2.42E-01	3.21E-01	4.11E-04	5.55E-04	5.04E-04	1.26E-04	0.00E+00	7.32E-04	7.33E-04	8.93E-08	2.55E-05	96.9	8.44E-02	2.20E-03
SI20_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI20_E	0.75	125	0	1	2.71E-01	3.60E-01	4.61E-04	6.23E-04	5.65E-04	1.41E-04	0.00E+00	8.22E-04	8.23E-04	1.00E-07	2.87E-05	108.8	9.48E-02	2.47E-03
SI20_E	0.75	154	0	1	3.35E-01	4.45E-01	5.69E-04	7.69E-04	6.98E-04	1.74E-04	0.00E+00	1.01E-03	1.02E-03	1.24E-07	3.54E-05	134.3	1.17E-01	3.05E-03
SI20_E	0.75	165	0	1	3.60E-01	4.79E-01	6.12E-04	8.28E-04	7.51E-04	1.88E-04	0.00E+00	1.09E-03	1.09E-03	1.33E-07	3.81E-05	144.5	1.26E-01	3.28E-03
SI20_E	0.75	115	0	1	2.50E-01	3.32E-01	4.25E-04	5.75E-04	5.21E-04	1.30E-04	0.00E+00	7.58E-04	7.59E-04	9.25E-08	2.64E-05	100.3	8.74E-02	2.27E-03
SI20_E	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.60E-05	0.00E+00	5.01E-04	5.01E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI20_E	0.75	64	0	1	1.40E-01	1.86E-01	2.38E-04	3.21E-04	2.92E-04	7.28E-05	0.00E+00	4.24E-04	4.24E-04	5.17E-08	1.48E-05	56.1	4.89E-02	1.27E-03
SI20_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.47E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.25E-05	47.6	4.15E-02	1.08E-03
SI20_E	0.75	45	0	1	9.75E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.41E-02	8.87E-04
SI20_E	0.75	33	0	1	7.20E-02	9.57E-02	1.22E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.18E-04	2.19E-04	2.66E-08	7.62E-06	28.9	2.52E-02	6.55E-04
SI20_W	0.75	27	0	1	5.82E-02	7.73E-02	9.89E-05	1.34E-04	1.21E-04	3.03E-05	0.00E+00	1.76E-04	1.77E-04	2.15E-08	6.15E-06	23.3	2.03E-02	5.29E-04
SI20_W	0.75	18	0	1	3.88E-02	5.15E-02	6.60E-05	8.91E-05	8.09E-05	2.02E-05	0.00E+00	1.18E-04	1.18E-04	1.43E-08	4.10E-06	15.6	1.36E-02	3.53E-04
SI20_W	0.75	16	0	1	3.39E-02	4.51E-02	5.77E-05	7.80E-05	7.08E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.59E-06	13.6	1.19E-02	3.09E-04
SI20_W	0.75	11	0	1	2.42E-02	3.22E-02	4.12E-05	5.57E-05	5.06E-05	1.26E-05	0.00E+00	7.35E-05	7.36E-05	8.97E-09	2.56E-06	9.7	8.48E-03	2.21E-04
SI20_W	0.75	16	0	1	3.39E-02	4.51E-02	5.77E-05	7.80E-05	7.08E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.59E-06	13.6	1.19E-02	3.09E-04
SI20_W	0.75	38	0	1	8.24E-02	1.10E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.72E-06	33.1	2.88E-02	7.50E-04
SI20_W	0.75	114	0	1	2.47E-01	3.29E-01	4.21E-04	5.68E-04	5.16E-04	1.29E-04	0.00E+00	7.50E-04	7.50E-04	9.15E-08	2.62E-05	99.2	8.64E-02	2.25E-03
SI20_W	0.75	174	0	1	3.78E-01	5.03E-01	6.43E-04	8.69E-04	7.89E-04	1.97E-04	0.00E+00	1.15E-03	1.15E-03	1.40E-07	4.00E-05	151.8	1.32E-01	3.44E-03
SI20_W	0.75	140	0	1	3.06E-01	4.06E-01	5.19E-04	7.02E-04	6.37E-04	1.59E-04	0.00E+00	9.26E-04	9.27E-04	1.13E-07	3.23E-05	122.6	1.07E-01	2.78E-03
SI20_W	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.79E-04	5.26E-04	1.31E-04	0.00E+00	7.64E-04	7.65E-04	9.32E-08	2.67E-05	101.2	8.81E-02	2.29E-03
SI20_W	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.24E-04	4.75E-04	1.19E-04	0.00E+00	6.91E-04	6.92E-04	8.43E-08	2.41E-05	91.4	7.97E-02	2.07E-03
SI20_W	0.75	118	0	1	2.57E-01	3.41E-01	4.37E-04	5.91E-04	5.36E-04	1.34E-04	0.00E+00	7.79E-04	7.80E-04	9.50E-08	2.72E-05	103.1	8.98E-02	2.34E-03
SI20_W	0.75	125	0	1	2.72E-01	3.61E-01	4.62E-04	6.24E-04	5.66E-04	1.41E-04	0.00E+00	8.23E-04	8.24E-04	1.00E-07	2.87E-05	109.0	9.49E-02	2.47E-03
SI20_W	0.75	127	0	1	2.76E-01	3.67E-01	4.70E-04	6.35E-04	5.76E-04	1.44E-04	0.00E+00	8.38E-04	8.39E-04	1.02E-07	2.92E-05	110.9	9.66E-02	2.51E-03
SI20_W	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.03E-05	114.8	1.00E-01	2.60E-03
SI20_W	0.75	143	0	1	3.10E-01	4.12E-01	5.28E-04	7.13E-04	6.47E-04	1.62E-04	0.00E+00	9.41E-04	9.42E-04	1.15E-07	3.28E-05	124.5	1.08E-01	2.82E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI20_W	0.75	176	0	1	3.83E-01	5.09E-01	6.51E-04	8.80E-04	7.99E-04	1.99E-04	0.00E+00	1.16E-03	1.16E-03	1.42E-07	4.05E-05	153.7	1.34E-01	3.49E-03
SI20_W	0.75	189	0	1	4.12E-01	5.48E-01	7.01E-04	9.47E-04	8.59E-04	2.15E-04	0.00E+00	1.25E-03	1.25E-03	1.52E-07	4.36E-05	165.4	1.44E-01	3.75E-03
SI20_W	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.03E-05	114.8	1.00E-01	2.60E-03
SI20_W	0.75	87	0	1	1.89E-01	2.51E-01	3.22E-04	4.35E-04	3.94E-04	9.85E-05	0.00E+00	5.73E-04	5.74E-04	6.99E-08	2.00E-05	75.9	6.61E-02	1.72E-03
SI20_W	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.33E-05	0.00E+00	4.85E-04	4.86E-04	5.92E-08	1.69E-05	64.2	5.59E-02	1.46E-03
SI20_W	0.75	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI20_W	0.75	51	0	1	1.12E-01	1.48E-01	1.90E-04	2.56E-04	2.33E-04	5.81E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.8	3.90E-02	1.01E-03
SI20_W	0.75	38	0	1	8.24E-02	1.10E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.72E-06	33.1	2.88E-02	7.50E-04
SI21_E	0.75	27	0	1	5.82E-02	7.73E-02	9.89E-05	1.34E-04	1.21E-04	3.03E-05	0.00E+00	1.76E-04	1.77E-04	2.15E-08	6.15E-06	23.3	2.03E-02	5.29E-04
SI21_E	0.75	18	0	1	3.88E-02	5.15E-02	6.60E-05	8.91E-05	8.09E-05	2.02E-05	0.00E+00	1.18E-04	1.18E-04	1.43E-08	4.10E-06	15.6	1.36E-02	3.53E-04
SI21_E	0.75	16	0	1	3.39E-02	4.51E-02	5.77E-05	7.80E-05	7.08E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.59E-06	13.6	1.19E-02	3.09E-04
SI21_E	0.75	11	0	1	2.42E-02	3.22E-02	4.12E-05	5.57E-05	5.06E-05	1.26E-05	0.00E+00	7.35E-05	7.36E-05	8.97E-09	2.56E-06	9.7	8.48E-03	2.21E-04
SI21_E	0.75	16	0	1	3.39E-02	4.51E-02	5.77E-05	7.80E-05	7.08E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.59E-06	13.6	1.19E-02	3.09E-04
SI21_E	0.75	38	0	1	8.24E-02	1.10E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.72E-06	33.1	2.88E-02	7.50E-04
SI21_E	0.75	114	0	1	2.47E-01	3.29E-01	4.21E-04	5.68E-04	5.16E-04	1.29E-04	0.00E+00	7.50E-04	7.50E-04	9.15E-08	2.62E-05	99.2	8.64E-02	2.25E-03
SI21_E	0.75	174	0	1	3.78E-01	5.03E-01	6.43E-04	8.69E-04	7.89E-04	1.97E-04	0.00E+00	1.15E-03	1.15E-03	1.40E-07	4.00E-05	151.8	1.32E-01	3.44E-03
SI21_E	0.75	140	0	1	3.06E-01	4.06E-01	5.19E-04	7.02E-04	6.37E-04	1.59E-04	0.00E+00	9.26E-04	9.27E-04	1.13E-07	3.23E-05	122.6	1.07E-01	2.78E-03
SI21_E	0.75	116	0	1	2.52E-01	3.35E-01	4.29E-04	5.79E-04	5.26E-04	1.31E-04	0.00E+00	7.64E-04	7.65E-04	9.32E-08	2.67E-05	101.2	8.81E-02	2.29E-03
SI21_E	0.75	105	0	1	2.28E-01	3.03E-01	3.88E-04	5.24E-04	4.75E-04	1.19E-04	0.00E+00	6.91E-04	6.92E-04	8.43E-08	2.41E-05	91.4	7.97E-02	2.07E-03
SI21_E	0.75	118	0	1	2.57E-01	3.41E-01	4.37E-04	5.91E-04	5.36E-04	1.34E-04	0.00E+00	7.79E-04	7.80E-04	9.50E-08	2.72E-05	103.1	8.98E-02	2.34E-03
SI21_E	0.75	125	0	1	2.72E-01	3.61E-01	4.62E-04	6.24E-04	5.66E-04	1.41E-04	0.00E+00	8.23E-04	8.24E-04	1.00E-07	2.87E-05	109.0	9.49E-02	2.47E-03
SI21_E	0.75	127	0	1	2.76E-01	3.67E-01	4.70E-04	6.35E-04	5.76E-04	1.44E-04	0.00E+00	8.38E-04	8.39E-04	1.02E-07	2.92E-05	110.9	9.66E-02	2.51E-03
SI21_E	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.03E-05	114.8	1.00E-01	2.60E-03
SI21_E	0.75	143	0	1	3.10E-01	4.12E-01	5.28E-04	7.13E-04	6.47E-04	1.62E-04	0.00E+00	9.41E-04	9.42E-04	1.15E-07	3.28E-05	124.5	1.08E-01	2.82E-03
SI21_E	0.75	176	0	1	3.83E-01	5.09E-01	6.51E-04	8.80E-04	7.99E-04	1.99E-04	0.00E+00	1.16E-03	1.16E-03	1.42E-07	4.05E-05	153.7	1.34E-01	3.49E-03
SI21_E	0.75	189	0	1	4.12E-01	5.48E-01	7.01E-04	9.47E-04	8.59E-04	2.15E-04	0.00E+00	1.25E-03	1.25E-03	1.52E-07	4.36E-05	165.4	1.44E-01	3.75E-03
SI21_E	0.75	131	0	1	2.86E-01	3.80E-01	4.86E-04	6.57E-04	5.96E-04	1.49E-04	0.00E+00	8.67E-04	8.68E-04	1.06E-07	3.03E-05	114.8	1.00E-01	2.60E-03
SI21_E	0.75	87	0	1	1.89E-01	2.51E-01	3.22E-04	4.35E-04	3.94E-04	9.85E-05	0.00E+00	5.73E-04	5.74E-04	6.99E-08	2.00E-05	75.9	6.61E-02	1.72E-03
SI21_E	0.75	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.33E-05	0.00E+00	4.85E-04	4.86E-04	5.92E-08	1.69E-05	64.2	5.59E-02	1.46E-03
SI21_E	0.75	62	0	1	1.36E-01	1.80E-01	2.31E-04	3.12E-04	2.83E-04	7.07E-05	0.00E+00	4.12E-04	4.12E-04	5.02E-08	1.44E-05	54.5	4.75E-02	1.24E-03
SI21_E	0.75	51	0	1	1.12E-01	1.48E-01	1.90E-04	2.56E-04	2.33E-04	5.81E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.8	3.90E-02	1.01E-03
SI21_E	0.75	38	0	1	8.24E-02	1.10E-01	1.40E-04	1.89E-04	1.72E-04	4.29E-05	0.00E+00	2.50E-04	2.50E-04	3.05E-08	8.72E-06	33.1	2.88E-02	7.50E-04
SI21_W	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI21_W	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI21_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI21_W	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI21_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI21_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI21_W	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI21_W	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03
SI21_W	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI21_W	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI21_W	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI21_W	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI21_W	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI21_W	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI21_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI21_W	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI21_W	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI21_W	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI21_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI21_W	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI21_W	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI21_W	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI21_W	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI21_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI22_E	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI22_E	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI22_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI22_E	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI22_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI22_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI22_E	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI22_E	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03
SI22_E	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI22_E	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI22_E	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI22_E	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI22_E	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI22_E	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI22_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI22_E	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI22_E	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI22_E	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI22_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI22_E	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI22_E	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI22_E	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI22_E	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI22_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI22_W	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI22_W	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI22_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI22_W	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI22_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI22_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI22_W	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI22_W	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03
SI22_W	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI22_W	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI22_W	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI22_W	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI22_W	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI22_W	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI22_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI22_W	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI22_W	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI22_W	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI22_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI22_W	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI22_W	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI22_W	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI22_W	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI22_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI23_E	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI23_E	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI23_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI23_E	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI23_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI23_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI23_E	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI23_E	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03
SI23_E	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI23_E	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI23_E	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI23_E	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI23_E	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI23_E	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI23_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI23_E	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI23_E	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI23_E	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI23_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI23_E	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI23_E	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI23_E	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI23_E	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI23_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI23_W	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI23_W	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI23_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI23_W	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI23_W	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI23_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI23_W	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI23_W	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI23_W	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI23_W	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI23_W	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI23_W	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI23_W	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI23_W	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI23_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI23_W	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI23_W	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI23_W	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI23_W	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI23_W	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI23_W	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI23_W	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI23_W	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI23_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI24_E	0.75	16	0	1	3.41E-02	4.52E-02	5.79E-05	7.82E-05	7.10E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI24_E	0.75	10	0	1	2.27E-02	3.02E-02	3.86E-05	5.22E-05	4.73E-05	1.18E-05	0.00E+00	6.88E-05	6.89E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.07E-04
SI24_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI24_E	0.75	7	0	1	1.42E-02	1.88E-02	2.41E-05	3.26E-05	2.96E-05	7.39E-06	0.00E+00	4.30E-05	4.30E-05	5.25E-09	1.50E-06	5.7	4.96E-03	1.29E-04
SI24_E	0.75	9	0	1	1.99E-02	2.64E-02	3.38E-05	4.56E-05	4.14E-05	1.03E-05	0.00E+00	6.02E-05	6.03E-05	7.34E-09	2.10E-06	8.0	6.94E-03	1.81E-04
SI24_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI24_E	0.75	66	0	1	1.45E-01	1.92E-01	2.46E-04	3.33E-04	3.02E-04	7.53E-05	0.00E+00	4.39E-04	4.39E-04	5.35E-08	1.53E-05	58.1	5.06E-02	1.32E-03
SI24_E	0.75	102	0	1	2.21E-01	2.94E-01	3.76E-04	5.09E-04	4.61E-04	1.15E-04	0.00E+00	6.71E-04	6.72E-04	8.18E-08	2.34E-05	88.8	7.74E-02	2.01E-03
SI24_E	0.75	82	0	1	1.79E-01	2.38E-01	3.04E-04	4.11E-04	3.73E-04	9.31E-05	0.00E+00	5.42E-04	5.42E-04	6.61E-08	1.89E-05	71.7	6.25E-02	1.63E-03
SI24_E	0.75	68	0	1	1.48E-01	1.96E-01	2.51E-04	3.39E-04	3.08E-04	7.68E-05	0.00E+00	4.47E-04	4.48E-04	5.46E-08	1.56E-05	59.2	5.16E-02	1.34E-03
SI24_E	0.75	61	0	1	1.33E-01	1.77E-01	2.27E-04	3.06E-04	2.78E-04	6.94E-05	0.00E+00	4.04E-04	4.05E-04	4.93E-08	1.41E-05	53.5	4.66E-02	1.21E-03
SI24_E	0.75	69	0	1	1.50E-01	2.00E-01	2.56E-04	3.46E-04	3.14E-04	7.83E-05	0.00E+00	4.56E-04	4.56E-04	5.56E-08	1.59E-05	60.3	5.26E-02	1.37E-03
SI24_E	0.75	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.8	5.55E-02	1.45E-03
SI24_E	0.75	74	0	1	1.62E-01	2.15E-01	2.75E-04	3.72E-04	3.37E-04	8.42E-05	0.00E+00	4.90E-04	4.91E-04	5.98E-08	1.71E-05	64.9	5.65E-02	1.47E-03
SI24_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI24_E	0.75	83	0	1	1.82E-01	2.41E-01	3.09E-04	4.17E-04	3.79E-04	9.45E-05	0.00E+00	5.50E-04	5.51E-04	6.72E-08	1.92E-05	72.9	6.35E-02	1.65E-03
SI24_E	0.75	103	0	1	2.24E-01	2.98E-01	3.81E-04	5.15E-04	4.67E-04	1.17E-04	0.00E+00	6.79E-04	6.80E-04	8.29E-08	2.37E-05	89.9	7.84E-02	2.04E-03
SI24_E	0.75	111	0	1	2.41E-01	3.20E-01	4.10E-04	5.54E-04	5.03E-04	1.26E-04	0.00E+00	7.31E-04	7.32E-04	8.92E-08	2.55E-05	96.8	8.43E-02	2.19E-03
SI24_E	0.75	77	0	1	1.67E-01	2.22E-01	2.85E-04	3.85E-04	3.49E-04	8.72E-05	0.00E+00	5.07E-04	5.08E-04	6.19E-08	1.77E-05	67.2	5.85E-02	1.52E-03
SI24_E	0.75	51	0	1	1.11E-01	1.47E-01	1.88E-04	2.54E-04	2.31E-04	5.76E-05	0.00E+00	3.35E-04	3.36E-04	4.09E-08	1.17E-05	44.4	3.87E-02	1.01E-03
SI24_E	0.75	43	0	1	9.36E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.46E-08	9.90E-06	37.6	3.27E-02	8.52E-04
SI24_E	0.75	36	0	1	7.95E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04
SI24_E	0.75	30	0	1	6.53E-02	8.67E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.41E-08	6.90E-06	26.2	2.28E-02	5.94E-04
SI24_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI24_W	0.75	17	0	1	3.74E-02	4.97E-02	6.36E-05	8.60E-05	7.80E-05	1.95E-05	0.00E+00	1.13E-04	1.14E-04	1.38E-08	3.96E-06	15.0	1.31E-02	3.41E-04
SI24_W	0.75	11	0	1	2.50E-02	3.32E-02	4.24E-05	5.73E-05	5.20E-05	1.30E-05	0.00E+00	7.56E-05	7.57E-05	9.23E-09	2.64E-06	10.0	8.72E-03	2.27E-04
SI24_W	0.75	10	0	1	2.18E-02	2.90E-02	3.71E-05	5.02E-05	4.55E-05	1.14E-05	0.00E+00	6.62E-05	6.63E-05	8.07E-09	2.31E-06	8.8	7.63E-03	1.99E-04
SI24_W	0.75	7	0	1	1.56E-02	2.07E-02	2.65E-05	3.58E-05	3.25E-05	8.12E-06	0.00E+00	4.73E-05	4.73E-05	5.77E-09	1.65E-06	6.3	5.45E-03	1.42E-04
SI24_W	0.75	10	0	1	2.18E-02	2.90E-02	3.71E-05	5.02E-05	4.55E-05	1.14E-05	0.00E+00	6.62E-05	6.63E-05	8.07E-09	2.31E-06	8.8	7.63E-03	1.99E-04
SI24_W	0.75	24	0	1	5.30E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.82E-04
SI24_W	0.75	73	0	1	1.59E-01	2.11E-01	2.71E-04	3.66E-04	3.32E-04	8.28E-05	0.00E+00	4.82E-04	4.83E-04	5.88E-08	1.68E-05	63.8	5.56E-02	1.45E-03
SI24_W	0.75	112	0	1	2.43E-01	3.23E-01	4.14E-04	5.59E-04	5.07E-04	1.27E-04	0.00E+00	7.38E-04	7.38E-04	9.00E-08	2.57E-05	97.6	8.51E-02	2.21E-03
SI24_W	0.75	90	0	1	1.97E-01	2.61E-01	3.34E-04	4.52E-04	4.10E-04	1.02E-04	0.00E+00	5.96E-04	5.96E-04	7.27E-08	2.08E-05	78.9	6.87E-02	1.79E-03
SI24_W	0.75	75	0	1	1.62E-01	2.16E-01	2.76E-04	3.73E-04	3.38E-04	8.45E-05	0.00E+00	4.92E-04	4.92E-04	6.00E-08	1.72E-05	65.1	5.67E-02	1.48E-03
SI24_W	0.75	67	0	1	1.47E-01	1.95E-01	2.49E-04	3.37E-04	3.06E-04	7.63E-05	0.00E+00	4.44E-04	4.45E-04	5.42E-08	1.55E-05	58.8	5.13E-02	1.33E-03
SI24_W	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.61E-05	0.00E+00	5.01E-04	5.02E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI24_W	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.01E-04	3.64E-04	9.10E-05	0.00E+00	5.30E-04	5.30E-04	6.46E-08	1.85E-05	70.1	6.11E-02	1.59E-03
SI24_W	0.75	82	0	1	1.78E-01	2.36E-01	3.02E-04	4.09E-04	3.71E-04	9.26E-05	0.00E+00	5.39E-04	5.40E-04	6.58E-08	1.88E-05	71.3	6.22E-02	1.62E-03
SI24_W	0.75	85	0	1	1.84E-01	2.45E-01	3.13E-04	4.23E-04	3.84E-04	9.58E-05	0.00E+00	5.58E-04	5.58E-04	6.81E-08	1.95E-05	73.8	6.43E-02	1.67E-03
SI24_W	0.75	92	0	1	2.00E-01	2.65E-01	3.39E-04	4.59E-04	4.16E-04	1.04E-04	0.00E+00	6.05E-04	6.06E-04	7.38E-08	2.11E-05	80.1	6.98E-02	1.82E-03
SI24_W	0.75	113	0	1	2.46E-01	3.27E-01	4.19E-04	5.66E-04	5.14E-04	1.28E-04	0.00E+00	7.47E-04	7.48E-04	9.11E-08	2.61E-05	98.9	8.61E-02	2.24E-03
SI24_W	0.75	122	0	1	2.65E-01	3.52E-01	4.51E-04	6.09E-04	5.53E-04	1.38E-04	0.00E+00	8.04E-04	8.05E-04	9.81E-08	2.80E-05	106.4	9.27E-02	2.41E-03
SI24_W	0.75	85	0	1	1.84E-01	2.45E-01	3.13E-04	4.23E-04	3.84E-04	9.58E-05	0.00E+00	5.58E-04	5.58E-04	6.81E-08	1.95E-05	73.8	6.43E-02	1.67E-03
SI24_W	0.75	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.33E-05	0.00E+00	3.69E-04	3.69E-04	4.50E-08	1.29E-05	48.8	4.25E-02	1.11E-03
SI24_W	0.75	47	0	1	1.03E-01	1.37E-01	1.75E-04	2.37E-04	2.15E-04	5.36E-05	0.00E+00	3.12E-04	3.12E-04	3.81E-08	1.09E-05	41.3	3.60E-02	9.37E-04
SI24_W	0.75	40	0	1	8.74E-02	1.16E-01	1.49E-04	2.01E-04	1.82E-04	4.55E-05	0.00E+00	2.65E-04	2.65E-04	3.23E-08	9.24E-06	35.0	3.05E-02	7.95E-04
SI24_W	0.75	33	0	1	7.18E-02	9.53E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.17E-04	2.18E-04	2.65E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI24_W	0.75	24	0	1	5.30E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.82E-04
SI25_E	0.75	17	0	1	3.74E-02	4.97E-02	6.36E-05	8.60E-05	7.80E-05	1.95E-05	0.00E+00	1.13E-04	1.14E-04	1.38E-08	3.96E-06	15.0	1.31E-02	3.41E-04
SI25_E	0.75	11	0	1	2.50E-02	3.32E-02	4.24E-05	5.73E-05	5.20E-05	1.30E-05	0.00E+00	7.56E-05	7.57E-05	9.23E-09	2.64E-06	10.0	8.72E-03	2.27E-04
SI25_E	0.75	10	0	1	2.18E-02	2.90E-02	3.71E-05	5.02E-05	4.55E-05	1.14E-05	0.00E+00	6.62E-05	6.63E-05	8.07E-09	2.31E-06	8.8	7.63E-03	1.99E-04
SI25_E	0.75	7	0	1	1.56E-02	2.07E-02	2.65E-05	3.58E-05	3.25E-05	8.12E-06	0.00E+00	4.73E-05	4.73E-05	5.77E-09	1.65E-06	6.3	5.45E-03	1.42E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI25_E	0.75	10	0	1	2.18E-02	2.90E-02	3.71E-05	5.02E-05	4.55E-05	1.14E-05	0.00E+00	6.62E-05	6.63E-05	8.07E-09	2.31E-06	8.8	7.63E-03	1.99E-04
SI25_E	0.75	24	0	1	5.30E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.82E-04
SI25_E	0.75	73	0	1	1.59E-01	2.11E-01	2.71E-04	3.66E-04	3.32E-04	8.28E-05	0.00E+00	4.82E-04	4.83E-04	5.88E-08	1.68E-05	63.8	5.56E-02	1.45E-03
SI25_E	0.75	112	0	1	2.43E-01	3.23E-01	4.14E-04	5.59E-04	5.07E-04	1.27E-04	0.00E+00	7.38E-04	7.38E-04	9.00E-08	2.57E-05	97.6	8.51E-02	2.21E-03
SI25_E	0.75	90	0	1	1.97E-01	2.61E-01	3.34E-04	4.52E-04	4.10E-04	1.02E-04	0.00E+00	5.96E-04	5.96E-04	7.27E-08	2.08E-05	78.9	6.87E-02	1.79E-03
SI25_E	0.75	75	0	1	1.62E-01	2.16E-01	2.76E-04	3.73E-04	3.38E-04	8.45E-05	0.00E+00	4.92E-04	4.92E-04	6.00E-08	1.72E-05	65.1	5.67E-02	1.48E-03
SI25_E	0.75	67	0	1	1.47E-01	1.95E-01	2.49E-04	3.37E-04	3.06E-04	7.63E-05	0.00E+00	4.44E-04	4.45E-04	5.42E-08	1.55E-05	58.8	5.13E-02	1.33E-03
SI25_E	0.75	76	0	1	1.65E-01	2.20E-01	2.81E-04	3.80E-04	3.45E-04	8.61E-05	0.00E+00	5.01E-04	5.02E-04	6.11E-08	1.75E-05	66.3	5.78E-02	1.50E-03
SI25_E	0.75	80	0	1	1.75E-01	2.32E-01	2.97E-04	4.01E-04	3.64E-04	9.10E-05	0.00E+00	5.30E-04	5.30E-04	6.46E-08	1.85E-05	70.1	6.11E-02	1.59E-03
SI25_E	0.75	82	0	1	1.78E-01	2.36E-01	3.02E-04	4.09E-04	3.71E-04	9.26E-05	0.00E+00	5.39E-04	5.40E-04	6.58E-08	1.88E-05	71.3	6.22E-02	1.62E-03
SI25_E	0.75	85	0	1	1.84E-01	2.45E-01	3.13E-04	4.23E-04	3.84E-04	9.58E-05	0.00E+00	5.58E-04	5.58E-04	6.81E-08	1.95E-05	73.8	6.43E-02	1.67E-03
SI25_E	0.75	92	0	1	2.00E-01	2.65E-01	3.39E-04	4.59E-04	4.16E-04	1.04E-04	0.00E+00	6.05E-04	6.06E-04	7.38E-08	2.11E-05	80.1	6.98E-02	1.82E-03
SI25_E	0.75	113	0	1	2.46E-01	3.27E-01	4.19E-04	5.66E-04	5.14E-04	1.28E-04	0.00E+00	7.47E-04	7.48E-04	9.11E-08	2.61E-05	98.9	8.61E-02	2.24E-03
SI25_E	0.75	122	0	1	2.65E-01	3.52E-01	4.51E-04	6.09E-04	5.53E-04	1.38E-04	0.00E+00	8.04E-04	8.05E-04	9.81E-08	2.80E-05	106.4	9.27E-02	2.41E-03
SI25_E	0.75	85	0	1	1.84E-01	2.45E-01	3.13E-04	4.23E-04	3.84E-04	9.58E-05	0.00E+00	5.58E-04	5.58E-04	6.81E-08	1.95E-05	73.8	6.43E-02	1.67E-03
SI25_E	0.75	56	0	1	1.22E-01	1.62E-01	2.07E-04	2.80E-04	2.54E-04	6.33E-05	0.00E+00	3.69E-04	3.69E-04	4.50E-08	1.29E-05	48.8	4.25E-02	1.11E-03
SI25_E	0.75	47	0	1	1.03E-01	1.37E-01	1.75E-04	2.37E-04	2.15E-04	5.36E-05	0.00E+00	3.12E-04	3.12E-04	3.81E-08	1.09E-05	41.3	3.60E-02	9.37E-04
SI25_E	0.75	40	0	1	8.74E-02	1.16E-01	1.49E-04	2.01E-04	1.82E-04	4.55E-05	0.00E+00	2.65E-04	2.65E-04	3.23E-08	9.24E-06	35.0	3.05E-02	7.95E-04
SI25_E	0.75	33	0	1	7.18E-02	9.53E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.17E-04	2.18E-04	2.65E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI25_E	0.75	24	0	1	5.30E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.82E-04
SI25_W	0.75	8	0	1	1.78E-02	2.36E-02	3.03E-05	4.09E-05	3.71E-05	9.26E-06	0.00E+00	5.39E-05	5.40E-05	6.58E-09	1.88E-06	7.1	6.22E-03	1.62E-04
SI25_W	0.75	5	0	1	1.19E-02	1.58E-02	2.02E-05	2.73E-05	2.47E-05	6.18E-06	0.00E+00	3.60E-05	3.60E-05	4.39E-09	1.25E-06	4.8	4.15E-03	1.08E-04
SI25_W	0.75	5	0	1	1.04E-02	1.38E-02	1.76E-05	2.39E-05	2.16E-05	5.40E-06	0.00E+00	3.15E-05	3.15E-05	3.84E-09	1.10E-06	4.2	3.63E-03	9.44E-05
SI25_W	0.75	3	0	1	7.42E-03	9.85E-03	1.26E-05	1.70E-05	1.55E-05	3.86E-06	0.00E+00	2.25E-05	2.25E-05	2.74E-09	7.84E-07	3.0	2.59E-03	6.75E-05
SI25_W	0.75	5	0	1	1.04E-02	1.38E-02	1.76E-05	2.39E-05	2.16E-05	5.40E-06	0.00E+00	3.15E-05	3.15E-05	3.84E-09	1.10E-06	4.2	3.63E-03	9.44E-05
SI25_W	0.75	12	0	1	2.52E-02	3.35E-02	4.29E-05	5.79E-05	5.26E-05	1.31E-05	0.00E+00	7.64E-05	7.65E-05	9.32E-09	2.67E-06	10.1	8.81E-03	2.29E-04
SI25_W	0.75	35	0	1	7.56E-02	1.00E-01	1.29E-04	1.74E-04	1.58E-04	3.94E-05	0.00E+00	2.29E-04	2.29E-04	2.80E-08	8.00E-06	30.3	2.64E-02	6.88E-04
SI25_W	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI25_W	0.75	43	0	1	9.34E-02	1.24E-01	1.59E-04	2.15E-04	1.95E-04	4.86E-05	0.00E+00	2.83E-04	2.83E-04	3.45E-08	9.88E-06	37.5	3.27E-02	8.50E-04
SI25_W	0.75	35	0	1	7.71E-02	1.02E-01	1.31E-04	1.77E-04	1.61E-04	4.01E-05	0.00E+00	2.34E-04	2.34E-04	2.85E-08	8.15E-06	30.9	2.70E-02	7.02E-04
SI25_W	0.75	32	0	1	6.97E-02	9.26E-02	1.19E-04	1.60E-04	1.45E-04	3.63E-05	0.00E+00	2.11E-04	2.11E-04	2.58E-08	7.37E-06	28.0	2.44E-02	6.34E-04
SI25_W	0.75	36	0	1	7.86E-02	1.04E-01	1.34E-04	1.81E-04	1.64E-04	4.09E-05	0.00E+00	2.38E-04	2.38E-04	2.91E-08	8.31E-06	31.5	2.75E-02	7.15E-04
SI25_W	0.75	38	0	1	8.31E-02	1.10E-01	1.41E-04	1.91E-04	1.73E-04	4.32E-05	0.00E+00	2.52E-04	2.52E-04	3.07E-08	8.78E-06	33.3	2.90E-02	7.56E-04
SI25_W	0.75	39	0	1	8.45E-02	1.12E-01	1.44E-04	1.94E-04	1.76E-04	4.40E-05	0.00E+00	2.56E-04	2.56E-04	3.13E-08	8.94E-06	33.9	2.95E-02	7.69E-04
SI25_W	0.75	40	0	1	8.75E-02	1.16E-01	1.49E-04	2.01E-04	1.82E-04	4.56E-05	0.00E+00	2.65E-04	2.65E-04	3.24E-08	9.25E-06	35.1	3.06E-02	7.96E-04
SI25_W	0.75	44	0	1	9.49E-02	1.26E-01	1.61E-04	2.18E-04	1.98E-04	4.94E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.63E-04
SI25_W	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.55E-04	4.33E-08	1.24E-05	47.0	4.09E-02	1.07E-03
SI25_W	0.75	58	0	1	1.26E-01	1.67E-01	2.14E-04	2.90E-04	2.63E-04	6.56E-05	0.00E+00	3.82E-04	3.82E-04	4.66E-08	1.33E-05	50.6	4.41E-02	1.15E-03
SI25_W	0.75	40	0	1	8.75E-02	1.16E-01	1.49E-04	2.01E-04	1.82E-04	4.56E-05	0.00E+00	2.65E-04	2.65E-04	3.24E-08	9.25E-06	35.1	3.06E-02	7.96E-04
SI25_W	0.75	27	0	1	5.78E-02	7.68E-02	9.83E-05	1.33E-04	1.21E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.12E-06	23.2	2.02E-02	5.26E-04
SI25_W	0.75	22	0	1	4.89E-02	6.50E-02	8.32E-05	1.12E-04	1.02E-04	2.55E-05	0.00E+00	1.48E-04	1.48E-04	1.81E-08	5.17E-06	19.6	1.71E-02	4.45E-04
SI25_W	0.75	19	0	1	4.15E-02	5.52E-02	7.06E-05	9.54E-05	8.66E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.39E-06	16.7	1.45E-02	3.78E-04
SI25_W	0.75	16	0	1	3.41E-02	4.53E-02	5.80E-05	7.84E-05	7.11E-05	1.78E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.61E-06	13.7	1.19E-02	3.10E-04
SI25_W	0.75	12	0	1	2.52E-02	3.35E-02	4.29E-05	5.79E-05	5.26E-05	1.31E-05	0.00E+00	7.64E-05	7.65E-05	9.32E-09	2.67E-06	10.1	8.81E-03	2.29E-04
SI26_E	0.52	6	0	1	1.24E-02	1.64E-02	2.10E-05	2.84E-05	2.58E-05	6.44E-06	0.00E+00	3.75E-05	3.75E-05	4.57E-09	1.31E-06	5.0	4.32E-03	1.13E-04
SI26_E	0.52	4	0	1	8.25E-03	1.10E-02	1.40E-05	1.90E-05	1.72E-05	4.29E-06	0.00E+00	2.50E-05	2.50E-05	3.05E-09	8.72E-07	3.3	2.88E-03	7.50E-05
SI26_E	0.52	3	0	1	7.22E-03	9.59E-03	1.23E-05	1.66E-05	1.50E-05	3.76E-06	0.00E+00	2.19E-05	2.19E-05	2.67E-09	7.63E-07	2.9	2.52E-03	6.57E-05
SI26_E	0.52	2	0	1	5.16E-03	6.85E-03	8.76E-06	1.18E-05	1.07E-05	2.68E-06	0.00E+00	1.56E-05	1.56E-05	1.91E-09	5.45E-07	2.1	1.80E-03	4.69E-05
SI26_E	0.52	3	0	1	7.22E-03	9.59E-03	1.23E-05	1.66E-05	1.50E-05	3.76E-06	0.00E+00	2.19E-05	2.19E-05	2.67E-09	7.63E-07	2.9	2.52E-03	6.57E-05
SI26_E	0.52	8	0	1	1.75E-02	2.33E-02	2.98E-05	4.03E-05	3.65E-05	9.13E-06	0.00E+00	5.31E-05	5.32E-05	6.48E-09	1.85E-06	7.0	6.13E-03	1.59E-04
SI26_E	0.52	24	0	1	5.26E-02	6.99E-02	8.94E-05	1.21E-04	1.10E-04	2.74E-05	0.00E+00	1.59E-04	1.60E-04	1.94E-08	5.56E-06	21.1	1.84E-02	4.78E-04
SI26_E	0.52	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.3	2.81E-02	7.32E-04
SI26_E	0.52	30	0	1	6.50E-02	8.63E-02	1.10E-04	1.49E-04	1.35E-04	3.38E-05	0.00E+00	1.97E-04	1.97E-04	2.40E-08	6.87E-06	26.1	2.27E-02	5.91E-04
SI26_E	0.52	25	0	1	5.36E-02	7.12E-02	9.12E-05	1.23E-04	1.12E-04	2.79E-05	0.00E+00	1.63E-04	1.63E-04	1.98E-08	5.67E-06	21.5	1.87E-02	4.88E-04
SI26_E	0.52	22	0	1	4.85E-02	6.44E-02	8.24E-05	1.11E-04	1.01E-04	2.52E-05	0.00E+00	1.47E-04	1.47E-04	1.79E-08	5.12E-06	19.4	1.69E-02	4.41E-04
SI26_E	0.52	25	0	1	5.46E-02	7.26E-02	9.29E-05	1.26E-04	1.14E-04	2.84E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.78E-06	21.9	1.91E-02	4.97E-04
SI26_E	0.52	27	0	1	5.77E-02	7.67E-02	9.82E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI26_E	0.52	27	0	1	5.88E-02	7.81E-02	9.99E-05	1.35E-04	1.23E-04	3.06E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.21E-06	23.6	2.05E-02	5.35E-04
SI26_E	0.52	28	0	1	6.08E-02	8.08E-02	1.03E-04	1.40E-04	1.27E-04	3.17E-05	0.00E+00	1.84E-04	1.85E-04	2.25E-08	6.43E-06	24.4	2.13E-02	5.53E-04
SI26_E	0.52	30	0	1	6.60E-02	8.77E-02	1.12E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.00E-04	2.00E-04	2.44E-08	6.98E-06	26.5	2.31E-02	6.00E-04
SI26_E	0.52	37	0	1	8.15E-02	1.08E-01	1.38E-04	1.87E-04	1.70E-04	4.24E-05	0.00E+00	2.47E-04	2.47E-04	3.01E-08	8.61E-06	32.7	2.85E-02	7.41E-04
SI26_E	0.52	40	0	1	8.76E-02	1.16E-01	1.49E-04	2.01E-04	1.83E-04	4.56E-05	0.00E+00	2.66E-04	2.66E-04	3.24E-08	9.27E-06	35.2	3.06E-02	7.97E-04
SI26_E	0.52	28	0	1	6.08E-02	8.08E-02	1.03E-04	1.40E-04	1.27E-04	3.17E-05	0.00E+00	1.84E-04	1.85E-04	2.25E-08	6.43E-06	24.4	2.13E-02	5.53E-04
SI26_E	0.52	18	0	1	4.02E-02	5.34E-02	6.84E-05	9.24E-05	8.38E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.49E-08	4.25E-06	16.1	1.41E-02	3.66E-04
SI26_E	0.52	16	0	1	3.40E-02	4.52E-02	5.78E-05	7.82E-05	7.09E-05	1.77E-05	0.00E+00	1.03E-04	1.03E-04	1.26E-08	3.60E-06	13.7	1.19E-02	3.10E-04
SI26_E	0.52	13	0	1	2.89E-02	3.84E-02	4.91E-05	6.63E-05	6.02E-05	1.50E-05	0.00E+00	8.75E-05	8.76E-05	1.07E-08	3.05E-06	11.6	1.01E-02	2.63E-04
SI26_E	0.52	11	0	1	2.37E-02	3.15E-02	4.03E-05	5.45E-05	4.94E-05	1.23E-05	0.00E+00	7.19E-05	7.19E-05	8.77E-09	2.51E-06	9.5	8.29E-03	2.16E-04
SI26_E	0.52	8	0	1	1.75E-02	2.33E-02	2.98E-05	4.03E-05	3.65E-05	9.13E-06	0.00E+00	5.31E-05	5.32E-05	6.48E-09	1.85E-06	7.0	6.13E-03	1.59E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI26_W	0.49	8	0	1	1.79E-02	2.38E-02	3.04E-05	4.11E-05	3.73E-05	9.31E-06	0.00E+00	5.42E-05	5.43E-05	6.62E-09	1.89E-06	7.2	6.25E-03	1.63E-04
SI26_W	0.49	5	0	1	1.19E-02	1.58E-02	2.03E-05	2.74E-05	2.49E-05	6.21E-06	0.00E+00	3.62E-05	3.62E-05	4.41E-09	1.26E-06	4.8	4.17E-03	1.09E-04
SI26_W	0.49	5	0	1	1.04E-02	1.39E-02	1.77E-05	2.40E-05	2.18E-05	5.43E-06	0.00E+00	3.16E-05	3.17E-05	3.86E-09	1.10E-06	4.2	3.65E-03	9.49E-05
SI26_W	0.49	3	0	1	7.45E-03	9.90E-03	1.27E-05	1.71E-05	1.55E-05	3.88E-06	0.00E+00	2.26E-05	2.26E-05	2.76E-09	7.88E-07	3.0	2.61E-03	6.78E-05
SI26_W	0.49	5	0	1	1.04E-02	1.39E-02	1.77E-05	2.40E-05	2.18E-05	5.43E-06	0.00E+00	3.16E-05	3.17E-05	3.86E-09	1.10E-06	4.2	3.65E-03	9.49E-05
SI26_W	0.49	12	0	1	2.53E-02	3.37E-02	4.31E-05	5.82E-05	5.28E-05	1.32E-05	0.00E+00	7.68E-05	7.69E-05	9.37E-09	2.68E-06	10.2	8.86E-03	2.31E-04
SI26_W	0.49	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI26_W	0.49	53	0	1	1.16E-01	1.54E-01	1.98E-04	2.67E-04	2.42E-04	6.05E-05	0.00E+00	3.52E-04	3.53E-04	4.30E-08	1.23E-05	46.7	4.06E-02	1.06E-03
SI26_W	0.49	43	0	1	9.39E-02	1.25E-01	1.60E-04	2.16E-04	1.96E-04	4.89E-05	0.00E+00	2.85E-04	2.85E-04	3.47E-08	9.93E-06	37.7	3.28E-02	8.55E-04
SI26_W	0.49	36	0	1	7.75E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.05E-04
SI26_W	0.49	32	0	1	7.01E-02	9.31E-02	1.19E-04	1.61E-04	1.46E-04	3.65E-05	0.00E+00	2.12E-04	2.13E-04	2.59E-08	7.41E-06	28.1	2.45E-02	6.38E-04
SI26_W	0.49	36	0	1	7.90E-02	1.05E-01	1.34E-04	1.82E-04	1.65E-04	4.11E-05	0.00E+00	2.40E-04	2.40E-04	2.92E-08	8.36E-06	31.7	2.76E-02	7.19E-04
SI26_W	0.49	38	0	1	8.35E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.53E-04	3.09E-08	8.83E-06	33.5	2.92E-02	7.60E-04
SI26_W	0.49	39	0	1	8.50E-02	1.13E-01	1.44E-04	1.95E-04	1.77E-04	4.42E-05	0.00E+00	2.58E-04	2.58E-04	3.14E-08	8.99E-06	34.1	2.97E-02	7.73E-04
SI26_W	0.49	40	0	1	8.80E-02	1.17E-01	1.50E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.67E-04	2.67E-04	3.25E-08	9.30E-06	35.3	3.07E-02	8.00E-04
SI26_W	0.49	44	0	1	9.54E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.90E-04	3.53E-08	1.01E-05	38.3	3.34E-02	8.68E-04
SI26_W	0.49	54	0	1	1.18E-01	1.56E-01	2.00E-04	2.71E-04	2.46E-04	6.13E-05	0.00E+00	3.57E-04	3.57E-04	4.36E-08	1.25E-05	47.3	4.12E-02	1.07E-03
SI26_W	0.49	58	0	1	1.27E-01	1.68E-01	2.15E-04	2.91E-04	2.64E-04	6.60E-05	0.00E+00	3.84E-04	3.85E-04	4.69E-08	1.34E-05	50.8	4.43E-02	1.15E-03
SI26_W	0.49	40	0	1	8.80E-02	1.17E-01	1.50E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.67E-04	2.67E-04	3.25E-08	9.30E-06	35.3	3.07E-02	8.00E-04
SI26_W	0.49	27	0	1	5.81E-02	7.72E-02	9.89E-05	1.34E-04	1.21E-04	3.03E-05	0.00E+00	1.76E-04	1.76E-04	2.15E-08	6.15E-06	23.3	2.03E-02	5.29E-04
SI26_W	0.49	23	0	1	4.92E-02	6.54E-02	8.37E-05	1.13E-04	1.03E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.48E-04
SI26_W	0.49	19	0	1	4.17E-02	5.55E-02	7.10E-05	9.59E-05	8.70E-05	2.17E-05	0.00E+00	1.27E-04	1.27E-04	1.54E-08	4.41E-06	16.7	1.46E-02	3.80E-04
SI26_W	0.49	16	0	1	3.43E-02	4.56E-02	5.83E-05	7.88E-05	7.15E-05	1.79E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.63E-06	13.8	1.20E-02	3.12E-04
SI26_W	0.49	12	0	1	2.53E-02	3.37E-02	4.31E-05	5.82E-05	5.28E-05	1.32E-05	0.00E+00	7.68E-05	7.69E-05	9.37E-09	2.68E-06	10.2	8.86E-03	2.31E-04
SI27_E	0.61	10	0	1	2.26E-02	3.01E-02	3.85E-05	5.20E-05	4.72E-05	1.18E-05	0.00E+00	6.86E-05	6.87E-05	8.37E-09	2.39E-06	9.1	7.91E-03	2.06E-04
SI27_E	0.61	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.47E-05	3.14E-05	7.85E-06	0.00E+00	4.57E-05	4.58E-05	5.58E-09	1.59E-06	6.1	5.27E-03	1.37E-04
SI27_E	0.61	6	0	1	1.32E-02	1.75E-02	2.24E-05	3.03E-05	2.75E-05	6.87E-06	0.00E+00	4.00E-05	4.00E-05	4.88E-09	1.40E-06	5.3	4.61E-03	1.20E-04
SI27_E	0.61	4	0	1	9.43E-03	1.25E-02	1.60E-05	2.17E-05	1.97E-05	4.91E-06	0.00E+00	2.86E-05	2.86E-05	3.49E-09	9.97E-07	3.8	3.30E-03	8.58E-05
SI27_E	0.61	6	0	1	1.32E-02	1.75E-02	2.24E-05	3.03E-05	2.75E-05	6.87E-06	0.00E+00	4.00E-05	4.00E-05	4.88E-09	1.40E-06	5.3	4.61E-03	1.20E-04
SI27_E	0.61	15	0	1	3.21E-02	4.26E-02	5.45E-05	7.37E-05	6.68E-05	1.67E-05	0.00E+00	9.72E-05	9.73E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI27_E	0.61	44	0	1	9.62E-02	1.28E-01	1.63E-04	2.21E-04	2.00E-04	5.01E-05	0.00E+00	2.91E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI27_E	0.61	68	0	1	1.47E-01	1.95E-01	2.50E-04	3.38E-04	3.07E-04	7.66E-05	0.00E+00	4.46E-04	4.46E-04	5.44E-08	1.56E-05	59.0	5.14E-02	1.34E-03
SI27_E	0.61	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.7	4.15E-02	1.08E-03
SI27_E	0.61	45	0	1	9.81E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.63E-08	1.04E-05	39.3	3.43E-02	8.92E-04
SI27_E	0.61	41	0	1	8.86E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.61E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.37E-06	35.6	3.10E-02	8.06E-04
SI27_E	0.61	46	0	1	9.99E-02	1.33E-01	1.70E-04	2.30E-04	2.08E-04	5.20E-05	0.00E+00	3.03E-04	3.03E-04	3.70E-08	1.06E-05	40.1	3.49E-02	9.09E-04
SI27_E	0.61	49	0	1	1.06E-01	1.40E-01	1.80E-04	2.43E-04	2.20E-04	5.50E-05	0.00E+00	3.20E-04	3.20E-04	3.90E-08	1.12E-05	42.4	3.69E-02	9.61E-04
SI27_E	0.61	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI27_E	0.61	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.56E-04	2.32E-04	5.79E-05	0.00E+00	3.37E-04	3.38E-04	4.11E-08	1.18E-05	44.6	3.89E-02	1.01E-03
SI27_E	0.61	55	0	1	1.21E-01	1.60E-01	2.05E-04	2.77E-04	2.52E-04	6.28E-05	0.00E+00	3.66E-04	3.66E-04	4.46E-08	1.28E-05	48.4	4.22E-02	1.10E-03
SI27_E	0.61	68	0	1	1.49E-01	1.98E-01	2.53E-04	3.42E-04	3.11E-04	7.76E-05	0.00E+00	4.51E-04	4.52E-04	5.51E-08	1.58E-05	59.8	5.21E-02	1.36E-03
SI27_E	0.61	74	0	1	1.60E-01	2.13E-01	2.72E-04	3.68E-04	3.34E-04	8.34E-05	0.00E+00	4.86E-04	4.86E-04	5.93E-08	1.69E-05	64.3	5.60E-02	1.46E-03
SI27_E	0.61	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.56E-04	2.32E-04	5.79E-05	0.00E+00	3.37E-04	3.38E-04	4.11E-08	1.18E-05	44.6	3.89E-02	1.01E-03
SI27_E	0.61	34	0	1	7.35E-02	9.77E-02	1.25E-04	1.69E-04	1.53E-04	3.83E-05	0.00E+00	2.23E-04	2.23E-04	2.72E-08	7.78E-06	29.5	2.57E-02	6.69E-04
SI27_E	0.61	29	0	1	6.22E-02	8.27E-02	1.06E-04	1.43E-04	1.30E-04	3.24E-05	0.00E+00	1.89E-04	1.89E-04	2.30E-08	6.58E-06	25.0	2.17E-02	5.66E-04
SI27_E	0.61	24	0	1	5.28E-02	7.01E-02	8.98E-05	1.21E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.95E-08	5.58E-06	21.2	1.85E-02	4.80E-04
SI27_E	0.61	20	0	1	4.34E-02	5.76E-02	7.37E-05	9.97E-05	9.04E-05	2.26E-05	0.00E+00	1.31E-04	1.32E-04	1.60E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI27_E	0.61	15	0	1	3.21E-02	4.26E-02	5.45E-05	7.37E-05	6.68E-05	1.67E-05	0.00E+00	9.72E-05	9.73E-05	1.19E-08	3.39E-06	12.9	1.12E-02	2.92E-04
SI27_W	0.66	11	0	1	2.44E-02	3.25E-02	4.16E-05	5.62E-05	5.10E-05	1.27E-05	0.00E+00	7.41E-05	7.42E-05	9.04E-09	2.58E-06	9.8	8.54E-03	2.22E-04
SI27_W	0.66	7	0	1	1.63E-02	2.17E-02	2.77E-05	3.74E-05	3.40E-05	8.48E-06	0.00E+00	4.94E-05	4.94E-05	6.03E-09	1.72E-06	6.5	5.70E-03	1.48E-04
SI27_W	0.66	7	0	1	1.43E-02	1.89E-02	2.42E-05	3.28E-05	2.97E-05	7.42E-06	0.00E+00	4.32E-05	4.33E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI27_W	0.66	5	0	1	1.02E-02	1.35E-02	1.73E-05	2.34E-05	2.12E-05	5.30E-06	0.00E+00	3.09E-05	3.09E-05	3.77E-09	1.08E-06	4.1	3.56E-03	9.27E-05
SI27_W	0.66	7	0	1	1.43E-02	1.89E-02	2.42E-05	3.28E-05	2.97E-05	7.42E-06	0.00E+00	4.32E-05	4.33E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI27_W	0.66	16	0	1	3.46E-02	4.60E-02	5.89E-05	7.96E-05	7.22E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI27_W	0.66	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.41E-05	0.00E+00	3.15E-04	3.15E-04	3.84E-08	1.10E-05	41.7	3.63E-02	9.45E-04
SI27_W	0.66	73	0	1	1.59E-01	2.11E-01	2.70E-04	3.65E-04	3.31E-04	8.27E-05	0.00E+00	4.82E-04	4.82E-04	5.88E-08	1.68E-05	63.7	5.55E-02	1.45E-03
SI27_W	0.66	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.95E-04	2.68E-04	6.68E-05	0.00E+00	3.89E-04	3.89E-04	4.75E-08	1.36E-05	51.5	4.49E-02	1.17E-03
SI27_W	0.66	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.43E-04	2.21E-04	5.51E-05	0.00E+00	3.21E-04	3.21E-04	3.92E-08	1.12E-05	42.5	3.70E-02	9.64E-04
SI27_W	0.66	44	0	1	9.57E-02	1.27E-01	1.63E-04	2.20E-04	2.00E-04	4.98E-05	0.00E+00	2.90E-04	2.90E-04	3.54E-08	1.01E-05	38.4	3.35E-02	8.71E-04
SI27_W	0.66	50	0	1	1.08E-01	1.43E-01	1.84E-04	2.48E-04	2.25E-04	5.62E-05	0.00E+00	3.27E-04	3.28E-04	3.99E-08	1.14E-05	43.3	3.77E-02	9.82E-04
SI27_W	0.66	52	0	1	1.14E-01	1.52E-01	1.94E-04	2.62E-04	2.38E-04	5.94E-05	0.00E+00	3.46E-04	3.46E-04	4.22E-08	1.21E-05	45.8	3.99E-02	1.04E-03
SI27_W	0.66	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.67E-04	2.42E-04	6.04E-05	0.00E+00	3.52E-04	3.52E-04	4.29E-08	1.23E-05	46.6	4.06E-02	1.06E-03
SI27_W	0.66	55	0	1	1.20E-01	1.60E-01	2.04E-04	2.76E-04	2.51E-04	6.26E-05	0.00E+00	3.64E-04	3.65E-04	4.44E-08	1.27E-05	48.2	4.20E-02	1.09E-03
SI27_W	0.66	60	0	1	1.30E-01	1.73E-01	2.22E-04	3.00E-04	2.72E-04	6.79E-05	0.00E+00	3.95E-04	3.96E-04	4.82E-08	1.38E-05	52.3	4.56E-02	1.19E-03
SI27_W	0.66	74	0	1	1.61E-01	2.14E-01	2.74E-04	3.70E-04	3.35E-04	8.38E-05	0.00E+00	4.88E-04	4.88E-04	5.95E-08	1.70E-05	64.6	5.62E-02	1.46E-03
SI27_W	0.66	80	0	1	1.73E-01	2.30E-01	2.94E-04	3.98E-04	3.61E-04	9.01E-05	0.00E+00	5.25E-04	5.25E-04	6.40E-08	1.83E-05	69.5	6.05E-02	1.58E-03
SI27_W	0.66	55	0	1	1.20E-01	1.60E-01	2.04E-04	2.76E-04	2.51E-04	6.26E-05	0.00E+00	3.64E-04	3.65E-04	4.44E-08	1.27E-05	48.2	4.20E-02	1.09E-03
SI27_W	0.66	36	0	1	7.94E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.14E-05	0.00E+00	2.41E-04	2.41E-04	2.94E-08	8.40E-06	31.9	2.78E-02	7.23E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI27_W	0.66	31	0	1	6.72E-02	8.93E-02	1.14E-04	1.54E-04	1.40E-04	3.50E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.11E-06	27.0	2.35E-02	6.12E-04
SI27_W	0.66	26	0	1	5.70E-02	7.58E-02	9.70E-05	1.31E-04	1.19E-04	2.97E-05	0.00E+00	1.73E-04	1.73E-04	2.11E-08	6.03E-06	22.9	1.99E-02	5.19E-04
SI27_W	0.66	22	0	1	4.69E-02	6.22E-02	7.97E-05	1.08E-04	9.77E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.73E-08	4.95E-06	18.8	1.64E-02	4.26E-04
SI27_W	0.66	16	0	1	3.46E-02	4.60E-02	5.89E-05	7.96E-05	7.22E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI28_E	0.55	9	0	1	2.05E-02	2.72E-02	3.48E-05	4.70E-05	4.27E-05	1.07E-05	0.00E+00	6.20E-05	6.21E-05	7.57E-09	2.16E-06	8.2	7.15E-03	1.86E-04
SI28_E	0.55	6	0	1	1.36E-02	1.81E-02	2.32E-05	3.13E-05	2.84E-05	7.10E-06	0.00E+00	4.13E-05	4.14E-05	5.04E-09	1.44E-06	5.5	4.77E-03	1.24E-04
SI28_E	0.55	5	0	1	1.19E-02	1.59E-02	2.03E-05	2.74E-05	2.49E-05	6.21E-06	0.00E+00	3.62E-05	3.62E-05	4.41E-09	1.26E-06	4.8	4.17E-03	1.09E-04
SI28_E	0.55	4	0	1	8.52E-03	1.13E-02	1.45E-05	1.96E-05	1.78E-05	4.44E-06	0.00E+00	2.58E-05	2.59E-05	3.15E-09	9.01E-07	3.4	2.98E-03	7.76E-05
SI28_E	0.55	5	0	1	1.19E-02	1.59E-02	2.03E-05	2.74E-05	2.49E-05	6.21E-06	0.00E+00	3.62E-05	3.62E-05	4.41E-09	1.26E-06	4.8	4.17E-03	1.09E-04
SI28_E	0.55	13	0	1	2.90E-02	3.85E-02	4.93E-05	6.66E-05	6.04E-05	1.51E-05	0.00E+00	8.78E-05	8.79E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.64E-04
SI28_E	0.55	40	0	1	8.70E-02	1.16E-01	1.48E-04	2.00E-04	1.81E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.19E-06	34.9	3.04E-02	7.91E-04
SI28_E	0.55	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.77E-04	6.92E-05	0.00E+00	4.03E-04	4.03E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI28_E	0.55	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.59E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.75E-02	9.77E-04
SI28_E	0.55	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.37E-06	35.6	3.10E-02	8.07E-04
SI28_E	0.55	37	0	1	8.01E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.17E-05	0.00E+00	2.43E-04	2.43E-04	2.96E-08	8.47E-06	32.1	2.80E-02	7.29E-04
SI28_E	0.55	42	0	1	9.04E-02	1.20E-01	1.54E-04	2.08E-04	1.88E-04	4.70E-05	0.00E+00	2.74E-04	2.74E-04	3.34E-08	9.55E-06	36.3	3.16E-02	8.22E-04
SI28_E	0.55	44	0	1	9.55E-02	1.27E-01	1.62E-04	2.19E-04	1.99E-04	4.97E-05	0.00E+00	2.89E-04	2.90E-04	3.53E-08	1.01E-05	38.3	3.34E-02	8.69E-04
SI28_E	0.55	45	0	1	9.72E-02	1.29E-01	1.65E-04	2.23E-04	2.03E-04	5.06E-05	0.00E+00	2.95E-04	2.95E-04	3.59E-08	1.03E-05	39.0	3.40E-02	8.84E-04
SI28_E	0.55	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.24E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.4	3.52E-02	9.15E-04
SI28_E	0.55	50	0	1	1.09E-01	1.45E-01	1.86E-04	2.51E-04	2.27E-04	5.68E-05	0.00E+00	3.31E-04	3.31E-04	4.03E-08	1.15E-05	43.8	3.81E-02	9.93E-04
SI28_E	0.55	62	0	1	1.35E-01	1.79E-01	2.29E-04	3.09E-04	2.81E-04	7.01E-05	0.00E+00	4.08E-04	4.09E-04	4.98E-08	1.42E-05	54.0	4.71E-02	1.23E-03
SI28_E	0.55	67	0	1	1.45E-01	1.93E-01	2.46E-04	3.33E-04	3.02E-04	7.54E-05	0.00E+00	4.39E-04	4.40E-04	5.36E-08	1.53E-05	58.1	5.07E-02	1.32E-03
SI28_E	0.55	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.31E-04	2.10E-04	5.24E-05	0.00E+00	3.05E-04	3.05E-04	3.72E-08	1.06E-05	40.4	3.52E-02	9.15E-04
SI28_E	0.55	31	0	1	6.65E-02	8.83E-02	1.13E-04	1.53E-04	1.39E-04	3.46E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.03E-06	26.7	2.32E-02	6.05E-04
SI28_E	0.55	26	0	1	5.63E-02	7.47E-02	9.57E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.71E-04	1.71E-04	2.08E-08	5.95E-06	22.6	1.97E-02	5.12E-04
SI28_E	0.55	22	0	1	4.77E-02	6.34E-02	8.12E-05	1.10E-04	9.95E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.05E-06	19.2	1.67E-02	4.34E-04
SI28_E	0.55	18	0	1	3.92E-02	5.21E-02	6.67E-05	9.01E-05	8.17E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.15E-06	15.7	1.37E-02	3.57E-04
SI28_E	0.55	13	0	1	2.90E-02	3.85E-02	4.93E-05	6.66E-05	6.04E-05	1.51E-05	0.00E+00	8.78E-05	8.79E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.64E-04
SI28_W	0.63	7	0	1	1.51E-02	2.01E-02	2.57E-05	3.47E-05	3.15E-05	7.87E-06	0.00E+00	4.58E-05	4.59E-05	5.59E-09	1.60E-06	6.1	5.28E-03	1.38E-04
SI28_W	0.63	5	0	1	1.01E-02	1.34E-02	1.71E-05	2.32E-05	2.10E-05	5.25E-06	0.00E+00	3.05E-05	3.06E-05	3.73E-09	1.07E-06	4.0	3.52E-03	9.17E-05
SI28_W	0.63	4	0	1	8.82E-03	1.17E-02	1.50E-05	2.03E-05	1.84E-05	4.59E-06	0.00E+00	2.67E-05	2.68E-05	3.26E-09	9.32E-07	3.5	3.08E-03	8.02E-05
SI28_W	0.63	3	0	1	6.30E-03	8.37E-03	1.07E-05	1.45E-05	1.31E-05	3.28E-06	0.00E+00	1.91E-05	1.91E-05	2.33E-09	6.66E-07	2.5	2.20E-03	5.73E-05
SI28_W	0.63	4	0	1	8.82E-03	1.17E-02	1.50E-05	2.03E-05	1.84E-05	4.59E-06	0.00E+00	2.67E-05	2.68E-05	3.26E-09	9.32E-07	3.5	3.08E-03	8.02E-05
SI28_W	0.63	10	0	1	2.14E-02	2.85E-02	3.64E-05	4.92E-05	4.46E-05	1.12E-05	0.00E+00	6.49E-05	6.50E-05	7.92E-09	2.26E-06	8.6	7.49E-03	1.95E-04
SI28_W	0.63	30	0	1	6.43E-02	8.54E-02	1.09E-04	1.48E-04	1.34E-04	3.35E-05	0.00E+00	1.95E-04	1.95E-04	2.38E-08	6.79E-06	25.8	2.25E-02	5.85E-04
SI28_W	0.63	45	0	1	9.83E-02	1.31E-01	1.67E-04	2.26E-04	2.05E-04	5.12E-05	0.00E+00	2.98E-04	2.98E-04	3.63E-08	1.04E-05	39.4	3.43E-02	8.94E-04
SI28_W	0.63	36	0	1	7.94E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.13E-05	0.00E+00	2.41E-04	2.41E-04	2.93E-08	8.39E-06	31.8	2.77E-02	7.22E-04
SI28_W	0.63	30	0	1	6.55E-02	8.70E-02	1.11E-04	1.51E-04	1.37E-04	3.41E-05	0.00E+00	1.99E-04	1.99E-04	2.42E-08	6.93E-06	26.3	2.29E-02	5.96E-04
SI28_W	0.63	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI28_W	0.63	31	0	1	6.68E-02	8.87E-02	1.14E-04	1.53E-04	1.39E-04	3.48E-05	0.00E+00	2.02E-04	2.03E-04	2.47E-08	7.06E-06	26.8	2.33E-02	6.07E-04
SI28_W	0.63	32	0	1	7.06E-02	9.37E-02	1.20E-04	1.62E-04	1.47E-04	3.67E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.46E-06	28.3	2.47E-02	6.42E-04
SI28_W	0.63	33	0	1	7.18E-02	9.54E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.59E-06	28.8	2.51E-02	6.53E-04
SI28_W	0.63	34	0	1	7.43E-02	9.88E-02	1.26E-04	1.71E-04	1.55E-04	3.87E-05	0.00E+00	2.25E-04	2.26E-04	2.75E-08	7.86E-06	29.8	2.60E-02	6.76E-04
SI28_W	0.63	37	0	1	8.06E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.20E-05	0.00E+00	2.44E-04	2.45E-04	2.98E-08	8.53E-06	32.3	2.82E-02	7.34E-04
SI28_W	0.63	46	0	1	9.95E-02	1.32E-01	1.69E-04	2.29E-04	2.07E-04	5.18E-05	0.00E+00	3.02E-04	3.02E-04	3.68E-08	1.05E-05	39.9	3.48E-02	9.05E-04
SI28_W	0.63	49	0	1	1.07E-01	1.42E-01	1.82E-04	2.46E-04	2.23E-04	5.58E-05	0.00E+00	3.25E-04	3.25E-04	3.96E-08	1.13E-05	43.0	3.74E-02	9.74E-04
SI28_W	0.63	34	0	1	7.43E-02	9.88E-02	1.26E-04	1.71E-04	1.55E-04	3.87E-05	0.00E+00	2.25E-04	2.26E-04	2.75E-08	7.86E-06	29.8	2.60E-02	6.76E-04
SI28_W	0.63	23	0	1	4.91E-02	6.53E-02	8.35E-05	1.13E-04	1.02E-04	2.56E-05	0.00E+00	1.49E-04	1.49E-04	1.82E-08	5.20E-06	19.7	1.72E-02	4.47E-04
SI28_W	0.63	19	0	1	4.16E-02	5.52E-02	7.07E-05	9.55E-05	8.67E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.54E-08	4.40E-06	16.7	1.45E-02	3.78E-04
SI28_W	0.63	16	0	1	3.53E-02	4.69E-02	6.00E-05	8.11E-05	7.35E-05	1.84E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.73E-06	14.2	1.23E-02	3.21E-04
SI28_W	0.63	13	0	1	2.90E-02	3.85E-02	4.93E-05	6.66E-05	6.04E-05	1.51E-05	0.00E+00	8.78E-05	8.79E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.64E-04
SI28_W	0.63	10	0	1	2.14E-02	2.85E-02	3.64E-05	4.92E-05	4.46E-05	1.12E-05	0.00E+00	6.49E-05	6.50E-05	7.92E-09	2.26E-06	8.6	7.49E-03	1.95E-04
SI29_E	0.75	8	0	1	1.80E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.39E-06	0.00E+00	5.47E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI29_E	0.75	6	0	1	1.20E-02	1.60E-02	2.04E-05	2.76E-05	2.51E-05	6.26E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.20E-03	1.09E-04
SI29_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI29_E	0.75	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI29_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI29_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI29_E	0.75	35	0	1	7.67E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.99E-05	0.00E+00	2.32E-04	2.33E-04	2.83E-08	8.11E-06	30.8	2.68E-02	6.97E-04
SI29_E	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.34E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI29_E	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI29_E	0.75	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI29_E	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI29_E	0.75	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.41E-04	2.42E-04	2.95E-08	8.42E-06	32.0	2.78E-02	7.25E-04
SI29_E	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI29_E	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	2.99E-02	7.80E-04
SI29_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI29_E	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI29_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.6	4.15E-02	1.08E-03
SI29_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.66E-04	6.65E-05	0.00E+00	3.87E-04	3.88E-04	4.72E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI29_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI29_E	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI29_E	0.75	23	0	1	4.96E-02	6.59E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI29_E	0.75	19	0	1	4.21E-02	5.59E-02	7.16E-05	9.67E-05	8.77E-05	2.19E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI29_E	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI29_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI29_W	0.75	8	0	1	1.80E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.39E-06	0.00E+00	5.47E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI29_W	0.75	6	0	1	1.20E-02	1.60E-02	2.04E-05	2.76E-05	2.51E-05	6.26E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.20E-03	1.09E-04
SI29_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI29_W	0.75	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI29_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI29_W	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI29_W	0.75	35	0	1	7.67E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.99E-05	0.00E+00	2.32E-04	2.33E-04	2.83E-08	8.11E-06	30.8	2.68E-02	6.97E-04
SI29_W	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.34E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI29_W	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI29_W	0.75	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI29_W	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI29_W	0.75	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.41E-04	2.42E-04	2.95E-08	8.42E-06	32.0	2.78E-02	7.25E-04
SI29_W	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI29_W	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	2.99E-02	7.80E-04
SI29_W	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI29_W	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI29_W	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.6	4.15E-02	1.08E-03
SI29_W	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.66E-04	6.65E-05	0.00E+00	3.87E-04	3.88E-04	4.72E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI29_W	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI29_W	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI29_W	0.75	23	0	1	4.96E-02	6.59E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI29_W	0.75	19	0	1	4.21E-02	5.59E-02	7.16E-05	9.67E-05	8.77E-05	2.19E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI29_W	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI29_W	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI30_E	0.75	8	0	1	1.80E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.39E-06	0.00E+00	5.47E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI30_E	0.75	6	0	1	1.20E-02	1.60E-02	2.04E-05	2.76E-05	2.51E-05	6.26E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.20E-03	1.09E-04
SI30_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI30_E	0.75	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI30_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI30_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI30_E	0.75	35	0	1	7.67E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.99E-05	0.00E+00	2.32E-04	2.33E-04	2.83E-08	8.11E-06	30.8	2.68E-02	6.97E-04
SI30_E	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.34E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI30_E	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI30_E	0.75	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI30_E	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI30_E	0.75	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.41E-04	2.42E-04	2.95E-08	8.42E-06	32.0	2.78E-02	7.25E-04
SI30_E	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI30_E	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	2.99E-02	7.80E-04
SI30_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI30_E	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI30_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.6	4.15E-02	1.08E-03
SI30_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.66E-04	6.65E-05	0.00E+00	3.87E-04	3.88E-04	4.72E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI30_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI30_E	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI30_E	0.75	23	0	1	4.96E-02	6.59E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI30_E	0.75	19	0	1	4.21E-02	5.59E-02	7.16E-05	9.67E-05	8.77E-05	2.19E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI30_E	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI30_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI30_W	0.75	8	0	1	1.80E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.39E-06	0.00E+00	5.47E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI30_W	0.75	6	0	1	1.20E-02	1.60E-02	2.04E-05	2.76E-05	2.51E-05	6.26E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.20E-03	1.09E-04
SI30_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI30_W	0.75	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI30_W	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI30_W	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI30_W	0.75	35	0	1	7.67E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.99E-05	0.00E+00	2.32E-04	2.33E-04	2.83E-08	8.11E-06	30.8	2.68E-02	6.97E-04
SI30_W	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.34E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI30_W	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI30_W	0.75	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI30_W	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI30_W	0.75	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.41E-04	2.42E-04	2.95E-08	8.42E-06	32.0	2.78E-02	7.25E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI30_W	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI30_W	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	2.99E-02	7.80E-04
SI30_W	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI30_W	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI30_W	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.6	4.15E-02	1.08E-03
SI30_W	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.66E-04	6.65E-05	0.00E+00	3.87E-04	3.88E-04	4.72E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI30_W	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI30_W	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI30_W	0.75	23	0	1	4.96E-02	6.59E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI30_W	0.75	19	0	1	4.21E-02	5.59E-02	7.16E-05	9.67E-05	8.77E-05	2.19E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI30_W	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI30_W	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI31_E	0.75	8	0	1	1.80E-02	2.40E-02	3.07E-05	4.15E-05	3.76E-05	9.39E-06	0.00E+00	5.47E-05	5.47E-05	6.67E-09	1.91E-06	7.2	6.31E-03	1.64E-04
SI31_E	0.75	6	0	1	1.20E-02	1.60E-02	2.04E-05	2.76E-05	2.51E-05	6.26E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.20E-03	1.09E-04
SI31_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI31_E	0.75	3	0	1	7.52E-03	9.99E-03	1.28E-05	1.73E-05	1.57E-05	3.91E-06	0.00E+00	2.28E-05	2.28E-05	2.78E-09	7.95E-07	3.0	2.63E-03	6.84E-05
SI31_E	0.75	5	0	1	1.05E-02	1.40E-02	1.79E-05	2.42E-05	2.19E-05	5.48E-06	0.00E+00	3.19E-05	3.19E-05	3.89E-09	1.11E-06	4.2	3.68E-03	9.57E-05
SI31_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI31_E	0.75	35	0	1	7.67E-02	1.02E-01	1.30E-04	1.76E-04	1.60E-04	3.99E-05	0.00E+00	2.32E-04	2.33E-04	2.83E-08	8.11E-06	30.8	2.68E-02	6.97E-04
SI31_E	0.75	54	0	1	1.17E-01	1.56E-01	1.99E-04	2.69E-04	2.44E-04	6.10E-05	0.00E+00	3.55E-04	3.56E-04	4.34E-08	1.24E-05	47.0	4.10E-02	1.07E-03
SI31_E	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI31_E	0.75	36	0	1	7.82E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.07E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.27E-06	31.4	2.73E-02	7.11E-04
SI31_E	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.14E-04	2.61E-08	7.47E-06	28.3	2.47E-02	6.43E-04
SI31_E	0.75	37	0	1	7.97E-02	1.06E-01	1.35E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.41E-04	2.42E-04	2.95E-08	8.42E-06	32.0	2.78E-02	7.25E-04
SI31_E	0.75	39	0	1	8.42E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.90E-06	33.8	2.94E-02	7.66E-04
SI31_E	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	2.99E-02	7.80E-04
SI31_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI31_E	0.75	44	0	1	9.62E-02	1.28E-01	1.64E-04	2.21E-04	2.01E-04	5.01E-05	0.00E+00	2.92E-04	2.92E-04	3.56E-08	1.02E-05	38.6	3.36E-02	8.75E-04
SI31_E	0.75	55	0	1	1.19E-01	1.58E-01	2.02E-04	2.73E-04	2.48E-04	6.18E-05	0.00E+00	3.60E-04	3.60E-04	4.39E-08	1.26E-05	47.6	4.15E-02	1.08E-03
SI31_E	0.75	59	0	1	1.28E-01	1.70E-01	2.17E-04	2.94E-04	2.66E-04	6.65E-05	0.00E+00	3.87E-04	3.88E-04	4.72E-08	1.35E-05	51.3	4.47E-02	1.16E-03
SI31_E	0.75	41	0	1	8.87E-02	1.18E-01	1.51E-04	2.04E-04	1.85E-04	4.62E-05	0.00E+00	2.69E-04	2.69E-04	3.28E-08	9.38E-06	35.6	3.10E-02	8.07E-04
SI31_E	0.75	27	0	1	5.86E-02	7.79E-02	9.97E-05	1.35E-04	1.22E-04	3.05E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.20E-06	23.5	2.05E-02	5.33E-04
SI31_E	0.75	23	0	1	4.96E-02	6.59E-02	8.43E-05	1.14E-04	1.03E-04	2.58E-05	0.00E+00	1.50E-04	1.51E-04	1.83E-08	5.25E-06	19.9	1.73E-02	4.51E-04
SI31_E	0.75	19	0	1	4.21E-02	5.59E-02	7.16E-05	9.67E-05	8.77E-05	2.19E-05	0.00E+00	1.28E-04	1.28E-04	1.56E-08	4.45E-06	16.9	1.47E-02	3.83E-04
SI31_E	0.75	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.94E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI31_E	0.75	12	0	1	2.56E-02	3.40E-02	4.34E-05	5.87E-05	5.33E-05	1.33E-05	0.00E+00	7.75E-05	7.75E-05	9.45E-09	2.70E-06	10.3	8.93E-03	2.32E-04
SI31_W	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.93E-05	6.28E-05	1.57E-05	0.00E+00	9.14E-05	9.14E-05	1.11E-08	3.19E-06	12.1	1.05E-02	2.74E-04
SI31_W	0.75	9	0	1	2.01E-02	2.67E-02	3.42E-05	4.62E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.10E-05	7.43E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI31_W	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI31_W	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.62E-05	6.54E-06	0.00E+00	3.81E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI31_W	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI31_W	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI31_W	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.67E-05	0.00E+00	3.88E-04	3.89E-04	4.74E-08	1.35E-05	51.4	4.48E-02	1.17E-03
SI31_W	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.94E-04	7.24E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI31_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI31_W	0.75	60	0	1	1.31E-01	1.74E-01	2.22E-04	3.00E-04	2.72E-04	6.80E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI31_W	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI31_W	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.78E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI31_W	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.27E-04	5.20E-08	1.49E-05	56.4	4.92E-02	1.28E-03
SI31_W	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI31_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI31_W	0.75	74	0	1	1.61E-01	2.14E-01	2.73E-04	3.69E-04	3.35E-04	8.37E-05	0.00E+00	4.87E-04	4.88E-04	5.94E-08	1.70E-05	64.5	5.62E-02	1.46E-03
SI31_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI31_W	0.75	98	0	1	2.13E-01	2.84E-01	3.63E-04	4.91E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.48E-04	7.89E-08	2.26E-05	85.7	7.46E-02	1.94E-03
SI31_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI31_W	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI31_W	0.75	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.3	2.90E-02	7.54E-04
SI31_W	0.75	32	0	1	7.03E-02	9.34E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI31_W	0.75	27	0	1	5.78E-02	7.67E-02	9.82E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI31_W	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI32_E	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.93E-05	6.28E-05	1.57E-05	0.00E+00	9.14E-05	9.14E-05	1.11E-08	3.19E-06	12.1	1.05E-02	2.74E-04
SI32_E	0.75	9	0	1	2.01E-02	2.67E-02	3.42E-05	4.62E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.10E-05	7.43E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI32_E	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI32_E	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.62E-05	6.54E-06	0.00E+00	3.81E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI32_E	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI32_E	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI32_E	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.67E-05	0.00E+00	3.88E-04	3.89E-04	4.74E-08	1.35E-05	51.4	4.48E-02	1.17E-03
SI32_E	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.94E-04	7.24E-08	2.07E-05	78.6	6.85E-02	1.78E-03

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI32_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI32_E	0.75	60	0	1	1.31E-01	1.74E-01	2.22E-04	3.00E-04	2.72E-04	6.80E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI32_E	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI32_E	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.78E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI32_E	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.27E-04	5.20E-08	1.49E-05	56.4	4.92E-02	1.28E-03
SI32_E	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI32_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI32_E	0.75	74	0	1	1.61E-01	2.14E-01	2.73E-04	3.69E-04	3.35E-04	8.37E-05	0.00E+00	4.87E-04	4.88E-04	5.94E-08	1.70E-05	64.5	5.62E-02	1.46E-03
SI32_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI32_E	0.75	98	0	1	2.13E-01	2.84E-01	3.63E-04	4.91E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.48E-04	7.89E-08	2.26E-05	85.7	7.46E-02	1.94E-03
SI32_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI32_E	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI32_E	0.75	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.3	2.90E-02	7.54E-04
SI32_E	0.75	32	0	1	7.03E-02	9.34E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI32_E	0.75	27	0	1	5.78E-02	7.67E-02	9.82E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI32_E	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI32_W	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.93E-05	6.28E-05	1.57E-05	0.00E+00	9.14E-05	9.14E-05	1.11E-08	3.19E-06	12.1	1.05E-02	2.74E-04
SI32_W	0.75	9	0	1	2.01E-02	2.67E-02	3.42E-05	4.62E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.10E-05	7.43E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI32_W	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI32_W	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.62E-05	6.54E-06	0.00E+00	3.81E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI32_W	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI32_W	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI32_W	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.67E-05	0.00E+00	3.88E-04	3.89E-04	4.74E-08	1.35E-05	51.4	4.48E-02	1.17E-03
SI32_W	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.94E-04	7.24E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI32_W	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI32_W	0.75	60	0	1	1.31E-01	1.74E-01	2.22E-04	3.00E-04	2.72E-04	6.80E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI32_W	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI32_W	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.78E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI32_W	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.27E-04	5.20E-08	1.49E-05	56.4	4.92E-02	1.28E-03
SI32_W	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI32_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI32_W	0.75	74	0	1	1.61E-01	2.14E-01	2.73E-04	3.69E-04	3.35E-04	8.37E-05	0.00E+00	4.87E-04	4.88E-04	5.94E-08	1.70E-05	64.5	5.62E-02	1.46E-03
SI32_W	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI32_W	0.75	98	0	1	2.13E-01	2.84E-01	3.63E-04	4.91E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.48E-04	7.89E-08	2.26E-05	85.7	7.46E-02	1.94E-03
SI32_W	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI32_W	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI32_W	0.75	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.3	2.90E-02	7.54E-04
SI32_W	0.75	32	0	1	7.03E-02	9.34E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI32_W	0.75	27	0	1	5.78E-02	7.67E-02	9.82E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI32_W	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI33_E	0.75	14	0	1	3.01E-02	4.00E-02	5.12E-05	6.93E-05	6.28E-05	1.57E-05	0.00E+00	9.14E-05	9.14E-05	1.11E-08	3.19E-06	12.1	1.05E-02	2.74E-04
SI33_E	0.75	9	0	1	2.01E-02	2.67E-02	3.42E-05	4.62E-05	4.19E-05	1.05E-05	0.00E+00	6.09E-05	6.10E-05	7.43E-09	2.12E-06	8.1	7.02E-03	1.83E-04
SI33_E	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI33_E	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.89E-05	2.62E-05	6.54E-06	0.00E+00	3.81E-05	3.81E-05	4.64E-09	1.33E-06	5.0	4.39E-03	1.14E-04
SI33_E	0.75	8	0	1	1.76E-02	2.34E-02	2.99E-05	4.04E-05	3.67E-05	9.15E-06	0.00E+00	5.33E-05	5.33E-05	6.50E-09	1.86E-06	7.1	6.15E-03	1.60E-04
SI33_E	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI33_E	0.75	59	0	1	1.28E-01	1.70E-01	2.18E-04	2.94E-04	2.67E-04	6.67E-05	0.00E+00	3.88E-04	3.89E-04	4.74E-08	1.35E-05	51.4	4.48E-02	1.17E-03
SI33_E	0.75	90	0	1	1.96E-01	2.60E-01	3.33E-04	4.50E-04	4.08E-04	1.02E-04	0.00E+00	5.94E-04	5.94E-04	7.24E-08	2.07E-05	78.6	6.85E-02	1.78E-03
SI33_E	0.75	73	0	1	1.58E-01	2.10E-01	2.69E-04	3.64E-04	3.30E-04	8.24E-05	0.00E+00	4.80E-04	4.80E-04	5.85E-08	1.67E-05	63.5	5.53E-02	1.44E-03
SI33_E	0.75	60	0	1	1.31E-01	1.74E-01	2.22E-04	3.00E-04	2.72E-04	6.80E-05	0.00E+00	3.96E-04	3.96E-04	4.83E-08	1.38E-05	52.4	4.56E-02	1.19E-03
SI33_E	0.75	54	0	1	1.18E-01	1.57E-01	2.01E-04	2.71E-04	2.46E-04	6.15E-05	0.00E+00	3.58E-04	3.58E-04	4.36E-08	1.25E-05	47.4	4.13E-02	1.07E-03
SI33_E	0.75	61	0	1	1.33E-01	1.77E-01	2.26E-04	3.06E-04	2.78E-04	6.93E-05	0.00E+00	4.03E-04	4.04E-04	4.92E-08	1.41E-05	53.4	4.65E-02	1.21E-03
SI33_E	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.32E-05	0.00E+00	4.26E-04	4.27E-04	5.20E-08	1.49E-05	56.4	4.92E-02	1.28E-03
SI33_E	0.75	66	0	1	1.43E-01	1.90E-01	2.43E-04	3.29E-04	2.98E-04	7.45E-05	0.00E+00	4.34E-04	4.34E-04	5.29E-08	1.51E-05	57.4	5.00E-02	1.30E-03
SI33_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI33_E	0.75	74	0	1	1.61E-01	2.14E-01	2.73E-04	3.69E-04	3.35E-04	8.37E-05	0.00E+00	4.87E-04	4.88E-04	5.94E-08	1.70E-05	64.5	5.62E-02	1.46E-03
SI33_E	0.75	91	0	1	1.98E-01	2.64E-01	3.37E-04	4.56E-04	4.14E-04	1.03E-04	0.00E+00	6.01E-04	6.02E-04	7.34E-08	2.10E-05	79.6	6.94E-02	1.81E-03
SI33_E	0.75	98	0	1	2.13E-01	2.84E-01	3.63E-04	4.91E-04	4.45E-04	1.11E-04	0.00E+00	6.47E-04	6.48E-04	7.89E-08	2.26E-05	85.7	7.46E-02	1.94E-03
SI33_E	0.75	68	0	1	1.48E-01	1.97E-01	2.52E-04	3.41E-04	3.09E-04	7.71E-05	0.00E+00	4.49E-04	4.50E-04	5.48E-08	1.57E-05	59.5	5.18E-02	1.35E-03
SI33_E	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.42E-02	8.91E-04
SI33_E	0.75	38	0	1	8.29E-02	1.10E-01	1.41E-04	1.90E-04	1.73E-04	4.31E-05	0.00E+00	2.51E-04	2.51E-04	3.06E-08	8.76E-06	33.3	2.90E-02	7.54E-04
SI33_E	0.75	32	0	1	7.03E-02	9.34E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI33_E	0.75	27	0	1	5.78E-02	7.67E-02	9.82E-05	1.33E-04	1.20E-04	3.01E-05	0.00E+00	1.75E-04	1.75E-04	2.14E-08	6.11E-06	23.2	2.02E-02	5.26E-04
SI33_E	0.75	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.51E-06	17.1	1.49E-02	3.88E-04
SI33_W	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.46E-05	1.11E-05	0.00E+00	6.48E-05	6.49E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI33_W	0.75	7	0	1	1.43E-02	1.89E-02	2.42E-05	3.27E-05	2.97E-05	7.42E-06	0.00E+00	4.32E-05	4.32E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI33_W	0.75	6	0	1	1.25E-02	1.66E-02	2.12E-05	2.87E-05	2.60E-05	6.49E-06	0.00E+00	3.78E-05	3.78E-05	4.61E-09	1.32E-06	5.0	4.36E-03	1.13E-04
SI33_W	0.75	4	0	1	8.91E-03	1.18E-02	1.51E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.70E-05	3.29E-09	9.42E-07	3.6	3.11E-03	8.10E-05

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI33_W	0.75	6	0	1	1.25E-02	1.66E-02	2.12E-05	2.87E-05	2.60E-05	6.49E-06	0.00E+00	3.78E-05	3.78E-05	4.61E-09	1.32E-06	5.0	4.36E-03	1.13E-04
SI33_W	0.75	14	0	1	3.03E-02	4.02E-02	5.15E-05	6.96E-05	6.31E-05	1.58E-05	0.00E+00	9.18E-05	9.19E-05	1.12E-08	3.20E-06	12.1	1.06E-02	2.75E-04
SI33_W	0.75	42	0	1	9.09E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.76E-04	3.36E-08	9.61E-06	36.4	3.18E-02	8.26E-04
SI33_W	0.75	64	0	1	1.39E-01	1.85E-01	2.36E-04	3.19E-04	2.90E-04	7.23E-05	0.00E+00	4.21E-04	4.22E-04	5.14E-08	1.47E-05	55.7	4.86E-02	1.26E-03
SI33_W	0.75	52	0	1	1.12E-01	1.49E-01	1.91E-04	2.58E-04	2.34E-04	5.84E-05	0.00E+00	3.40E-04	3.40E-04	4.15E-08	1.19E-05	45.0	3.92E-02	1.02E-03
SI33_W	0.75	43	0	1	9.26E-02	1.23E-01	1.57E-04	2.13E-04	1.93E-04	4.82E-05	0.00E+00	2.81E-04	2.81E-04	3.43E-08	9.79E-06	37.2	3.24E-02	8.43E-04
SI33_W	0.75	38	0	1	8.37E-02	1.11E-01	1.42E-04	1.92E-04	1.75E-04	4.36E-05	0.00E+00	2.54E-04	2.54E-04	3.10E-08	8.85E-06	33.6	2.93E-02	7.62E-04
SI33_W	0.75	43	0	1	9.44E-02	1.25E-01	1.61E-04	2.17E-04	1.97E-04	4.92E-05	0.00E+00	2.86E-04	2.86E-04	3.49E-08	9.98E-06	37.9	3.30E-02	8.59E-04
SI33_W	0.75	46	0	1	9.98E-02	1.33E-01	1.70E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.03E-04	3.69E-08	1.05E-05	40.0	3.49E-02	9.08E-04
SI33_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.33E-04	2.12E-04	5.29E-05	0.00E+00	3.08E-04	3.08E-04	3.75E-08	1.07E-05	40.7	3.55E-02	9.24E-04
SI33_W	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.41E-04	2.19E-04	5.47E-05	0.00E+00	3.19E-04	3.19E-04	3.89E-08	1.11E-05	42.2	3.67E-02	9.56E-04
SI33_W	0.75	52	0	1	1.14E-01	1.51E-01	1.94E-04	2.62E-04	2.38E-04	5.94E-05	0.00E+00	3.46E-04	3.46E-04	4.22E-08	1.21E-05	45.7	3.98E-02	1.04E-03
SI33_W	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.33E-05	0.00E+00	4.27E-04	4.27E-04	5.20E-08	1.49E-05	56.5	4.92E-02	1.28E-03
SI33_W	0.75	70	0	1	1.51E-01	2.01E-01	2.57E-04	3.48E-04	3.16E-04	7.88E-05	0.00E+00	4.59E-04	4.59E-04	5.60E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI33_W	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.41E-04	2.19E-04	5.47E-05	0.00E+00	3.19E-04	3.19E-04	3.89E-08	1.11E-05	42.2	3.67E-02	9.56E-04
SI33_W	0.75	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI33_W	0.75	27	0	1	5.88E-02	7.81E-02	9.99E-05	1.35E-04	1.23E-04	3.06E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.22E-06	23.6	2.05E-02	5.35E-04
SI33_W	0.75	23	0	1	4.99E-02	6.63E-02	8.48E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.27E-06	20.0	1.74E-02	4.54E-04
SI33_W	0.75	19	0	1	4.10E-02	5.44E-02	6.97E-05	9.41E-05	8.54E-05	2.13E-05	0.00E+00	1.24E-04	1.24E-04	1.51E-08	4.33E-06	16.4	1.43E-02	3.73E-04
SI33_W	0.75	14	0	1	3.03E-02	4.02E-02	5.15E-05	6.96E-05	6.31E-05	1.58E-05	0.00E+00	9.18E-05	9.19E-05	1.12E-08	3.20E-06	12.1	1.06E-02	2.75E-04
SI34_E	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.46E-05	1.11E-05	0.00E+00	6.48E-05	6.49E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI34_E	0.75	7	0	1	1.43E-02	1.89E-02	2.42E-05	3.27E-05	2.97E-05	7.42E-06	0.00E+00	4.32E-05	4.32E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI34_E	0.75	6	0	1	1.25E-02	1.66E-02	2.12E-05	2.87E-05	2.60E-05	6.49E-06	0.00E+00	3.78E-05	3.78E-05	4.61E-09	1.32E-06	5.0	4.36E-03	1.13E-04
SI34_E	0.75	4	0	1	8.91E-03	1.18E-02	1.51E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.70E-05	3.29E-09	9.42E-07	3.6	3.11E-03	8.10E-05
SI34_E	0.75	6	0	1	1.25E-02	1.66E-02	2.12E-05	2.87E-05	2.60E-05	6.49E-06	0.00E+00	3.78E-05	3.78E-05	4.61E-09	1.32E-06	5.0	4.36E-03	1.13E-04
SI34_E	0.75	14	0	1	3.03E-02	4.02E-02	5.15E-05	6.96E-05	6.31E-05	1.58E-05	0.00E+00	9.18E-05	9.19E-05	1.12E-08	3.20E-06	12.1	1.06E-02	2.75E-04
SI34_E	0.75	42	0	1	9.09E-02	1.21E-01	1.54E-04	2.09E-04	1.89E-04	4.73E-05	0.00E+00	2.75E-04	2.76E-04	3.36E-08	9.61E-06	36.4	3.18E-02	8.26E-04
SI34_E	0.75	64	0	1	1.39E-01	1.85E-01	2.36E-04	3.19E-04	2.90E-04	7.23E-05	0.00E+00	4.21E-04	4.22E-04	5.14E-08	1.47E-05	55.7	4.86E-02	1.26E-03
SI34_E	0.75	52	0	1	1.12E-01	1.49E-01	1.91E-04	2.58E-04	2.34E-04	5.84E-05	0.00E+00	3.40E-04	3.40E-04	4.15E-08	1.19E-05	45.0	3.92E-02	1.02E-03
SI34_E	0.75	43	0	1	9.26E-02	1.23E-01	1.57E-04	2.13E-04	1.93E-04	4.82E-05	0.00E+00	2.81E-04	2.81E-04	3.43E-08	9.79E-06	37.2	3.24E-02	8.43E-04
SI34_E	0.75	38	0	1	8.37E-02	1.11E-01	1.42E-04	1.92E-04	1.75E-04	4.36E-05	0.00E+00	2.54E-04	2.54E-04	3.10E-08	8.85E-06	33.6	2.93E-02	7.62E-04
SI34_E	0.75	43	0	1	9.44E-02	1.25E-01	1.61E-04	2.17E-04	1.97E-04	4.92E-05	0.00E+00	2.86E-04	2.86E-04	3.49E-08	9.98E-06	37.9	3.30E-02	8.59E-04
SI34_E	0.75	46	0	1	9.98E-02	1.33E-01	1.70E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.03E-04	3.69E-08	1.05E-05	40.0	3.49E-02	9.08E-04
SI34_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.33E-04	2.12E-04	5.29E-05	0.00E+00	3.08E-04	3.08E-04	3.75E-08	1.07E-05	40.7	3.55E-02	9.24E-04
SI34_E	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.41E-04	2.19E-04	5.47E-05	0.00E+00	3.19E-04	3.19E-04	3.89E-08	1.11E-05	42.2	3.67E-02	9.56E-04
SI34_E	0.75	52	0	1	1.14E-01	1.51E-01	1.94E-04	2.62E-04	2.38E-04	5.94E-05	0.00E+00	3.46E-04	3.46E-04	4.22E-08	1.21E-05	45.7	3.98E-02	1.04E-03
SI34_E	0.75	65	0	1	1.41E-01	1.87E-01	2.39E-04	3.23E-04	2.93E-04	7.33E-05	0.00E+00	4.27E-04	4.27E-04	5.20E-08	1.49E-05	56.5	4.92E-02	1.28E-03
SI34_E	0.75	70	0	1	1.51E-01	2.01E-01	2.57E-04	3.48E-04	3.16E-04	7.88E-05	0.00E+00	4.59E-04	4.59E-04	5.60E-08	1.60E-05	60.7	5.29E-02	1.38E-03
SI34_E	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.41E-04	2.19E-04	5.47E-05	0.00E+00	3.19E-04	3.19E-04	3.89E-08	1.11E-05	42.2	3.67E-02	9.56E-04
SI34_E	0.75	32	0	1	6.95E-02	9.23E-02	1.18E-04	1.60E-04	1.45E-04	3.62E-05	0.00E+00	2.11E-04	2.11E-04	2.57E-08	7.35E-06	27.9	2.43E-02	6.32E-04
SI34_E	0.75	27	0	1	5.88E-02	7.81E-02	9.99E-05	1.35E-04	1.23E-04	3.06E-05	0.00E+00	1.78E-04	1.78E-04	2.17E-08	6.22E-06	23.6	2.05E-02	5.35E-04
SI34_E	0.75	23	0	1	4.99E-02	6.63E-02	8.48E-05	1.15E-04	1.04E-04	2.60E-05	0.00E+00	1.51E-04	1.51E-04	1.84E-08	5.27E-06	20.0	1.74E-02	4.54E-04
SI34_E	0.75	19	0	1	4.10E-02	5.44E-02	6.97E-05	9.41E-05	8.54E-05	2.13E-05	0.00E+00	1.24E-04	1.24E-04	1.51E-08	4.33E-06	16.4	1.43E-02	3.73E-04
SI34_E	0.75	14	0	1	3.03E-02	4.02E-02	5.15E-05	6.96E-05	6.31E-05	1.58E-05	0.00E+00	9.18E-05	9.19E-05	1.12E-08	3.20E-06	12.1	1.06E-02	2.75E-04
SI34_W	0.75	11	0	1	2.35E-02	3.12E-02	3.99E-05	5.40E-05	4.89E-05	1.22E-05	0.00E+00	7.12E-05	7.12E-05	8.68E-09	2.48E-06	9.4	8.21E-03	2.14E-04
SI34_W	0.75	7	0	1	1.57E-02	2.08E-02	2.66E-05	3.60E-05	3.26E-05	8.15E-06	0.00E+00	4.74E-05	4.75E-05	5.79E-09	1.66E-06	6.3	5.47E-03	1.42E-04
SI34_W	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI34_W	0.75	4	0	1	9.78E-03	1.30E-02	1.66E-05	2.25E-05	2.04E-05	5.09E-06	0.00E+00	2.97E-05	2.97E-05	3.62E-09	1.03E-06	3.9	3.42E-03	8.90E-05
SI34_W	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI34_W	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04
SI34_W	0.75	46	0	1	9.98E-02	1.33E-01	1.70E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.03E-04	3.69E-08	1.06E-05	40.0	3.49E-02	9.08E-04
SI34_W	0.75	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.95E-05	0.00E+00	4.63E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI34_W	0.75	57	0	1	1.23E-01	1.64E-01	2.10E-04	2.83E-04	2.57E-04	6.42E-05	0.00E+00	3.74E-04	3.74E-04	4.56E-08	1.30E-05	49.5	4.31E-02	1.12E-03
SI34_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI34_W	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.72E-06	36.9	3.21E-02	8.37E-04
SI34_W	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.15E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI34_W	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.70E-05	0.00E+00	3.32E-04	3.32E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI34_W	0.75	51	0	1	1.12E-01	1.48E-01	1.90E-04	2.56E-04	2.32E-04	5.81E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.7	3.90E-02	1.01E-03
SI34_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI34_W	0.75	58	0	1	1.25E-01	1.66E-01	2.13E-04	2.88E-04	2.61E-04	6.52E-05	0.00E+00	3.80E-04	3.80E-04	4.63E-08	1.32E-05	50.2	4.38E-02	1.14E-03
SI34_W	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.05E-05	0.00E+00	4.68E-04	4.69E-04	5.72E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI34_W	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.66E-05	0.00E+00	5.04E-04	5.05E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI34_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI34_W	0.75	35	0	1	7.63E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.32E-04	2.82E-08	8.07E-06	30.6	2.67E-02	6.94E-04
SI34_W	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.87E-04
SI34_W	0.75	25	0	1	5.48E-02	7.28E-02	9.31E-05	1.26E-04	1.14E-04	2.85E-05	0.00E+00	1.66E-04	1.66E-04	2.03E-08	5.79E-06	22.0	1.91E-02	4.98E-04
SI34_W	0.75	21	0	1	4.50E-02	5.98E-02	7.65E-05	1.03E-04	9.38E-05	2.34E-05	0.00E+00	1.36E-04	1.37E-04	1.66E-08	4.76E-06	18.1	1.57E-02	4.09E-04
SI34_W	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI35_E	0.75	11	0	1	2.35E-02	3.12E-02	3.99E-05	5.40E-05	4.89E-05	1.22E-05	0.00E+00	7.12E-05	7.12E-05	8.68E-09	2.48E-06	9.4	8.21E-03	2.14E-04
SI35_E	0.75	7	0	1	1.57E-02	2.08E-02	2.66E-05	3.60E-05	3.26E-05	8.15E-06	0.00E+00	4.74E-05	4.75E-05	5.79E-09	1.66E-06	6.3	5.47E-03	1.42E-04
SI35_E	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI35_E	0.75	4	0	1	9.78E-03	1.30E-02	1.66E-05	2.25E-05	2.04E-05	5.09E-06	0.00E+00	2.97E-05	2.97E-05	3.62E-09	1.03E-06	3.9	3.42E-03	8.90E-05
SI35_E	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI35_E	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04
SI35_E	0.75	46	0	1	9.98E-02	1.33E-01	1.70E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.03E-04	3.69E-08	1.06E-05	40.0	3.49E-02	9.08E-04
SI35_E	0.75	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.95E-05	0.00E+00	4.63E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI35_E	0.75	57	0	1	1.23E-01	1.64E-01	2.10E-04	2.83E-04	2.57E-04	6.42E-05	0.00E+00	3.74E-04	3.74E-04	4.56E-08	1.30E-05	49.5	4.31E-02	1.12E-03
SI35_E	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI35_E	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.72E-06	36.9	3.21E-02	8.37E-04
SI35_E	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.15E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI35_E	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.70E-05	0.00E+00	3.32E-04	3.32E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI35_E	0.75	51	0	1	1.12E-01	1.48E-01	1.90E-04	2.56E-04	2.32E-04	5.81E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.7	3.90E-02	1.01E-03
SI35_E	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI35_E	0.75	58	0	1	1.25E-01	1.66E-01	2.13E-04	2.88E-04	2.61E-04	6.52E-05	0.00E+00	3.80E-04	3.80E-04	4.63E-08	1.32E-05	50.2	4.38E-02	1.14E-03
SI35_E	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.05E-05	0.00E+00	4.68E-04	4.69E-04	5.72E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI35_E	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.66E-05	0.00E+00	5.04E-04	5.05E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI35_E	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI35_E	0.75	35	0	1	7.63E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.32E-04	2.82E-08	8.07E-06	30.6	2.67E-02	6.94E-04
SI35_E	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.87E-04
SI35_E	0.75	25	0	1	5.48E-02	7.28E-02	9.31E-05	1.26E-04	1.14E-04	2.85E-05	0.00E+00	1.66E-04	1.66E-04	2.03E-08	5.79E-06	22.0	1.91E-02	4.98E-04
SI35_E	0.75	21	0	1	4.50E-02	5.98E-02	7.65E-05	1.03E-04	9.38E-05	2.34E-05	0.00E+00	1.36E-04	1.37E-04	1.66E-08	4.76E-06	18.1	1.57E-02	4.09E-04
SI35_E	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04
SI35_W	0.75	11	0	1	2.35E-02	3.12E-02	3.99E-05	5.40E-05	4.89E-05	1.22E-05	0.00E+00	7.12E-05	7.12E-05	8.68E-09	2.48E-06	9.4	8.21E-03	2.14E-04
SI35_W	0.75	7	0	1	1.57E-02	2.08E-02	2.66E-05	3.60E-05	3.26E-05	8.15E-06	0.00E+00	4.74E-05	4.75E-05	5.79E-09	1.66E-06	6.3	5.47E-03	1.42E-04
SI35_W	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI35_W	0.75	4	0	1	9.78E-03	1.30E-02	1.66E-05	2.25E-05	2.04E-05	5.09E-06	0.00E+00	2.97E-05	2.97E-05	3.62E-09	1.03E-06	3.9	3.42E-03	8.90E-05
SI35_W	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI35_W	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04
SI35_W	0.75	46	0	1	9.98E-02	1.33E-01	1.70E-04	2.29E-04	2.08E-04	5.19E-05	0.00E+00	3.02E-04	3.03E-04	3.69E-08	1.06E-05	40.0	3.49E-02	9.08E-04
SI35_W	0.75	70	0	1	1.53E-01	2.03E-01	2.59E-04	3.51E-04	3.18E-04	7.95E-05	0.00E+00	4.63E-04	4.63E-04	5.64E-08	1.61E-05	61.2	5.33E-02	1.39E-03
SI35_W	0.75	57	0	1	1.23E-01	1.64E-01	2.10E-04	2.83E-04	2.57E-04	6.42E-05	0.00E+00	3.74E-04	3.74E-04	4.56E-08	1.30E-05	49.5	4.31E-02	1.12E-03
SI35_W	0.75	47	0	1	1.02E-01	1.35E-01	1.73E-04	2.34E-04	2.12E-04	5.30E-05	0.00E+00	3.08E-04	3.09E-04	3.76E-08	1.08E-05	40.8	3.56E-02	9.26E-04
SI35_W	0.75	42	0	1	9.20E-02	1.22E-01	1.56E-04	2.11E-04	1.92E-04	4.79E-05	0.00E+00	2.79E-04	2.79E-04	3.40E-08	9.72E-06	36.9	3.21E-02	8.37E-04
SI35_W	0.75	48	0	1	1.04E-01	1.38E-01	1.76E-04	2.38E-04	2.16E-04	5.40E-05	0.00E+00	3.14E-04	3.15E-04	3.83E-08	1.10E-05	41.6	3.62E-02	9.43E-04
SI35_W	0.75	50	0	1	1.10E-01	1.46E-01	1.86E-04	2.52E-04	2.28E-04	5.70E-05	0.00E+00	3.32E-04	3.32E-04	4.05E-08	1.16E-05	44.0	3.83E-02	9.97E-04
SI35_W	0.75	51	0	1	1.12E-01	1.48E-01	1.90E-04	2.56E-04	2.32E-04	5.81E-05	0.00E+00	3.38E-04	3.38E-04	4.12E-08	1.18E-05	44.7	3.90E-02	1.01E-03
SI35_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI35_W	0.75	58	0	1	1.25E-01	1.66E-01	2.13E-04	2.88E-04	2.61E-04	6.52E-05	0.00E+00	3.80E-04	3.80E-04	4.63E-08	1.32E-05	50.2	4.38E-02	1.14E-03
SI35_W	0.75	71	0	1	1.55E-01	2.05E-01	2.63E-04	3.55E-04	3.22E-04	8.05E-05	0.00E+00	4.68E-04	4.69E-04	5.72E-08	1.63E-05	62.0	5.40E-02	1.41E-03
SI35_W	0.75	76	0	1	1.66E-01	2.21E-01	2.83E-04	3.82E-04	3.47E-04	8.66E-05	0.00E+00	5.04E-04	5.05E-04	6.15E-08	1.76E-05	66.7	5.81E-02	1.51E-03
SI35_W	0.75	53	0	1	1.15E-01	1.53E-01	1.96E-04	2.65E-04	2.41E-04	6.01E-05	0.00E+00	3.50E-04	3.50E-04	4.27E-08	1.22E-05	46.3	4.03E-02	1.05E-03
SI35_W	0.75	35	0	1	7.63E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.32E-04	2.82E-08	8.07E-06	30.6	2.67E-02	6.94E-04
SI35_W	0.75	30	0	1	6.46E-02	8.58E-02	1.10E-04	1.48E-04	1.35E-04	3.36E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.83E-06	25.9	2.26E-02	5.87E-04
SI35_W	0.75	25	0	1	5.48E-02	7.28E-02	9.31E-05	1.26E-04	1.14E-04	2.85E-05	0.00E+00	1.66E-04	1.66E-04	2.03E-08	5.79E-06	22.0	1.91E-02	4.98E-04
SI35_W	0.75	21	0	1	4.50E-02	5.98E-02	7.65E-05	1.03E-04	9.38E-05	2.34E-05	0.00E+00	1.36E-04	1.37E-04	1.66E-08	4.76E-06	18.1	1.57E-02	4.09E-04
SI35_W	0.75	15	0	1	3.33E-02	4.42E-02	5.66E-05	7.64E-05	6.93E-05	1.73E-05	0.00E+00	1.01E-04	1.01E-04	1.23E-08	3.52E-06	13.3	1.16E-02	3.03E-04
SI36_E	0.75	9	0	1	1.89E-02	2.51E-02	3.22E-05	4.35E-05	3.94E-05	9.84E-06	0.00E+00	5.73E-05	5.74E-05	6.99E-09	2.00E-06	7.6	6.61E-03	1.72E-04
SI36_E	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.90E-05	2.63E-05	6.56E-06	0.00E+00	3.82E-05	3.82E-05	4.66E-09	1.33E-06	5.1	4.41E-03	1.15E-04
SI36_E	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI36_E	0.75	4	0	1	7.88E-03	1.05E-02	1.34E-05	1.81E-05	1.64E-05	4.10E-06	0.00E+00	2.39E-05	2.39E-05	2.91E-09	8.33E-07	3.2	2.75E-03	7.17E-05
SI36_E	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI36_E	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI36_E	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.18E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.2	2.81E-02	7.31E-04
SI36_E	0.75	56	0	1	1.23E-01	1.63E-01	2.09E-04	2.82E-04	2.56E-04	6.40E-05	0.00E+00	3.73E-04	3.73E-04	4.55E-08	1.30E-05	49.3	4.30E-02	1.12E-03
SI36_E	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI36_E	0.75	38	0	1	8.19E-02	1.09E-01	1.39E-04	1.88E-04	1.71E-04	4.27E-05	0.00E+00	2.48E-04	2.49E-04	3.03E-08	8.66E-06	32.9	2.86E-02	7.46E-04
SI36_E	0.75	34	0	1	7.41E-02	9.84E-02	1.26E-04	1.70E-04	1.54E-04	3.86E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.83E-06	29.7	2.59E-02	6.74E-04
SI36_E	0.75	38	0	1	8.35E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.53E-04	3.09E-08	8.83E-06	33.5	2.92E-02	7.60E-04
SI36_E	0.75	41	0	1	8.83E-02	1.17E-01	1.50E-04	2.03E-04	1.84E-04	4.59E-05	0.00E+00	2.67E-04	2.68E-04	3.26E-08	9.33E-06	35.4	3.08E-02	8.03E-04
SI36_E	0.75	41	0	1	8.98E-02	1.19E-01	1.53E-04	2.06E-04	1.87E-04	4.68E-05	0.00E+00	2.72E-04	2.73E-04	3.32E-08	9.50E-06	36.0	3.14E-02	8.17E-04
SI36_E	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI36_E	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.06E-04	3.06E-04	3.73E-08	1.07E-05	40.5	3.53E-02	9.18E-04
SI36_E	0.75	57	0	1	1.24E-01	1.65E-01	2.12E-04	2.86E-04	2.60E-04	6.48E-05	0.00E+00	3.77E-04	3.78E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI36_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.97E-05	0.00E+00	4.06E-04	4.06E-04	4.95E-08	1.42E-05	53.7	4.68E-02	1.22E-03
SI36_E	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI36_E	0.75	28	0	1	6.15E-02	8.16E-02	1.04E-04	1.41E-04	1.28E-04	3.20E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.50E-06	24.7	2.15E-02	5.59E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI36_E	0.75	24	0	1	5.20E-02	6.91E-02	8.84E-05	1.19E-04	1.08E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.92E-08	5.50E-06	20.9	1.82E-02	4.73E-04
SI36_E	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.20E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.67E-06	17.7	1.54E-02	4.01E-04
SI36_E	0.75	17	0	1	3.62E-02	4.82E-02	6.16E-05	8.33E-05	7.56E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI36_E	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI36_W	0.75	9	0	1	1.89E-02	2.51E-02	3.22E-05	4.35E-05	3.94E-05	9.84E-06	0.00E+00	5.73E-05	5.74E-05	6.99E-09	2.00E-06	7.6	6.61E-03	1.72E-04
SI36_W	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.90E-05	2.63E-05	6.56E-06	0.00E+00	3.82E-05	3.82E-05	4.66E-09	1.33E-06	5.1	4.41E-03	1.15E-04
SI36_W	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI36_W	0.75	4	0	1	7.88E-03	1.05E-02	1.34E-05	1.81E-05	1.64E-05	4.10E-06	0.00E+00	2.39E-05	2.39E-05	2.91E-09	8.33E-07	3.2	2.75E-03	7.17E-05
SI36_W	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI36_W	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI36_W	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.18E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.2	2.81E-02	7.31E-04
SI36_W	0.75	56	0	1	1.23E-01	1.63E-01	2.09E-04	2.82E-04	2.56E-04	6.40E-05	0.00E+00	3.73E-04	3.73E-04	4.55E-08	1.30E-05	49.3	4.30E-02	1.12E-03
SI36_W	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI36_W	0.75	38	0	1	8.19E-02	1.09E-01	1.39E-04	1.88E-04	1.71E-04	4.27E-05	0.00E+00	2.48E-04	2.49E-04	3.03E-08	8.66E-06	32.9	2.86E-02	7.46E-04
SI36_W	0.75	34	0	1	7.41E-02	9.84E-02	1.26E-04	1.70E-04	1.54E-04	3.86E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.83E-06	29.7	2.59E-02	6.74E-04
SI36_W	0.75	38	0	1	8.35E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.53E-04	3.09E-08	8.83E-06	33.5	2.92E-02	7.60E-04
SI36_W	0.75	41	0	1	8.83E-02	1.17E-01	1.50E-04	2.03E-04	1.84E-04	4.59E-05	0.00E+00	2.67E-04	2.68E-04	3.26E-08	9.33E-06	35.4	3.08E-02	8.03E-04
SI36_W	0.75	41	0	1	8.98E-02	1.19E-01	1.53E-04	2.06E-04	1.87E-04	4.68E-05	0.00E+00	2.72E-04	2.73E-04	3.32E-08	9.50E-06	36.0	3.14E-02	8.17E-04
SI36_W	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI36_W	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.06E-04	3.06E-04	3.73E-08	1.07E-05	40.5	3.53E-02	9.18E-04
SI36_W	0.75	57	0	1	1.24E-01	1.65E-01	2.12E-04	2.86E-04	2.60E-04	6.48E-05	0.00E+00	3.77E-04	3.78E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI36_W	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.97E-05	0.00E+00	4.06E-04	4.06E-04	4.95E-08	1.42E-05	53.7	4.68E-02	1.22E-03
SI36_W	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI36_W	0.75	28	0	1	6.15E-02	8.16E-02	1.04E-04	1.41E-04	1.28E-04	3.20E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.50E-06	24.7	2.15E-02	5.59E-04
SI36_W	0.75	24	0	1	5.20E-02	6.91E-02	8.84E-05	1.19E-04	1.08E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.92E-08	5.50E-06	20.9	1.82E-02	4.73E-04
SI36_W	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.20E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.67E-06	17.7	1.54E-02	4.01E-04
SI36_W	0.75	17	0	1	3.62E-02	4.82E-02	6.16E-05	8.33E-05	7.56E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI36_W	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI37_E	0.75	9	0	1	1.89E-02	2.51E-02	3.22E-05	4.35E-05	3.94E-05	9.84E-06	0.00E+00	5.73E-05	5.74E-05	6.99E-09	2.00E-06	7.6	6.61E-03	1.72E-04
SI37_E	0.75	6	0	1	1.26E-02	1.67E-02	2.14E-05	2.90E-05	2.63E-05	6.56E-06	0.00E+00	3.82E-05	3.82E-05	4.66E-09	1.33E-06	5.1	4.41E-03	1.15E-04
SI37_E	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI37_E	0.75	4	0	1	7.88E-03	1.05E-02	1.34E-05	1.81E-05	1.64E-05	4.10E-06	0.00E+00	2.39E-05	2.39E-05	2.91E-09	8.33E-07	3.2	2.75E-03	7.17E-05
SI37_E	0.75	5	0	1	1.10E-02	1.47E-02	1.88E-05	2.53E-05	2.30E-05	5.74E-06	0.00E+00	3.34E-05	3.35E-05	4.08E-09	1.17E-06	4.4	3.86E-03	1.00E-04
SI37_E	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI37_E	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.18E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.2	2.81E-02	7.31E-04
SI37_E	0.75	56	0	1	1.23E-01	1.63E-01	2.09E-04	2.82E-04	2.56E-04	6.40E-05	0.00E+00	3.73E-04	3.73E-04	4.55E-08	1.30E-05	49.3	4.30E-02	1.12E-03
SI37_E	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI37_E	0.75	38	0	1	8.19E-02	1.09E-01	1.39E-04	1.88E-04	1.71E-04	4.27E-05	0.00E+00	2.48E-04	2.49E-04	3.03E-08	8.66E-06	32.9	2.86E-02	7.46E-04
SI37_E	0.75	34	0	1	7.41E-02	9.84E-02	1.26E-04	1.70E-04	1.54E-04	3.86E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.83E-06	29.7	2.59E-02	6.74E-04
SI37_E	0.75	38	0	1	8.35E-02	1.11E-01	1.42E-04	1.92E-04	1.74E-04	4.35E-05	0.00E+00	2.53E-04	2.53E-04	3.09E-08	8.83E-06	33.5	2.92E-02	7.60E-04
SI37_E	0.75	41	0	1	8.83E-02	1.17E-01	1.50E-04	2.03E-04	1.84E-04	4.59E-05	0.00E+00	2.67E-04	2.68E-04	3.26E-08	9.33E-06	35.4	3.08E-02	8.03E-04
SI37_E	0.75	41	0	1	8.98E-02	1.19E-01	1.53E-04	2.06E-04	1.87E-04	4.68E-05	0.00E+00	2.72E-04	2.73E-04	3.32E-08	9.50E-06	36.0	3.14E-02	8.17E-04
SI37_E	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI37_E	0.75	46	0	1	1.01E-01	1.34E-01	1.71E-04	2.32E-04	2.10E-04	5.25E-05	0.00E+00	3.06E-04	3.06E-04	3.73E-08	1.07E-05	40.5	3.53E-02	9.18E-04
SI37_E	0.75	57	0	1	1.24E-01	1.65E-01	2.12E-04	2.86E-04	2.60E-04	6.48E-05	0.00E+00	3.77E-04	3.78E-04	4.60E-08	1.32E-05	49.9	4.35E-02	1.13E-03
SI37_E	0.75	62	0	1	1.34E-01	1.78E-01	2.28E-04	3.08E-04	2.79E-04	6.97E-05	0.00E+00	4.06E-04	4.06E-04	4.95E-08	1.42E-05	53.7	4.68E-02	1.22E-03
SI37_E	0.75	43	0	1	9.30E-02	1.24E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.46E-04
SI37_E	0.75	28	0	1	6.15E-02	8.16E-02	1.04E-04	1.41E-04	1.28E-04	3.20E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.50E-06	24.7	2.15E-02	5.59E-04
SI37_E	0.75	24	0	1	5.20E-02	6.91E-02	8.84E-05	1.19E-04	1.08E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.92E-08	5.50E-06	20.9	1.82E-02	4.73E-04
SI37_E	0.75	20	0	1	4.41E-02	5.86E-02	7.50E-05	1.01E-04	9.20E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.63E-08	4.67E-06	17.7	1.54E-02	4.01E-04
SI37_E	0.75	17	0	1	3.62E-02	4.82E-02	6.16E-05	8.33E-05	7.56E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.34E-08	3.83E-06	14.5	1.27E-02	3.30E-04
SI37_E	0.75	12	0	1	2.68E-02	3.56E-02	4.55E-05	6.16E-05	5.58E-05	1.39E-05	0.00E+00	8.12E-05	8.13E-05	9.91E-09	2.83E-06	10.7	9.36E-03	2.44E-04
SI37_W	0.75	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.93E-05	3.56E-05	8.89E-06	0.00E+00	5.18E-05	5.18E-05	6.32E-09	1.81E-06	6.9	5.97E-03	1.55E-04
SI37_W	0.75	5	0	1	1.14E-02	1.51E-02	1.94E-05	2.62E-05	2.37E-05	5.93E-06	0.00E+00	3.45E-05	3.46E-05	4.21E-09	1.20E-06	4.6	3.98E-03	1.04E-04
SI37_W	0.75	5	0	1	9.97E-03	1.32E-02	1.69E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.02E-05	3.69E-09	1.05E-06	4.0	3.48E-03	9.07E-05
SI37_W	0.75	3	0	1	7.12E-03	9.46E-03	1.21E-05	1.64E-05	1.48E-05	3.71E-06	0.00E+00	2.16E-05	2.16E-05	2.63E-09	7.53E-07	2.9	2.49E-03	6.48E-05
SI37_W	0.75	5	0	1	9.97E-03	1.32E-02	1.69E-05	2.29E-05	2.08E-05	5.19E-06	0.00E+00	3.02E-05	3.02E-05	3.69E-09	1.05E-06	4.0	3.48E-03	9.07E-05
SI37_W	0.75	11	0	1	2.42E-02	3.22E-02	4.12E-05	5.56E-05	5.05E-05	1.26E-05	0.00E+00	7.34E-05	7.34E-05	8.95E-09	2.56E-06	9.7	8.46E-03	2.20E-04
SI37_W	0.75	33	0	1	7.26E-02	9.65E-02	1.23E-04	1.67E-04	1.51E-04	3.78E-05	0.00E+00	2.20E-04	2.20E-04	2.69E-08	7.68E-06	29.1	2.54E-02	6.61E-04
SI37_W	0.75	51	0	1	1.11E-01	1.48E-01	1.89E-04	2.55E-04	2.32E-04	5.78E-05	0.00E+00	3.37E-04	3.37E-04	4.11E-08	1.17E-05	44.6	3.88E-02	1.01E-03
SI37_W	0.75	41	0	1	8.97E-02	1.19E-01	1.53E-04	2.06E-04	1.87E-04	4.67E-05	0.00E+00	2.72E-04	2.72E-04	3.32E-08	9.48E-06	36.0	3.14E-02	8.16E-04
SI37_W	0.75	34	0	1	7.40E-02	9.84E-02	1.26E-04	1.70E-04	1.54E-04	3.85E-05	0.00E+00	2.24E-04	2.25E-04	2.74E-08	7.83E-06	29.7	2.59E-02	6.74E-04
SI37_W	0.75	31	0	1	6.69E-02	8.89E-02	1.14E-04	1.54E-04	1.40E-04	3.48E-05	0.00E+00	2.03E-04	2.03E-04	2.47E-08	7.08E-06	26.8	2.34E-02	6.09E-04
SI37_W	0.75	35	0	1	7.55E-02	1.00E-01	1.28E-04	1.73E-04	1.57E-04	3.93E-05	0.00E+00	2.29E-04	2.29E-04	2.79E-08	7.98E-06	30.3	2.64E-02	6.87E-04
SI37_W	0.75	37	0	1	7.97E-02	1.06E-01	1.36E-04	1.83E-04	1.66E-04	4.15E-05	0.00E+00	2.42E-04	2.42E-04	2.95E-08	8.43E-06	32.0	2.79E-02	7.25E-04
SI37_W	0.75	37	0	1	8.12E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.23E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.58E-06	32.6	2.84E-02	7.38E-04
SI37_W	0.75	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.88E-06	33.7	2.94E-02	7.64E-04
SI37_W	0.75	42	0	1	9.11E-02	1.21E-01	1.55E-04	2.09E-04	1.90E-04	4.74E-05	0.00E+00	2.76E-04	2.76E-04	3.37E-08	9.63E-06	36.6	3.19E-02	8.29E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI37_W	0.75	52	0	1	1.12E-01	1.49E-01	1.91E-04	2.58E-04	2.34E-04	5.86E-05	0.00E+00	3.41E-04	3.41E-04	4.16E-08	1.19E-05	45.1	3.93E-02	1.02E-03
SI37_W	0.75	56	0	1	1.21E-01	1.61E-01	2.06E-04	2.78E-04	2.52E-04	6.30E-05	0.00E+00	3.67E-04	3.67E-04	4.48E-08	1.28E-05	48.6	4.23E-02	1.10E-03
SI37_W	0.75	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.37E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.88E-06	33.7	2.94E-02	7.64E-04
SI37_W	0.75	26	0	1	5.55E-02	7.38E-02	9.44E-05	1.28E-04	1.16E-04	2.89E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.87E-06	22.3	1.94E-02	5.05E-04
SI37_W	0.75	22	0	1	4.70E-02	6.24E-02	7.99E-05	1.08E-04	9.80E-05	2.45E-05	0.00E+00	1.42E-04	1.43E-04	1.74E-08	4.97E-06	18.9	1.64E-02	4.27E-04
SI37_W	0.75	18	0	1	3.99E-02	5.30E-02	6.78E-05	9.16E-05	8.31E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.47E-08	4.22E-06	16.0	1.39E-02	3.63E-04
SI37_W	0.75	15	0	1	3.27E-02	4.35E-02	5.57E-05	7.52E-05	6.83E-05	1.70E-05	0.00E+00	9.93E-05	9.94E-05	1.21E-08	3.46E-06	13.1	1.14E-02	2.98E-04
SI37_W	0.75	11	0	1	2.42E-02	3.22E-02	4.12E-05	5.56E-05	5.05E-05	1.26E-05	0.00E+00	7.34E-05	7.34E-05	8.95E-09	2.56E-06	9.7	8.46E-03	2.20E-04
SI38_E	0.36	4	0	1	8.14E-03	1.08E-02	1.38E-05	1.87E-05	1.70E-05	4.24E-06	0.00E+00	2.47E-05	2.47E-05	3.01E-09	8.60E-07	3.3	2.84E-03	7.40E-05
SI38_E	0.36	2	0	1	5.42E-03	7.21E-03	9.22E-06	1.25E-05	1.13E-05	2.82E-06	0.00E+00	1.64E-05	1.65E-05	2.01E-09	5.74E-07	2.2	1.90E-03	4.93E-05
SI38_E	0.36	2	0	1	4.75E-03	6.31E-03	8.07E-06	1.09E-05	9.89E-06	2.47E-06	0.00E+00	1.44E-05	1.44E-05	1.75E-09	5.02E-07	1.9	1.66E-03	4.32E-05
SI38_E	0.36	2	0	1	3.39E-03	4.50E-03	5.76E-06	7.79E-06	7.07E-06	1.76E-06	0.00E+00	1.03E-05	1.03E-05	1.25E-09	3.58E-07	1.4	1.18E-03	3.08E-05
SI38_E	0.36	2	0	1	4.75E-03	6.31E-03	8.07E-06	1.09E-05	9.89E-06	2.47E-06	0.00E+00	1.44E-05	1.44E-05	1.75E-09	5.02E-07	1.9	1.66E-03	4.32E-05
SI38_E	0.36	5	0	1	1.15E-02	1.53E-02	1.96E-05	2.65E-05	2.40E-05	6.00E-06	0.00E+00	3.49E-05	3.50E-05	4.26E-09	1.22E-06	4.6	4.03E-03	1.05E-04
SI38_E	0.36	16	0	1	3.46E-02	4.59E-02	5.88E-05	7.95E-05	7.21E-05	1.80E-05	0.00E+00	1.05E-04	1.05E-04	1.28E-08	3.66E-06	13.9	1.21E-02	3.15E-04
SI38_E	0.36	24	0	1	5.29E-02	7.03E-02	8.99E-05	1.22E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.96E-08	5.59E-06	21.2	1.85E-02	4.81E-04
SI38_E	0.36	20	0	1	4.27E-02	5.67E-02	7.26E-05	9.81E-05	8.90E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.52E-06	17.1	1.49E-02	3.89E-04
SI38_E	0.36	16	0	1	3.53E-02	4.68E-02	5.99E-05	8.10E-05	7.35E-05	1.84E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.73E-06	14.1	1.23E-02	3.21E-04
SI38_E	0.36	15	0	1	3.19E-02	4.23E-02	5.42E-05	7.32E-05	6.64E-05	1.66E-05	0.00E+00	9.66E-05	9.67E-05	1.18E-08	3.37E-06	12.8	1.11E-02	2.90E-04
SI38_E	0.36	17	0	1	3.59E-02	4.77E-02	6.11E-05	8.26E-05	7.49E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.80E-06	14.4	1.26E-02	3.27E-04
SI38_E	0.36	17	0	1	3.80E-02	5.04E-02	6.46E-05	8.72E-05	7.92E-05	1.98E-05	0.00E+00	1.15E-04	1.15E-04	1.40E-08	4.01E-06	15.2	1.33E-02	3.45E-04
SI38_E	0.36	18	0	1	3.86E-02	5.13E-02	6.57E-05	8.88E-05	8.06E-05	2.01E-05	0.00E+00	1.17E-04	1.17E-04	1.43E-08	4.09E-06	15.5	1.35E-02	3.52E-04
SI38_E	0.36	18	0	1	4.00E-02	5.31E-02	6.80E-05	9.19E-05	8.34E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.23E-06	16.0	1.40E-02	3.64E-04
SI38_E	0.36	20	0	1	4.34E-02	5.76E-02	7.38E-05	9.97E-05	9.05E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.60E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI38_E	0.36	25	0	1	5.36E-02	7.12E-02	9.11E-05	1.23E-04	1.12E-04	2.79E-05	0.00E+00	1.62E-04	1.63E-04	1.98E-08	5.66E-06	21.5	1.87E-02	4.87E-04
SI38_E	0.36	26	0	1	5.76E-02	7.66E-02	9.80E-05	1.32E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.09E-06	23.1	2.01E-02	5.24E-04
SI38_E	0.36	18	0	1	4.00E-02	5.31E-02	6.80E-05	9.19E-05	8.34E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.23E-06	16.0	1.40E-02	3.64E-04
SI38_E	0.36	12	0	1	2.64E-02	3.51E-02	4.50E-05	6.08E-05	5.51E-05	1.38E-05	0.00E+00	8.01E-05	8.02E-05	9.78E-09	2.80E-06	10.6	9.24E-03	2.41E-04
SI38_E	0.36	10	0	1	2.24E-02	2.97E-02	3.80E-05	5.14E-05	4.66E-05	1.16E-05	0.00E+00	6.78E-05	6.79E-05	8.27E-09	2.37E-06	9.0	7.82E-03	2.04E-04
SI38_E	0.36	9	0	1	1.90E-02	2.52E-02	3.23E-05	4.36E-05	3.96E-05	9.88E-06	0.00E+00	5.75E-05	5.76E-05	7.02E-09	2.01E-06	7.6	6.64E-03	1.73E-04
SI38_E	0.36	7	0	1	1.56E-02	2.07E-02	2.65E-05	3.58E-05	3.25E-05	8.12E-06	0.00E+00	4.73E-05	4.73E-05	5.77E-09	1.65E-06	6.3	5.45E-03	1.42E-04
SI38_E	0.36	5	0	1	1.15E-02	1.53E-02	1.96E-05	2.65E-05	2.40E-05	6.00E-06	0.00E+00	3.49E-05	3.50E-05	4.26E-09	1.22E-06	4.6	4.03E-03	1.05E-04
SI38_W	0.39	4	0	1	8.79E-03	1.17E-02	1.49E-05	2.02E-05	1.83E-05	4.57E-06	0.00E+00	2.66E-05	2.67E-05	3.25E-09	9.29E-07	3.5	3.07E-03	7.99E-05
SI38_W	0.39	3	0	1	5.86E-03	7.78E-03	9.96E-06	1.35E-05	1.22E-05	3.05E-06	0.00E+00	1.78E-05	1.78E-05	2.17E-09	6.19E-07	2.4	2.05E-03	5.33E-05
SI38_W	0.39	2	0	1	5.13E-03	6.81E-03	8.71E-06	1.18E-05	1.07E-05	2.67E-06	0.00E+00	1.55E-05	1.56E-05	1.90E-09	5.42E-07	2.1	1.79E-03	4.66E-05
SI38_W	0.39	2	0	1	3.66E-03	4.86E-03	6.22E-06	8.41E-06	7.63E-06	1.91E-06	0.00E+00	1.11E-05	1.11E-05	1.35E-09	3.87E-07	1.5	1.28E-03	3.33E-05
SI38_W	0.39	2	0	1	5.13E-03	6.81E-03	8.71E-06	1.18E-05	1.07E-05	2.67E-06	0.00E+00	1.55E-05	1.56E-05	1.90E-09	5.42E-07	2.1	1.79E-03	4.66E-05
SI38_W	0.39	6	0	1	1.24E-02	1.65E-02	2.12E-05	2.86E-05	2.60E-05	6.48E-06	0.00E+00	3.77E-05	3.78E-05	4.60E-09	1.32E-06	5.0	4.35E-03	1.13E-04
SI38_W	0.39	17	0	1	3.73E-02	4.96E-02	6.35E-05	8.58E-05	7.79E-05	1.94E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.95E-06	15.0	1.31E-02	3.40E-04
SI38_W	0.39	26	0	1	5.71E-02	7.59E-02	9.71E-05	1.31E-04	1.19E-04	2.97E-05	0.00E+00	1.73E-04	1.73E-04	2.11E-08	6.04E-06	22.9	2.00E-02	5.20E-04
SI38_W	0.39	21	0	1	4.61E-02	6.13E-02	7.84E-05	1.06E-04	9.62E-05	2.40E-05	0.00E+00	1.40E-04	1.40E-04	1.71E-08	4.88E-06	18.5	1.61E-02	4.20E-04
SI38_W	0.39	17	0	1	3.81E-02	5.06E-02	6.47E-05	8.75E-05	7.94E-05	1.98E-05	0.00E+00	1.15E-04	1.16E-04	1.41E-08	4.03E-06	15.3	1.33E-02	3.46E-04
SI38_W	0.39	16	0	1	3.44E-02	4.57E-02	5.85E-05	7.91E-05	7.17E-05	1.79E-05	0.00E+00	1.04E-04	1.04E-04	1.27E-08	3.64E-06	13.8	1.20E-02	3.13E-04
SI38_W	0.39	18	0	1	3.88E-02	5.16E-02	6.60E-05	8.92E-05	8.09E-05	2.02E-05	0.00E+00	1.18E-04	1.18E-04	1.44E-08	4.10E-06	15.6	1.36E-02	3.53E-04
SI38_W	0.39	19	0	1	4.10E-02	5.45E-02	6.97E-05	9.42E-05	8.55E-05	2.13E-05	0.00E+00	1.24E-04	1.24E-04	1.52E-08	4.34E-06	16.5	1.43E-02	3.73E-04
SI38_W	0.39	19	0	1	4.17E-02	5.54E-02	7.10E-05	9.59E-05	8.70E-05	2.17E-05	0.00E+00	1.27E-04	1.27E-04	1.54E-08	4.41E-06	16.7	1.46E-02	3.80E-04
SI38_W	0.39	20	0	1	4.32E-02	5.74E-02	7.35E-05	9.93E-05	9.01E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.57E-06	17.3	1.51E-02	3.93E-04
SI38_W	0.39	22	0	1	4.69E-02	6.23E-02	7.97E-05	1.08E-04	9.77E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.73E-08	4.96E-06	18.8	1.64E-02	4.26E-04
SI38_W	0.39	27	0	1	5.78E-02	7.69E-02	9.84E-05	1.33E-04	1.21E-04	3.01E-05	0.00E+00	1.75E-04	1.76E-04	2.14E-08	6.12E-06	23.2	2.02E-02	5.26E-04
SI38_W	0.39	29	0	1	6.22E-02	8.27E-02	1.06E-04	1.43E-04	1.30E-04	3.24E-05	0.00E+00	1.89E-04	1.89E-04	2.30E-08	6.58E-06	25.0	2.18E-02	5.66E-04
SI38_W	0.39	20	0	1	4.32E-02	5.74E-02	7.35E-05	9.93E-05	9.01E-05	2.25E-05	0.00E+00	1.31E-04	1.31E-04	1.60E-08	4.57E-06	17.3	1.51E-02	3.93E-04
SI38_W	0.39	13	0	1	2.86E-02	3.79E-02	4.86E-05	6.56E-05	5.95E-05	1.49E-05	0.00E+00	8.66E-05	8.66E-05	1.06E-08	3.02E-06	11.5	9.98E-03	2.60E-04
SI38_W	0.39	11	0	1	2.42E-02	3.21E-02	4.11E-05	5.55E-05	5.04E-05	1.26E-05	0.00E+00	7.32E-05	7.33E-05	8.94E-09	2.55E-06	9.7	8.45E-03	2.20E-04
SI38_W	0.39	9	0	1	2.05E-02	2.72E-02	3.49E-05	4.71E-05	4.27E-05	1.07E-05	0.00E+00	6.21E-05	6.22E-05	7.58E-09	2.17E-06	8.2	7.17E-03	1.87E-04
SI38_W	0.39	8	0	1	1.68E-02	2.24E-02	2.86E-05	3.87E-05	3.51E-05	8.77E-06	0.00E+00	5.10E-05	5.11E-05	6.23E-09	1.78E-06	6.8	5.89E-03	1.53E-04
SI38_W	0.39	6	0	1	1.24E-02	1.65E-02	2.12E-05	2.86E-05	2.60E-05	6.48E-06	0.00E+00	3.77E-05	3.78E-05	4.60E-09	1.32E-06	5.0	4.35E-03	1.13E-04
SI39_E	0.25	3	0	1	5.53E-03	7.34E-03	9.40E-06	1.27E-05	1.15E-05	2.88E-06	0.00E+00	1.68E-05	1.68E-05	2.04E-09	5.84E-07	2.2	1.93E-03	5.03E-05
SI39_E	0.25	2	0	1	3.68E-03	4.90E-03	6.26E-06	8.47E-06	7.68E-06	1.92E-06	0.00E+00	1.12E-05	1.12E-05	1.36E-09	3.90E-07	1.5	1.29E-03	3.35E-05
SI39_E	0.25	1	0	1	3.22E-03	4.28E-03	5.48E-06	7.41E-06	6.72E-06	1.68E-06	0.00E+00	9.77E-06	9.78E-06	1.19E-09	3.41E-07	1.3	1.13E-03	2.93E-05
SI39_E	0.25	1	0	1	2.30E-03	3.06E-03	3.92E-06	5.29E-06	4.80E-06	1.20E-06	0.00E+00	6.98E-06	6.99E-06	8.52E-10	2.43E-07	0.9	8.05E-04	2.10E-05
SI39_E	0.25	1	0	1	3.22E-03	4.28E-03	5.48E-06	7.41E-06	6.72E-06	1.68E-06	0.00E+00	9.77E-06	9.78E-06	1.19E-09	3.41E-07	1.3	1.13E-03	2.93E-05
SI39_E	0.25	4	0	1	7.83E-03	1.04E-02	1.33E-05	1.80E-05	1.63E-05	4.08E-06	0.00E+00	2.37E-05	2.38E-05	2.90E-09	8.28E-07	3.1	2.74E-03	7.12E-05
SI39_E	0.25	11	0	1	2.35E-02	3.12E-02	3.99E-05	5.40E-05	4.90E-05	1.22E-05	0.00E+00	7.12E-05	7.13E-05	8.69E-09	2.48E-06	9.4	8.21E-03	2.14E-04
SI39_E	0.25	17	0	1	3.59E-02	4.77E-02	6.11E-05	8.26E-05	7.49E-05	1.87E-05	0.00E+00	1.09E-04	1.09E-04	1.33E-08	3.80E-06	14.4	1.26E-02	3.27E-04
SI39_E	0.25	13	0	1	2.90E-02	3.85E-02	4.93E-05	6.67E-05	6.05E-05	1.51E-05	0.00E+00	8.79E-05	8.80E-05	1.07E-08	3.07E-06	11.6	1.01E-02	2.64E-04
SI39_E	0.25	11	0	1	2.40E-02	3.18E-02	4.07E-05	5.50E-05	4.99E-05	1.25E-05	0.00E+00	7.26E-05	7.27E-05	8.86E-09	2.53E-06	9.6	8.37E-03	2.18E-04
SI39_E	0.25	10	0	1	2.16E-02	2.88E-02	3.68E-05	4.97E-05	4.51E-05	1.13E-05	0.00E+00	6.56E-05	6.57E-05	8.00E-09	2.29E-06	8.7	7.57E-03	1.97E-04
SI39_E	0.25	11	0	1	2.44E-02	3.24E-02	4.15E-05	5.61E-05	5.09E-05	1.27E-05	0.00E+00	7.40E-05	7.41E-05	9.03E-09	2.58E-06	9.8	8.53E-03	2.22E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI39_E	0.25	12	0	1	2.58E-02	3.43E-02	4.39E-05	5.93E-05	5.38E-05	1.34E-05	0.00E+00	7.82E-05	7.83E-05	9.54E-09	2.73E-06	10.3	9.02E-03	2.35E-04
SI39_E	0.25	12	0	1	2.63E-02	3.49E-02	4.46E-05	6.03E-05	5.47E-05	1.37E-05	0.00E+00	7.96E-05	7.97E-05	9.71E-09	2.78E-06	10.5	9.18E-03	2.39E-04
SI39_E	0.25	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.24E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.50E-03	2.47E-04
SI39_E	0.25	14	0	1	2.95E-02	3.92E-02	5.01E-05	6.77E-05	6.15E-05	1.53E-05	0.00E+00	8.93E-05	8.94E-05	1.09E-08	3.12E-06	11.8	1.03E-02	2.68E-04
SI39_E	0.25	17	0	1	3.64E-02	4.83E-02	6.19E-05	8.36E-05	7.59E-05	1.89E-05	0.00E+00	1.10E-04	1.10E-04	1.35E-08	3.85E-06	14.6	1.27E-02	3.31E-04
SI39_E	0.25	18	0	1	3.92E-02	5.20E-02	6.66E-05	9.00E-05	8.16E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.14E-06	15.7	1.37E-02	3.56E-04
SI39_E	0.25	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.24E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.50E-03	2.47E-04
SI39_E	0.25	8	0	1	1.80E-02	2.39E-02	3.05E-05	4.13E-05	3.74E-05	9.35E-06	0.00E+00	5.44E-05	5.45E-05	6.64E-09	1.90E-06	7.2	6.28E-03	1.63E-04
SI39_E	0.25	7	0	1	1.52E-02	2.02E-02	2.58E-05	3.49E-05	3.17E-05	7.91E-06	0.00E+00	4.61E-05	4.61E-05	5.62E-09	1.61E-06	6.1	5.31E-03	1.38E-04
SI39_E	0.25	6	0	1	1.29E-02	1.71E-02	2.19E-05	2.96E-05	2.69E-05	6.71E-06	0.00E+00	3.91E-05	3.91E-05	4.77E-09	1.36E-06	5.2	4.51E-03	1.17E-04
SI39_E	0.25	5	0	1	1.06E-02	1.41E-02	1.80E-05	2.43E-05	2.21E-05	5.52E-06	0.00E+00	3.21E-05	3.21E-05	3.92E-09	1.12E-06	4.3	3.70E-03	9.64E-05
SI39_E	0.25	4	0	1	7.83E-03	1.04E-02	1.33E-05	1.80E-05	1.63E-05	4.08E-06	0.00E+00	2.37E-05	2.38E-05	2.90E-09	8.28E-07	3.1	2.74E-03	7.12E-05
SI39_W	0.17	2	0	1	3.68E-03	4.88E-03	6.25E-06	8.45E-06	7.66E-06	1.91E-06	0.00E+00	1.11E-05	1.12E-05	1.36E-09	3.89E-07	1.5	1.28E-03	3.34E-05
SI39_W	0.17	1	0	1	2.45E-03	3.26E-03	4.17E-06	5.63E-06	5.11E-06	1.28E-06	0.00E+00	7.43E-06	7.43E-06	9.06E-10	2.59E-07	1.0	8.57E-04	2.23E-05
SI39_W	0.17	1	0	1	2.14E-03	2.85E-03	3.65E-06	4.93E-06	4.47E-06	1.12E-06	0.00E+00	6.50E-06	6.51E-06	7.93E-10	2.27E-07	0.9	7.49E-04	1.95E-05
SI39_W	0.17	1	0	1	1.53E-03	2.03E-03	2.60E-06	3.52E-06	3.19E-06	7.97E-07	0.00E+00	4.64E-06	4.65E-06	5.66E-10	1.62E-07	0.6	5.35E-04	1.39E-05
SI39_W	0.17	1	0	1	2.14E-03	2.85E-03	3.65E-06	4.93E-06	4.47E-06	1.12E-06	0.00E+00	6.50E-06	6.51E-06	7.93E-10	2.27E-07	0.9	7.49E-04	1.95E-05
SI39_W	0.17	2	0	1	5.21E-03	6.92E-03	8.85E-06	1.20E-05	1.09E-05	2.71E-06	0.00E+00	1.58E-05	1.58E-05	1.93E-09	5.51E-07	2.1	1.82E-03	4.74E-05
SI39_W	0.17	7	0	1	1.56E-02	2.08E-02	2.66E-05	3.59E-05	3.26E-05	8.13E-06	0.00E+00	4.73E-05	4.74E-05	5.78E-09	1.65E-06	6.3	5.46E-03	1.42E-04
SI39_W	0.17	11	0	1	2.39E-02	3.17E-02	4.06E-05	5.49E-05	4.98E-05	1.24E-05	0.00E+00	7.24E-05	7.25E-05	8.83E-09	2.53E-06	9.6	8.35E-03	2.17E-04
SI39_W	0.17	9	0	1	1.93E-02	2.56E-02	3.28E-05	4.43E-05	4.02E-05	1.00E-05	0.00E+00	5.85E-05	5.85E-05	7.14E-09	2.04E-06	7.7	6.75E-03	1.76E-04
SI39_W	0.17	7	0	1	1.59E-02	2.12E-02	2.71E-05	3.66E-05	3.32E-05	8.29E-06	0.00E+00	4.83E-05	4.83E-05	5.89E-09	1.68E-06	6.4	5.57E-03	1.45E-04
SI39_W	0.17	7	0	1	1.44E-02	1.91E-02	2.45E-05	3.31E-05	3.00E-05	7.50E-06	0.00E+00	4.36E-05	4.37E-05	5.32E-09	1.52E-06	5.8	5.03E-03	1.31E-04
SI39_W	0.17	7	0	1	1.62E-02	2.16E-02	2.76E-05	3.73E-05	3.38E-05	8.45E-06	0.00E+00	4.92E-05	4.93E-05	6.00E-09	1.72E-06	6.5	5.67E-03	1.48E-04
SI39_W	0.17	8	0	1	1.72E-02	2.28E-02	2.92E-05	3.94E-05	3.58E-05	8.93E-06	0.00E+00	5.20E-05	5.20E-05	6.34E-09	1.81E-06	6.9	6.00E-03	1.56E-04
SI39_W	0.17	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.09E-06	0.00E+00	5.29E-05	5.30E-05	6.46E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI39_W	0.17	8	0	1	1.81E-02	2.40E-02	3.07E-05	4.15E-05	3.77E-05	9.41E-06	0.00E+00	5.48E-05	5.48E-05	6.68E-09	1.91E-06	7.3	6.32E-03	1.64E-04
SI39_W	0.17	9	0	1	1.96E-02	2.60E-02	3.33E-05	4.50E-05	4.09E-05	1.02E-05	0.00E+00	5.94E-05	5.95E-05	7.25E-09	2.07E-06	7.9	6.85E-03	1.78E-04
SI39_W	0.17	11	0	1	2.42E-02	3.21E-02	4.11E-05	5.56E-05	5.04E-05	1.26E-05	0.00E+00	7.33E-05	7.34E-05	8.95E-09	2.56E-06	9.7	8.46E-03	2.20E-04
SI39_W	0.17	12	0	1	2.60E-02	3.46E-02	4.43E-05	5.98E-05	5.43E-05	1.36E-05	0.00E+00	7.89E-05	7.90E-05	9.63E-09	2.75E-06	10.4	9.10E-03	2.37E-04
SI39_W	0.17	8	0	1	1.81E-02	2.40E-02	3.07E-05	4.15E-05	3.77E-05	9.41E-06	0.00E+00	5.48E-05	5.48E-05	6.68E-09	1.91E-06	7.3	6.32E-03	1.64E-04
SI39_W	0.17	5	0	1	1.19E-02	1.59E-02	2.03E-05	2.75E-05	2.49E-05	6.22E-06	0.00E+00	3.62E-05	3.62E-05	4.42E-09	1.26E-06	4.8	4.18E-03	1.09E-04
SI39_W	0.17	5	0	1	1.01E-02	1.34E-02	1.72E-05	2.32E-05	2.11E-05	5.26E-06	0.00E+00	3.06E-05	3.07E-05	3.74E-09	1.07E-06	4.1	3.53E-03	9.20E-05
SI39_W	0.17	4	0	1	8.58E-03	1.14E-02	1.46E-05	1.97E-05	1.79E-05	4.47E-06	0.00E+00	2.60E-05	2.60E-05	3.17E-09	9.07E-07	3.4	3.00E-03	7.80E-05
SI39_W	0.17	3	0	1	7.05E-03	9.36E-03	1.20E-05	1.62E-05	1.47E-05	3.67E-06	0.00E+00	2.14E-05	2.14E-05	2.61E-09	7.45E-07	2.8	2.46E-03	6.41E-05
SI39_W	0.17	2	0	1	5.21E-03	6.92E-03	8.85E-06	1.20E-05	1.09E-05	2.71E-06	0.00E+00	1.58E-05	1.58E-05	1.93E-09	5.51E-07	2.1	1.82E-03	4.74E-05
SI40_E	0.49	5	0	1	1.04E-02	1.38E-02	1.77E-05	2.39E-05	2.17E-05	5.42E-06	0.00E+00	3.16E-05	3.16E-05	3.85E-09	1.10E-06	4.2	3.64E-03	9.47E-05
SI40_E	0.49	3	0	1	6.94E-03	9.22E-03	1.18E-05	1.59E-05	1.45E-05	3.61E-06	0.00E+00	2.10E-05	2.11E-05	2.57E-09	7.34E-07	2.8	2.43E-03	6.31E-05
SI40_E	0.49	3	0	1	6.07E-03	8.07E-03	1.03E-05	1.40E-05	1.27E-05	3.16E-06	0.00E+00	1.84E-05	1.84E-05	2.25E-09	6.42E-07	2.4	2.12E-03	5.53E-05
SI40_E	0.49	2	0	1	4.34E-03	5.76E-03	7.38E-06	9.97E-06	9.04E-06	2.26E-06	0.00E+00	1.31E-05	1.32E-05	1.60E-09	4.59E-07	1.7	1.52E-03	3.95E-05
SI40_E	0.49	3	0	1	6.07E-03	8.07E-03	1.03E-05	1.40E-05	1.27E-05	3.16E-06	0.00E+00	1.84E-05	1.84E-05	2.25E-09	6.42E-07	2.4	2.12E-03	5.53E-05
SI40_E	0.49	7	0	1	1.47E-02	1.96E-02	2.51E-05	3.39E-05	3.07E-05	7.68E-06	0.00E+00	4.47E-05	4.47E-05	5.45E-09	1.56E-06	5.9	5.16E-03	1.34E-04
SI40_E	0.49	20	0	1	4.42E-02	5.88E-02	7.52E-05	1.02E-04	9.22E-05	2.30E-05	0.00E+00	1.34E-04	1.34E-04	1.64E-08	4.68E-06	17.8	1.55E-02	4.03E-04
SI40_E	0.49	31	0	1	6.77E-02	8.99E-02	1.15E-04	1.56E-04	1.41E-04	3.52E-05	0.00E+00	2.05E-04	2.05E-04	2.50E-08	7.16E-06	27.2	2.37E-02	6.16E-04
SI40_E	0.49	25	0	1	5.47E-02	7.26E-02	9.29E-05	1.26E-04	1.14E-04	2.85E-05	0.00E+00	1.66E-04	1.66E-04	2.02E-08	5.78E-06	21.9	1.91E-02	4.97E-04
SI40_E	0.49	21	0	1	4.51E-02	5.99E-02	7.67E-05	1.04E-04	9.41E-05	2.35E-05	0.00E+00	1.37E-04	1.37E-04	1.67E-08	4.77E-06	18.1	1.58E-02	4.10E-04
SI40_E	0.49	19	0	1	4.08E-02	5.42E-02	6.93E-05	9.37E-05	8.50E-05	2.12E-05	0.00E+00	1.24E-04	1.24E-04	1.51E-08	4.31E-06	16.4	1.43E-02	3.71E-04
SI40_E	0.49	21	0	1	4.60E-02	6.11E-02	7.82E-05	1.06E-04	9.59E-05	2.39E-05	0.00E+00	1.39E-04	1.40E-04	1.70E-08	4.86E-06	18.4	1.61E-02	4.18E-04
SI40_E	0.49	22	0	1	4.86E-02	6.45E-02	8.26E-05	1.12E-04	1.01E-04	2.53E-05	0.00E+00	1.47E-04	1.47E-04	1.80E-08	5.14E-06	19.5	1.70E-02	4.42E-04
SI40_E	0.49	23	0	1	4.95E-02	6.57E-02	8.41E-05	1.14E-04	1.03E-04	2.57E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.23E-06	19.8	1.73E-02	4.50E-04
SI40_E	0.49	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI40_E	0.49	26	0	1	5.55E-02	7.38E-02	9.44E-05	1.28E-04	1.16E-04	2.89E-05	0.00E+00	1.68E-04	1.68E-04	2.05E-08	5.87E-06	22.3	1.94E-02	5.05E-04
SI40_E	0.49	31	0	1	6.85E-02	9.11E-02	1.17E-04	1.57E-04	1.43E-04	3.57E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.25E-06	27.5	2.40E-02	6.24E-04
SI40_E	0.49	34	0	1	7.37E-02	9.80E-02	1.25E-04	1.69E-04	1.54E-04	3.84E-05	0.00E+00	2.24E-04	2.24E-04	2.73E-08	7.80E-06	29.6	2.58E-02	6.71E-04
SI40_E	0.49	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI40_E	0.49	16	0	1	3.38E-02	4.50E-02	5.75E-05	7.78E-05	7.05E-05	1.76E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.18E-02	3.08E-04
SI40_E	0.49	13	0	1	2.86E-02	3.80E-02	4.87E-05	6.58E-05	5.97E-05	1.49E-05	0.00E+00	8.68E-05	8.69E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.60E-04
SI40_E	0.49	11	0	1	2.43E-02	3.23E-02	4.13E-05	5.58E-05	5.06E-05	1.26E-05	0.00E+00	7.36E-05	7.37E-05	8.98E-09	2.57E-06	9.7	8.49E-03	2.21E-04
SI40_E	0.49	9	0	1	2.00E-02	2.65E-02	3.39E-05	4.59E-05	4.16E-05	1.04E-05	0.00E+00	6.05E-05	6.05E-05	7.38E-09	2.11E-06	8.0	6.97E-03	1.82E-04
SI40_E	0.49	7	0	1	1.47E-02	1.96E-02	2.51E-05	3.39E-05	3.07E-05	7.68E-06	0.00E+00	4.47E-05	4.47E-05	5.45E-09	1.56E-06	5.9	5.16E-03	1.34E-04
SI40_W	0.50	5	0	1	1.01E-02	1.34E-02	1.71E-05	2.31E-05	2.10E-05	5.23E-06	0.00E+00	3.05E-05	3.05E-05	3.72E-09	1.06E-06	4.0	3.51E-03	9.14E-05
SI40_W	0.50	3	0	1	6.70E-03	8.90E-03	1.14E-05	1.54E-05	1.40E-05	3.49E-06	0.00E+00	2.03E-05	2.03E-05	2.48E-09	7.09E-07	2.7	2.34E-03	6.10E-05
SI40_W	0.50	3	0	1	5.86E-03	7.79E-03	9.97E-06	1.35E-05	1.22E-05	3.05E-06	0.00E+00	1.78E-05	1.78E-05	2.17E-09	6.20E-07	2.4	2.05E-03	5.33E-05
SI40_W	0.50	2	0	1	4.19E-03	5.56E-03	7.12E-06	9.62E-06	8.73E-06	2.18E-06	0.00E+00	1.27E-05	1.27E-05	1.55E-09	4.43E-07	1.7	1.46E-03	3.81E-05
SI40_W	0.50	3	0	1	5.86E-03	7.79E-03	9.97E-06	1.35E-05	1.22E-05	3.05E-06	0.00E+00	1.78E-05	1.78E-05	2.17E-09	6.20E-07	2.4	2.05E-03	5.33E-05
SI40_W	0.50	7	0	1	1.42E-02	1.89E-02	2.42E-05	3.27E-05	2.97E-05	7.41E-06	0.00E+00	4.32E-05	4.32E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI40_W	0.50	20	0	1	4.27E-02	5.68E-02	7.26E-05	9.82E-05	8.91E-05	2.22E-05	0.00E+00	1.29E-04	1.30E-04	1.58E-08	4.52E-06	17.1	1.49E-02	3.89E-04
SI40_W	0.50	30	0	1	6.53E-02	8.68E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.28E-02	5.94E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI40_W	0.50	24	0	1	5.28E-02	7.01E-02	8.97E-05	1.21E-04	1.10E-04	2.75E-05	0.00E+00	1.60E-04	1.60E-04	1.95E-08	5.58E-06	21.2	1.84E-02	4.80E-04
SI40_W	0.50	20	0	1	4.36E-02	5.79E-02	7.41E-05	1.00E-04	9.08E-05	2.27E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.61E-06	17.5	1.52E-02	3.96E-04
SI40_W	0.50	18	0	1	3.94E-02	5.23E-02	6.69E-05	9.05E-05	8.21E-05	2.05E-05	0.00E+00	1.19E-04	1.19E-04	1.46E-08	4.16E-06	15.8	1.38E-02	3.58E-04
SI40_W	0.50	20	0	1	4.44E-02	5.90E-02	7.55E-05	1.02E-04	9.25E-05	2.31E-05	0.00E+00	1.35E-04	1.35E-04	1.64E-08	4.69E-06	17.8	1.55E-02	4.04E-04
SI40_W	0.50	22	0	1	4.69E-02	6.23E-02	7.97E-05	1.08E-04	9.78E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.73E-08	4.96E-06	18.8	1.64E-02	4.27E-04
SI40_W	0.50	22	0	1	4.77E-02	6.34E-02	8.12E-05	1.10E-04	9.95E-05	2.49E-05	0.00E+00	1.45E-04	1.45E-04	1.77E-08	5.05E-06	19.2	1.67E-02	4.34E-04
SI40_W	0.50	23	0	1	4.94E-02	6.57E-02	8.40E-05	1.14E-04	1.03E-04	2.57E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.23E-06	19.8	1.73E-02	4.50E-04
SI40_W	0.50	25	0	1	5.36E-02	7.12E-02	9.11E-05	1.23E-04	1.12E-04	2.79E-05	0.00E+00	1.62E-04	1.63E-04	1.98E-08	5.67E-06	21.5	1.87E-02	4.88E-04
SI40_W	0.50	30	0	1	6.62E-02	8.79E-02	1.13E-04	1.52E-04	1.38E-04	3.44E-05	0.00E+00	2.01E-04	2.01E-04	2.45E-08	7.00E-06	26.5	2.31E-02	6.02E-04
SI40_W	0.50	33	0	1	7.12E-02	9.46E-02	1.21E-04	1.64E-04	1.48E-04	3.71E-05	0.00E+00	2.16E-04	2.16E-04	2.63E-08	7.53E-06	28.6	2.49E-02	6.48E-04
SI40_W	0.50	23	0	1	4.94E-02	6.57E-02	8.40E-05	1.14E-04	1.03E-04	2.57E-05	0.00E+00	1.50E-04	1.50E-04	1.83E-08	5.23E-06	19.8	1.73E-02	4.50E-04
SI40_W	0.50	15	0	1	3.27E-02	4.34E-02	5.55E-05	7.51E-05	6.81E-05	1.70E-05	0.00E+00	9.90E-05	9.91E-05	1.21E-08	3.45E-06	13.1	1.14E-02	2.97E-04
SI40_W	0.50	13	0	1	2.76E-02	3.67E-02	4.70E-05	6.35E-05	5.76E-05	1.44E-05	0.00E+00	8.38E-05	8.39E-05	1.02E-08	2.92E-06	11.1	9.66E-03	2.51E-04
SI40_W	0.50	11	0	1	2.35E-02	3.12E-02	3.99E-05	5.39E-05	4.89E-05	1.22E-05	0.00E+00	7.11E-05	7.12E-05	8.67E-09	2.48E-06	9.4	8.20E-03	2.13E-04
SI40_W	0.50	9	0	1	1.93E-02	2.56E-02	3.28E-05	4.43E-05	4.02E-05	1.00E-05	0.00E+00	5.84E-05	5.85E-05	7.12E-09	2.04E-06	7.7	6.73E-03	1.75E-04
SI40_W	0.50	7	0	1	1.42E-02	1.89E-02	2.42E-05	3.27E-05	2.97E-05	7.41E-06	0.00E+00	4.32E-05	4.32E-05	5.27E-09	1.51E-06	5.7	4.98E-03	1.30E-04
SI41_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.85E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI41_E	0.75	5	0	1	1.01E-02	1.34E-02	1.71E-05	2.31E-05	2.10E-05	5.23E-06	0.00E+00	3.05E-05	3.05E-05	3.72E-09	1.06E-06	4.0	3.51E-03	9.14E-05
SI41_E	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI41_E	0.75	3	0	1	6.28E-03	8.35E-03	1.07E-05	1.44E-05	1.31E-05	3.27E-06	0.00E+00	1.90E-05	1.91E-05	2.32E-09	6.64E-07	2.5	2.20E-03	5.72E-05
SI41_E	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI41_E	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI41_E	0.75	29	0	1	6.41E-02	8.51E-02	1.09E-04	1.47E-04	1.34E-04	3.34E-05	0.00E+00	1.94E-04	1.94E-04	2.37E-08	6.78E-06	25.7	2.24E-02	5.83E-04
SI41_E	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.43E-02	8.92E-04
SI41_E	0.75	36	0	1	7.92E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.12E-05	0.00E+00	2.40E-04	2.40E-04	2.93E-08	8.37E-06	31.8	2.77E-02	7.20E-04
SI41_E	0.75	30	0	1	6.53E-02	8.68E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.28E-02	5.94E-04
SI41_E	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.24E-06	23.7	2.06E-02	5.37E-04
SI41_E	0.75	31	0	1	6.66E-02	8.85E-02	1.13E-04	1.53E-04	1.39E-04	3.47E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.04E-06	26.7	2.33E-02	6.06E-04
SI41_E	0.75	32	0	1	7.04E-02	9.35E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI41_E	0.75	33	0	1	7.16E-02	9.51E-02	1.22E-04	1.65E-04	1.49E-04	3.73E-05	0.00E+00	2.17E-04	2.17E-04	2.65E-08	7.57E-06	28.7	2.50E-02	6.52E-04
SI41_E	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI41_E	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.3	2.81E-02	7.32E-04
SI41_E	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI41_E	0.75	49	0	1	1.07E-01	1.42E-01	1.82E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.72E-04
SI41_E	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI41_E	0.75	23	0	1	4.90E-02	6.51E-02	8.33E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.18E-06	19.7	1.71E-02	4.46E-04
SI41_E	0.75	19	0	1	4.15E-02	5.51E-02	7.05E-05	9.53E-05	8.64E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.53E-08	4.38E-06	16.6	1.45E-02	3.77E-04
SI41_E	0.75	16	0	1	3.52E-02	4.67E-02	5.98E-05	8.08E-05	7.33E-05	1.83E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.72E-06	14.1	1.23E-02	3.20E-04
SI41_E	0.75	13	0	1	2.89E-02	3.84E-02	4.91E-05	6.64E-05	6.02E-05	1.50E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI41_E	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI41_W	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.85E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI41_W	0.75	5	0	1	1.01E-02	1.34E-02	1.71E-05	2.31E-05	2.10E-05	5.23E-06	0.00E+00	3.05E-05	3.05E-05	3.72E-09	1.06E-06	4.0	3.51E-03	9.14E-05
SI41_W	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI41_W	0.75	3	0	1	6.28E-03	8.35E-03	1.07E-05	1.44E-05	1.31E-05	3.27E-06	0.00E+00	1.90E-05	1.91E-05	2.32E-09	6.64E-07	2.5	2.20E-03	5.72E-05
SI41_W	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI41_W	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI41_W	0.75	29	0	1	6.41E-02	8.51E-02	1.09E-04	1.47E-04	1.34E-04	3.34E-05	0.00E+00	1.94E-04	1.94E-04	2.37E-08	6.78E-06	25.7	2.24E-02	5.83E-04
SI41_W	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.43E-02	8.92E-04
SI41_W	0.75	36	0	1	7.92E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.12E-05	0.00E+00	2.40E-04	2.40E-04	2.93E-08	8.37E-06	31.8	2.77E-02	7.20E-04
SI41_W	0.75	30	0	1	6.53E-02	8.68E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.28E-02	5.94E-04
SI41_W	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.24E-06	23.7	2.06E-02	5.37E-04
SI41_W	0.75	31	0	1	6.66E-02	8.85E-02	1.13E-04	1.53E-04	1.39E-04	3.47E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.04E-06	26.7	2.33E-02	6.06E-04
SI41_W	0.75	32	0	1	7.04E-02	9.35E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI41_W	0.75	33	0	1	7.16E-02	9.51E-02	1.22E-04	1.65E-04	1.49E-04	3.73E-05	0.00E+00	2.17E-04	2.17E-04	2.65E-08	7.57E-06	28.7	2.50E-02	6.52E-04
SI41_W	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI41_W	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.3	2.81E-02	7.32E-04
SI41_W	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI41_W	0.75	49	0	1	1.07E-01	1.42E-01	1.82E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.72E-04
SI41_W	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI41_W	0.75	23	0	1	4.90E-02	6.51E-02	8.33E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.18E-06	19.7	1.71E-02	4.46E-04
SI41_W	0.75	19	0	1	4.15E-02	5.51E-02	7.05E-05	9.53E-05	8.64E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.53E-08	4.38E-06	16.6	1.45E-02	3.77E-04
SI41_W	0.75	16	0	1	3.52E-02	4.67E-02	5.98E-05	8.08E-05	7.33E-05	1.83E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.72E-06	14.1	1.23E-02	3.20E-04
SI41_W	0.75	13	0	1	2.89E-02	3.84E-02	4.91E-05	6.64E-05	6.02E-05	1.50E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI41_W	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI42_E	0.75	7	0	1	1.51E-02	2.00E-02	2.56E-05	3.46E-05	3.14E-05	7.85E-06	0.00E+00	4.57E-05	4.57E-05	5.57E-09	1.59E-06	6.0	5.27E-03	1.37E-04
SI42_E	0.75	5	0	1	1.01E-02	1.34E-02	1.71E-05	2.31E-05	2.10E-05	5.23E-06	0.00E+00	3.05E-05	3.05E-05	3.72E-09	1.06E-06	4.0	3.51E-03	9.14E-05
SI42_E	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI42_E	0.75	3	0	1	6.28E-03	8.35E-03	1.07E-05	1.44E-05	1.31E-05	3.27E-06	0.00E+00	1.90E-05	1.91E-05	2.32E-09	6.64E-07	2.5	2.20E-03	5.72E-05

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI42_E	0.75	4	0	1	8.80E-03	1.17E-02	1.50E-05	2.02E-05	1.83E-05	4.58E-06	0.00E+00	2.67E-05	2.67E-05	3.25E-09	9.30E-07	3.5	3.07E-03	8.00E-05
SI42_E	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI42_E	0.75	29	0	1	6.41E-02	8.51E-02	1.09E-04	1.47E-04	1.34E-04	3.34E-05	0.00E+00	1.94E-04	1.94E-04	2.37E-08	6.78E-06	25.7	2.24E-02	5.83E-04
SI42_E	0.75	45	0	1	9.80E-02	1.30E-01	1.67E-04	2.25E-04	2.04E-04	5.10E-05	0.00E+00	2.97E-04	2.97E-04	3.62E-08	1.04E-05	39.3	3.43E-02	8.92E-04
SI42_E	0.75	36	0	1	7.92E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.12E-05	0.00E+00	2.40E-04	2.40E-04	2.93E-08	8.37E-06	31.8	2.77E-02	7.20E-04
SI42_E	0.75	30	0	1	6.53E-02	8.68E-02	1.11E-04	1.50E-04	1.36E-04	3.40E-05	0.00E+00	1.98E-04	1.98E-04	2.42E-08	6.91E-06	26.2	2.28E-02	5.94E-04
SI42_E	0.75	27	0	1	5.91E-02	7.85E-02	1.00E-04	1.36E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.24E-06	23.7	2.06E-02	5.37E-04
SI42_E	0.75	31	0	1	6.66E-02	8.85E-02	1.13E-04	1.53E-04	1.39E-04	3.47E-05	0.00E+00	2.02E-04	2.02E-04	2.46E-08	7.04E-06	26.7	2.33E-02	6.06E-04
SI42_E	0.75	32	0	1	7.04E-02	9.35E-02	1.20E-04	1.62E-04	1.47E-04	3.66E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.44E-06	28.2	2.46E-02	6.40E-04
SI42_E	0.75	33	0	1	7.16E-02	9.51E-02	1.22E-04	1.65E-04	1.49E-04	3.73E-05	0.00E+00	2.17E-04	2.17E-04	2.65E-08	7.57E-06	28.7	2.50E-02	6.52E-04
SI42_E	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI42_E	0.75	37	0	1	8.04E-02	1.07E-01	1.37E-04	1.85E-04	1.68E-04	4.19E-05	0.00E+00	2.44E-04	2.44E-04	2.97E-08	8.50E-06	32.3	2.81E-02	7.32E-04
SI42_E	0.75	46	0	1	9.93E-02	1.32E-01	1.69E-04	2.28E-04	2.07E-04	5.17E-05	0.00E+00	3.01E-04	3.01E-04	3.67E-08	1.05E-05	39.8	3.47E-02	9.03E-04
SI42_E	0.75	49	0	1	1.07E-01	1.42E-01	1.82E-04	2.45E-04	2.23E-04	5.56E-05	0.00E+00	3.24E-04	3.24E-04	3.95E-08	1.13E-05	42.8	3.73E-02	9.72E-04
SI42_E	0.75	34	0	1	7.41E-02	9.85E-02	1.26E-04	1.70E-04	1.55E-04	3.86E-05	0.00E+00	2.25E-04	2.25E-04	2.74E-08	7.84E-06	29.7	2.59E-02	6.74E-04
SI42_E	0.75	23	0	1	4.90E-02	6.51E-02	8.33E-05	1.13E-04	1.02E-04	2.55E-05	0.00E+00	1.49E-04	1.49E-04	1.81E-08	5.18E-06	19.7	1.71E-02	4.46E-04
SI42_E	0.75	19	0	1	4.15E-02	5.51E-02	7.05E-05	9.53E-05	8.64E-05	2.16E-05	0.00E+00	1.26E-04	1.26E-04	1.53E-08	4.38E-06	16.6	1.45E-02	3.77E-04
SI42_E	0.75	16	0	1	3.52E-02	4.67E-02	5.98E-05	8.08E-05	7.33E-05	1.83E-05	0.00E+00	1.07E-04	1.07E-04	1.30E-08	3.72E-06	14.1	1.23E-02	3.20E-04
SI42_E	0.75	13	0	1	2.89E-02	3.84E-02	4.91E-05	6.64E-05	6.02E-05	1.50E-05	0.00E+00	8.76E-05	8.77E-05	1.07E-08	3.06E-06	11.6	1.01E-02	2.63E-04
SI42_E	0.75	10	0	1	2.14E-02	2.84E-02	3.63E-05	4.91E-05	4.45E-05	1.11E-05	0.00E+00	6.47E-05	6.48E-05	7.90E-09	2.26E-06	8.6	7.47E-03	1.94E-04
SI42_W	0.75	6	0	1	1.23E-02	1.64E-02	2.09E-05	2.83E-05	2.57E-05	6.41E-06	0.00E+00	3.73E-05	3.74E-05	4.55E-09	1.30E-06	4.9	4.31E-03	1.12E-04
SI42_W	0.75	4	0	1	8.21E-03	1.09E-02	1.40E-05	1.89E-05	1.71E-05	4.28E-06	0.00E+00	2.49E-05	2.49E-05	3.04E-09	8.68E-07	3.3	2.87E-03	7.47E-05
SI42_W	0.75	3	0	1	7.19E-03	9.55E-03	1.22E-05	1.65E-05	1.50E-05	3.74E-06	0.00E+00	2.18E-05	2.18E-05	2.66E-09	7.60E-07	2.9	2.51E-03	6.54E-05
SI42_W	0.75	2	0	1	5.13E-03	6.82E-03	8.73E-06	1.18E-05	1.07E-05	2.67E-06	0.00E+00	1.56E-05	1.56E-05	1.90E-09	5.43E-07	2.1	1.79E-03	4.67E-05
SI42_W	0.75	3	0	1	7.19E-03	9.55E-03	1.22E-05	1.65E-05	1.50E-05	3.74E-06	0.00E+00	2.18E-05	2.18E-05	2.66E-09	7.60E-07	2.9	2.51E-03	6.54E-05
SI42_W	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.08E-06	0.00E+00	5.29E-05	5.29E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI42_W	0.75	24	0	1	5.24E-02	6.95E-02	8.90E-05	1.20E-04	1.09E-04	2.73E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.54E-06	21.0	1.83E-02	4.76E-04
SI42_W	0.75	37	0	1	8.01E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.17E-05	0.00E+00	2.43E-04	2.43E-04	2.96E-08	8.47E-06	32.1	2.80E-02	7.28E-04
SI42_W	0.75	30	0	1	6.47E-02	8.59E-02	1.10E-04	1.49E-04	1.35E-04	3.37E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.84E-06	25.9	2.26E-02	5.88E-04
SI42_W	0.75	25	0	1	5.34E-02	7.09E-02	9.08E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.97E-08	5.64E-06	21.4	1.87E-02	4.86E-04
SI42_W	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI42_W	0.75	25	0	1	5.44E-02	7.23E-02	9.25E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.75E-06	21.8	1.90E-02	4.95E-04
SI42_W	0.75	26	0	1	5.75E-02	7.64E-02	9.77E-05	1.32E-04	1.20E-04	2.99E-05	0.00E+00	1.74E-04	1.74E-04	2.13E-08	6.08E-06	23.1	2.01E-02	5.23E-04
SI42_W	0.75	27	0	1	5.85E-02	7.77E-02	9.95E-05	1.34E-04	1.22E-04	3.05E-05	0.00E+00	1.77E-04	1.78E-04	2.16E-08	6.19E-06	23.5	2.05E-02	5.32E-04
SI42_W	0.75	28	0	1	6.06E-02	8.05E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.84E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.12E-02	5.51E-04
SI42_W	0.75	30	0	1	6.57E-02	8.73E-02	1.12E-04	1.51E-04	1.37E-04	3.42E-05	0.00E+00	1.99E-04	1.99E-04	2.43E-08	6.95E-06	26.4	2.30E-02	5.98E-04
SI42_W	0.75	37	0	1	8.11E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.22E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.57E-06	32.5	2.83E-02	7.38E-04
SI42_W	0.75	40	0	1	8.73E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.54E-05	0.00E+00	2.64E-04	2.65E-04	3.23E-08	9.23E-06	35.0	3.05E-02	7.94E-04
SI42_W	0.75	28	0	1	6.06E-02	8.05E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.84E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.12E-02	5.51E-04
SI42_W	0.75	18	0	1	4.00E-02	5.32E-02	6.81E-05	9.20E-05	8.35E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.23E-06	16.1	1.40E-02	3.64E-04
SI42_W	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.78E-05	7.06E-05	1.76E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.18E-02	3.08E-04
SI42_W	0.75	13	0	1	2.87E-02	3.82E-02	4.89E-05	6.60E-05	5.99E-05	1.50E-05	0.00E+00	8.71E-05	8.72E-05	1.06E-08	3.04E-06	11.5	1.00E-02	2.61E-04
SI42_W	0.75	11	0	1	2.36E-02	3.14E-02	4.01E-05	5.42E-05	4.92E-05	1.23E-05	0.00E+00	7.16E-05	7.16E-05	8.73E-09	2.50E-06	9.5	8.25E-03	2.15E-04
SI42_W	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.08E-06	0.00E+00	5.29E-05	5.29E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI43_E	0.75	6	0	1	1.37E-02	1.82E-02	2.33E-05	3.15E-05	2.86E-05	7.13E-06	0.00E+00	4.15E-05	4.16E-05	5.06E-09	1.45E-06	5.5	4.79E-03	1.25E-04
SI43_E	0.75	4	0	1	9.13E-03	1.21E-02	1.55E-05	2.10E-05	1.90E-05	4.75E-06	0.00E+00	2.77E-05	2.77E-05	3.38E-09	9.66E-07	3.7	3.19E-03	8.31E-05
SI43_E	0.75	4	0	1	7.99E-03	1.06E-02	1.36E-05	1.84E-05	1.67E-05	4.16E-06	0.00E+00	2.42E-05	2.42E-05	2.95E-09	8.45E-07	3.2	2.79E-03	7.27E-05
SI43_E	0.75	3	0	1	5.71E-03	7.58E-03	9.70E-06	1.31E-05	1.19E-05	2.97E-06	0.00E+00	1.73E-05	1.73E-05	2.11E-09	6.03E-07	2.3	1.99E-03	5.19E-05
SI43_E	0.75	4	0	1	7.99E-03	1.06E-02	1.36E-05	1.84E-05	1.67E-05	4.16E-06	0.00E+00	2.42E-05	2.42E-05	2.95E-09	8.45E-07	3.2	2.79E-03	7.27E-05
SI43_E	0.75	9	0	1	1.94E-02	2.58E-02	3.30E-05	4.46E-05	4.05E-05	1.01E-05	0.00E+00	5.88E-05	5.89E-05	7.18E-09	2.05E-06	7.8	6.78E-03	1.77E-04
SI43_E	0.75	27	0	1	5.82E-02	7.73E-02	9.90E-05	1.34E-04	1.21E-04	3.03E-05	0.00E+00	1.76E-04	1.77E-04	2.15E-08	6.16E-06	23.4	2.03E-02	5.30E-04
SI43_E	0.75	41	0	1	8.90E-02	1.18E-01	1.51E-04	2.05E-04	1.86E-04	4.64E-05	0.00E+00	2.70E-04	2.70E-04	3.29E-08	9.41E-06	35.7	3.11E-02	8.10E-04
SI43_E	0.75	33	0	1	7.19E-02	9.55E-02	1.22E-04	1.65E-04	1.50E-04	3.74E-05	0.00E+00	2.18E-04	2.18E-04	2.66E-08	7.60E-06	28.9	2.51E-02	6.54E-04
SI43_E	0.75	27	0	1	5.94E-02	7.89E-02	1.01E-04	1.36E-04	1.24E-04	3.09E-05	0.00E+00	1.80E-04	1.80E-04	2.19E-08	6.28E-06	23.8	2.07E-02	5.40E-04
SI43_E	0.75	25	0	1	5.36E-02	7.13E-02	9.12E-05	1.23E-04	1.12E-04	2.79E-05	0.00E+00	1.63E-04	1.63E-04	1.98E-08	5.67E-06	21.5	1.88E-02	4.88E-04
SI43_E	0.75	28	0	1	6.05E-02	8.04E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.83E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.11E-02	5.50E-04
SI43_E	0.75	29	0	1	6.39E-02	8.49E-02	1.09E-04	1.47E-04	1.33E-04	3.33E-05	0.00E+00	1.94E-04	1.94E-04	2.36E-08	6.76E-06	25.6	2.23E-02	5.82E-04
SI43_E	0.75	30	0	1	6.51E-02	8.64E-02	1.11E-04	1.50E-04	1.36E-04	3.39E-05	0.00E+00	1.97E-04	1.97E-04	2.41E-08	6.88E-06	26.1	2.27E-02	5.92E-04
SI43_E	0.75	31	0	1	6.73E-02	8.95E-02	1.14E-04	1.55E-04	1.40E-04	3.51E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.12E-06	27.0	2.35E-02	6.13E-04
SI43_E	0.75	34	0	1	7.31E-02	9.71E-02	1.24E-04	1.68E-04	1.52E-04	3.80E-05	0.00E+00	2.21E-04	2.22E-04	2.70E-08	7.72E-06	29.3	2.55E-02	6.65E-04
SI43_E	0.75	41	0	1	9.02E-02	1.20E-01	1.53E-04	2.07E-04	1.88E-04	4.69E-05	0.00E+00	2.73E-04	2.74E-04	3.33E-08	9.53E-06	36.2	3.15E-02	8.20E-04
SI43_E	0.75	45	0	1	9.70E-02	1.29E-01	1.65E-04	2.23E-04	2.02E-04	5.05E-05	0.00E+00	2.94E-04	2.94E-04	3.59E-08	1.03E-05	38.9	3.39E-02	8.83E-04
SI43_E	0.75	31	0	1	6.73E-02	8.95E-02	1.14E-04	1.55E-04	1.40E-04	3.51E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.12E-06	27.0	2.35E-02	6.13E-04
SI43_E	0.75	20	0	1	4.45E-02	5.91E-02	7.57E-05	1.02E-04	9.28E-05	2.32E-05	0.00E+00	1.35E-04	1.35E-04	1.65E-08	4.71E-06	17.9	1.56E-02	4.05E-04
SI43_E	0.75	17	0	1	3.77E-02	5.00E-02	6.40E-05	8.66E-05	7.85E-05	1.96E-05	0.00E+00	1.14E-04	1.14E-04	1.39E-08	3.98E-06	15.1	1.32E-02	3.43E-04
SI43_E	0.75	15	0	1	3.20E-02	4.25E-02	5.43E-05	7.34E-05	6.66E-05	1.66E-05	0.00E+00	9.69E-05	9.70E-05	1.18E-08	3.38E-06	12.8	1.12E-02	2.91E-04
SI43_E	0.75	12	0	1	2.63E-02	3.49E-02	4.46E-05	6.03E-05	5.47E-05	1.37E-05	0.00E+00	7.96E-05	7.97E-05	9.71E-09	2.78E-06	10.5	9.18E-03	2.39E-04
SI43_E	0.75	9	0	1	1.94E-02	2.58E-02	3.30E-05	4.46E-05	4.05E-05	1.01E-05	0.00E+00	5.88E-05	5.89E-05	7.18E-09	2.05E-06	7.8	6.78E-03	1.77E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI43_W	0.75	6	0	1	1.34E-02	1.78E-02	2.27E-05	3.07E-05	2.79E-05	6.96E-06	0.00E+00	4.05E-05	4.06E-05	4.94E-09	1.41E-06	5.4	4.67E-03	1.22E-04
SI43_W	0.75	4	0	1	8.91E-03	1.18E-02	1.52E-05	2.05E-05	1.86E-05	4.64E-06	0.00E+00	2.70E-05	2.70E-05	3.30E-09	9.42E-07	3.6	3.12E-03	8.11E-05
SI43_W	0.75	4	0	1	7.80E-03	1.04E-02	1.33E-05	1.79E-05	1.63E-05	4.06E-06	0.00E+00	2.36E-05	2.37E-05	2.88E-09	8.25E-07	3.1	2.73E-03	7.09E-05
SI43_W	0.75	3	0	1	5.57E-03	7.40E-03	9.47E-06	1.28E-05	1.16E-05	2.90E-06	0.00E+00	1.69E-05	1.69E-05	2.06E-09	5.89E-07	2.2	1.95E-03	5.07E-05
SI43_W	0.75	4	0	1	7.80E-03	1.04E-02	1.33E-05	1.79E-05	1.63E-05	4.06E-06	0.00E+00	2.36E-05	2.37E-05	2.88E-09	8.25E-07	3.1	2.73E-03	7.09E-05
SI43_W	0.75	9	0	1	1.89E-02	2.52E-02	3.22E-05	4.35E-05	3.95E-05	9.86E-06	0.00E+00	5.74E-05	5.75E-05	7.00E-09	2.00E-06	7.6	6.62E-03	1.72E-04
SI43_W	0.75	26	0	1	5.68E-02	7.55E-02	9.66E-05	1.31E-04	1.18E-04	2.96E-05	0.00E+00	1.72E-04	1.72E-04	2.10E-08	6.01E-06	22.8	1.99E-02	5.17E-04
SI43_W	0.75	40	0	1	8.69E-02	1.15E-01	1.48E-04	2.00E-04	1.81E-04	4.52E-05	0.00E+00	2.63E-04	2.64E-04	3.21E-08	9.19E-06	34.9	3.04E-02	7.91E-04
SI43_W	0.75	32	0	1	7.02E-02	9.32E-02	1.19E-04	1.61E-04	1.46E-04	3.65E-05	0.00E+00	2.13E-04	2.13E-04	2.60E-08	7.42E-06	28.2	2.45E-02	6.39E-04
SI43_W	0.75	27	0	1	5.79E-02	7.70E-02	9.85E-05	1.33E-04	1.21E-04	3.02E-05	0.00E+00	1.76E-04	1.76E-04	2.14E-08	6.13E-06	23.2	2.02E-02	5.27E-04
SI43_W	0.75	24	0	1	5.24E-02	6.96E-02	8.90E-05	1.20E-04	1.09E-04	2.73E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.54E-06	21.0	1.83E-02	4.76E-04
SI43_W	0.75	27	0	1	5.90E-02	7.84E-02	1.00E-04	1.36E-04	1.23E-04	3.07E-05	0.00E+00	1.79E-04	1.79E-04	2.18E-08	6.24E-06	23.7	2.06E-02	5.37E-04
SI43_W	0.75	29	0	1	6.24E-02	8.29E-02	1.06E-04	1.43E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.89E-04	2.31E-08	6.60E-06	25.0	2.18E-02	5.68E-04
SI43_W	0.75	29	0	1	6.35E-02	8.44E-02	1.08E-04	1.46E-04	1.32E-04	3.31E-05	0.00E+00	1.92E-04	1.93E-04	2.35E-08	6.71E-06	25.5	2.22E-02	5.78E-04
SI43_W	0.75	30	0	1	6.57E-02	8.73E-02	1.12E-04	1.51E-04	1.37E-04	3.42E-05	0.00E+00	1.99E-04	1.99E-04	2.43E-08	6.95E-06	26.4	2.30E-02	5.98E-04
SI43_W	0.75	33	0	1	7.13E-02	9.47E-02	1.21E-04	1.64E-04	1.49E-04	3.71E-05	0.00E+00	2.16E-04	2.16E-04	2.64E-08	7.54E-06	28.6	2.49E-02	6.49E-04
SI43_W	0.75	40	0	1	8.80E-02	1.17E-01	1.50E-04	2.02E-04	1.83E-04	4.58E-05	0.00E+00	2.67E-04	2.67E-04	3.25E-08	9.31E-06	35.3	3.08E-02	8.01E-04
SI43_W	0.75	44	0	1	9.47E-02	1.26E-01	1.61E-04	2.18E-04	1.97E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI43_W	0.75	30	0	1	6.57E-02	8.73E-02	1.12E-04	1.51E-04	1.37E-04	3.42E-05	0.00E+00	1.99E-04	1.99E-04	2.43E-08	6.95E-06	26.4	2.30E-02	5.98E-04
SI43_W	0.75	20	0	1	4.35E-02	5.77E-02	7.39E-05	9.98E-05	9.06E-05	2.26E-05	0.00E+00	1.32E-04	1.32E-04	1.61E-08	4.59E-06	17.4	1.52E-02	3.95E-04
SI43_W	0.75	17	0	1	3.68E-02	4.88E-02	6.25E-05	8.45E-05	7.66E-05	1.91E-05	0.00E+00	1.11E-04	1.12E-04	1.36E-08	3.89E-06	14.8	1.29E-02	3.34E-04
SI43_W	0.75	14	0	1	3.12E-02	4.14E-02	5.30E-05	7.17E-05	6.50E-05	1.62E-05	0.00E+00	9.45E-05	9.46E-05	1.15E-08	3.30E-06	12.5	1.09E-02	2.84E-04
SI43_W	0.75	12	0	1	2.56E-02	3.40E-02	4.36E-05	5.89E-05	5.34E-05	1.33E-05	0.00E+00	7.77E-05	7.77E-05	9.47E-09	2.71E-06	10.3	8.96E-03	2.33E-04
SI43_W	0.75	9	0	1	1.89E-02	2.52E-02	3.22E-05	4.35E-05	3.95E-05	9.86E-06	0.00E+00	5.74E-05	5.75E-05	7.00E-09	2.00E-06	7.6	6.62E-03	1.72E-04
SI44_E	0.75	6	0	1	1.23E-02	1.64E-02	2.09E-05	2.83E-05	2.57E-05	6.41E-06	0.00E+00	3.73E-05	3.74E-05	4.55E-09	1.30E-06	4.9	4.31E-03	1.12E-04
SI44_E	0.75	4	0	1	8.21E-03	1.09E-02	1.40E-05	1.89E-05	1.71E-05	4.28E-06	0.00E+00	2.49E-05	2.49E-05	3.04E-09	8.68E-07	3.3	2.87E-03	7.47E-05
SI44_E	0.75	3	0	1	7.19E-03	9.55E-03	1.22E-05	1.65E-05	1.50E-05	3.74E-06	0.00E+00	2.18E-05	2.18E-05	2.66E-09	7.60E-07	2.9	2.51E-03	6.54E-05
SI44_E	0.75	2	0	1	5.13E-03	6.82E-03	8.73E-06	1.18E-05	1.07E-05	2.67E-06	0.00E+00	1.56E-05	1.56E-05	1.90E-09	5.43E-07	2.1	1.79E-03	4.67E-05
SI44_E	0.75	3	0	1	7.19E-03	9.55E-03	1.22E-05	1.65E-05	1.50E-05	3.74E-06	0.00E+00	2.18E-05	2.18E-05	2.66E-09	7.60E-07	2.9	2.51E-03	6.54E-05
SI44_E	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.08E-06	0.00E+00	5.29E-05	5.29E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI44_E	0.75	24	0	1	5.24E-02	6.95E-02	8.90E-05	1.20E-04	1.09E-04	2.73E-05	0.00E+00	1.59E-04	1.59E-04	1.94E-08	5.54E-06	21.0	1.83E-02	4.76E-04
SI44_E	0.75	37	0	1	8.01E-02	1.06E-01	1.36E-04	1.84E-04	1.67E-04	4.17E-05	0.00E+00	2.43E-04	2.43E-04	2.96E-08	8.47E-06	32.1	2.80E-02	7.28E-04
SI44_E	0.75	30	0	1	6.47E-02	8.59E-02	1.10E-04	1.49E-04	1.35E-04	3.37E-05	0.00E+00	1.96E-04	1.96E-04	2.39E-08	6.84E-06	25.9	2.26E-02	5.88E-04
SI44_E	0.75	25	0	1	5.34E-02	7.09E-02	9.08E-05	1.23E-04	1.11E-04	2.78E-05	0.00E+00	1.62E-04	1.62E-04	1.97E-08	5.64E-06	21.4	1.87E-02	4.86E-04
SI44_E	0.75	22	0	1	4.82E-02	6.41E-02	8.20E-05	1.11E-04	1.01E-04	2.51E-05	0.00E+00	1.46E-04	1.46E-04	1.78E-08	5.10E-06	19.4	1.69E-02	4.39E-04
SI44_E	0.75	25	0	1	5.44E-02	7.23E-02	9.25E-05	1.25E-04	1.13E-04	2.83E-05	0.00E+00	1.65E-04	1.65E-04	2.01E-08	5.75E-06	21.8	1.90E-02	4.95E-04
SI44_E	0.75	26	0	1	5.75E-02	7.64E-02	9.77E-05	1.32E-04	1.20E-04	2.99E-05	0.00E+00	1.74E-04	1.74E-04	2.13E-08	6.08E-06	23.1	2.01E-02	5.23E-04
SI44_E	0.75	27	0	1	5.85E-02	7.77E-02	9.95E-05	1.34E-04	1.22E-04	3.05E-05	0.00E+00	1.77E-04	1.78E-04	2.16E-08	6.19E-06	23.5	2.05E-02	5.32E-04
SI44_E	0.75	28	0	1	6.06E-02	8.05E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.84E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.12E-02	5.51E-04
SI44_E	0.75	30	0	1	6.57E-02	8.73E-02	1.12E-04	1.51E-04	1.37E-04	3.42E-05	0.00E+00	1.99E-04	1.99E-04	2.43E-08	6.95E-06	26.4	2.30E-02	5.98E-04
SI44_E	0.75	37	0	1	8.11E-02	1.08E-01	1.38E-04	1.86E-04	1.69E-04	4.22E-05	0.00E+00	2.46E-04	2.46E-04	3.00E-08	8.57E-06	32.5	2.83E-02	7.38E-04
SI44_E	0.75	40	0	1	8.73E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.54E-05	0.00E+00	2.64E-04	2.65E-04	3.23E-08	9.23E-06	35.0	3.05E-02	7.94E-04
SI44_E	0.75	28	0	1	6.06E-02	8.05E-02	1.03E-04	1.39E-04	1.26E-04	3.15E-05	0.00E+00	1.84E-04	1.84E-04	2.24E-08	6.40E-06	24.3	2.12E-02	5.51E-04
SI44_E	0.75	18	0	1	4.00E-02	5.32E-02	6.81E-05	9.20E-05	8.35E-05	2.08E-05	0.00E+00	1.21E-04	1.21E-04	1.48E-08	4.23E-06	16.1	1.40E-02	3.64E-04
SI44_E	0.75	16	0	1	3.39E-02	4.50E-02	5.76E-05	7.78E-05	7.06E-05	1.76E-05	0.00E+00	1.03E-04	1.03E-04	1.25E-08	3.58E-06	13.6	1.18E-02	3.08E-04
SI44_E	0.75	13	0	1	2.87E-02	3.82E-02	4.89E-05	6.60E-05	5.99E-05	1.50E-05	0.00E+00	8.71E-05	8.72E-05	1.06E-08	3.04E-06	11.5	1.00E-02	2.61E-04
SI44_E	0.75	11	0	1	2.36E-02	3.14E-02	4.01E-05	5.42E-05	4.92E-05	1.23E-05	0.00E+00	7.16E-05	7.16E-05	8.73E-09	2.50E-06	9.5	8.25E-03	2.15E-04
SI44_E	0.75	8	0	1	1.75E-02	2.32E-02	2.97E-05	4.01E-05	3.64E-05	9.08E-06	0.00E+00	5.29E-05	5.29E-05	6.45E-09	1.85E-06	7.0	6.10E-03	1.59E-04
SI44_W	0.75	7	0	1	1.44E-02	1.92E-02	2.45E-05	3.31E-05	3.01E-05	7.51E-06	0.00E+00	4.37E-05	4.38E-05	5.33E-09	1.52E-06	5.8	5.04E-03	1.31E-04
SI44_W	0.75	4	0	1	9.61E-03	1.28E-02	1.63E-05	2.21E-05	2.00E-05	5.00E-06	0.00E+00	2.91E-05	2.92E-05	3.55E-09	1.02E-06	3.9	3.36E-03	8.75E-05
SI44_W	0.75	4	0	1	8.41E-03	1.12E-02	1.43E-05	1.93E-05	1.75E-05	4.38E-06	0.00E+00	2.55E-05	2.55E-05	3.11E-09	8.89E-07	3.4	2.94E-03	7.65E-05
SI44_W	0.75	3	0	1	6.01E-03	7.98E-03	1.02E-05	1.38E-05	1.25E-05	3.13E-06	0.00E+00	1.82E-05	1.82E-05	2.22E-09	6.35E-07	2.4	2.10E-03	5.47E-05
SI44_W	0.75	4	0	1	8.41E-03	1.12E-02	1.43E-05	1.93E-05	1.75E-05	4.38E-06	0.00E+00	2.55E-05	2.55E-05	3.11E-09	8.89E-07	3.4	2.94E-03	7.65E-05
SI44_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.26E-05	1.06E-05	0.00E+00	6.19E-05	6.20E-05	7.55E-09	2.16E-06	8.2	7.14E-03	1.86E-04
SI44_W	0.75	28	0	1	6.13E-02	8.14E-02	1.04E-04	1.41E-04	1.28E-04	3.19E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.48E-06	24.6	2.14E-02	5.58E-04
SI44_W	0.75	43	0	1	9.37E-02	1.25E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.47E-08	9.91E-06	37.6	3.28E-02	8.53E-04
SI44_W	0.75	35	0	1	7.57E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.94E-05	0.00E+00	2.29E-04	2.30E-04	2.80E-08	8.00E-06	30.4	2.65E-02	6.89E-04
SI44_W	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.90E-04	2.31E-08	6.61E-06	25.1	2.18E-02	5.69E-04
SI44_W	0.75	26	0	1	5.65E-02	7.50E-02	9.60E-05	1.30E-04	1.18E-04	2.94E-05	0.00E+00	1.71E-04	1.71E-04	2.09E-08	5.97E-06	22.7	1.97E-02	5.14E-04
SI44_W	0.75	29	0	1	6.37E-02	8.46E-02	1.08E-04	1.46E-04	1.33E-04	3.32E-05	0.00E+00	1.93E-04	1.93E-04	2.36E-08	6.73E-06	25.6	2.23E-02	5.79E-04
SI44_W	0.75	31	0	1	6.73E-02	8.94E-02	1.14E-04	1.55E-04	1.40E-04	3.50E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.12E-06	27.0	2.35E-02	6.12E-04
SI44_W	0.75	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.57E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI44_W	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.50E-06	28.4	2.48E-02	6.45E-04
SI44_W	0.75	35	0	1	7.69E-02	1.02E-01	1.31E-04	1.77E-04	1.60E-04	4.00E-05	0.00E+00	2.33E-04	2.33E-04	2.84E-08	8.13E-06	30.9	2.69E-02	7.00E-04
SI44_W	0.75	44	0	1	9.49E-02	1.26E-01	1.61E-04	2.18E-04	1.98E-04	4.94E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.64E-04
SI44_W	0.75	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.29E-04
SI44_W	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.50E-06	28.4	2.48E-02	6.45E-04
SI44_W	0.75	22	0	1	4.69E-02	6.23E-02	7.97E-05	1.08E-04	9.77E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.73E-08	4.96E-06	18.8	1.64E-02	4.26E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI44_W	0.75	18	0	1	3.97E-02	5.27E-02	6.74E-05	9.11E-05	8.27E-05	2.06E-05	0.00E+00	1.20E-04	1.20E-04	1.47E-08	4.19E-06	15.9	1.39E-02	3.61E-04
SI44_W	0.75	15	0	1	3.36E-02	4.47E-02	5.72E-05	7.73E-05	7.01E-05	1.75E-05	0.00E+00	1.02E-04	1.02E-04	1.24E-08	3.56E-06	13.5	1.18E-02	3.06E-04
SI44_W	0.75	13	0	1	2.76E-02	3.67E-02	4.70E-05	6.35E-05	5.76E-05	1.44E-05	0.00E+00	8.38E-05	8.39E-05	1.02E-08	2.92E-06	11.1	9.66E-03	2.51E-04
SI44_W	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.26E-05	1.06E-05	0.00E+00	6.19E-05	6.20E-05	7.55E-09	2.16E-06	8.2	7.14E-03	1.86E-04
SI45_E	0.75	7	0	1	1.44E-02	1.92E-02	2.45E-05	3.31E-05	3.01E-05	7.51E-06	0.00E+00	4.37E-05	4.38E-05	5.33E-09	1.52E-06	5.8	5.04E-03	1.31E-04
SI45_E	0.75	4	0	1	9.61E-03	1.28E-02	1.63E-05	2.21E-05	2.00E-05	5.00E-06	0.00E+00	2.91E-05	2.92E-05	3.55E-09	1.02E-06	3.9	3.36E-03	8.75E-05
SI45_E	0.75	4	0	1	8.41E-03	1.12E-02	1.43E-05	1.93E-05	1.75E-05	4.38E-06	0.00E+00	2.55E-05	2.55E-05	3.11E-09	8.89E-07	3.4	2.94E-03	7.65E-05
SI45_E	0.75	3	0	1	6.01E-03	7.98E-03	1.02E-05	1.38E-05	1.25E-05	3.13E-06	0.00E+00	1.82E-05	1.82E-05	2.22E-09	6.35E-07	2.4	2.10E-03	5.47E-05
SI45_E	0.75	4	0	1	8.41E-03	1.12E-02	1.43E-05	1.93E-05	1.75E-05	4.38E-06	0.00E+00	2.55E-05	2.55E-05	3.11E-09	8.89E-07	3.4	2.94E-03	7.65E-05
SI45_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.26E-05	1.06E-05	0.00E+00	6.19E-05	6.20E-05	7.55E-09	2.16E-06	8.2	7.14E-03	1.86E-04
SI45_E	0.75	28	0	1	6.13E-02	8.14E-02	1.04E-04	1.41E-04	1.28E-04	3.19E-05	0.00E+00	1.86E-04	1.86E-04	2.27E-08	6.48E-06	24.6	2.14E-02	5.58E-04
SI45_E	0.75	43	0	1	9.37E-02	1.25E-01	1.59E-04	2.15E-04	1.95E-04	4.88E-05	0.00E+00	2.84E-04	2.84E-04	3.47E-08	9.91E-06	37.6	3.28E-02	8.53E-04
SI45_E	0.75	35	0	1	7.57E-02	1.01E-01	1.29E-04	1.74E-04	1.58E-04	3.94E-05	0.00E+00	2.29E-04	2.30E-04	2.80E-08	8.00E-06	30.4	2.65E-02	6.89E-04
SI45_E	0.75	29	0	1	6.25E-02	8.30E-02	1.06E-04	1.44E-04	1.30E-04	3.25E-05	0.00E+00	1.89E-04	1.90E-04	2.31E-08	6.61E-06	25.1	2.18E-02	5.69E-04
SI45_E	0.75	26	0	1	5.65E-02	7.50E-02	9.60E-05	1.30E-04	1.18E-04	2.94E-05	0.00E+00	1.71E-04	1.71E-04	2.09E-08	5.97E-06	22.7	1.97E-02	5.14E-04
SI45_E	0.75	29	0	1	6.37E-02	8.46E-02	1.08E-04	1.46E-04	1.33E-04	3.32E-05	0.00E+00	1.93E-04	1.93E-04	2.36E-08	6.73E-06	25.6	2.23E-02	5.79E-04
SI45_E	0.75	31	0	1	6.73E-02	8.94E-02	1.14E-04	1.55E-04	1.40E-04	3.50E-05	0.00E+00	2.04E-04	2.04E-04	2.49E-08	7.12E-06	27.0	2.35E-02	6.12E-04
SI45_E	0.75	31	0	1	6.85E-02	9.10E-02	1.16E-04	1.57E-04	1.43E-04	3.57E-05	0.00E+00	2.08E-04	2.08E-04	2.53E-08	7.24E-06	27.5	2.39E-02	6.23E-04
SI45_E	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.50E-06	28.4	2.48E-02	6.45E-04
SI45_E	0.75	35	0	1	7.69E-02	1.02E-01	1.31E-04	1.77E-04	1.60E-04	4.00E-05	0.00E+00	2.33E-04	2.33E-04	2.84E-08	8.13E-06	30.9	2.69E-02	7.00E-04
SI45_E	0.75	44	0	1	9.49E-02	1.26E-01	1.61E-04	2.18E-04	1.98E-04	4.94E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.64E-04
SI45_E	0.75	47	0	1	1.02E-01	1.36E-01	1.74E-04	2.35E-04	2.13E-04	5.32E-05	0.00E+00	3.10E-04	3.10E-04	3.78E-08	1.08E-05	41.0	3.57E-02	9.29E-04
SI45_E	0.75	33	0	1	7.09E-02	9.42E-02	1.21E-04	1.63E-04	1.48E-04	3.69E-05	0.00E+00	2.15E-04	2.15E-04	2.62E-08	7.50E-06	28.4	2.48E-02	6.45E-04
SI45_E	0.75	22	0	1	4.69E-02	6.23E-02	7.97E-05	1.08E-04	9.77E-05	2.44E-05	0.00E+00	1.42E-04	1.42E-04	1.73E-08	4.96E-06	18.8	1.64E-02	4.26E-04
SI45_E	0.75	18	0	1	3.97E-02	5.27E-02	6.74E-05	9.11E-05	8.27E-05	2.06E-05	0.00E+00	1.20E-04	1.20E-04	1.47E-08	4.19E-06	15.9	1.39E-02	3.61E-04
SI45_E	0.75	15	0	1	3.36E-02	4.47E-02	5.72E-05	7.73E-05	7.01E-05	1.75E-05	0.00E+00	1.02E-04	1.02E-04	1.24E-08	3.56E-06	13.5	1.18E-02	3.06E-04
SI45_E	0.75	13	0	1	2.76E-02	3.67E-02	4.70E-05	6.35E-05	5.76E-05	1.44E-05	0.00E+00	8.38E-05	8.39E-05	1.02E-08	2.92E-06	11.1	9.66E-03	2.51E-04
SI45_E	0.75	9	0	1	2.04E-02	2.71E-02	3.47E-05	4.69E-05	4.26E-05	1.06E-05	0.00E+00	6.19E-05	6.20E-05	7.55E-09	2.16E-06	8.2	7.14E-03	1.86E-04
SI45_W	0.75	6	0	1	1.20E-02	1.60E-02	2.05E-05	2.77E-05	2.51E-05	6.27E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.21E-03	1.10E-04
SI45_W	0.75	4	0	1	8.03E-03	1.07E-02	1.36E-05	1.84E-05	1.67E-05	4.18E-06	0.00E+00	2.43E-05	2.44E-05	2.97E-09	8.49E-07	3.2	2.81E-03	7.30E-05
SI45_W	0.75	3	0	1	7.03E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.43E-07	2.8	2.46E-03	6.39E-05
SI45_W	0.75	2	0	1	5.02E-03	6.67E-03	8.53E-06	1.15E-05	1.05E-05	2.61E-06	0.00E+00	1.52E-05	1.52E-05	1.86E-09	5.31E-07	2.0	1.75E-03	4.56E-05
SI45_W	0.75	3	0	1	7.03E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.43E-07	2.8	2.46E-03	6.39E-05
SI45_W	0.75	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.56E-05	8.88E-06	0.00E+00	5.17E-05	5.18E-05	6.31E-09	1.80E-06	6.8	5.96E-03	1.55E-04
SI45_W	0.75	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI45_W	0.75	36	0	1	7.83E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.08E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.28E-06	31.4	2.74E-02	7.12E-04
SI45_W	0.75	29	0	1	6.32E-02	8.40E-02	1.07E-04	1.45E-04	1.32E-04	3.29E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.68E-06	25.4	2.21E-02	5.75E-04
SI45_W	0.75	24	0	1	5.22E-02	6.93E-02	8.87E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.52E-06	20.9	1.82E-02	4.75E-04
SI45_W	0.75	22	0	1	4.72E-02	6.27E-02	8.02E-05	1.08E-04	9.83E-05	2.46E-05	0.00E+00	1.43E-04	1.43E-04	1.74E-08	4.99E-06	18.9	1.65E-02	4.29E-04
SI45_W	0.75	24	0	1	5.32E-02	7.07E-02	9.04E-05	1.22E-04	1.11E-04	2.77E-05	0.00E+00	1.61E-04	1.61E-04	1.97E-08	5.62E-06	21.3	1.86E-02	4.84E-04
SI45_W	0.75	26	0	1	5.62E-02	7.47E-02	9.55E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.70E-04	1.71E-04	2.08E-08	5.94E-06	22.5	1.96E-02	5.11E-04
SI45_W	0.75	26	0	1	5.72E-02	7.60E-02	9.73E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.12E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI45_W	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI45_W	0.75	30	0	1	6.42E-02	8.53E-02	1.09E-04	1.48E-04	1.34E-04	3.34E-05	0.00E+00	1.95E-04	1.95E-04	2.37E-08	6.79E-06	25.8	2.24E-02	5.84E-04
SI45_W	0.75	36	0	1	7.93E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.13E-05	0.00E+00	2.40E-04	2.41E-04	2.93E-08	8.38E-06	31.8	2.77E-02	7.21E-04
SI45_W	0.75	39	0	1	8.53E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.59E-04	2.59E-04	3.15E-08	9.02E-06	34.2	2.98E-02	7.76E-04
SI45_W	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI45_W	0.75	18	0	1	3.91E-02	5.20E-02	6.65E-05	8.99E-05	8.16E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.14E-06	15.7	1.37E-02	3.56E-04
SI45_W	0.75	15	0	1	3.31E-02	4.40E-02	5.63E-05	7.61E-05	6.90E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.50E-06	13.3	1.16E-02	3.01E-04
SI45_W	0.75	13	0	1	2.81E-02	3.73E-02	4.78E-05	6.46E-05	5.86E-05	1.46E-05	0.00E+00	8.52E-05	8.53E-05	1.04E-08	2.97E-06	11.3	9.82E-03	2.56E-04
SI45_W	0.75	11	0	1	2.31E-02	3.07E-02	3.92E-05	5.30E-05	4.81E-05	1.20E-05	0.00E+00	7.00E-05	7.00E-05	8.53E-09	2.44E-06	9.3	8.07E-03	2.10E-04
SI45_W	0.75	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.56E-05	8.88E-06	0.00E+00	5.17E-05	5.18E-05	6.31E-09	1.80E-06	6.8	5.96E-03	1.55E-04
SI46_E	0.75	6	0	1	1.20E-02	1.60E-02	2.05E-05	2.77E-05	2.51E-05	6.27E-06	0.00E+00	3.65E-05	3.65E-05	4.45E-09	1.27E-06	4.8	4.21E-03	1.10E-04
SI46_E	0.75	4	0	1	8.03E-03	1.07E-02	1.36E-05	1.84E-05	1.67E-05	4.18E-06	0.00E+00	2.43E-05	2.44E-05	2.97E-09	8.49E-07	3.2	2.81E-03	7.30E-05
SI46_E	0.75	3	0	1	7.03E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.43E-07	2.8	2.46E-03	6.39E-05
SI46_E	0.75	2	0	1	5.02E-03	6.67E-03	8.53E-06	1.15E-05	1.05E-05	2.61E-06	0.00E+00	1.52E-05	1.52E-05	1.86E-09	5.31E-07	2.0	1.75E-03	4.56E-05
SI46_E	0.75	3	0	1	7.03E-03	9.33E-03	1.19E-05	1.61E-05	1.46E-05	3.66E-06	0.00E+00	2.13E-05	2.13E-05	2.60E-09	7.43E-07	2.8	2.46E-03	6.39E-05
SI46_E	0.75	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.56E-05	8.88E-06	0.00E+00	5.17E-05	5.18E-05	6.31E-09	1.80E-06	6.8	5.96E-03	1.55E-04
SI46_E	0.75	24	0	1	5.12E-02	6.80E-02	8.70E-05	1.18E-04	1.07E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.41E-06	20.5	1.79E-02	4.66E-04
SI46_E	0.75	36	0	1	7.83E-02	1.04E-01	1.33E-04	1.80E-04	1.63E-04	4.08E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.28E-06	31.4	2.74E-02	7.12E-04
SI46_E	0.75	29	0	1	6.32E-02	8.40E-02	1.07E-04	1.45E-04	1.32E-04	3.29E-05	0.00E+00	1.92E-04	1.92E-04	2.34E-08	6.68E-06	25.4	2.21E-02	5.75E-04
SI46_E	0.75	24	0	1	5.22E-02	6.93E-02	8.87E-05	1.20E-04	1.09E-04	2.72E-05	0.00E+00	1.58E-04	1.58E-04	1.93E-08	5.52E-06	20.9	1.82E-02	4.75E-04
SI46_E	0.75	22	0	1	4.72E-02	6.27E-02	8.02E-05	1.08E-04	9.83E-05	2.46E-05	0.00E+00	1.43E-04	1.43E-04	1.74E-08	4.99E-06	18.9	1.65E-02	4.29E-04
SI46_E	0.75	24	0	1	5.32E-02	7.07E-02	9.04E-05	1.22E-04	1.11E-04	2.77E-05	0.00E+00	1.61E-04	1.61E-04	1.97E-08	5.62E-06	21.3	1.86E-02	4.84E-04
SI46_E	0.75	26	0	1	5.62E-02	7.47E-02	9.55E-05	1.29E-04	1.17E-04	2.93E-05	0.00E+00	1.70E-04	1.71E-04	2.08E-08	5.94E-06	22.5	1.96E-02	5.11E-04
SI46_E	0.75	26	0	1	5.72E-02	7.60E-02	9.73E-05	1.31E-04	1.19E-04	2.98E-05	0.00E+00	1.73E-04	1.74E-04	2.12E-08	6.05E-06	22.9	2.00E-02	5.20E-04
SI46_E	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI46_E	0.75	30	0	1	6.42E-02	8.53E-02	1.09E-04	1.48E-04	1.34E-04	3.34E-05	0.00E+00	1.95E-04	1.95E-04	2.37E-08	6.79E-06	25.8	2.24E-02	5.84E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI46_E	0.75	36	0	1	7.93E-02	1.05E-01	1.35E-04	1.82E-04	1.65E-04	4.13E-05	0.00E+00	2.40E-04	2.41E-04	2.93E-08	8.38E-06	31.8	2.77E-02	7.21E-04
SI46_E	0.75	39	0	1	8.53E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.59E-04	2.59E-04	3.15E-08	9.02E-06	34.2	2.98E-02	7.76E-04
SI46_E	0.75	27	0	1	5.92E-02	7.87E-02	1.01E-04	1.36E-04	1.23E-04	3.08E-05	0.00E+00	1.79E-04	1.80E-04	2.19E-08	6.26E-06	23.8	2.07E-02	5.39E-04
SI46_E	0.75	18	0	1	3.91E-02	5.20E-02	6.65E-05	8.99E-05	8.16E-05	2.04E-05	0.00E+00	1.19E-04	1.19E-04	1.45E-08	4.14E-06	15.7	1.37E-02	3.56E-04
SI46_E	0.75	15	0	1	3.31E-02	4.40E-02	5.63E-05	7.61E-05	6.90E-05	1.72E-05	0.00E+00	1.00E-04	1.00E-04	1.22E-08	3.50E-06	13.3	1.16E-02	3.01E-04
SI46_E	0.75	13	0	1	2.81E-02	3.73E-02	4.78E-05	6.46E-05	5.86E-05	1.46E-05	0.00E+00	8.52E-05	8.53E-05	1.04E-08	2.97E-06	11.3	9.82E-03	2.56E-04
SI46_E	0.75	11	0	1	2.31E-02	3.07E-02	3.92E-05	5.30E-05	4.81E-05	1.20E-05	0.00E+00	7.00E-05	7.00E-05	8.53E-09	2.44E-06	9.3	8.07E-03	2.10E-04
SI46_E	0.75	8	0	1	1.71E-02	2.27E-02	2.90E-05	3.92E-05	3.56E-05	8.88E-06	0.00E+00	5.17E-05	5.18E-05	6.31E-09	1.80E-06	6.8	5.96E-03	1.55E-04
SI46_W	0.75	8	0	1	1.63E-02	2.17E-02	2.78E-05	3.75E-05	3.40E-05	8.50E-06	0.00E+00	4.95E-05	4.95E-05	6.04E-09	1.73E-06	6.6	5.71E-03	1.49E-04
SI46_W	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.67E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI46_W	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI46_W	0.75	3	0	1	6.80E-03	9.04E-03	1.16E-05	1.56E-05	1.42E-05	3.54E-06	0.00E+00	2.06E-05	2.06E-05	2.52E-09	7.19E-07	2.7	2.38E-03	6.19E-05
SI46_W	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI46_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI46_W	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.11E-04	2.57E-08	7.34E-06	27.8	2.43E-02	6.31E-04
SI46_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.22E-04	3.22E-04	3.92E-08	1.12E-05	42.6	3.71E-02	9.65E-04
SI46_W	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	3.00E-02	7.80E-04
SI46_W	0.75	33	0	1	7.08E-02	9.40E-02	1.20E-04	1.63E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.62E-08	7.48E-06	28.4	2.47E-02	6.44E-04
SI46_W	0.75	29	0	1	6.39E-02	8.50E-02	1.09E-04	1.47E-04	1.33E-04	3.33E-05	0.00E+00	1.94E-04	1.94E-04	2.36E-08	6.76E-06	25.7	2.24E-02	5.82E-04
SI46_W	0.75	33	0	1	7.21E-02	9.58E-02	1.23E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.62E-06	28.9	2.52E-02	6.56E-04
SI46_W	0.75	35	0	1	7.62E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.31E-04	2.82E-08	8.06E-06	30.6	2.66E-02	6.93E-04
SI46_W	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.06E-04
SI46_W	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI46_W	0.75	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	34.9	3.04E-02	7.92E-04
SI46_W	0.75	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI46_W	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI46_W	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI46_W	0.75	24	0	1	5.31E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.83E-04
SI46_W	0.75	21	0	1	4.49E-02	5.96E-02	7.63E-05	1.03E-04	9.36E-05	2.34E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.75E-06	18.0	1.57E-02	4.08E-04
SI46_W	0.75	18	0	1	3.81E-02	5.06E-02	6.48E-05	8.75E-05	7.94E-05	1.98E-05	0.00E+00	1.15E-04	1.16E-04	1.41E-08	4.03E-06	15.3	1.33E-02	3.47E-04
SI46_W	0.75	14	0	1	3.13E-02	4.16E-02	5.32E-05	7.19E-05	6.52E-05	1.63E-05	0.00E+00	9.48E-05	9.49E-05	1.16E-08	3.31E-06	12.6	1.09E-02	2.85E-04
SI46_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI47_E	0.75	8	0	1	1.63E-02	2.17E-02	2.78E-05	3.75E-05	3.40E-05	8.50E-06	0.00E+00	4.95E-05	4.95E-05	6.04E-09	1.73E-06	6.6	5.71E-03	1.49E-04
SI47_E	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.67E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI47_E	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI47_E	0.75	3	0	1	6.80E-03	9.04E-03	1.16E-05	1.56E-05	1.42E-05	3.54E-06	0.00E+00	2.06E-05	2.06E-05	2.52E-09	7.19E-07	2.7	2.38E-03	6.19E-05
SI47_E	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI47_E	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI47_E	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.11E-04	2.57E-08	7.34E-06	27.8	2.43E-02	6.31E-04
SI47_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.22E-04	3.22E-04	3.92E-08	1.12E-05	42.6	3.71E-02	9.65E-04
SI47_E	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	3.00E-02	7.80E-04
SI47_E	0.75	33	0	1	7.08E-02	9.40E-02	1.20E-04	1.63E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.62E-08	7.48E-06	28.4	2.47E-02	6.44E-04
SI47_E	0.75	29	0	1	6.39E-02	8.50E-02	1.09E-04	1.47E-04	1.33E-04	3.33E-05	0.00E+00	1.94E-04	1.94E-04	2.36E-08	6.76E-06	25.7	2.24E-02	5.82E-04
SI47_E	0.75	33	0	1	7.21E-02	9.58E-02	1.23E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.62E-06	28.9	2.52E-02	6.56E-04
SI47_E	0.75	35	0	1	7.62E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.31E-04	2.82E-08	8.06E-06	30.6	2.66E-02	6.93E-04
SI47_E	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.06E-04
SI47_E	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI47_E	0.75	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	34.9	3.04E-02	7.92E-04
SI47_E	0.75	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI47_E	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI47_E	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI47_E	0.75	24	0	1	5.31E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.83E-04
SI47_E	0.75	21	0	1	4.49E-02	5.96E-02	7.63E-05	1.03E-04	9.36E-05	2.34E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.75E-06	18.0	1.57E-02	4.08E-04
SI47_E	0.75	18	0	1	3.81E-02	5.06E-02	6.48E-05	8.75E-05	7.94E-05	1.98E-05	0.00E+00	1.15E-04	1.16E-04	1.41E-08	4.03E-06	15.3	1.33E-02	3.47E-04
SI47_E	0.75	14	0	1	3.13E-02	4.16E-02	5.32E-05	7.19E-05	6.52E-05	1.63E-05	0.00E+00	9.48E-05	9.49E-05	1.16E-08	3.31E-06	12.6	1.09E-02	2.85E-04
SI47_E	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI47_W	0.75	8	0	1	1.63E-02	2.17E-02	2.78E-05	3.75E-05	3.40E-05	8.50E-06	0.00E+00	4.95E-05	4.95E-05	6.04E-09	1.73E-06	6.6	5.71E-03	1.49E-04
SI47_W	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.67E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI47_W	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI47_W	0.75	3	0	1	6.80E-03	9.04E-03	1.16E-05	1.56E-05	1.42E-05	3.54E-06	0.00E+00	2.06E-05	2.06E-05	2.52E-09	7.19E-07	2.7	2.38E-03	6.19E-05
SI47_W	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI47_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI47_W	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.11E-04	2.57E-08	7.34E-06	27.8	2.43E-02	6.31E-04
SI47_W	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.22E-04	3.22E-04	3.92E-08	1.12E-05	42.6	3.71E-02	9.65E-04
SI47_W	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	3.00E-02	7.80E-04
SI47_W	0.75	33	0	1	7.08E-02	9.40E-02	1.20E-04	1.63E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.62E-08	7.48E-06	28.4	2.47E-02	6.44E-04
SI47_W	0.75	29	0	1	6.39E-02	8.50E-02	1.09E-04	1.47E-04	1.33E-04	3.33E-05	0.00E+00	1.94E-04	1.94E-04	2.36E-08	6.76E-06	25.7	2.24E-02	5.82E-04
SI47_W	0.75	33	0	1	7.21E-02	9.58E-02	1.23E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.62E-06	28.9	2.52E-02	6.56E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI47_W	0.75	35	0	1	7.62E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.31E-04	2.82E-08	8.06E-06	30.6	2.66E-02	6.93E-04
SI47_W	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.06E-04
SI47_W	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI47_W	0.75	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	34.9	3.04E-02	7.92E-04
SI47_W	0.75	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI47_W	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI47_W	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI47_W	0.75	24	0	1	5.31E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.83E-04
SI47_W	0.75	21	0	1	4.49E-02	5.96E-02	7.63E-05	1.03E-04	9.36E-05	2.34E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.75E-06	18.0	1.57E-02	4.08E-04
SI47_W	0.75	18	0	1	3.81E-02	5.06E-02	6.48E-05	8.75E-05	7.94E-05	1.98E-05	0.00E+00	1.15E-04	1.16E-04	1.41E-08	4.03E-06	15.3	1.33E-02	3.47E-04
SI47_W	0.75	14	0	1	3.13E-02	4.16E-02	5.32E-05	7.19E-05	6.52E-05	1.63E-05	0.00E+00	9.48E-05	9.49E-05	1.16E-08	3.31E-06	12.6	1.09E-02	2.85E-04
SI47_W	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI48_E	0.75	8	0	1	1.63E-02	2.17E-02	2.78E-05	3.75E-05	3.40E-05	8.50E-06	0.00E+00	4.95E-05	4.95E-05	6.04E-09	1.73E-06	6.6	5.71E-03	1.49E-04
SI48_E	0.75	5	0	1	1.09E-02	1.45E-02	1.85E-05	2.50E-05	2.27E-05	5.67E-06	0.00E+00	3.30E-05	3.30E-05	4.02E-09	1.15E-06	4.4	3.80E-03	9.90E-05
SI48_E	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI48_E	0.75	3	0	1	6.80E-03	9.04E-03	1.16E-05	1.56E-05	1.42E-05	3.54E-06	0.00E+00	2.06E-05	2.06E-05	2.52E-09	7.19E-07	2.7	2.38E-03	6.19E-05
SI48_E	0.75	4	0	1	9.52E-03	1.27E-02	1.62E-05	2.19E-05	1.99E-05	4.96E-06	0.00E+00	2.89E-05	2.89E-05	3.52E-09	1.01E-06	3.8	3.33E-03	8.66E-05
SI48_E	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI48_E	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.11E-04	2.57E-08	7.34E-06	27.8	2.43E-02	6.31E-04
SI48_E	0.75	49	0	1	1.06E-01	1.41E-01	1.80E-04	2.44E-04	2.21E-04	5.52E-05	0.00E+00	3.22E-04	3.22E-04	3.92E-08	1.12E-05	42.6	3.71E-02	9.65E-04
SI48_E	0.75	39	0	1	8.57E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.06E-06	34.4	3.00E-02	7.80E-04
SI48_E	0.75	33	0	1	7.08E-02	9.40E-02	1.20E-04	1.63E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.62E-08	7.48E-06	28.4	2.47E-02	6.44E-04
SI48_E	0.75	29	0	1	6.39E-02	8.50E-02	1.09E-04	1.47E-04	1.33E-04	3.33E-05	0.00E+00	1.94E-04	1.94E-04	2.36E-08	6.76E-06	25.7	2.24E-02	5.82E-04
SI48_E	0.75	33	0	1	7.21E-02	9.58E-02	1.23E-04	1.66E-04	1.50E-04	3.75E-05	0.00E+00	2.19E-04	2.19E-04	2.67E-08	7.62E-06	28.9	2.52E-02	6.56E-04
SI48_E	0.75	35	0	1	7.62E-02	1.01E-01	1.30E-04	1.75E-04	1.59E-04	3.97E-05	0.00E+00	2.31E-04	2.31E-04	2.82E-08	8.06E-06	30.6	2.66E-02	6.93E-04
SI48_E	0.75	36	0	1	7.76E-02	1.03E-01	1.32E-04	1.78E-04	1.62E-04	4.04E-05	0.00E+00	2.35E-04	2.35E-04	2.87E-08	8.20E-06	31.1	2.71E-02	7.06E-04
SI48_E	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI48_E	0.75	40	0	1	8.71E-02	1.16E-01	1.48E-04	2.00E-04	1.82E-04	4.53E-05	0.00E+00	2.64E-04	2.64E-04	3.22E-08	9.21E-06	34.9	3.04E-02	7.92E-04
SI48_E	0.75	49	0	1	1.07E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.97E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI48_E	0.75	53	0	1	1.16E-01	1.54E-01	1.97E-04	2.66E-04	2.41E-04	6.02E-05	0.00E+00	3.51E-04	3.51E-04	4.28E-08	1.22E-05	46.4	4.04E-02	1.05E-03
SI48_E	0.75	37	0	1	8.03E-02	1.07E-01	1.36E-04	1.84E-04	1.67E-04	4.18E-05	0.00E+00	2.43E-04	2.44E-04	2.97E-08	8.49E-06	32.2	2.81E-02	7.30E-04
SI48_E	0.75	24	0	1	5.31E-02	7.05E-02	9.02E-05	1.22E-04	1.11E-04	2.76E-05	0.00E+00	1.61E-04	1.61E-04	1.96E-08	5.61E-06	21.3	1.85E-02	4.83E-04
SI48_E	0.75	21	0	1	4.49E-02	5.96E-02	7.63E-05	1.03E-04	9.36E-05	2.34E-05	0.00E+00	1.36E-04	1.36E-04	1.66E-08	4.75E-06	18.0	1.57E-02	4.08E-04
SI48_E	0.75	18	0	1	3.81E-02	5.06E-02	6.48E-05	8.75E-05	7.94E-05	1.98E-05	0.00E+00	1.15E-04	1.16E-04	1.41E-08	4.03E-06	15.3	1.33E-02	3.47E-04
SI48_E	0.75	14	0	1	3.13E-02	4.16E-02	5.32E-05	7.19E-05	6.52E-05	1.63E-05	0.00E+00	9.48E-05	9.49E-05	1.16E-08	3.31E-06	12.6	1.09E-02	2.85E-04
SI48_E	0.75	11	0	1	2.31E-02	3.07E-02	3.93E-05	5.31E-05	4.82E-05	1.20E-05	0.00E+00	7.01E-05	7.02E-05	8.55E-09	2.45E-06	9.3	8.08E-03	2.10E-04
SI48_W	0.75	7	0	1	1.60E-02	2.13E-02	2.72E-05	3.68E-05	3.34E-05	8.33E-06	0.00E+00	4.85E-05	4.86E-05	5.92E-09	1.69E-06	6.4	5.60E-03	1.46E-04
SI48_W	0.75	5	0	1	1.07E-02	1.42E-02	1.81E-05	2.45E-05	2.22E-05	5.56E-06	0.00E+00	3.23E-05	3.24E-05	3.95E-09	1.13E-06	4.3	3.73E-03	9.71E-05
SI48_W	0.75	4	0	1	9.34E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.86E-06	0.00E+00	2.83E-05	2.83E-05	3.45E-09	9.87E-07	3.7	3.26E-03	8.50E-05
SI48_W	0.75	3	0	1	6.67E-03	8.86E-03	1.13E-05	1.53E-05	1.39E-05	3.47E-06	0.00E+00	2.02E-05	2.02E-05	2.47E-09	7.05E-07	2.7	2.33E-03	6.07E-05
SI48_W	0.75	4	0	1	9.34E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.86E-06	0.00E+00	2.83E-05	2.83E-05	3.45E-09	9.87E-07	3.7	3.26E-03	8.50E-05
SI48_W	0.75	10	0	1	2.27E-02	3.01E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.87E-05	6.88E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI48_W	0.75	31	0	1	6.80E-02	9.04E-02	1.16E-04	1.56E-04	1.42E-04	3.54E-05	0.00E+00	2.06E-04	2.06E-04	2.52E-08	7.19E-06	27.3	2.38E-02	6.19E-04
SI48_W	0.75	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.42E-05	0.00E+00	3.15E-04	3.16E-04	3.85E-08	1.10E-05	41.7	3.64E-02	9.47E-04
SI48_W	0.75	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.89E-06	33.7	2.94E-02	7.65E-04
SI48_W	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.10E-04	2.57E-08	7.33E-06	27.8	2.42E-02	6.31E-04
SI48_W	0.75	29	0	1	6.27E-02	8.33E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.2	2.19E-02	5.70E-04
SI48_W	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.61E-08	7.48E-06	28.4	2.47E-02	6.43E-04
SI48_W	0.75	34	0	1	7.47E-02	9.92E-02	1.27E-04	1.72E-04	1.56E-04	3.89E-05	0.00E+00	2.26E-04	2.27E-04	2.76E-08	7.90E-06	30.0	2.61E-02	6.80E-04
SI48_W	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI48_W	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI48_W	0.75	39	0	1	8.54E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.59E-04	2.59E-04	3.16E-08	9.03E-06	34.3	2.98E-02	7.77E-04
SI48_W	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.19E-04	3.20E-04	3.90E-08	1.11E-05	42.3	3.68E-02	9.59E-04
SI48_W	0.75	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.61E-04	2.36E-04	5.90E-05	0.00E+00	3.44E-04	3.44E-04	4.19E-08	1.20E-05	45.5	3.96E-02	1.03E-03
SI48_W	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI48_W	0.75	24	0	1	5.20E-02	6.91E-02	8.85E-05	1.20E-04	1.08E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.92E-08	5.50E-06	20.9	1.82E-02	4.73E-04
SI48_W	0.75	20	0	1	4.40E-02	5.85E-02	7.48E-05	1.01E-04	9.18E-05	2.29E-05	0.00E+00	1.33E-04	1.34E-04	1.63E-08	4.65E-06	17.7	1.54E-02	4.01E-04
SI48_W	0.75	17	0	1	3.74E-02	4.96E-02	6.35E-05	8.58E-05	7.79E-05	1.94E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.95E-06	15.0	1.31E-02	3.40E-04
SI48_W	0.75	14	0	1	3.07E-02	4.08E-02	5.22E-05	7.05E-05	6.40E-05	1.60E-05	0.00E+00	9.30E-05	9.31E-05	1.13E-08	3.24E-06	12.3	1.07E-02	2.79E-04
SI48_W	0.75	10	0	1	2.27E-02	3.01E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.87E-05	6.88E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI49_E	0.75	7	0	1	1.60E-02	2.13E-02	2.72E-05	3.68E-05	3.34E-05	8.33E-06	0.00E+00	4.85E-05	4.86E-05	5.92E-09	1.69E-06	6.4	5.60E-03	1.46E-04
SI49_E	0.75	5	0	1	1.07E-02	1.42E-02	1.81E-05	2.45E-05	2.22E-05	5.56E-06	0.00E+00	3.23E-05	3.24E-05	3.95E-09	1.13E-06	4.3	3.73E-03	9.71E-05
SI49_E	0.75	4	0	1	9.34E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.86E-06	0.00E+00	2.83E-05	2.83E-05	3.45E-09	9.87E-07	3.7	3.26E-03	8.50E-05
SI49_E	0.75	3	0	1	6.67E-03	8.86E-03	1.13E-05	1.53E-05	1.39E-05	3.47E-06	0.00E+00	2.02E-05	2.02E-05	2.47E-09	7.05E-07	2.7	2.33E-03	6.07E-05
SI49_E	0.75	4	0	1	9.34E-03	1.24E-02	1.59E-05	2.15E-05	1.95E-05	4.86E-06	0.00E+00	2.83E-05	2.83E-05	3.45E-09	9.87E-07	3.7	3.26E-03	8.50E-05
SI49_E	0.75	10	0	1	2.27E-02	3.01E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.87E-05	6.88E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI49_E	0.75	31	0	1	6.80E-02	9.04E-02	1.16E-04	1.56E-04	1.42E-04	3.54E-05	0.00E+00	2.06E-04	2.06E-04	2.52E-08	7.19E-06	27.3	2.38E-02	6.19E-04
SI49_E	0.75	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.42E-05	0.00E+00	3.15E-04	3.16E-04	3.85E-08	1.10E-05	41.7	3.64E-02	9.47E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI49_E	0.75	39	0	1	8.40E-02	1.12E-01	1.43E-04	1.93E-04	1.75E-04	4.38E-05	0.00E+00	2.55E-04	2.55E-04	3.11E-08	8.89E-06	33.7	2.94E-02	7.65E-04
SI49_E	0.75	32	0	1	6.94E-02	9.22E-02	1.18E-04	1.59E-04	1.45E-04	3.61E-05	0.00E+00	2.10E-04	2.10E-04	2.57E-08	7.33E-06	27.8	2.42E-02	6.31E-04
SI49_E	0.75	29	0	1	6.27E-02	8.33E-02	1.07E-04	1.44E-04	1.31E-04	3.26E-05	0.00E+00	1.90E-04	1.90E-04	2.32E-08	6.63E-06	25.2	2.19E-02	5.70E-04
SI49_E	0.75	32	0	1	7.07E-02	9.39E-02	1.20E-04	1.62E-04	1.47E-04	3.68E-05	0.00E+00	2.14E-04	2.15E-04	2.61E-08	7.48E-06	28.4	2.47E-02	6.43E-04
SI49_E	0.75	34	0	1	7.47E-02	9.92E-02	1.27E-04	1.72E-04	1.56E-04	3.89E-05	0.00E+00	2.26E-04	2.27E-04	2.76E-08	7.90E-06	30.0	2.61E-02	6.80E-04
SI49_E	0.75	35	0	1	7.60E-02	1.01E-01	1.29E-04	1.75E-04	1.59E-04	3.96E-05	0.00E+00	2.30E-04	2.31E-04	2.81E-08	8.04E-06	30.5	2.66E-02	6.92E-04
SI49_E	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI49_E	0.75	39	0	1	8.54E-02	1.13E-01	1.45E-04	1.96E-04	1.78E-04	4.44E-05	0.00E+00	2.59E-04	2.59E-04	3.16E-08	9.03E-06	34.3	2.98E-02	7.77E-04
SI49_E	0.75	48	0	1	1.05E-01	1.40E-01	1.79E-04	2.42E-04	2.20E-04	5.49E-05	0.00E+00	3.19E-04	3.20E-04	3.90E-08	1.11E-05	42.3	3.68E-02	9.59E-04
SI49_E	0.75	52	0	1	1.13E-01	1.51E-01	1.93E-04	2.61E-04	2.36E-04	5.90E-05	0.00E+00	3.44E-04	3.44E-04	4.19E-08	1.20E-05	45.5	3.96E-02	1.03E-03
SI49_E	0.75	36	0	1	7.87E-02	1.05E-01	1.34E-04	1.81E-04	1.64E-04	4.10E-05	0.00E+00	2.39E-04	2.39E-04	2.91E-08	8.32E-06	31.6	2.75E-02	7.16E-04
SI49_E	0.75	24	0	1	5.20E-02	6.91E-02	8.85E-05	1.20E-04	1.08E-04	2.71E-05	0.00E+00	1.58E-04	1.58E-04	1.92E-08	5.50E-06	20.9	1.82E-02	4.73E-04
SI49_E	0.75	20	0	1	4.40E-02	5.85E-02	7.48E-05	1.01E-04	9.18E-05	2.29E-05	0.00E+00	1.33E-04	1.34E-04	1.63E-08	4.65E-06	17.7	1.54E-02	4.01E-04
SI49_E	0.75	17	0	1	3.74E-02	4.96E-02	6.35E-05	8.58E-05	7.79E-05	1.94E-05	0.00E+00	1.13E-04	1.13E-04	1.38E-08	3.95E-06	15.0	1.31E-02	3.40E-04
SI49_E	0.75	14	0	1	3.07E-02	4.08E-02	5.22E-05	7.05E-05	6.40E-05	1.60E-05	0.00E+00	9.30E-05	9.31E-05	1.13E-08	3.24E-06	12.3	1.07E-02	2.79E-04
SI49_E	0.75	10	0	1	2.27E-02	3.01E-02	3.86E-05	5.21E-05	4.73E-05	1.18E-05	0.00E+00	6.87E-05	6.88E-05	8.39E-09	2.40E-06	9.1	7.93E-03	2.06E-04
SI49_W	0.75	10	0	1	2.19E-02	2.90E-02	3.72E-05	5.02E-05	4.56E-05	1.14E-05	0.00E+00	6.63E-05	6.63E-05	8.08E-09	2.31E-06	8.8	7.64E-03	1.99E-04
SI49_W	0.75	7	0	1	1.46E-02	1.94E-02	2.48E-05	3.35E-05	3.04E-05	7.59E-06	0.00E+00	4.42E-05	4.42E-05	5.39E-09	1.54E-06	5.8	5.09E-03	1.33E-04
SI49_W	0.75	6	0	1	1.28E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.64E-06	0.00E+00	3.87E-05	3.87E-05	4.72E-09	1.35E-06	5.1	4.46E-03	1.16E-04
SI49_W	0.75	4	0	1	9.11E-03	1.21E-02	1.55E-05	2.09E-05	1.90E-05	4.74E-06	0.00E+00	2.76E-05	2.76E-05	3.37E-09	9.63E-07	3.7	3.18E-03	8.29E-05
SI49_W	0.75	6	0	1	1.28E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.64E-06	0.00E+00	3.87E-05	3.87E-05	4.72E-09	1.35E-06	5.1	4.46E-03	1.16E-04
SI49_W	0.75	14	0	1	3.10E-02	4.12E-02	5.27E-05	7.12E-05	6.46E-05	1.61E-05	0.00E+00	9.39E-05	9.40E-05	1.15E-08	3.28E-06	12.4	1.08E-02	2.82E-04
SI49_W	0.75	43	0	1	9.29E-02	1.23E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.45E-04
SI49_W	0.75	65	0	1	1.42E-01	1.89E-01	2.42E-04	3.27E-04	2.96E-04	7.40E-05	0.00E+00	4.31E-04	4.31E-04	5.26E-08	1.50E-05	57.0	4.97E-02	1.29E-03
SI49_W	0.75	53	0	1	1.15E-01	1.53E-01	1.95E-04	2.64E-04	2.39E-04	5.98E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.1	4.01E-02	1.04E-03
SI49_W	0.75	44	0	1	9.48E-02	1.26E-01	1.61E-04	2.18E-04	1.98E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI49_W	0.75	39	0	1	8.56E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.05E-06	34.4	2.99E-02	7.79E-04
SI49_W	0.75	44	0	1	9.66E-02	1.28E-01	1.64E-04	2.22E-04	2.01E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.57E-08	1.02E-05	38.7	3.38E-02	8.79E-04
SI49_W	0.75	47	0	1	1.02E-01	1.36E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.10E-04	3.77E-08	1.08E-05	40.9	3.57E-02	9.28E-04
SI49_W	0.75	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.41E-05	0.00E+00	3.15E-04	3.15E-04	3.84E-08	1.10E-05	41.7	3.63E-02	9.45E-04
SI49_W	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.98E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI49_W	0.75	54	0	1	1.17E-01	1.55E-01	1.98E-04	2.68E-04	2.43E-04	6.07E-05	0.00E+00	3.53E-04	3.54E-04	4.31E-08	1.23E-05	46.8	4.08E-02	1.06E-03
SI49_W	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.8	5.03E-02	1.31E-03
SI49_W	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.73E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI49_W	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.98E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI49_W	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.51E-06	28.5	2.48E-02	6.46E-04
SI49_W	0.75	28	0	1	6.01E-02	7.99E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.36E-06	24.1	2.10E-02	5.47E-04
SI49_W	0.75	23	0	1	5.10E-02	6.78E-02	8.67E-05	1.17E-04	1.06E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.39E-06	20.5	1.78E-02	4.64E-04
SI49_W	0.75	19	0	1	4.19E-02	5.57E-02	7.13E-05	9.63E-05	8.74E-05	2.18E-05	0.00E+00	1.27E-04	1.27E-04	1.55E-08	4.43E-06	16.8	1.46E-02	3.81E-04
SI49_W	0.75	14	0	1	3.10E-02	4.12E-02	5.27E-05	7.12E-05	6.46E-05	1.61E-05	0.00E+00	9.39E-05	9.40E-05	1.15E-08	3.28E-06	12.4	1.08E-02	2.82E-04
SI50_E	0.75	10	0	1	2.19E-02	2.90E-02	3.72E-05	5.02E-05	4.56E-05	1.14E-05	0.00E+00	6.63E-05	6.63E-05	8.08E-09	2.31E-06	8.8	7.64E-03	1.99E-04
SI50_E	0.75	7	0	1	1.46E-02	1.94E-02	2.48E-05	3.35E-05	3.04E-05	7.59E-06	0.00E+00	4.42E-05	4.42E-05	5.39E-09	1.54E-06	5.8	5.09E-03	1.33E-04
SI50_E	0.75	6	0	1	1.28E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.64E-06	0.00E+00	3.87E-05	3.87E-05	4.72E-09	1.35E-06	5.1	4.46E-03	1.16E-04
SI50_E	0.75	4	0	1	9.11E-03	1.21E-02	1.55E-05	2.09E-05	1.90E-05	4.74E-06	0.00E+00	2.76E-05	2.76E-05	3.37E-09	9.63E-07	3.7	3.18E-03	8.29E-05
SI50_E	0.75	6	0	1	1.28E-02	1.69E-02	2.17E-05	2.93E-05	2.66E-05	6.64E-06	0.00E+00	3.87E-05	3.87E-05	4.72E-09	1.35E-06	5.1	4.46E-03	1.16E-04
SI50_E	0.75	14	0	1	3.10E-02	4.12E-02	5.27E-05	7.12E-05	6.46E-05	1.61E-05	0.00E+00	9.39E-05	9.40E-05	1.15E-08	3.28E-06	12.4	1.08E-02	2.82E-04
SI50_E	0.75	43	0	1	9.29E-02	1.23E-01	1.58E-04	2.14E-04	1.94E-04	4.84E-05	0.00E+00	2.82E-04	2.82E-04	3.44E-08	9.83E-06	37.3	3.25E-02	8.45E-04
SI50_E	0.75	65	0	1	1.42E-01	1.89E-01	2.42E-04	3.27E-04	2.96E-04	7.40E-05	0.00E+00	4.31E-04	4.31E-04	5.26E-08	1.50E-05	57.0	4.97E-02	1.29E-03
SI50_E	0.75	53	0	1	1.15E-01	1.53E-01	1.95E-04	2.64E-04	2.39E-04	5.98E-05	0.00E+00	3.48E-04	3.48E-04	4.24E-08	1.21E-05	46.1	4.01E-02	1.04E-03
SI50_E	0.75	44	0	1	9.48E-02	1.26E-01	1.61E-04	2.18E-04	1.98E-04	4.93E-05	0.00E+00	2.87E-04	2.87E-04	3.50E-08	1.00E-05	38.0	3.31E-02	8.62E-04
SI50_E	0.75	39	0	1	8.56E-02	1.14E-01	1.46E-04	1.97E-04	1.79E-04	4.46E-05	0.00E+00	2.60E-04	2.60E-04	3.17E-08	9.05E-06	34.4	2.99E-02	7.79E-04
SI50_E	0.75	44	0	1	9.66E-02	1.28E-01	1.64E-04	2.22E-04	2.01E-04	5.03E-05	0.00E+00	2.93E-04	2.93E-04	3.57E-08	1.02E-05	38.7	3.38E-02	8.79E-04
SI50_E	0.75	47	0	1	1.02E-01	1.36E-01	1.73E-04	2.34E-04	2.13E-04	5.31E-05	0.00E+00	3.09E-04	3.10E-04	3.77E-08	1.08E-05	40.9	3.57E-02	9.28E-04
SI50_E	0.75	48	0	1	1.04E-01	1.38E-01	1.77E-04	2.39E-04	2.17E-04	5.41E-05	0.00E+00	3.15E-04	3.15E-04	3.84E-08	1.10E-05	41.7	3.63E-02	9.45E-04
SI50_E	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.98E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI50_E	0.75	54	0	1	1.17E-01	1.55E-01	1.98E-04	2.68E-04	2.43E-04	6.07E-05	0.00E+00	3.53E-04	3.54E-04	4.31E-08	1.23E-05	46.8	4.08E-02	1.06E-03
SI50_E	0.75	66	0	1	1.44E-01	1.91E-01	2.45E-04	3.31E-04	3.00E-04	7.49E-05	0.00E+00	4.36E-04	4.37E-04	5.32E-08	1.52E-05	57.8	5.03E-02	1.31E-03
SI50_E	0.75	71	0	1	1.55E-01	2.06E-01	2.63E-04	3.56E-04	3.23E-04	8.06E-05	0.00E+00	4.69E-04	4.70E-04	5.73E-08	1.64E-05	62.1	5.41E-02	1.41E-03
SI50_E	0.75	49	0	1	1.08E-01	1.43E-01	1.83E-04	2.47E-04	2.24E-04	5.60E-05	0.00E+00	3.26E-04	3.26E-04	3.98E-08	1.14E-05	43.1	3.76E-02	9.78E-04
SI50_E	0.75	33	0	1	7.11E-02	9.44E-02	1.21E-04	1.63E-04	1.48E-04	3.70E-05	0.00E+00	2.15E-04	2.16E-04	2.63E-08	7.51E-06	28.5	2.48E-02	6.46E-04
SI50_E	0.75	28	0	1	6.01E-02	7.99E-02	1.02E-04	1.38E-04	1.25E-04	3.13E-05	0.00E+00	1.82E-04	1.82E-04	2.22E-08	6.36E-06	24.1	2.10E-02	5.47E-04
SI50_E	0.75	23	0	1	5.10E-02	6.78E-02	8.67E-05	1.17E-04	1.06E-04	2.66E-05	0.00E+00	1.55E-04	1.55E-04	1.89E-08	5.39E-06	20.5	1.78E-02	4.64E-04
SI50_E	0.75	19	0	1	4.19E-02	5.57E-02	7.13E-05	9.63E-05	8.74E-05	2.18E-05	0.00E+00	1.27E-04	1.27E-04	1.55E-08	4.43E-06	16.8	1.46E-02	3.81E-04
SI50_E	0.75	14	0	1	3.10E-02	4.12E-02	5.27E-05	7.12E-05	6.46E-05	1.61E-05	0.00E+00	9.39E-05	9.40E-05	1.15E-08	3.28E-06	12.4	1.08E-02	2.82E-04
SI50_W	0.75	32	0	1	6.88E-02	9.13E-02	1.17E-04	1.58E-04	1.43E-04	3.58E-05	0.00E+00	2.08E-04	2.09E-04	2.54E-08	7.27E-06	27.6	2.40E-02	6.26E-04
SI50_W	0.75	21	0	1	4.58E-02	6.09E-02	7.79E-05	1.05E-04	9.56E-05	2.39E-05	0.00E+00	1.39E-04	1.39E-04	1.69E-08	4.85E-06	18.4	1.60E-02	4.17E-04
SI50_W	0.75	18	0	1	4.01E-02	5.33E-02	6.82E-05	9.22E-05	8.36E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.48E-08	4.24E-06	16.1	1.40E-02	3.65E-04
SI50_W	0.75	13	0	1	2.87E-02	3.81E-02	4.87E-05	6.58E-05	5.97E-05	1.49E-05	0.00E+00	8.68E-05	8.69E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI50_W	0.75	18	0	1	4.01E-02	5.33E-02	6.82E-05	9.22E-05	8.36E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.48E-08	4.24E-06	16.1	1.40E-02	3.65E-04
SI50_W	0.75	45	0	1	9.74E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI50_W	0.75	134	0	1	2.92E-01	3.88E-01	4.97E-04	6.71E-04	6.09E-04	1.52E-04	0.00E+00	8.86E-04	8.87E-04	1.08E-07	3.09E-05	117.2	1.02E-01	2.66E-03
SI50_W	0.75	205	0	1	4.47E-01	5.94E-01	7.60E-04	1.03E-03	9.32E-04	2.33E-04	0.00E+00	1.35E-03	1.36E-03	1.65E-07	4.73E-05	179.3	1.56E-01	4.07E-03
SI50_W	0.75	166	0	1	3.61E-01	4.80E-01	6.14E-04	8.29E-04	7.53E-04	1.88E-04	0.00E+00	1.09E-03	1.10E-03	1.33E-07	3.82E-05	144.8	1.26E-01	3.28E-03
SI50_W	0.75	137	0	1	2.98E-01	3.96E-01	5.07E-04	6.85E-04	6.21E-04	1.55E-04	0.00E+00	9.03E-04	9.04E-04	1.10E-07	3.15E-05	119.5	1.04E-01	2.71E-03
SI50_W	0.75	124	0	1	2.69E-01	3.58E-01	4.58E-04	6.19E-04	5.61E-04	1.40E-04	0.00E+00	8.16E-04	8.17E-04	9.96E-08	2.85E-05	108.0	9.41E-02	2.45E-03
SI50_W	0.75	140	0	1	3.04E-01	4.03E-01	5.16E-04	6.98E-04	6.33E-04	1.58E-04	0.00E+00	9.20E-04	9.21E-04	1.12E-07	3.21E-05	121.8	1.06E-01	2.76E-03
SI50_W	0.75	147	0	1	3.21E-01	4.26E-01	5.46E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.73E-04	9.74E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI50_W	0.75	150	0	1	3.27E-01	4.34E-01	5.55E-04	7.50E-04	6.81E-04	1.70E-04	0.00E+00	9.90E-04	9.91E-04	1.21E-07	3.45E-05	131.0	1.14E-01	2.97E-03
SI50_W	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.08E-03
SI50_W	0.75	168	0	1	3.67E-01	4.87E-01	6.23E-04	8.43E-04	7.64E-04	1.91E-04	0.00E+00	1.11E-03	1.11E-03	1.36E-07	3.88E-05	147.1	1.28E-01	3.34E-03
SI50_W	0.75	208	0	1	4.53E-01	6.01E-01	7.70E-04	1.04E-03	9.44E-04	2.36E-04	0.00E+00	1.37E-03	1.37E-03	1.67E-07	4.79E-05	181.6	1.58E-01	4.12E-03
SI50_W	0.75	224	0	1	4.87E-01	6.47E-01	8.28E-04	1.12E-03	1.02E-03	2.54E-04	0.00E+00	1.48E-03	1.48E-03	1.80E-07	5.15E-05	195.4	1.70E-01	4.43E-03
SI50_W	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.08E-03
SI50_W	0.75	103	0	1	2.23E-01	2.97E-01	3.80E-04	5.13E-04	4.66E-04	1.16E-04	0.00E+00	6.77E-04	6.78E-04	8.26E-08	2.36E-05	89.7	7.81E-02	2.03E-03
SI50_W	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.74E-04	6.99E-08	2.00E-05	75.9	6.61E-02	1.72E-03
SI50_W	0.75	74	0	1	1.60E-01	2.13E-01	2.73E-04	3.69E-04	3.34E-04	8.35E-05	0.00E+00	4.86E-04	4.87E-04	5.93E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI50_W	0.75	61	0	1	1.32E-01	1.75E-01	2.24E-04	3.03E-04	2.75E-04	6.86E-05	0.00E+00	3.99E-04	4.00E-04	4.87E-08	1.39E-05	52.9	4.61E-02	1.20E-03
SI50_W	0.75	45	0	1	9.74E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI51_E	0.75	32	0	1	6.88E-02	9.13E-02	1.17E-04	1.58E-04	1.43E-04	3.58E-05	0.00E+00	2.08E-04	2.09E-04	2.54E-08	7.27E-06	27.6	2.40E-02	6.26E-04
SI51_E	0.75	21	0	1	4.58E-02	6.09E-02	7.79E-05	1.05E-04	9.56E-05	2.39E-05	0.00E+00	1.39E-04	1.39E-04	1.69E-08	4.85E-06	18.4	1.60E-02	4.17E-04
SI51_E	0.75	18	0	1	4.01E-02	5.33E-02	6.82E-05	9.22E-05	8.36E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.48E-08	4.24E-06	16.1	1.40E-02	3.65E-04
SI51_E	0.75	13	0	1	2.87E-02	3.81E-02	4.87E-05	6.58E-05	5.97E-05	1.49E-05	0.00E+00	8.68E-05	8.69E-05	1.06E-08	3.03E-06	11.5	1.00E-02	2.61E-04
SI51_E	0.75	18	0	1	4.01E-02	5.33E-02	6.82E-05	9.22E-05	8.36E-05	2.09E-05	0.00E+00	1.22E-04	1.22E-04	1.48E-08	4.24E-06	16.1	1.40E-02	3.65E-04
SI51_E	0.75	45	0	1	9.74E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI51_E	0.75	134	0	1	2.92E-01	3.88E-01	4.97E-04	6.71E-04	6.09E-04	1.52E-04	0.00E+00	8.86E-04	8.87E-04	1.08E-07	3.09E-05	117.2	1.02E-01	2.66E-03
SI51_E	0.75	205	0	1	4.47E-01	5.94E-01	7.60E-04	1.03E-03	9.32E-04	2.33E-04	0.00E+00	1.35E-03	1.36E-03	1.65E-07	4.73E-05	179.3	1.56E-01	4.07E-03
SI51_E	0.75	166	0	1	3.61E-01	4.80E-01	6.14E-04	8.29E-04	7.53E-04	1.88E-04	0.00E+00	1.09E-03	1.10E-03	1.33E-07	3.82E-05	144.8	1.26E-01	3.28E-03
SI51_E	0.75	137	0	1	2.98E-01	3.96E-01	5.07E-04	6.85E-04	6.21E-04	1.55E-04	0.00E+00	9.03E-04	9.04E-04	1.10E-07	3.15E-05	119.5	1.04E-01	2.71E-03
SI51_E	0.75	124	0	1	2.69E-01	3.58E-01	4.58E-04	6.19E-04	5.61E-04	1.40E-04	0.00E+00	8.16E-04	8.17E-04	9.96E-08	2.85E-05	108.0	9.41E-02	2.45E-03
SI51_E	0.75	140	0	1	3.04E-01	4.03E-01	5.16E-04	6.98E-04	6.33E-04	1.58E-04	0.00E+00	9.20E-04	9.21E-04	1.12E-07	3.21E-05	121.8	1.06E-01	2.76E-03
SI51_E	0.75	147	0	1	3.21E-01	4.26E-01	5.46E-04	7.37E-04	6.69E-04	1.67E-04	0.00E+00	9.73E-04	9.74E-04	1.19E-07	3.39E-05	128.7	1.12E-01	2.92E-03
SI51_E	0.75	150	0	1	3.27E-01	4.34E-01	5.55E-04	7.50E-04	6.81E-04	1.70E-04	0.00E+00	9.90E-04	9.91E-04	1.21E-07	3.45E-05	131.0	1.14E-01	2.97E-03
SI51_E	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.08E-03
SI51_E	0.75	168	0	1	3.67E-01	4.87E-01	6.23E-04	8.43E-04	7.64E-04	1.91E-04	0.00E+00	1.11E-03	1.11E-03	1.36E-07	3.88E-05	147.1	1.28E-01	3.34E-03
SI51_E	0.75	208	0	1	4.53E-01	6.01E-01	7.70E-04	1.04E-03	9.44E-04	2.36E-04	0.00E+00	1.37E-03	1.37E-03	1.67E-07	4.79E-05	181.6	1.58E-01	4.12E-03
SI51_E	0.75	224	0	1	4.87E-01	6.47E-01	8.28E-04	1.12E-03	1.02E-03	2.54E-04	0.00E+00	1.48E-03	1.48E-03	1.80E-07	5.15E-05	195.4	1.70E-01	4.43E-03
SI51_E	0.75	155	0	1	3.38E-01	4.49E-01	5.75E-04	7.77E-04	7.05E-04	1.76E-04	0.00E+00	1.02E-03	1.03E-03	1.25E-07	3.57E-05	135.6	1.18E-01	3.08E-03
SI51_E	0.75	103	0	1	2.23E-01	2.97E-01	3.80E-04	5.13E-04	4.66E-04	1.16E-04	0.00E+00	6.77E-04	6.78E-04	8.26E-08	2.36E-05	89.7	7.81E-02	2.03E-03
SI51_E	0.75	87	0	1	1.89E-01	2.51E-01	3.21E-04	4.34E-04	3.94E-04	9.84E-05	0.00E+00	5.73E-04	5.74E-04	6.99E-08	2.00E-05	75.9	6.61E-02	1.72E-03
SI51_E	0.75	74	0	1	1.60E-01	2.13E-01	2.73E-04	3.69E-04	3.34E-04	8.35E-05	0.00E+00	4.86E-04	4.87E-04	5.93E-08	1.70E-05	64.4	5.61E-02	1.46E-03
SI51_E	0.75	61	0	1	1.32E-01	1.75E-01	2.24E-04	3.03E-04	2.75E-04	6.86E-05	0.00E+00	3.99E-04	4.00E-04	4.87E-08	1.39E-05	52.9	4.61E-02	1.20E-03
SI51_E	0.75	45	0	1	9.74E-02	1.29E-01	1.66E-04	2.24E-04	2.03E-04	5.07E-05	0.00E+00	2.95E-04	2.96E-04	3.60E-08	1.03E-05	39.1	3.40E-02	8.86E-04
SI51_W	0.75	19	0	1	4.07E-02	5.41E-02	6.92E-05	9.36E-05	8.49E-05	2.12E-05	0.00E+00	1.23E-04	1.24E-04	1.51E-08	4.31E-06	16.3	1.42E-02	3.71E-04
SI51_W	0.75	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.23E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.49E-03	2.47E-04
SI51_W	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI51_W	0.75	8	0	1	1.70E-02	2.25E-02	2.89E-05	3.90E-05	3.54E-05	8.84E-06	0.00E+00	5.14E-05	5.15E-05	6.28E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI51_W	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI51_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI51_W	0.75	80	0	1	1.73E-01	2.30E-01	2.94E-04	3.98E-04	3.61E-04	9.01E-05	0.00E+00	5.25E-04	5.25E-04	6.40E-08	1.83E-05	69.5	6.05E-02	1.57E-03
SI51_W	0.75	122	0	1	2.65E-01	3.52E-01	4.50E-04	6.08E-04	5.52E-04	1.38E-04	0.00E+00	8.02E-04	8.03E-04	9.79E-08	2.80E-05	106.2	9.25E-02	2.41E-03
SI51_W	0.75	98	0	1	2.14E-01	2.84E-01	3.64E-04	4.91E-04	4.46E-04	1.11E-04	0.00E+00	6.48E-04	6.49E-04	7.91E-08	2.26E-05	85.8	7.47E-02	1.95E-03
SI51_W	0.75	81	0	1	1.77E-01	2.34E-01	3.00E-04	4.06E-04	3.68E-04	9.19E-05	0.00E+00	5.35E-04	5.36E-04	6.53E-08	1.87E-05	70.8	6.17E-02	1.61E-03
SI51_W	0.75	73	0	1	1.60E-01	2.12E-01	2.71E-04	3.67E-04	3.33E-04	8.31E-05	0.00E+00	4.84E-04	4.84E-04	5.90E-08	1.69E-05	64.0	5.58E-02	1.45E-03
SI51_W	0.75	83	0	1	1.80E-01	2.39E-01	3.06E-04	4.13E-04	3.75E-04	9.37E-05	0.00E+00	5.45E-04	5.46E-04	6.65E-08	1.90E-05	72.2	6.29E-02	1.64E-03
SI51_W	0.75	87	0	1	1.90E-01	2.53E-01	3.23E-04	4.37E-04	3.96E-04	9.90E-05	0.00E+00	5.76E-04	5.77E-04	7.03E-08	2.01E-05	76.3	6.64E-02	1.73E-03
SI51_W	0.75	89	0	1	1.93E-01	2.57E-01	3.29E-04	4.45E-04	4.03E-04	1.01E-04	0.00E+00	5.86E-04	5.87E-04	7.15E-08	2.05E-05	77.6	6.76E-02	1.76E-03
SI51_W	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI51_W	0.75	100	0	1	2.17E-01	2.89E-01	3.69E-04	4.99E-04	4.53E-04	1.13E-04	0.00E+00	6.58E-04	6.59E-04	8.03E-08	2.30E-05	87.2	7.59E-02	1.98E-03
SI51_W	0.75	123	0	1	2.68E-01	3.56E-01	4.56E-04	6.16E-04	5.59E-04	1.40E-04	0.00E+00	8.13E-04	8.14E-04	9.91E-08	2.84E-05	107.6	9.37E-02	2.44E-03
SI51_W	0.75	133	0	1	2.89E-01	3.83E-01	4.91E-04	6.63E-04	6.01E-04	1.50E-04	0.00E+00	8.74E-04	8.75E-04	1.07E-07	3.05E-05	115.8	1.01E-01	2.62E-03
SI51_W	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI51_W	0.75	61	0	1	1.32E-01	1.76E-01	2.25E-04	3.04E-04	2.76E-04	6.89E-05	0.00E+00	4.01E-04	4.02E-04	4.89E-08	1.40E-05	53.1	4.63E-02	1.20E-03
SI51_W	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.34E-04	5.83E-05	0.00E+00	3.39E-04	3.40E-04	4.14E-08	1.18E-05	44.9	3.92E-02	1.02E-03
SI51_W	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.65E-04
SI51_W	0.75	36	0	1	7.81E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI51_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04

Table F-14: Dundas BRT - Dundas Street West Vehicle Signalized Source Emission Summary: Future No-Build Conditions (2041)

Source Information					Max Emission Rate (G/S)											Max Emission Rate (G/S)		
Source ID	Ratio of Red Light/ Signal Cycle	Idling Ratio x Approach Volume (VEH-HR)	Speed Bin	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
SI52_E	0.75	19	0	1	4.07E-02	5.41E-02	6.92E-05	9.36E-05	8.49E-05	2.12E-05	0.00E+00	1.23E-04	1.24E-04	1.51E-08	4.31E-06	16.3	1.42E-02	3.71E-04
SI52_E	0.75	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.23E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.49E-03	2.47E-04
SI52_E	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI52_E	0.75	8	0	1	1.70E-02	2.25E-02	2.89E-05	3.90E-05	3.54E-05	8.84E-06	0.00E+00	5.14E-05	5.15E-05	6.28E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI52_E	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI52_E	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI52_E	0.75	80	0	1	1.73E-01	2.30E-01	2.94E-04	3.98E-04	3.61E-04	9.01E-05	0.00E+00	5.25E-04	5.25E-04	6.40E-08	1.83E-05	69.5	6.05E-02	1.57E-03
SI52_E	0.75	122	0	1	2.65E-01	3.52E-01	4.50E-04	6.08E-04	5.52E-04	1.38E-04	0.00E+00	8.02E-04	8.03E-04	9.79E-08	2.80E-05	106.2	9.25E-02	2.41E-03
SI52_E	0.75	98	0	1	2.14E-01	2.84E-01	3.64E-04	4.91E-04	4.46E-04	1.11E-04	0.00E+00	6.48E-04	6.49E-04	7.91E-08	2.26E-05	85.8	7.47E-02	1.95E-03
SI52_E	0.75	81	0	1	1.77E-01	2.34E-01	3.00E-04	4.06E-04	3.68E-04	9.19E-05	0.00E+00	5.35E-04	5.36E-04	6.53E-08	1.87E-05	70.8	6.17E-02	1.61E-03
SI52_E	0.75	73	0	1	1.60E-01	2.12E-01	2.71E-04	3.67E-04	3.33E-04	8.31E-05	0.00E+00	4.84E-04	4.84E-04	5.90E-08	1.69E-05	64.0	5.58E-02	1.45E-03
SI52_E	0.75	83	0	1	1.80E-01	2.39E-01	3.06E-04	4.13E-04	3.75E-04	9.37E-05	0.00E+00	5.45E-04	5.46E-04	6.65E-08	1.90E-05	72.2	6.29E-02	1.64E-03
SI52_E	0.75	87	0	1	1.90E-01	2.53E-01	3.23E-04	4.37E-04	3.96E-04	9.90E-05	0.00E+00	5.76E-04	5.77E-04	7.03E-08	2.01E-05	76.3	6.64E-02	1.73E-03
SI52_E	0.75	89	0	1	1.93E-01	2.57E-01	3.29E-04	4.45E-04	4.03E-04	1.01E-04	0.00E+00	5.86E-04	5.87E-04	7.15E-08	2.05E-05	77.6	6.76E-02	1.76E-03
SI52_E	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI52_E	0.75	100	0	1	2.17E-01	2.89E-01	3.69E-04	4.99E-04	4.53E-04	1.13E-04	0.00E+00	6.58E-04	6.59E-04	8.03E-08	2.30E-05	87.2	7.59E-02	1.98E-03
SI52_E	0.75	123	0	1	2.68E-01	3.56E-01	4.56E-04	6.16E-04	5.59E-04	1.40E-04	0.00E+00	8.13E-04	8.14E-04	9.91E-08	2.84E-05	107.6	9.37E-02	2.44E-03
SI52_E	0.75	133	0	1	2.89E-01	3.83E-01	4.91E-04	6.63E-04	6.01E-04	1.50E-04	0.00E+00	8.74E-04	8.75E-04	1.07E-07	3.05E-05	115.8	1.01E-01	2.62E-03
SI52_E	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI52_E	0.75	61	0	1	1.32E-01	1.76E-01	2.25E-04	3.04E-04	2.76E-04	6.89E-05	0.00E+00	4.01E-04	4.02E-04	4.89E-08	1.40E-05	53.1	4.63E-02	1.20E-03
SI52_E	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.34E-04	5.83E-05	0.00E+00	3.39E-04	3.40E-04	4.14E-08	1.18E-05	44.9	3.92E-02	1.02E-03
SI52_E	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.65E-04
SI52_E	0.75	36	0	1	7.81E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI52_E	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI52_W	0.75	19	0	1	4.07E-02	5.41E-02	6.92E-05	9.36E-05	8.49E-05	2.12E-05	0.00E+00	1.23E-04	1.24E-04	1.51E-08	4.31E-06	16.3	1.42E-02	3.71E-04
SI52_W	0.75	12	0	1	2.72E-02	3.61E-02	4.62E-05	6.24E-05	5.66E-05	1.41E-05	0.00E+00	8.23E-05	8.24E-05	1.00E-08	2.87E-06	10.9	9.49E-03	2.47E-04
SI52_W	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI52_W	0.75	8	0	1	1.70E-02	2.25E-02	2.89E-05	3.90E-05	3.54E-05	8.84E-06	0.00E+00	5.14E-05	5.15E-05	6.28E-09	1.79E-06	6.8	5.93E-03	1.54E-04
SI52_W	0.75	11	0	1	2.38E-02	3.16E-02	4.04E-05	5.46E-05	4.95E-05	1.24E-05	0.00E+00	7.20E-05	7.21E-05	8.79E-09	2.51E-06	9.5	8.30E-03	2.16E-04
SI52_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04
SI52_W	0.75	80	0	1	1.73E-01	2.30E-01	2.94E-04	3.98E-04	3.61E-04	9.01E-05	0.00E+00	5.25E-04	5.25E-04	6.40E-08	1.83E-05	69.5	6.05E-02	1.57E-03
SI52_W	0.75	122	0	1	2.65E-01	3.52E-01	4.50E-04	6.08E-04	5.52E-04	1.38E-04	0.00E+00	8.02E-04	8.03E-04	9.79E-08	2.80E-05	106.2	9.25E-02	2.41E-03
SI52_W	0.75	98	0	1	2.14E-01	2.84E-01	3.64E-04	4.91E-04	4.46E-04	1.11E-04	0.00E+00	6.48E-04	6.49E-04	7.91E-08	2.26E-05	85.8	7.47E-02	1.95E-03
SI52_W	0.75	81	0	1	1.77E-01	2.34E-01	3.00E-04	4.06E-04	3.68E-04	9.19E-05	0.00E+00	5.35E-04	5.36E-04	6.53E-08	1.87E-05	70.8	6.17E-02	1.61E-03
SI52_W	0.75	73	0	1	1.60E-01	2.12E-01	2.71E-04	3.67E-04	3.33E-04	8.31E-05	0.00E+00	4.84E-04	4.84E-04	5.90E-08	1.69E-05	64.0	5.58E-02	1.45E-03
SI52_W	0.75	83	0	1	1.80E-01	2.39E-01	3.06E-04	4.13E-04	3.75E-04	9.37E-05	0.00E+00	5.45E-04	5.46E-04	6.65E-08	1.90E-05	72.2	6.29E-02	1.64E-03
SI52_W	0.75	87	0	1	1.90E-01	2.53E-01	3.23E-04	4.37E-04	3.96E-04	9.90E-05	0.00E+00	5.76E-04	5.77E-04	7.03E-08	2.01E-05	76.3	6.64E-02	1.73E-03
SI52_W	0.75	89	0	1	1.93E-01	2.57E-01	3.29E-04	4.45E-04	4.03E-04	1.01E-04	0.00E+00	5.86E-04	5.87E-04	7.15E-08	2.05E-05	77.6	6.76E-02	1.76E-03
SI52_W	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI52_W	0.75	100	0	1	2.17E-01	2.89E-01	3.69E-04	4.99E-04	4.53E-04	1.13E-04	0.00E+00	6.58E-04	6.59E-04	8.03E-08	2.30E-05	87.2	7.59E-02	1.98E-03
SI52_W	0.75	123	0	1	2.68E-01	3.56E-01	4.56E-04	6.16E-04	5.59E-04	1.40E-04	0.00E+00	8.13E-04	8.14E-04	9.91E-08	2.84E-05	107.6	9.37E-02	2.44E-03
SI52_W	0.75	133	0	1	2.89E-01	3.83E-01	4.91E-04	6.63E-04	6.01E-04	1.50E-04	0.00E+00	8.74E-04	8.75E-04	1.07E-07	3.05E-05	115.8	1.01E-01	2.62E-03
SI52_W	0.75	92	0	1	2.00E-01	2.66E-01	3.40E-04	4.60E-04	4.17E-04	1.04E-04	0.00E+00	6.07E-04	6.08E-04	7.40E-08	2.12E-05	80.3	7.00E-02	1.82E-03
SI52_W	0.75	61	0	1	1.32E-01	1.76E-01	2.25E-04	3.04E-04	2.76E-04	6.89E-05	0.00E+00	4.01E-04	4.02E-04	4.89E-08	1.40E-05	53.1	4.63E-02	1.20E-03
SI52_W	0.75	51	0	1	1.12E-01	1.49E-01	1.90E-04	2.57E-04	2.34E-04	5.83E-05	0.00E+00	3.39E-04	3.40E-04	4.14E-08	1.18E-05	44.9	3.92E-02	1.02E-03
SI52_W	0.75	44	0	1	9.50E-02	1.26E-01	1.62E-04	2.18E-04	1.98E-04	4.95E-05	0.00E+00	2.88E-04	2.88E-04	3.51E-08	1.00E-05	38.1	3.32E-02	8.65E-04
SI52_W	0.75	36	0	1	7.81E-02	1.04E-01	1.33E-04	1.79E-04	1.63E-04	4.06E-05	0.00E+00	2.37E-04	2.37E-04	2.89E-08	8.25E-06	31.3	2.73E-02	7.10E-04
SI52_W	0.75	27	0	1	5.77E-02	7.67E-02	9.81E-05	1.33E-04	1.20E-04	3.00E-05	0.00E+00	1.75E-04	1.75E-04	2.13E-08	6.10E-06	23.2	2.02E-02	5.25E-04

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Appendix G

OLM Calculations at Sensitive & Critical Receptors

Air Quality Impact Assessment
Appendix G

Dundas Bus Rapid Transit (BRT)
Metrolinx, September 2021

OLM Method for NOx conversion to NO2

CRITICAL RECEPTORS

Table G-1: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR1

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	97.53	51.87	42.00	47.19	88.73	BCR1
	24	17.15	9.12	36.54	9.12	17.15	BCR1
	Annual	4.28	2.28	25.64	2.28	4.28	BCR1
Future No-Build	1	68.77	36.57	42.00	36.57	68.77	BCR1
	24	10.89	5.79	36.54	5.79	10.89	BCR1
	Annual	2.52	1.34	57.00	1.34	2.52	BCR1
Future Build	1	73.53	39.10	42.00	39.10	73.53	BCR1
	24	13.50	7.18	36.54	7.18	13.50	BCR1
	Annual	3.32	1.77	57.00	1.77	3.32	BCR1

Table G-2: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR2

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	90.92	48.35	42.00	46.84	88.07	BCR2
	24	16.69	8.88	36.54	8.88	16.69	BCR2
	Annual	3.97	2.11	25.64	2.11	3.97	BCR2
Future No-Build	1	65.16	34.65	42.00	34.65	65.16	BCR2
	24	10.64	5.66	36.54	5.66	10.64	BCR2
	Annual	2.35	1.25	57.00	1.25	2.35	BCR2
Future Build	1	69.33	36.87	42.00	36.87	69.33	BCR2
	24	12.84	6.83	36.54	6.83	12.84	BCR2
	Annual	3.07	1.63	57.00	1.63	3.07	BCR2

Table G-3: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR3

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	80.97	43.06	42.00	43.06	80.97	BCR3
	24	25.92	13.78	36.54	13.78	25.92	BCR3
	Annual	7.17	3.81	25.64	3.81	7.17	BCR3
Future No-Build	1	44.84	23.85	42.00	23.85	44.84	BCR3
	24	14.28	7.60	36.54	7.60	14.28	BCR3
	Annual	3.88	2.06	57.00	2.06	3.88	BCR3
Future Build	1	62.74	33.37	42.00	33.37	62.74	BCR3
	24	20.43	10.87	36.54	10.87	20.43	BCR3
	Annual	5.61	2.98	57.00	2.98	5.61	BCR3

Table G-4: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR4

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	47.40	25.21	42.00	25.21	47.40	BCR4
	24	10.80	5.75	36.54	5.75	10.80	BCR4
	Annual	2.62	1.39	25.64	1.39	2.62	BCR4
Future No-Build	1	33.50	17.82	42.00	17.82	33.50	BCR4
	24	6.43	3.42	36.54	3.42	6.43	BCR4
	Annual	1.57	0.83	57.00	0.83	1.57	BCR4
Future Build	1	37.51	19.95	42.00	19.95	37.51	BCR4
	24	9.18	4.88	36.54	4.88	9.18	BCR4
	Annual	2.24	1.19	57.00	1.19	2.24	BCR4

Table G-5: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR5

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	32.09	17.06	42.00	17.06	32.09	BCR5
	24	9.85	5.24	36.54	5.24	9.85	BCR5
	Annual	2.58	1.37	25.64	1.37	2.58	BCR5
Future No-Build	1	21.42	11.39	42.00	11.39	21.42	BCR5
	24	6.21	3.30	36.54	3.30	6.21	BCR5
	Annual	1.57	0.84	57.00	0.84	1.57	BCR5
Future Build	1	28.57	15.19	42.00	15.19	28.57	BCR5
	24	8.90	4.73	36.54	4.73	8.90	BCR5
	Annual	2.39	1.27	57.00	1.27	2.39	BCR5

Table G-6: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR6

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	129.88	69.07	42.00	48.91	91.97	BCR6
	24	43.26	23.01	36.54	23.01	43.26	BCR6
	Annual	13.88	7.38	25.64	7.38	13.88	BCR6
Future No-Build	1	129.58	68.91	42.00	48.89	91.93	BCR6
	24	35.39	18.82	36.54	18.82	35.39	BCR6
	Annual	11.86	6.30	57.00	6.30	11.86	BCR6
Future Build	1	178.31	94.83	42.00	51.48	96.81	BCR6
	24	50.22	26.71	36.54	26.71	50.22	BCR6
	Annual	16.92	9.00	57.00	9.00	16.92	BCR6

Table G-7: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR7

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	139.99	74.44	42.00	49.44	92.98	BCR7
	24	38.62	20.54	36.54	20.54	38.62	BCR7
	Annual	12.36	6.57	25.64	6.57	12.36	BCR7
Future No-Build	1	133.73	71.12	42.00	49.11	92.35	BCR7
	24	26.03	13.84	36.54	13.84	26.03	BCR7
	Annual	8.44	4.49	57.00	4.49	8.44	BCR7
Future Build	1	175.78	93.48	42.00	51.35	96.55	BCR7
	24	35.70	18.99	36.54	18.99	35.70	BCR7
	Annual	11.52	6.13	57.00	6.13	11.52	BCR7

Table G-8: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR8

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	38.84	20.65	42.00	20.65	38.84	BCR8
	24	13.01	6.92	36.54	6.92	13.01	BCR8
	Annual	3.21	1.71	25.64	1.71	3.21	BCR8
Future No-Build	1	23.57	12.53	42.00	12.53	23.57	BCR8
	24	7.80	4.15	36.54	4.15	7.80	BCR8
	Annual	1.95	1.04	57.00	1.04	1.95	BCR8
Future Build	1	33.26	17.69	42.00	17.69	33.26	BCR8
	24	11.33	6.03	36.54	6.03	11.33	BCR8
	Annual	2.83	1.50	57.00	1.50	2.83	BCR8

Table G-9: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor CR9

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	40.77	21.68	42.00	21.68	40.77	BCR9
	24	12.48	6.64	36.54	6.64	12.48	BCR9
	Annual	3.48	1.85	25.64	1.85	3.48	BCR9
Future No-Build	1	24.29	12.92	42.00	12.92	24.29	BCR9
	24	7.48	3.98	36.54	3.98	7.48	BCR9
	Annual	2.07	1.10	57.00	1.10	2.07	BCR9
Future Build	1	34.40	18.29	42.00	18.29	34.40	BCR9
	24	10.76	5.72	36.54	5.72	10.76	BCR9
	Annual	3.00	1.60	57.00	1.60	3.00	BCR9

SENSITIVE RECEPTORS

Table G-10: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 1

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	233.70	124.28	42.00	54.43	102.35	ASR10
	24	69.02	36.71	36.54	36.71	69.02	ASR10
	Annual	23.06	12.26	25.64	12.26	23.06	ASR10
Future No-Build	1	137.81	73.29	42.00	49.33	92.76	ASR10
	24	44.96	23.91	36.54	23.91	44.96	ASR10
	Annual	14.86	7.90	57.00	7.90	14.86	ASR10
Future Build	1	164.96	87.72	42.00	50.77	95.47	ASR10
	24	54.92	29.21	36.54	29.21	54.92	ASR10
	Annual	18.09	9.62	57.00	9.62	18.09	ASR10

Table G-11: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 2

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	222.58	118.37	42.00	53.84	101.23	ASR11
	24	54.93	29.21	36.54	29.21	54.93	ASR11
	Annual	18.04	9.60	25.64	9.60	18.04	ASR11
Future No-Build	1	175.83	93.51	42.00	51.35	96.56	ASR11
	24	42.23	22.46	36.54	22.46	42.23	ASR11
	Annual	13.86	7.37	57.00	7.37	13.86	ASR11
Future Build	1	230.40	122.53	42.00	54.25	102.02	ASR11
	24	52.55	27.95	36.54	27.95	52.55	ASR11
	Annual	17.35	9.23	57.00	9.23	17.35	ASR11

Table G-12: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 3

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	233.73	124.30	42.00	54.43	102.35	BSR1
	24	69.03	36.71	36.54	36.71	69.03	BSR1
	Annual	23.06	12.26	25.64	12.26	23.06	BSR1
Future No-Build	1	137.82	73.29	42.00	49.33	92.76	BSR1
	24	44.96	23.91	36.54	23.91	44.96	BSR1
	Annual	14.86	7.90	57.00	7.90	14.86	BSR1
Future Build	1	164.97	87.73	42.00	50.77	95.47	BSR1
	24	54.92	29.21	36.54	29.21	54.92	BSR1
	Annual	18.09	9.62	57.00	9.62	18.09	BSR1

Table G-13: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 4

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	222.79	118.48	42.00	53.85	101.26	BSR2
	24	54.96	29.23	36.54	29.23	54.96	BSR2
	Annual	18.06	9.60	25.64	9.60	18.06	BSR2
Future No-Build	1	175.92	93.55	42.00	51.36	96.57	BSR2
	24	42.26	22.47	36.54	22.47	42.26	BSR2
	Annual	13.87	7.37	57.00	7.37	13.87	BSR2
Future Build	1	230.54	122.60	42.00	54.26	102.03	BSR2
	24	52.59	27.97	36.54	27.97	52.59	BSR2
	Annual	17.36	9.23	57.00	9.23	17.36	BSR2

Table G-14: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 5

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	61.52	32.72	42.00	32.72	61.52	BSR3
	24	16.46	8.75	36.54	8.75	16.46	BSR3
	Annual	4.07	2.17	25.64	2.17	4.07	BSR3
Future No-Build	1	46.63	24.80	42.00	24.80	46.63	BSR3
	24	13.21	7.03	36.54	7.03	13.21	BSR3
	Annual	3.33	1.77	57.00	1.77	3.33	BSR3
Future Build	1	52.82	28.09	42.00	28.09	52.82	BSR3
	24	15.57	8.28	36.54	8.28	15.57	BSR3
	Annual	3.90	2.07	57.00	2.07	3.90	BSR3

Table G-15: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 6

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	140.93	74.95	42.00	49.49	93.07	BSR4
	24	45.55	24.22	36.54	24.22	45.55	BSR4
	Annual	12.57	6.69	25.64	6.69	12.57	BSR4
Future No-Build	1	114.01	60.63	42.00	48.06	90.38	BSR4
	24	37.28	19.83	36.54	19.83	37.28	BSR4
	Annual	10.48	5.57	57.00	5.57	10.48	BSR4
Future Build	1	119.29	63.44	42.00	48.34	90.91	BSR4
	24	39.76	21.14	36.54	21.14	39.76	BSR4
	Annual	11.06	5.88	57.00	5.88	11.06	BSR4

Table G-16: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 7

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	136.63	72.66	42.00	49.27	92.64	BSR5
	24	42.97	22.85	36.54	22.85	42.97	BSR5
	Annual	12.74	6.78	25.64	6.78	12.74	BSR5
Future No-Build	1	106.16	56.46	42.00	47.65	89.59	BSR5
	24	33.69	17.92	36.54	17.92	33.69	BSR5
	Annual	10.02	5.33	57.00	5.33	10.02	BSR5
Future Build	1	114.75	61.03	42.00	48.10	90.45	BSR5
	24	37.24	19.80	36.54	19.80	37.24	BSR5
	Annual	11.06	5.88	57.00	5.88	11.06	BSR5

Table G-17: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 8

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	187.01	99.45	42.00	51.95	97.68	BSR6
	24	59.96	31.89	36.54	31.89	59.96	BSR6
	Annual	18.41	9.79	25.64	9.79	18.41	BSR6
Future No-Build	1	147.33	78.35	42.00	49.84	93.71	BSR6
	24	47.23	25.12	36.54	25.12	47.23	BSR6
	Annual	14.66	7.80	57.00	7.80	14.66	BSR6
Future Build	1	154.64	82.24	42.00	50.22	94.44	BSR6
	24	50.73	26.98	36.54	26.98	50.73	BSR6
	Annual	15.60	8.29	57.00	8.29	15.60	BSR6

Table G-18: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 9

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	81.42	43.30	42.00	43.30	81.42	BSR7
	24	26.91	14.31	36.54	14.31	26.91	BSR7
	Annual	7.15	3.80	25.64	3.80	7.15	BSR7
Future No-Build	1	58.02	30.86	42.00	30.86	58.02	BSR7
	24	19.02	10.11	36.54	10.11	19.02	BSR7
	Annual	5.10	2.71	57.00	2.71	5.10	BSR7
Future Build	1	60.87	32.37	42.00	32.37	60.87	BSR7
	24	20.51	10.91	36.54	10.91	20.51	BSR7
	Annual	5.43	2.89	57.00	2.89	5.43	BSR7

Table G-19: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 10

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	399.00	212.19	42.00	63.22	118.88	BSR8
	24	126.69	67.37	36.54	43.28	81.38	BSR8
	Annual	40.27	21.42	25.64	21.42	40.27	BSR8
Future No-Build	1	324.93	172.80	42.00	59.28	111.47	BSR8
	24	108.63	57.77	36.54	42.32	79.58	BSR8
	Annual	35.42	18.83	57.00	18.83	35.42	BSR8
Future Build	1	320.43	170.40	42.00	59.04	111.02	BSR8
	24	109.60	58.29	36.54	42.37	79.67	BSR8
	Annual	35.53	18.90	57.00	18.90	35.53	BSR8

Table G-20: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 11

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	339.80	180.71	42.00	60.07	112.96	BSR9
	24	111.88	59.50	36.54	42.49	79.90	BSR9
	Annual	35.08	18.66	25.64	18.66	35.08	BSR9
Future No-Build	1	242.70	129.07	42.00	54.91	103.25	BSR9
	24	79.64	42.35	36.54	40.78	76.68	BSR9
	Annual	25.27	13.44	57.00	13.44	25.27	BSR9
Future Build	1	258.65	137.55	42.00	55.75	104.84	BSR9
	24	87.30	46.43	36.54	41.18	77.44	BSR9
	Annual	27.62	14.69	57.00	14.69	27.62	BSR9

Table G-21: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 12

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	203.71	108.33	42.00	52.83	99.35	BSR10
	24	58.38	31.05	36.54	31.05	58.38	BSR10
	Annual	16.18	8.60	25.64	8.60	16.18	BSR10
Future No-Build	1	141.67	141.67	42.00	56.17	105.62	BSR10
	24	36.77	36.77	36.54	36.77	69.14	BSR10
	Annual	9.96	9.96	57.00	9.96	18.74	BSR10
Future Build	1	167.07	88.85	42.00	50.88	95.68	BSR10
	24	43.78	23.28	36.54	23.28	43.78	BSR10
	Annual	11.84	6.30	57.00	6.30	11.84	BSR10

Table G-22: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 13

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	399.45	212.43	42.00	63.24	118.92	BSR11
	24	101.93	54.21	36.54	41.96	78.91	BSR11
	Annual	31.36	16.68	25.64	16.68	31.36	BSR11
Future No-Build	1	238.30	238.30	42.00	65.83	123.79	BSR11
	24	61.08	61.08	36.54	42.65	80.20	BSR11
	Annual	18.91	18.91	57.00	18.91	35.57	BSR11
Future Build	1	258.66	137.56	42.00	55.76	104.84	BSR11
	24	70.36	37.42	36.54	37.42	70.36	BSR11
	Annual	21.67	11.52	57.00	11.52	21.67	BSR11

Table G-23: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 14

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	160.53	85.37	42.00	50.54	95.03	BSR12
	24	36.83	19.58	36.54	19.58	36.83	BSR12
	Annual	9.74	5.18	25.64	5.18	9.74	BSR12
Future No-Build	1	104.96	104.96	42.00	52.50	98.71	BSR12
	24	20.52	20.52	36.54	20.52	38.58	BSR12
	Annual	5.27	5.27	57.00	5.27	9.90	BSR12
Future Build	1	115.83	61.60	42.00	48.16	90.56	BSR12
	24	25.97	13.81	36.54	13.81	25.97	BSR12
	Annual	6.87	3.66	57.00	3.66	6.87	BSR12

Table G-24: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 15

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	101.89	54.19	42.00	47.42	89.17	BSR13
	24	19.36	10.29	36.54	10.29	19.36	BSR13
	Annual	4.55	2.42	25.64	2.42	4.55	BSR13
Future No-Build	1	70.58	70.58	42.00	49.06	92.25	BSR13
	24	11.44	11.44	36.54	11.44	21.50	BSR13
	Annual	2.67	2.67	57.00	2.67	5.03	BSR13
Future Build	1	76.68	40.78	42.00	40.78	76.68	BSR13
	24	16.07	8.55	36.54	8.55	16.07	BSR13
	Annual	3.62	1.92	57.00	1.92	3.62	BSR13

Table G-25: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 16

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	197.24	104.89	42.00	52.49	98.70	BSR14
	24	47.63	25.33	36.54	25.33	47.63	BSR14
	Annual	14.78	7.86	25.64	7.86	14.78	BSR14
Future No-Build	1	91.13	91.13	42.00	51.11	96.11	BSR14
	24	27.83	27.83	36.54	27.83	52.33	BSR14
	Annual	7.91	7.91	57.00	7.91	14.87	BSR14
Future Build	1	129.02	68.61	42.00	48.86	91.88	BSR14
	24	41.02	21.81	36.54	21.81	41.02	BSR14
	Annual	11.62	6.18	57.00	6.18	11.62	BSR14

Table G-26: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 17

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	61.85	32.89	42.00	32.89	61.85	BSR15
	24	16.11	8.57	36.54	8.57	16.11	BSR15
	Annual	4.12	2.19	25.64	2.19	4.12	BSR15
Future No-Build	1	35.70	35.70	42.00	35.70	67.13	BSR15
	24	9.31	9.31	36.54	9.31	17.50	BSR15
	Annual	2.36	2.36	57.00	2.36	4.45	BSR15
Future Build	1	54.80	29.14	42.00	29.14	54.80	BSR15
	24	13.88	7.38	36.54	7.38	13.88	BSR15
	Annual	3.39	1.80	57.00	1.80	3.39	BSR15

Table G-27: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 18

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	43.90	23.35	42.00	23.35	43.90	BSR16
	24	13.94	7.41	36.54	7.41	13.94	BSR16
	Annual	3.58	1.90	25.64	1.90	3.58	BSR16
Future No-Build	1	26.85	26.85	42.00	26.85	50.48	BSR16
	24	8.50	8.50	36.54	8.50	15.99	BSR16
	Annual	2.10	2.10	57.00	2.10	3.94	BSR16
Future Build	1	36.92	19.64	42.00	19.64	36.92	BSR16
	24	11.61	6.18	36.54	6.18	11.61	BSR16
	Annual	3.11	1.65	57.00	1.65	3.11	BSR16

Table G-28: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 19

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	91.35	48.58	42.00	46.86	88.11	BSR17
	24	22.32	11.87	36.54	11.87	22.32	BSR17
	Annual	5.32	2.83	25.64	2.83	5.32	BSR17
Future No-Build	1	52.28	52.28	42.00	47.23	88.81	BSR17
	24	12.70	12.70	36.54	12.70	23.89	BSR17
	Annual	2.93	2.93	57.00	2.93	5.51	BSR17
Future Build	1	63.17	33.59	42.00	33.59	63.17	BSR17
	24	17.46	9.28	36.54	9.28	17.46	BSR17
	Annual	4.29	2.28	57.00	2.28	4.29	BSR17

Table G-29: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 20

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	141.70	75.36	42.00	49.54	93.15	BSR18
	24	46.53	24.74	36.54	24.74	46.53	BSR18
	Annual	15.50	8.24	25.64	8.24	15.50	BSR18
Future No-Build	1	89.71	89.71	42.00	50.97	95.85	BSR18
	24	25.38	25.38	36.54	25.38	47.72	BSR18
	Annual	8.28	8.28	57.00	8.28	15.57	BSR18
Future Build	1	161.93	86.11	42.00	50.61	95.17	BSR18
	24	45.26	24.07	36.54	24.07	45.26	BSR18
	Annual	15.03	7.99	57.00	7.99	15.03	BSR18

Table G-30: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 21

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	59.34	31.56	42.00	31.56	59.34	BSR19
	24	19.27	10.25	36.54	10.25	19.27	BSR19
	Annual	5.21	2.77	25.64	2.77	5.21	BSR19
Future No-Build	1	35.43	35.43	42.00	35.43	66.62	BSR19
	24	11.44	11.44	36.54	11.44	21.52	BSR19
	Annual	3.08	3.08	57.00	3.08	5.80	BSR19
Future Build	1	56.88	30.25	42.00	30.25	56.88	BSR19
	24	18.73	9.96	36.54	9.96	18.73	BSR19
	Annual	5.15	2.74	57.00	2.74	5.15	BSR19

Table G-31: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 22

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	48.97	26.04	42.00	26.04	48.97	BSR20
	24	15.72	8.36	36.54	8.36	15.72	BSR20
	Annual	4.22	2.24	25.64	2.24	4.22	BSR20
Future No-Build	1	30.22	30.22	42.00	30.22	56.82	BSR20
	24	9.81	9.81	36.54	9.81	18.44	BSR20
	Annual	2.61	2.61	57.00	2.61	4.92	BSR20
Future Build	1	47.79	25.41	42.00	25.41	47.79	BSR20
	24	15.27	8.12	36.54	8.12	15.27	BSR20
	Annual	4.31	2.29	57.00	2.29	4.31	BSR20

Table G-32: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 23

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	79.30	42.17	42.00	42.17	79.30	BSR21
	24	25.58	13.60	36.54	13.60	25.58	BSR21
	Annual	7.90	4.20	25.64	4.20	7.90	BSR21
Future No-Build	1	51.37	51.37	42.00	47.14	88.64	BSR21
	24	16.86	16.86	36.54	16.86	31.70	BSR21
	Annual	5.17	5.17	57.00	5.17	9.71	BSR21
Future Build	1	86.63	46.07	42.00	46.07	86.63	BSR21
	24	28.75	15.29	36.54	15.29	28.75	BSR21
	Annual	9.11	4.84	57.00	4.84	9.11	BSR21

Table G-33: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 24

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	40.60	21.59	42.00	21.59	40.60	BSR22
	24	13.42	7.14	36.54	7.14	13.42	BSR22
	Annual	3.40	1.81	25.64	1.81	3.40	BSR22
Future No-Build	1	24.88	24.88	42.00	24.88	46.78	BSR22
	24	8.17	8.17	36.54	8.17	15.36	BSR22
	Annual	2.08	2.08	57.00	2.08	3.92	BSR22
Future Build	1	36.75	19.54	42.00	19.54	36.75	BSR22
	24	12.27	6.53	36.54	6.53	12.27	BSR22
	Annual	3.18	1.69	57.00	1.69	3.18	BSR22

Table G-34: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 25

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	50.52	26.86	42.00	26.86	50.52	BSR23
	24	15.68	8.34	36.54	8.34	15.68	BSR23
	Annual	4.48	2.38	25.64	2.38	4.48	BSR23
Future No-Build	1	31.21	31.21	42.00	31.21	58.68	BSR23
	24	9.68	9.68	36.54	9.68	18.19	BSR23
	Annual	2.78	2.78	57.00	2.78	5.23	BSR23
Future Build	1	45.37	24.13	42.00	24.13	45.37	BSR23
	24	14.38	7.65	36.54	7.65	14.38	BSR23
	Annual	4.13	2.20	57.00	2.20	4.13	BSR23

Table G-35: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 26

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	39.75	21.14	42.00	21.14	39.75	BSR24
	24	12.62	6.71	36.54	6.71	12.62	BSR24
	Annual	3.38	1.80	25.64	1.80	3.38	BSR24
Future No-Build	1	24.72	24.72	42.00	24.72	46.48	BSR24
	24	8.20	8.20	36.54	8.20	15.41	BSR24
	Annual	2.12	2.12	57.00	2.12	3.98	BSR24
Future Build	1	35.12	18.68	42.00	18.68	35.12	BSR24
	24	11.34	6.03	36.54	6.03	11.34	BSR24
	Annual	3.08	1.64	57.00	1.64	3.08	BSR24

Table G-36: Conversion of atmospheric NOx to NO2 using the OLM Method: Sensitive Receptor No. 27

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration (µg/m^3)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration (µg/m^3)	Receptor ID
Existing Conditions	1	152.77	81.24	42.00	50.12	94.25	BSR25
	24	50.10	26.64	36.54	26.64	50.10	BSR25
	Annual	16.55	8.80	25.64	8.80	16.55	BSR25
Future No-Build	1	98.72	98.72	42.00	51.87	97.54	BSR25
	24	32.57	32.57	36.54	32.57	61.24	BSR25
	Annual	10.99	10.99	57.00	10.99	20.67	BSR25
Future Build	1	136.34	72.51	42.00	49.25	92.61	BSR25
	24	45.90	24.41	36.54	24.41	45.90	BSR25
	Annual	15.38	8.18	57.00	8.18	15.38	BSR25

Notes:

$\mathbf{NO + O_3 \rightarrow NO_2 + O2}$

Assuming NO is represented by NOx, and

Assuming the rate of conversion is controlled by the availability of ozone:

a) if the concentration (ppm/ppb) of NO is less than that of ozone (i.e. IF [NOx] < [O_3], or more precisely [O_3] > 0.9 [NOx]) then we can assume that all NOx has been

b) if the concentration (ppm/ppb) of NO is greater than that of ozone ([NOx] > [O_3]), then the concentration of NO equal to the concentration (ppm/ppb) of Ozone is converted

Source: MDDELCC *Guide d'estimation de la concentration de dioxyde d'azote (NO2) dans l'air ambiant lors de l'aplicaiton des modeles de dispersion atmosphérique* , August 2008

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Appendix H

Maximum Concentrations at Sensitive & Critical Receptors

Air Quality Impact Assessment
Appendix H

Dundas Bus Rapid Transit (BRT)
Metrolinx, September 2021

Maximum Concentrations at Sensitive & Critical Receptors - Future Build

CRITICAL RECEPTORS

Table H-1: Future Build Maximum Concentration at Critical Receptor CR1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	73.53	109.53	400	AAQC	18%	27%
	1 hour	88.00	90th	73.53	161.53	83	CAAQS (2025)	89%	195%
	24 hour	28.00	90th	13.50	41.50	200	AAQC	7%	21%
	Annual(1)	17.00	Average	3.32	20.32	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	70.94	492.94	36,200	AAQC	0%	1%
	8 hour	413.00	90th	21.71	434.71	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.52	5.52	178	AAQC	0%	3%
	1 hour	25.00	90th	0.32	25.32	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.32	3.32	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.20	25.20	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.08	20.08	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.24	5.24	500	AAQC	0%	1%
	24 hour	2.00	90th	0.04	2.04	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	20%	260%
	Annual(1)	0.00017	Average	0.00	0.00	0.00001	AAQC	25%	1725%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:
[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)
[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-2: Future Build Maximum Concentration at Critical Receptor CR2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	69.33	105.33	400	AAQC	17%	26%
	1 hour	88.00	90th	69.33	157.33	83	CAAQS (2025)	84%	190%
	24 hour	28.00	90th	12.84	40.84	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.07	20.07	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	66.88	488.88	36,200	AAQC	0%	1%
	8 hour	413.00	90th	20.90	433.90	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.49	5.49	178	AAQC	0%	3%
	1 hour	25.00	90th	0.30	25.30	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.30	3.30	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.19	25.19	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.07	20.07	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.23	5.23	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	19%	259%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	23%	1723%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-3: Future Build Maximum Concentration at Critical Receptor CR3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	62.74	98.74	400	AAQC	16%	25%
	1 hour	88.00	90th	62.74	150.74	83	CAAQS (2025)	76%	182%
	24 hour	28.00	90th	20.43	48.43	200	AAQC	10%	24%
	Annual[1]	17.00	Average	5.61	22.61	24	CAAQS (2025)	23%	94%
CO	1 hour	422.00	90th	67.93	489.93	36,200	AAQC	0%	1%
	8 hour	413.00	90th	35.13	448.13	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.43	5.43	178	AAQC	0%	3%
	1 hour	25.00	90th	0.26	25.26	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.26	3.26	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.47	25.47	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.15	20.15	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.21	5.21	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	31%	271%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	43%	1743%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.06	3.06	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-4: Future Build Maximum Concentration at Critical Receptor CR4

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	37.51	73.51	400	AAQC	9%	18%
	1 hour	88.00	90th	37.51	125.51	83	CAAQS (2025)	45%	151%
	24 hour	28.00	90th	9.18	37.18	200	AAQC	5%	19%
	Annual[1]	17.00	Average	2.24	19.24	24	CAAQS (2025)	9%	80%
CO	1 hour	422.00	90th	35.89	457.89	36,200	AAQC	0%	1%
	8 hour	413.00	90th	16.17	429.17	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.21	25.21	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.07	20.07	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.12	5.12	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	0%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	14%	254%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	17%	1717%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-5: Future Build Maximum Concentration at Critical Receptor CR5

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	28.57	64.57	400	AAQC	7%	16%
	1 hour	88.00	90th	28.57	116.57	83	CAAQS (2025)	34%	140%
	24 hour	28.00	90th	8.90	36.90	200	AAQC	4%	18%
	Annual[1]	17.00	Average	2.39	19.39	24	CAAQS (2025)	10%	81%
CO	1 hour	422.00	90th	29.55	451.55	36,200	AAQC	0%	1%
	8 hour	413.00	90th	15.28	428.28	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.18	5.18	178	AAQC	0%	3%
	1 hour	25.00	90th	0.11	25.11	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.11	3.11	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.23	25.23	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.07	20.07	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.10	5.10	500	AAQC	0%	1%
	24 hour	2.00	90th	0.02	2.02	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	0%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	13%	253%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	18%	1718%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-6: Future Build Maximum Concentration at Critical Receptor CR6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	178.31	214.31	400	AAQC	45%	54%
	1 hour	88.00	90th	178.31	266.31	83	CAAQS (2025)	215%	321%
	24 hour	28.00	90th	50.22	78.22	200	AAQC	25%	39%
	Annual[1]	17.00	Average	16.92	33.92	24	CAAQS (2025)	71%	141%
CO	1 hour	422.00	90th	163.06	585.06	36,200	AAQC	0%	2%
	8 hour	413.00	90th	74.35	487.35	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.31	6.31	178	AAQC	1%	4%
	1 hour	25.00	90th	0.79	25.79	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.79	3.79	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.13	26.13	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.38	20.38	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.13	7.83	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.61	5.61	500	AAQC	0%	1%
	24 hour	2.00	90th	0.14	2.14	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	73%	313%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	121%	1821%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-7: Future Build Maximum Concentration at Critical Receptor CR7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	175.78	211.78	400	AAQC	44%	53%
	1 hour	88.00	90th	175.78	263.78	83	CAAQS (2025)	212%	318%
	24 hour	28.00	90th	35.70	63.70	200	AAQC	18%	32%
	Annual[1]	17.00	Average	11.52	28.52	24	CAAQS (2025)	48%	119%
CO	1 hour	422.00	90th	162.87	584.87	36,200	AAQC	0%	2%
	8 hour	413.00	90th	54.40	467.40	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.33	6.33	178	AAQC	1%	4%
	1 hour	25.00	90th	0.81	25.81	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.81	3.81	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.90	25.90	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.30	20.30	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.60	5.60	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	54%	294%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	86%	1786%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-8: Future Build Maximum Concentration at Critical Receptor CR8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	33.26	69.26	400	AAQC	8%	17%
	1 hour	88.00	90th	33.26	121.26	83	CAAQS (2025)	40%	146%
	24 hour	28.00	90th	11.33	39.33	200	AAQC	6%	20%
	Annual[1]	17.00	Average	2.83	19.83	24	CAAQS (2025)	12%	83%
CO	1 hour	422.00	90th	34.53	456.53	36,200	AAQC	0%	1%
	8 hour	413.00	90th	18.00	431.00	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.32	25.32	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.11	5.11	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	18%	258%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	22%	1722%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-9: Future Build Maximum Concentration at Critical Receptor CR9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	34.40	70.40	400	AAQC	9%	18%
	1 hour	88.00	90th	34.40	122.40	83	CAAQS (2025)	41%	147%
	24 hour	28.00	90th	10.76	38.76	200	AAQC	5%	19%
	Annual[1]	17.00	Average	3.00	20.00	24	CAAQS (2025)	13%	83%
CO	1 hour	422.00	90th	35.79	457.79	36,200	AAQC	0%	1%
	8 hour	413.00	90th	18.51	431.51	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.31	25.31	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.12	5.12	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	17%	257%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	24%	1724%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

SENSITIVE RECEPTORS

Table H-10: Future Build Maximum Concentration at Sensitive Receptor No.1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	164.96	200.96	400	AAQC	41%	50%
	1 hour	88.00	90th	164.96	252.96	83	CAAQS (2025)	199%	305%
	24 hour	28.00	90th	54.92	82.92	200	AAQC	27%	41%
	Annual[1]	17.00	Average	18.09	35.09	24	CAAQS (2025)	75%	146%
CO	1 hour	422.00	90th	154.44	576.44	36,200	AAQC	0%	2%
	8 hour	413.00	90th	79.64	492.64	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	0.98	5.98	178	AAQC	1%	3%
	1 hour	25.00	90th	0.59	25.59	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.59	3.59	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.59	25.59	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.24	20.24	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.54	5.54	500	AAQC	0%	1%
	24 hour	2.00	90th	0.15	2.15	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	67%	307%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	110%	1810%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.16	3.16	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-11: Future Build Maximum Concentration at Sensitive Receptor No.2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	230.40	266.40	400	AAQC	58%	67%
	1 hour	88.00	90th	230.40	318.40	83	CAAQS (2025)	278%	384%
	24 hour	28.00	90th	52.55	80.55	200	AAQC	26%	40%
	Annual[1]	17.00	Average	17.35	34.35	24	CAAQS (2025)	72%	143%
CO	1 hour	422.00	90th	212.80	634.80	36,200	AAQC	1%	2%
	8 hour	413.00	90th	77.00	490.00	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.58	6.58	178	AAQC	1%	4%
	1 hour	25.00	90th	0.95	25.95	179	CAAQS (2025)	1%	14%
	1 hour	3.00	90th	0.95	3.95	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.68	25.68	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.25	20.25	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.74	5.74	500	AAQC	0%	1%
	24 hour	2.00	90th	0.14	2.14	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	68%	308%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	111%	1811%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-12: Future Build Maximum Concentration at Sensitive Receptor No.3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	164.97	200.97	400	AAQC	41%	50%
	1 hour	88.00	90th	164.97	252.97	83	CAAQS (2025)	199%	305%
	24 hour	28.00	90th	54.92	82.92	200	AAQC	27%	41%
	Annual[1]	17.00	Average	18.09	35.09	24	CAAQS (2025)	75%	146%
CO	1 hour	422.00	90th	154.45	576.45	36,200	AAQC	0%	2%
	8 hour	413.00	90th	79.64	492.64	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	0.98	5.98	178	AAQC	1%	3%
	1 hour	25.00	90th	0.59	25.59	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.59	3.59	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.59	25.59	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.24	20.24	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.06	5.06	500	AAQC	0%	1%
	24 hour	2.00	90th	0.15	2.15	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	67%	307%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	110%	1810%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.16	3.16	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-13: Future Build Maximum Concentration at Sensitive Receptor No.4

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	230.54	266.54	400	AAQC	58%	67%
	1 hour	88.00	90th	230.54	318.54	83	CAAQS (2025)	278%	384%
	24 hour	28.00	90th	52.59	80.59	200	AAQC	26%	40%
	Annual[1]	17.00	Average	17.36	34.36	24	CAAQS (2025)	72%	143%
CO	1 hour	422.00	90th	212.92	634.92	36,200	AAQC	1%	2%
	8 hour	413.00	90th	77.05	490.05	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.58	6.58	178	AAQC	1%	4%
	1 hour	25.00	90th	0.95	25.95	179	CAAQS (2025)	1%	14%
	1 hour	3.00	90th	0.95	3.95	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.68	25.68	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.25	20.25	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.06	5.06	500	AAQC	0%	1%
	24 hour	2.00	90th	0.14	2.14	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	68%	308%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	111%	1811%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-14: Future Build Maximum Concentration at Sensitive Receptor No.5

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	52.82	88.82	400	AAQC	13%	22%
	1 hour	88.00	90th	52.82	140.82	83	CAAQS (2025)	64%	170%
	24 hour	28.00	90th	15.57	43.57	200	AAQC	8%	22%
	Annual[1]	17.00	Average	3.90	20.90	24	CAAQS (2025)	16%	87%
CO	1 hour	422.00	90th	47.72	469.72	36,200	AAQC	0%	1%
	8 hour	413.00	90th	22.15	435.15	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.34	5.34	178	AAQC	0%	3%
	1 hour	25.00	90th	0.20	25.20	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.20	3.20	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.22	25.22	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.08	20.08	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.04	2.04	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	21%	261%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	26%	1726%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-15: Future Build Maximum Concentration at Sensitive Receptor No.6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	119.29	155.29	400	AAQC	30%	39%
	1 hour	88.00	90th	119.29	207.29	83	CAAQS (2025)	144%	250%
	24 hour	28.00	90th	39.76	67.76	200	AAQC	20%	34%
	Annual[1]	17.00	Average	11.06	28.06	24	CAAQS (2025)	46%	117%
CO	1 hour	422.00	90th	120.86	542.86	36,200	AAQC	0%	1%
	8 hour	413.00	90th	62.54	475.54	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.83	5.83	178	AAQC	0%	3%
	1 hour	25.00	90th	0.50	25.50	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.50	3.50	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.61	25.61	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.23	20.23	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.07	7.77	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.11	2.11	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	2%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	58%	298%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	81%	1781%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-16: Future Build Maximum Concentration at Sensitive Receptor No.7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	114.75	150.75	400	AAQC	29%	38%
	1 hour	88.00	90th	114.75	202.75	83	CAAQS (2025)	138%	244%
	24 hour	28.00	90th	37.24	65.24	200	AAQC	19%	33%
	Annual[1]	17.00	Average	11.06	28.06	24	CAAQS (2025)	46%	117%
CO	1 hour	422.00	90th	113.31	535.31	36,200	AAQC	0%	1%
	8 hour	413.00	90th	58.62	471.62	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.84	5.84	178	AAQC	0%	3%
	1 hour	25.00	90th	0.51	25.51	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.51	3.51	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.49	25.49	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.20	20.20	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	54%	294%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	80%	1780%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-17: Future Build Maximum Concentration at Sensitive Receptor No.8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	154.64	190.64	400	AAQC	39%	48%
	1 hour	88.00	90th	154.64	242.64	83	CAAQS (2025)	186%	292%
	24 hour	28.00	90th	50.73	78.73	200	AAQC	25%	39%
	Annual[1]	17.00	Average	15.60	32.60	24	CAAQS (2025)	65%	136%
CO	1 hour	422.00	90th	148.11	570.11	36,200	AAQC	0%	2%
	8 hour	413.00	90th	76.64	489.64	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.10	6.10	178	AAQC	1%	3%
	1 hour	25.00	90th	0.67	25.67	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.67	3.67	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.51	25.51	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.24	20.24	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.07	7.77	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.05	5.05	500	AAQC	0%	1%
	24 hour	2.00	90th	0.14	2.14	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	73%	313%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	112%	1812%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.14	3.14	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-18: Future Build Maximum Concentration at Sensitive Receptor No.9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	60.87	96.87	400	AAQC	15%	24%
	1 hour	88.00	90th	60.87	148.87	83	CAAQS (2025)	73%	179%
	24 hour	28.00	90th	20.51	48.51	200	AAQC	10%	24%
	Annual[1]	17.00	Average	5.43	22.43	24	CAAQS (2025)	23%	93%
CO	1 hour	422.00	90th	58.19	480.19	36,200	AAQC	0%	1%
	8 hour	413.00	90th	30.01	443.01	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.40	5.40	178	AAQC	0%	3%
	1 hour	25.00	90th	0.24	25.24	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.24	3.24	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.21	25.21	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.05	2.05	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	29%	269%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	39%	1739%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.06	3.06	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-19: Future Build Maximum Concentration at Sensitive Receptor No.10

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	320.43	356.43	400	AAQC	80%	89%
	1 hour	88.00	90th	320.43	408.43	83	CAAQS (2025)	386%	492%
	24 hour	28.00	90th	109.60	137.60	200	AAQC	55%	69%
	Annual[1]	17.00	Average	35.53	52.53	24	CAAQS (2025)	148%	219%
CO	1 hour	422.00	90th	302.01	724.01	36,200	AAQC	1%	2%
	8 hour	413.00	90th	156.37	569.37	15,700	AAQC	1%	4%
SO_2	10-min[2]	5.00	90th	2.25	7.25	178	AAQC	1%	4%
	1 hour	25.00	90th	1.36	26.36	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.36	4.36	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.15	2.95	11	CAAQS (2025)	1%	27%
	Annual[1]	3.30	Average	0.15	3.45	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.97	25.97	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.48	20.48	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.16	7.86	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.11	5.11	500	AAQC	0%	1%
	24 hour	2.00	90th	0.29	2.29	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.09	0.89	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	153%	393%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	248%	1948%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.30	3.30	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-20: Future Build Maximum Concentration at Sensitive Receptor No.11

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	258.65	294.65	400	AAQC	65%	74%
	1 hour	88.00	90th	258.65	346.65	83	CAAQS (2025)	312%	418%
	24 hour	28.00	90th	87.30	115.30	200	AAQC	44%	58%
	Annual[1]	17.00	Average	27.62	44.62	24	CAAQS (2025)	115%	186%
CO	1 hour	422.00	90th	241.09	663.09	36,200	AAQC	1%	2%
	8 hour	413.00	90th	124.77	537.77	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	1.81	6.81	178	AAQC	1%	4%
	1 hour	25.00	90th	1.10	26.10	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.10	4.10	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.12	2.92	11	CAAQS (2025)	1%	27%
	Annual[1]	3.30	Average	0.12	3.42	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.71	25.71	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.37	20.37	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.12	7.82	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.09	5.09	500	AAQC	0%	1%
	24 hour	2.00	90th	0.23	2.23	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.07	0.87	2.3	AAQC	3%	38%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	122%	362%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	193%	1893%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.24	3.24	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-21: Future Build Maximum Concentration at Sensitive Receptor No.12

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	167.07	203.07	400	AAQC	42%	51%
	1 hour	88.00	90th	167.07	255.07	83	CAAQS (2025)	201%	307%
	24 hour	28.00	90th	43.78	71.78	200	AAQC	22%	36%
	Annual[1]	17.00	Average	11.84	28.84	24	CAAQS (2025)	49%	120%
CO	1 hour	422.00	90th	163.11	585.11	36,200	AAQC	0%	2%
	8 hour	413.00	90th	72.66	485.66	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.22	6.22	178	AAQC	1%	3%
	1 hour	25.00	90th	0.74	25.74	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.74	3.74	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.55	25.55	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.23	20.23	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.44	2.44	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	63%	303%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	87%	1787%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-22: Future Build Maximum Concentration at Sensitive Receptor No.13

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	258.66	294.66	400	AAQC	65%	74%
	1 hour	88.00	90th	258.66	346.66	83	CAAQS (2025)	312%	418%
	24 hour	28.00	90th	70.36	98.36	200	AAQC	35%	49%
	Annual[1]	17.00	Average	21.67	38.67	24	CAAQS (2025)	90%	161%
CO	1 hour	422.00	90th	251.55	673.55	36,200	AAQC	1%	2%
	8 hour	413.00	90th	108.33	521.33	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	2.02	7.02	178	AAQC	1%	4%
	1 hour	25.00	90th	1.23	26.23	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.23	4.23	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.10	2.90	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.10	3.40	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.85	25.85	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.37	20.37	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.12	7.82	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.07	5.07	500	AAQC	0%	1%
	24 hour	2.00	90th	0.69	2.69	500	AAQC	0%	1%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.06	0.86	2.3	AAQC	3%	38%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	4%	113%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	108%	348%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	167%	1867%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.20	3.20	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-23: Future Build Maximum Concentration at Sensitive Receptor No.14

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	115.83	151.83	400	AAQC	29%	38%
	1 hour	88.00	90th	115.83	203.83	83	CAAQS (2025)	140%	246%
	24 hour	28.00	90th	25.97	53.97	200	AAQC	13%	27%
	Annual[1]	17.00	Average	6.87	23.87	24	CAAQS (2025)	29%	99%
CO	1 hour	422.00	90th	112.58	534.58	36,200	AAQC	0%	1%
	8 hour	413.00	90th	47.14	460.14	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.85	5.85	178	AAQC	0%	3%
	1 hour	25.00	90th	0.52	25.52	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.52	3.52	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.03	2.83	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.03	3.33	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.35	25.35	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.14	20.14	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.31	2.31	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	40%	280%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	54%	1754%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.07	3.07	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-24: Future Build Maximum Concentration at Sensitive Receptor No.15

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	76.68	112.68	400	AAQC	19%	28%
	1 hour	88.00	90th	76.68	164.68	83	CAAQS (2025)	92%	198%
	24 hour	28.00	90th	16.07	44.07	200	AAQC	8%	22%
	Annual[1]	17.00	Average	3.62	20.62	24	CAAQS (2025)	15%	86%
CO	1 hour	422.00	90th	73.99	495.99	36,200	AAQC	0%	1%
	8 hour	413.00	90th	24.71	437.71	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.54	5.54	178	AAQC	0%	3%
	1 hour	25.00	90th	0.33	25.33	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.33	3.33	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.23	25.23	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.09	20.09	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.20	2.20	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	24%	264%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	27%	1727%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.05	3.05	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-25: Future Build Maximum Concentration at Sensitive Receptor No.16

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	129.02	165.02	400	AAQC	32%	41%
	1 hour	88.00	90th	129.02	217.02	83	CAAQS (2025)	155%	261%
	24 hour	28.00	90th	41.02	69.02	200	AAQC	21%	35%
	Annual[1]	17.00	Average	11.62	28.62	24	CAAQS (2025)	48%	119%
CO	1 hour	422.00	90th	120.93	542.93	36,200	AAQC	0%	1%
	8 hour	413.00	90th	68.32	481.32	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.99	5.99	178	AAQC	1%	3%
	1 hour	25.00	90th	0.60	25.60	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.60	3.60	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.54	25.54	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.20	20.20	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.35	2.35	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	58%	298%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	83%	1783%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-26: Future Build Maximum Concentration at Sensitive Receptor No.17

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	54.80	90.80	400	AAQC	14%	23%
	1 hour	88.00	90th	54.80	142.80	83	CAAQS (2025)	66%	172%
	24 hour	28.00	90th	13.88	41.88	200	AAQC	7%	21%
	Annual[1]	17.00	Average	3.39	20.39	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	58.95	480.95	36,200	AAQC	0%	1%
	8 hour	413.00	90th	23.98	436.98	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.39	5.39	178	AAQC	0%	3%
	1 hour	25.00	90th	0.24	25.24	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.24	3.24	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.37	25.37	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.11	20.11	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.15	2.15	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	21%	261%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	26%	1726%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-27: Future Build Maximum Concentration at Sensitive Receptor No.18

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	36.92	72.92	400	AAQC	9%	18%
	1 hour	88.00	90th	36.92	124.92	83	CAAQS (2025)	44%	151%
	24 hour	28.00	90th	11.61	39.61	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.11	20.11	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	40.16	462.16	36,200	AAQC	0%	1%
	8 hour	413.00	90th	20.77	433.77	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.24	5.24	178	AAQC	0%	3%
	1 hour	25.00	90th	0.14	25.14	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.14	3.14	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.29	25.29	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.09	20.09	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	18%	258%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	24%	1724%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-28: Future Build Maximum Concentration at Sensitive Receptor No.19

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	63.17	99.17	400	AAQC	16%	25%
	1 hour	88.00	90th	63.17	151.17	83	CAAQS (2025)	76%	182%
	24 hour	28.00	90th	17.46	45.46	200	AAQC	9%	23%
	Annual[1]	17.00	Average	4.29	21.29	24	CAAQS (2025)	18%	89%
CO	1 hour	422.00	90th	64.91	486.91	36,200	AAQC	0%	1%
	8 hour	413.00	90th	31.84	444.84	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.47	5.47	178	AAQC	0%	3%
	1 hour	25.00	90th	0.28	25.28	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.28	3.28	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.59	25.59	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.16	20.16	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.05	7.75	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.17	2.17	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	27%	267%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	35%	1735%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.05	3.05	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-29: Future Build Maximum Concentration at Sensitive Receptor No.20

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	161.93	197.93	400	AAQC	40%	49%
	1 hour	88.00	90th	161.93	249.93	83	CAAQS (2025)	195%	301%
	24 hour	28.00	90th	45.26	73.26	200	AAQC	23%	37%
	Annual[1]	17.00	Average	15.03	32.03	24	CAAQS (2025)	63%	133%
CO	1 hour	422.00	90th	151.26	573.26	36,200	AAQC	0%	2%
	8 hour	413.00	90th	69.45	482.45	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.07	6.07	178	AAQC	1%	3%
	1 hour	25.00	90th	0.65	25.65	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.65	3.65	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.06	2.86	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.06	3.36	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.80	25.80	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.28	20.28	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.05	5.05	500	AAQC	0%	1%
	24 hour	2.00	90th	0.43	2.43	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	63%	303%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	104%	1804%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.13	3.13	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-30: Future Build Maximum Concentration at Sensitive Receptor No.21

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	56.88	92.88	400	AAQC	14%	23%
	1 hour	88.00	90th	56.88	144.88	83	CAAQS (2025)	69%	175%
	24 hour	28.00	90th	18.73	46.73	200	AAQC	9%	23%
	Annual[1]	17.00	Average	5.15	22.15	24	CAAQS (2025)	21%	92%
CO	1 hour	422.00	90th	60.60	482.60	36,200	AAQC	0%	1%
	8 hour	413.00	90th	31.37	444.37	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.37	5.37	178	AAQC	0%	3%
	1 hour	25.00	90th	0.22	25.22	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.22	3.22	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.71	25.71	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.21	20.21	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.15	2.15	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	27%	267%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	37%	1737%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.05	3.05	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-31: Future Build Maximum Concentration at Sensitive Receptor No.22

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	47.79	83.79	400	AAQC	12%	21%
	1 hour	88.00	90th	47.79	135.79	83	CAAQS (2025)	58%	164%
	24 hour	28.00	90th	15.27	43.27	200	AAQC	8%	22%
	Annual[1]	17.00	Average	4.31	21.31	24	CAAQS (2025)	18%	89%
CO	1 hour	422.00	90th	53.16	475.16	36,200	AAQC	0%	1%
	8 hour	413.00	90th	27.50	440.50	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.32	5.32	178	AAQC	0%	3%
	1 hour	25.00	90th	0.19	25.19	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.19	3.19	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.72	25.72	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.20	20.20	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.13	2.13	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	23%	263%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	33%	1733%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-32: Future Build Maximum Concentration at Sensitive Receptor No.23

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	86.63	122.63	400	AAQC	22%	31%
	1 hour	88.00	90th	86.63	174.63	83	CAAQS (2025)	104%	210%
	24 hour	28.00	90th	28.75	56.75	200	AAQC	14%	28%
	Annual[1]	17.00	Average	9.11	26.11	24	CAAQS (2025)	38%	109%
CO	1 hour	422.00	90th	86.18	508.18	36,200	AAQC	0%	1%
	8 hour	413.00	90th	44.61	457.61	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.60	5.60	178	AAQC	0%	3%
	1 hour	25.00	90th	0.36	25.36	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.36	3.36	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.73	25.73	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.23	20.23	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.07	7.77	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.03	5.03	500	AAQC	0%	1%
	24 hour	2.00	90th	0.24	2.24	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	41%	281%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	65%	1765%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.08	3.08	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-33: Future Build Maximum Concentration at Sensitive Receptor No.24

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	36.75	72.75	400	AAQC	9%	18%
	1 hour	88.00	90th	36.75	124.75	83	CAAQS (2025)	44%	150%
	24 hour	28.00	90th	12.27	40.27	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.18	20.18	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	38.24	460.24	36,200	AAQC	0%	1%
	8 hour	413.00	90th	19.78	432.78	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.37	25.37	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.12	20.12	27	CAAQS	0%	75%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	19%	259%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	24%	1724%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-34: Future Build Maximum Concentration at Sensitive Receptor No.25

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	45.37	81.37	400	AAQC	11%	20%
	1 hour	88.00	90th	45.37	133.37	83	CAAQS (2025)	55%	161%
	24 hour	28.00	90th	14.38	42.38	200	AAQC	7%	21%
	Annual[1]	17.00	Average	4.13	21.13	24	CAAQS (2025)	17%	88%
CO	1 hour	422.00	90th	47.74	469.74	36,200	AAQC	0%	1%
	8 hour	413.00	90th	24.69	437.69	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.31	5.31	178	AAQC	0%	3%
	1 hour	25.00	90th	0.19	25.19	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.19	3.19	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.49	25.49	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.15	20.15	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.13	2.13	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	22%	262%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	32%	1732%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-35: Future Build Maximum Concentration at Sensitive Receptor No.26

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	35.12	71.12	400	AAQC	9%	18%
	1 hour	88.00	90th	35.12	123.12	83	CAAQS (2025)	42%	148%
	24 hour	28.00	90th	11.34	39.34	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.08	20.08	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	36.35	458.35	36,200	AAQC	0%	1%
	8 hour	413.00	90th	18.80	431.80	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.24	5.24	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.31	25.31	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	17%	257%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	24%	1724%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-36: Future Build Maximum Concentration at Sensitive Receptor No.27

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	136.34	172.34	400	AAQC	34%	43%
	1 hour	88.00	90th	136.34	224.34	83	CAAQS (2025)	164%	270%
	24 hour	28.00	90th	45.90	73.90	200	AAQC	23%	37%
	Annual[1]	17.00	Average	15.38	32.38	24	CAAQS (2025)	64%	135%
CO	1 hour	422.00	90th	136.74	558.74	36,200	AAQC	0%	2%
	8 hour	413.00	90th	70.79	483.79	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.14	6.14	178	AAQC	1%	3%
	1 hour	25.00	90th	0.69	25.69	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.69	3.69	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.04	26.04	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.37	20.37	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.12	7.82	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.05	5.05	500	AAQC	0%	1%
	24 hour	2.00	90th	0.39	2.39	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00	0.00	0.00005	AAQC	75%	315%
	Annual[1]	0.00017	Average	0.00	0.00	0.00001	AAQC	125%	1825%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.14	3.14	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Maximum Concentrations at Sensitive & Critical Receptors - Existing Conditions

CRITICAL RECEPTORS

Table H-39: Existing Conditions Maximum Concentration at Critical Receptor CR1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	88.73	124.73	400	AAQC	22%	31%
	1 hour	88.00	90th	88.73	176.73	83	CAAQS (2025)	107%	213%
	24 hour	28.00	90th	17.15	45.15	200	AAQC	9%	23%
	Annual[1]	17.00	Average	4.28	21.28	24	CAAQS (2025)	18%	89%
CO	1 hour	422.00	90th	249.53	671.53	36,200	AAQC	1%	2%
	8 hour	413.00	90th	71.03	484.03	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.53	6.53	178	AAQC	1%	4%
	1 hour	25.00	90th	0.92	25.92	179	CAAQS (2025)	1%	14%
	1 hour	3.00	90th	0.92	3.92	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.89	25.89	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.70	20.70	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.18	7.88	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.59	5.59	500	AAQC	0%	1%
	24 hour	2.00	90th	0.09	2.09	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.06	0.26	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.10	0.90	2.3	AAQC	5%	39%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00013	0.00025	0.00005	AAQC	265%	505%
	Annual[1]	0.00017	Average	0.00003	0.00020	0.00001	AAQC	330%	2030%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:
[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)
[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-40: Existing Conditions Maximum Concentration at Critical Receptor CR2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	88.07	124.07	400	AAQC	22%	31%
	1 hour	88.00	90th	88.07	176.07	83	CAAQS (2025)	106%	212%
	24 hour	28.00	90th	16.69	44.69	200	AAQC	8%	22%
	Annual(1)	17.00	Average	3.97	20.97	24	CAAQS (2025)	17%	87%
CO	1 hour	422.00	90th	234.26	656.26	36,200	AAQC	1%	2%
	8 hour	413.00	90th	71.06	484.06	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.43	6.43	178	AAQC	1%	4%
	1 hour	25.00	90th	0.87	25.87	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.87	3.87	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.83	25.83	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.68	20.68	27	CAAQS	3%	77%
	Annual(1)	7.70	Average	0.17	7.87	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.55	5.55	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.06	0.26	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.10	0.90	2.3	AAQC	4%	39%
	Annual(1)	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00013	0.00025	0.00005	AAQC	258%	498%
	Annual(1)	0.00017	Average	0.00003	0.00020	0.00001	AAQC	306%	2006%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-41: Existing Conditions Maximum Concentration at Critical Receptor CR3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	80.97	116.97	400	AAQC	20%	29%
	1 hour	88.00	90th	80.97	168.97	83	CAAQS (2025)	98%	204%
	24 hour	28.00	90th	25.92	53.92	200	AAQC	13%	27%
	Annual[1]	17.00	Average	7.17	24.17	24	CAAQS (2025)	30%	101%
CO	1 hour	422.00	90th	208.54	630.54	36,200	AAQC	1%	2%
	8 hour	413.00	90th	105.24	518.24	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	1.13	6.13	178	AAQC	1%	3%
	1 hour	25.00	90th	0.69	25.69	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.69	3.69	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.06	2.86	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.06	3.36	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.73	26.73	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20.00	90th	1.16	21.16	27	CAAQS	4%	78%
	Annual[1]	7.70	Average	0.32	8.02	8.8	CAAQS	4%	91%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.48	5.48	500	AAQC	0%	1%
	24 hour	2.00	90th	0.13	2.13	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.05	0.25	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.02	0.12	0.4	AAQC	4%	29%
Benzene	24 hour	0.80	90th	0.16	0.96	2.3	AAQC	7%	42%
	Annual[1]	0.49	Average	0.04	0.53	0.45	AAQC	10%	118%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00020	0.00032	0.00005	AAQC	396%	636%
	Annual[1]	0.00017	Average	0.00005	0.00022	0.00001	AAQC	547%	2247%
1,3-Butadiene	24 hour	0.06	90th	0.02	0.08	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.01	0.05	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.23	3.23	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-42: Existing Conditions Maximum Concentration at Critical Receptor CR4

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	47.40	83.40	400	AAQC	12%	21%
	1 hour	88.00	90th	47.40	135.40	83	CAAQS (2025)	57%	163%
	24 hour	28.00	90th	10.80	38.80	200	AAQC	5%	19%
	Annual[1]	17.00	Average	2.62	19.62	24	CAAQS (2025)	11%	82%
CO	1 hour	422.00	90th	122.41	544.41	36,200	AAQC	0%	2%
	8 hour	413.00	90th	46.32	459.32	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.72	5.72	178	AAQC	0%	3%
	1 hour	25.00	90th	0.44	25.44	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.44	3.44	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.65	25.65	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.46	20.46	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.11	7.81	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.29	5.29	500	AAQC	0%	1%
	24 hour	2.00	90th	0.05	2.05	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.07	0.87	2.3	AAQC	3%	38%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	4%	113%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00008	0.00020	0.00005	AAQC	165%	405%
	Annual[1]	0.00017	Average	0.00002	0.00019	0.00001	AAQC	200%	1900%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.10	3.10	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-43: Existing Conditions Maximum Concentration at Critical Receptor CR5

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	32.09	68.09	400	AAQC	8%	17%
	1 hour	88.00	90th	32.09	120.09	83	CAAQS (2025)	39%	145%
	24 hour	28.00	90th	9.85	37.85	200	AAQC	5%	19%
	Annual[1]	17.00	Average	2.58	19.58	24	CAAQS (2025)	11%	82%
CO	1 hour	422.00	90th	89.97	511.97	36,200	AAQC	0%	1%
	8 hour	413.00	90th	45.40	458.40	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.47	5.47	178	AAQC	0%	3%
	1 hour	25.00	90th	0.29	25.29	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.29	3.29	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.03	2.83	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.03	3.33	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.61	25.61	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.42	20.42	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.11	7.81	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.19	5.19	500	AAQC	0%	1%
	24 hour	2.00	90th	0.05	2.05	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.07	0.87	2.3	AAQC	3%	38%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	4%	113%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00008	0.00020	0.00005	AAQC	151%	391%
	Annual[1]	0.00017	Average	0.00002	0.00019	0.00001	AAQC	197%	1897%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.09	3.09	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-44: Existing Conditions Maximum Concentration at Critical Receptor CR6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	91.97	127.97	400	AAQC	23%	32%
	1 hour	88.00	90th	91.97	179.97	83	CAAQS (2025)	111%	217%
	24 hour	28.00	90th	43.26	71.26	200	AAQC	22%	36%
	Annual(1)	17.00	Average	13.88	30.88	24	CAAQS (2025)	58%	129%
CO	1 hour	422.00	90th	397.09	819.09	36,200	AAQC	1%	2%
	8 hour	413.00	90th	200.69	613.69	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.52	7.52	178	AAQC	1%	4%
	1 hour	25.00	90th	1.53	26.53	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.53	4.53	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.17	2.97	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.17	3.47	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	2.52	27.52	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20.00	90th	1.79	21.79	27	CAAQS	7%	81%
	Annual(1)	7.70	Average	0.57	8.27	8.8	CAAQS	6%	94%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.80	5.80	500	AAQC	0%	1%
	24 hour	2.00	90th	0.22	2.22	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.08	0.28	4.5	AAQC	2%	6%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	7%	32%
Benzene	24 hour	0.80	90th	0.33	1.13	2.3	AAQC	14%	49%
	Annual(1)	0.49	Average	0.11	0.60	0.45	AAQC	24%	133%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00033	0.00045	0.00005	AAQC	658%	898%
	Annual(1)	0.00017	Average	0.00011	0.00028	0.00001	AAQC	1055%	2755%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.39	3.39	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-45: Existing Conditions Maximum Concentration at Critical Receptor CR7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	92.98	128.98	400	AAQC	23%	32%
	1 hour	88.00	90th	92.98	180.98	83	CAAQS (2025)	112%	218%
	24 hour	28.00	90th	38.62	66.62	200	AAQC	19%	33%
	Annual(1)	17.00	Average	12.36	29.36	24	CAAQS (2025)	51%	122%
CO	1 hour	422.00	90th	418.32	840.32	36,200	AAQC	1%	2%
	8 hour	413.00	90th	173.41	586.41	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.88	7.88	178	AAQC	2%	4%
	1 hour	25.00	90th	1.74	26.74	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.74	4.74	106	AAQC	2%	4%
	Annual(1)	2.80	Average	0.15	2.95	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.15	3.45	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.24	27.24	50	AAQC	4%	54%
$PM_{2.5}$	24 hour	20.00	90th	1.60	21.60	27	CAAQS	6%	80%
	Annual(1)	7.70	Average	0.51	8.21	8.8	CAAQS	6%	93%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.87	5.87	500	AAQC	0%	1%
	24 hour	2.00	90th	0.20	2.20	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.09	0.29	4.5	AAQC	2%	6%
	24 hour	0.10	90th	0.02	0.12	0.4	AAQC	6%	31%
Benzene	24 hour	0.80	90th	0.28	1.08	2.3	AAQC	12%	47%
	Annual(1)	0.49	Average	0.09	0.58	0.45	AAQC	20%	129%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00029	0.00041	0.00005	AAQC	589%	829%
	Annual(1)	0.00017	Average	0.00009	0.00026	0.00001	AAQC	943%	2643%
1,3-Butadiene	24 hour	0.06	90th	0.03	0.09	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.35	3.35	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-46: Existing Conditions Maximum Concentration at Critical Receptor CR8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	38.84	74.84	400	AAQC	10%	19%
	1 hour	88.00	90th	38.84	126.84	83	CAAQS (2025)	47%	153%
	24 hour	28.00	90th	13.01	41.01	200	AAQC	7%	21%
	Annual[1]	17.00	Average	3.21	20.21	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	114.18	536.18	36,200	AAQC	0%	1%
	8 hour	413.00	90th	57.90	470.90	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.63	5.63	178	AAQC	0%	3%
	1 hour	25.00	90th	0.38	25.38	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.38	3.38	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.79	25.79	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.55	20.55	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.14	7.84	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.24	5.24	500	AAQC	0%	1%
	24 hour	2.00	90th	0.07	2.07	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.09	0.89	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000099	0.000219	0.000050	AAQC	198%	438%
	Annual[1]	0.000170	Average	0.000024	0.000194	0.000010	AAQC	245%	1945%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-47: Existing Conditions Maximum Concentration at Critical Receptor CR9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	40.77	76.77	400	AAQC	10%	19%
	1 hour	88.00	90th	40.77	128.77	83	CAAQS (2025)	49%	155%
	24 hour	28.00	90th	12.48	40.48	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.48	20.48	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	119.85	541.85	36,200	AAQC	0%	1%
	8 hour	413.00	90th	60.49	473.49	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.66	5.66	178	AAQC	0%	3%
	1 hour	25.00	90th	0.40	25.40	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.40	3.40	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.76	25.76	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.53	20.53	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.15	7.85	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.25	5.25	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.09	0.89	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	6%	114%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000095	0.000215	0.000050	AAQC	190%	430%
	Annual[1]	0.000170	Average	0.000026	0.000196	0.000010	AAQC	265%	1965%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

SENSITIVE RECEPTORS

Table H-48: Existing Conditions Maximum Concentration at Sensitive Receptor No.1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	102.35	138.35	400	AAQC	26%	35%
	1 hour	88.00	90th	102.35	190.35	83	CAAQS (2025)	123%	229%
	24 hour	28.00	90th	69.02	97.02	200	AAQC	35%	49%
	Annual(1)	17.00	Average	23.06	40.06	24	CAAQS (2025)	96%	167%
CO	1 hour	422.00	90th	517.14	939.14	36,200	AAQC	1%	3%
	8 hour	413.00	90th	252.10	665.10	15,700	AAQC	2%	4%
SO_2	10-min(2)	5.00	90th	3.25	8.25	178	AAQC	2%	5%
	1 hour	25.00	90th	1.97	26.97	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.97	4.97	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.20	3.00	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.20	3.50	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	3.42	28.42	50	AAQC	7%	57%
$PM_{2.5}$	24 hour	20.00	90th	2.85	22.85	27	CAAQS	11%	85%
	Annual(1)	7.70	Average	0.95	8.65	8.8	CAAQS	11%	98%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.40	6.40	500	AAQC	0%	1%
	24 hour	2.00	90th	0.34	2.34	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.15	0.35	4.5	AAQC	3%	8%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	11%	36%
Benzene	24 hour	0.80	90th	0.40	1.20	2.3	AAQC	17%	52%
	Annual(1)	0.49	Average	0.13	0.62	0.45	AAQC	29%	138%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000534	0.000654	0.000050	AAQC	1068%	1308%
	Annual(1)	0.000170	Average	0.000178	0.000348	0.000010	AAQC	1783%	3483%
1,3-Butadiene	24 hour	0.06	90th	0.05	0.11	10	AAQC	1%	1%
	Annual(1)	0.04	90th	0.02	0.06	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.62	3.62	65	AAQC	1%	6%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-49: Existing Conditions Maximum Concentration at Sensitive Receptor No.2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	101.23	137.23	400	AAQC	25%	34%
	1 hour	88.00	90th	101.23	189.23	83	CAAQS (2025)	122%	228%
	24 hour	28.00	90th	54.93	82.93	200	AAQC	27%	41%
	Annual(1)	17.00	Average	18.04	35.04	24	CAAQS (2025)	75%	146%
CO	1 hour	422.00	90th	532.91	954.91	36,200	AAQC	1%	3%
	8 hour	413.00	90th	214.30	627.30	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	3.41	8.41	178	AAQC	2%	5%
	1 hour	25.00	90th	2.06	27.06	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	2.06	5.06	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.17	2.97	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.17	3.47	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	2.73	27.73	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20.00	90th	2.24	22.24	27	CAAQS	8%	82%
	Annual(1)	7.70	Average	0.74	8.44	8.8	CAAQS	8%	96%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.34	6.34	500	AAQC	0%	1%
	24 hour	2.00	90th	0.27	2.27	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.14	0.34	4.5	AAQC	3%	8%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	9%	34%
Benzene	24 hour	0.80	90th	0.34	1.14	2.3	AAQC	15%	50%
	Annual(1)	0.49	Average	0.11	0.60	0.45	AAQC	25%	134%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000423	0.000543	0.000050	AAQC	845%	1085%
	Annual(1)	0.000170	Average	0.000139	0.000309	0.000010	AAQC	1389%	3089%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.49	3.49	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-50: Existing Conditions Maximum Concentration at Sensitive Receptor No.3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	102.35	138.35	400	AAQC	26%	35%
	1 hour	88.00	90th	102.35	190.35	83	CAAQS (2025)	123%	229%
	24 hour	28.00	90th	69.03	97.03	200	AAQC	35%	49%
	Annual(1)	17.00	Average	23.06	40.06	24	CAAQS (2025)	96%	167%
CO	1 hour	422.00	90th	517.21	939.21	36,200	AAQC	1%	3%
	8 hour	413.00	90th	252.11	665.11	15,700	AAQC	2%	4%
SO_2	10-min(2)	5.00	90th	3.25	8.25	178	AAQC	2%	5%
	1 hour	25.00	90th	1.97	26.97	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.97	4.97	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.20	3.00	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.20	3.50	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	3.42	28.42	50	AAQC	7%	57%
$PM_{2.5}$	24 hour	20.00	90th	2.85	22.85	27	CAAQS	11%	85%
	Annual(1)	7.70	Average	0.95	8.65	8.8	CAAQS	11%	98%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.40	6.40	500	AAQC	0%	1%
	24 hour	2.00	90th	0.34	2.34	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.15	0.35	4.5	AAQC	3%	8%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	11%	36%
Benzene	24 hour	0.80	90th	0.40	1.20	2.3	AAQC	17%	52%
	Annual(1)	0.49	Average	0.13	0.62	0.45	AAQC	29%	138%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000534	0.000654	0.000050	AAQC	1068%	1308%
	Annual(1)	0.000170	Average	0.000178	0.000348	0.000010	AAQC	1783%	3483%
1,3-Butadiene	24 hour	0.06	90th	0.05	0.11	10	AAQC	1%	1%
	Annual(1)	0.04	90th	0.02	0.06	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.62	3.62	65	AAQC	1%	6%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-51: Existing Conditions Maximum Concentration at Sensitive Receptor No.4

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	101.26	137.26	400	AAQC	25%	34%
	1 hour	88.00	90th	101.26	189.26	83	CAAQS (2025)	122%	228%
	24 hour	28.00	90th	54.96	82.96	200	AAQC	27%	41%
	Annual(1)	17.00	Average	18.06	35.06	24	CAAQS (2025)	75%	146%
CO	1 hour	422.00	90th	533.40	955.40	36,200	AAQC	1%	3%
	8 hour	413.00	90th	214.44	627.44	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	3.41	8.41	178	AAQC	2%	5%
	1 hour	25.00	90th	2.06	27.06	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	2.06	5.06	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.17	2.97	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.17	3.47	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	2.74	27.74	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20.00	90th	2.24	22.24	27	CAAQS	8%	82%
	Annual(1)	7.70	Average	0.74	8.44	8.8	CAAQS	8%	96%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.34	6.34	500	AAQC	0%	1%
	24 hour	2.00	90th	0.27	2.27	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.14	0.34	4.5	AAQC	3%	8%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	9%	34%
Benzene	24 hour	0.80	90th	0.34	1.14	2.3	AAQC	15%	50%
	Annual(1)	0.49	Average	0.11	0.60	0.45	AAQC	25%	134%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000423	0.000543	0.000050	AAQC	846%	1086%
	Annual(1)	0.000170	Average	0.000139	0.000309	0.000010	AAQC	1390%	3090%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.49	3.49	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-52: Existing Conditions Maximum Concentration at Sensitive Receptor No.5

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	61.52	97.52	400	AAQC	15%	24%
	1 hour	88.00	90th	61.52	149.52	83	CAAQS (2025)	74%	180%
	24 hour	28.00	90th	16.46	44.46	200	AAQC	8%	22%
	Annual(1)	17.00	Average	4.07	21.07	24	CAAQS (2025)	17%	88%
CO	1 hour	422.00	90th	168.31	590.31	36,200	AAQC	0%	2%
	8 hour	413.00	90th	64.53	477.53	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.12	6.12	178	AAQC	1%	3%
	1 hour	25.00	90th	0.68	25.68	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.68	3.68	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.84	25.84	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.67	20.67	27	CAAQS	2%	77%
	Annual(1)	7.70	Average	0.16	7.86	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.38	5.38	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.04	0.24	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.11	0.91	2.3	AAQC	5%	40%
	Annual(1)	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000126	0.000246	0.000050	AAQC	252%	492%
	Annual(1)	0.000170	Average	0.000031	0.000201	0.000010	AAQC	312%	2012%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-53: Existing Conditions Maximum Concentration at Sensitive Receptor No.6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	93.07	129.07	400	AAQC	23%	32%
	1 hour	88.00	90th	93.07	181.07	83	CAAQS (2025)	112%	218%
	24 hour	28.00	90th	45.55	73.55	200	AAQC	23%	37%
	Annual(1)	17.00	Average	12.57	29.57	24	CAAQS (2025)	52%	123%
CO	1 hour	422.00	90th	386.99	808.99	36,200	AAQC	1%	2%
	8 hour	413.00	90th	195.52	608.52	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.45	7.45	178	AAQC	1%	4%
	1 hour	25.00	90th	1.48	26.48	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.48	4.48	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.13	2.93	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.13	3.43	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.31	27.31	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20.00	90th	1.83	21.83	27	CAAQS	7%	81%
	Annual(1)	7.70	Average	0.51	8.21	8.8	CAAQS	6%	93%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.86	5.86	500	AAQC	0%	1%
	24 hour	2.00	90th	0.23	2.23	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.09	0.29	4.5	AAQC	2%	6%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	7%	32%
Benzene	24 hour	0.80	90th	0.31	1.11	2.3	AAQC	13%	48%
	Annual(1)	0.49	Average	0.09	0.58	0.45	AAQC	19%	128%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000347	0.000467	0.000050	AAQC	694%	934%
	Annual(1)	0.000170	Average	0.000096	0.000266	0.000010	AAQC	956%	2656%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.41	3.41	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-54: Existing Conditions Maximum Concentration at Sensitive Receptor No.7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	92.64	128.64	400	AAQC	23%	32%
	1 hour	88.00	90th	92.64	180.64	83	CAAQS (2025)	112%	218%
	24 hour	28.00	90th	42.97	70.97	200	AAQC	21%	35%
	Annual(1)	17.00	Average	12.74	29.74	24	CAAQS (2025)	53%	124%
CO	1 hour	422.00	90th	370.58	792.58	36,200	AAQC	1%	2%
	8 hour	413.00	90th	187.12	600.12	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.42	7.42	178	AAQC	1%	4%
	1 hour	25.00	90th	1.47	26.47	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.47	4.47	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.13	2.93	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.13	3.43	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.12	27.12	50	AAQC	4%	54%
$PM_{2.5}$	24 hour	20.00	90th	1.72	21.72	27	CAAQS	6%	80%
	Annual(1)	7.70	Average	0.51	8.21	8.8	CAAQS	6%	93%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.84	5.84	500	AAQC	0%	1%
	24 hour	2.00	90th	0.22	2.22	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.09	0.29	4.5	AAQC	2%	6%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	7%	32%
Benzene	24 hour	0.80	90th	0.29	1.09	2.3	AAQC	13%	47%
	Annual(1)	0.49	Average	0.09	0.58	0.45	AAQC	19%	128%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000329	0.000449	0.000050	AAQC	657%	897%
	Annual(1)	0.000170	Average	0.000097	0.000267	0.000010	AAQC	974%	2674%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.39	3.39	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-55: Existing Conditions Maximum Concentration at Sensitive Receptor No.8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	97.68	133.68	400	AAQC	24%	33%
	1 hour	88.00	90th	97.68	185.68	83	CAAQS (2025)	118%	224%
	24 hour	28.00	90th	59.96	87.96	200	AAQC	30%	44%
	Annual(1)	17.00	Average	18.41	35.41	24	CAAQS (2025)	77%	148%
CO	1 hour	422.00	90th	505.62	927.62	36,200	AAQC	1%	3%
	8 hour	413.00	90th	255.38	668.38	15,700	AAQC	2%	4%
SO_2	10-min(2)	5.00	90th	3.18	8.18	178	AAQC	2%	5%
	1 hour	25.00	90th	1.92	26.92	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.92	4.92	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.20	3.00	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.20	3.50	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	2.83	27.83	50	AAQC	6%	56%
$PM_{2.5}$	24 hour	20.00	90th	2.38	22.38	27	CAAQS	9%	83%
	Annual(1)	7.70	Average	0.73	8.43	8.8	CAAQS	8%	96%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.14	6.14	500	AAQC	0%	1%
	24 hour	2.00	90th	0.30	2.30	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.12	0.32	4.5	AAQC	3%	7%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	10%	35%
Benzene	24 hour	0.80	90th	0.40	1.20	2.3	AAQC	18%	52%
	Annual(1)	0.49	Average	0.12	0.61	0.45	AAQC	28%	136%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000461	0.000581	0.000050	AAQC	921%	1161%
	Annual(1)	0.000170	Average	0.000141	0.000311	0.000010	AAQC	1414%	3114%
1,3-Butadiene	24 hour	0.06	90th	0.05	0.11	10	AAQC	1%	1%
	Annual(1)	0.04	90th	0.02	0.06	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.54	3.54	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-56: Existing Conditions Maximum Concentration at Sensitive Receptor No.9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	81.42	117.42	400	AAQC	20%	29%
	1 hour	88.00	90th	81.42	169.42	83	CAAQS (2025)	98%	204%
	24 hour	28.00	90th	26.91	54.91	200	AAQC	13%	27%
	Annual[1]	17.00	Average	7.15	24.15	24	CAAQS (2025)	30%	101%
CO	1 hour	422.00	90th	207.44	629.44	36,200	AAQC	1%	2%
	8 hour	413.00	90th	104.50	517.50	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	1.21	6.21	178	AAQC	1%	3%
	1 hour	25.00	90th	0.73	25.73	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.73	3.73	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.29	26.29	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20.00	90th	1.09	21.09	27	CAAQS	4%	78%
	Annual[1]	7.70	Average	0.29	7.99	8.8	CAAQS	3%	91%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.49	5.49	500	AAQC	0%	1%
	24 hour	2.00	90th	0.13	2.13	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.05	0.25	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.02	0.12	0.4	AAQC	4%	29%
Benzene	24 hour	0.80	90th	0.17	0.97	2.3	AAQC	7%	42%
	Annual[1]	0.49	Average	0.05	0.54	0.45	AAQC	10%	119%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000208	0.000328	0.000050	AAQC	415%	655%
	Annual[1]	0.000170	Average	0.000055	0.000225	0.000010	AAQC	552%	2252%
1,3-Butadiene	24 hour	0.06	90th	0.02	0.08	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.01	0.05	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.24	3.24	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-57: Existing Conditions Maximum Concentration at Sensitive Receptor No.10

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	118.88	154.88	400	AAQC	30%	39%
	1 hour	88.00	90th	118.88	206.88	83	CAAQS (2025)	143%	249%
	24 hour	28.00	90th	81.38	109.38	200	AAQC	41%	55%
	Annual[1]	17.00	Average	40.27	57.27	24	CAAQS (2025)	168%	239%
CO	1 hour	422.00	90th	978.33	1400.33	36,200	AAQC	3%	4%
	8 hour	413.00	90th	486.64	899.64	15,700	AAQC	3%	6%
SO_2	10-min[2]	5.00	90th	6.37	11.37	178	AAQC	4%	6%
	1 hour	25.00	90th	3.86	28.86	179	CAAQS (2025)	2%	16%
	1 hour	3.00	90th	3.86	6.86	106	AAQC	4%	6%
	Annual[1]	2.80	Average	0.40	3.20	11	CAAQS (2025)	4%	29%
	Annual[1]	3.30	Average	0.40	3.70	11	AAQC	4%	34%
PM_{10}	24 hour	25.00	90th	6.03	31.03	50	AAQC	12%	62%
$PM_{2.5}$	24 hour	20.00	90th	5.11	25.11	27	CAAQS	19%	93%
	Annual[1]	7.70	Average	1.63	9.33	8.8	CAAQS	18%	106%
Acetaldehyde	0.5 hour[2]	5.00	90th	2.42	7.42	500	AAQC	0%	1%
	24 hour	2.00	90th	0.63	2.63	500	AAQC	0%	1%
Acrolein	1 hour	0.20	90th	0.26	0.46	4.5	AAQC	6%	10%
	24 hour	0.10	90th	0.08	0.18	0.4	AAQC	20%	45%
Benzene	24 hour	0.80	90th	0.79	1.59	2.3	AAQC	34%	69%
	Annual[1]	0.49	Average	0.25	0.74	0.45	AAQC	56%	165%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000977	0.001097	0.000050	AAQC	1955%	2195%
	Annual[1]	0.000170	Average	0.000311	0.000481	0.000010	AAQC	3106%	4806%
1,3-Butadiene	24 hour	0.06	90th	0.10	0.16	10	AAQC	1%	2%
	Annual[1]	0.04	90th	0.03	0.07	2	AAQC	2%	4%
Formaldehyde	24 hour	3.00	90th	1.14	4.14	65	AAQC	2%	6%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-58: Existing Conditions Maximum Concentration at Sensitive Receptor No.11

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	112.96	148.96	400	AAQC	28%	37%
	1 hour	88.00	90th	112.96	200.96	83	CAAQS (2025)	136%	242%
	24 hour	28.00	90th	79.90	107.90	200	AAQC	40%	54%
	Annual(1)	17.00	Average	35.08	52.08	24	CAAQS (2025)	146%	217%
CO	1 hour	422.00	90th	860.19	1282.19	36,200	AAQC	2%	4%
	8 hour	413.00	90th	434.54	847.54	15,700	AAQC	3%	5%
SO_2	10-min(2)	5.00	90th	5.48	10.48	178	AAQC	3%	6%
	1 hour	25.00	90th	3.32	28.32	179	CAAQS (2025)	2%	16%
	1 hour	3.00	90th	3.32	6.32	106	AAQC	3%	6%
	Annual(1)	2.80	Average	0.35	3.15	11	CAAQS (2025)	3%	29%
	Annual(1)	3.30	Average	0.35	3.65	11	AAQC	3%	33%
PM_{10}	24 hour	25.00	90th	5.19	30.19	50	AAQC	10%	60%
$PM_{2.5}$	24 hour	20.00	90th	4.48	24.48	27	CAAQS	17%	91%
	Annual(1)	7.70	Average	1.40	9.10	8.8	CAAQS	16%	103%
Acetaldehyde	0.5 hour(2)	5.00	90th	2.07	7.07	500	AAQC	0%	1%
	24 hour	2.00	90th	0.56	2.56	500	AAQC	0%	1%
Acrolein	1 hour	0.20	90th	0.22	0.42	4.5	AAQC	5%	9%
	24 hour	0.10	90th	0.07	0.17	0.4	AAQC	18%	43%
Benzene	24 hour	0.80	90th	0.71	1.51	2.3	AAQC	31%	66%
	Annual(1)	0.49	Average	0.22	0.71	0.45	AAQC	49%	158%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000865	0.000985	0.000050	AAQC	1730%	1970%
	Annual(1)	0.000170	Average	0.000271	0.000441	0.000010	AAQC	2713%	4413%
1,3-Butadiene	24 hour	0.06	90th	0.09	0.15	10	AAQC	1%	1%
	Annual(1)	0.04	90th	0.03	0.07	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	1.01	4.01	65	AAQC	2%	6%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-59: Existing Conditions Maximum Concentration at Sensitive Receptor No.12

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	99.35	135.35	400	AAQC	25%	34%
	1 hour	88.00	90th	99.35	187.35	83	CAAQS (2025)	120%	226%
	24 hour	28.00	90th	58.38	86.38	200	AAQC	29%	43%
	Annual(1)	17.00	Average	16.18	33.18	24	CAAQS (2025)	67%	138%
CO	1 hour	422.00	90th	517.12	939.12	36,200	AAQC	1%	3%
	8 hour	413.00	90th	233.77	646.77	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	3.21	8.21	178	AAQC	2%	5%
	1 hour	25.00	90th	1.94	26.94	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.94	4.94	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.15	2.95	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.15	3.45	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.91	27.91	50	AAQC	6%	56%
$PM_{2.5}$	24 hour	20.00	90th	2.39	22.39	27	CAAQS	9%	83%
	Annual(1)	7.70	Average	0.66	8.36	8.8	CAAQS	8%	95%
Acetaldehyde	0.5 hour(2)	5.00	90th	1.23	6.23	500	AAQC	0%	1%
	24 hour	2.00	90th	0.29	2.29	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.13	0.33	4.5	AAQC	3%	7%
	24 hour	0.10	90th	0.04	0.14	0.4	AAQC	9%	34%
Benzene	24 hour	0.80	90th	0.35	1.15	2.3	AAQC	15%	50%
	Annual(1)	0.49	Average	0.10	0.59	0.45	AAQC	22%	130%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000450	0.000570	0.000050	AAQC	900%	1140%
	Annual(1)	0.000170	Average	0.000125	0.000295	0.000010	AAQC	1245%	2945%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.53	3.53	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-60: Existing Conditions Maximum Concentration at Sensitive Receptor No.13

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	118.92	154.92	400	AAQC	30%	39%
	1 hour	88.00	90th	118.92	206.92	83	CAAQS (2025)	143%	249%
	24 hour	28.00	90th	78.91	106.91	200	AAQC	39%	53%
	Annual(1)	17.00	Average	31.36	48.36	24	CAAQS (2025)	131%	201%
CO	1 hour	422.00	90th	883.98	1305.98	36,200	AAQC	2%	4%
	8 hour	413.00	90th	371.37	784.37	15,700	AAQC	2%	5%
SO_2	10-min(2)	5.00	90th	5.55	10.55	178	AAQC	3%	6%
	1 hour	25.00	90th	3.36	28.36	179	CAAQS (2025)	2%	16%
	1 hour	3.00	90th	3.36	6.36	106	AAQC	3%	6%
	Annual(1)	2.80	Average	0.27	3.07	11	CAAQS (2025)	2%	28%
	Annual(1)	3.30	Average	0.27	3.57	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	4.96	29.96	50	AAQC	10%	60%
$PM_{2.5}$	24 hour	20.00	90th	4.20	24.20	27	CAAQS	16%	90%
	Annual(1)	7.70	Average	1.29	8.99	8.8	CAAQS	15%	102%
Acetaldehyde	0.5 hour(2)	5.00	90th	2.39	7.39	500	AAQC	0%	1%
	24 hour	2.00	90th	0.50	2.50	500	AAQC	0%	1%
Acrolein	1 hour	0.20	90th	0.26	0.46	4.5	AAQC	6%	10%
	24 hour	0.10	90th	0.07	0.17	0.4	AAQC	17%	42%
Benzene	24 hour	0.80	90th	0.58	1.38	2.3	AAQC	25%	60%
	Annual(1)	0.49	Average	0.18	0.67	0.45	AAQC	39%	148%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000790	0.000910	0.000050	AAQC	1581%	1821%
	Annual(1)	0.000170	Average	0.000243	0.000413	0.000010	AAQC	2431%	4131%
1,3-Butadiene	24 hour	0.06	90th	0.07	0.13	10	AAQC	1%	1%
	Annual(1)	0.04	90th	0.02	0.06	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.92	3.92	65	AAQC	1%	6%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-61: Existing Conditions Maximum Concentration at Sensitive Receptor No.14

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	95.03	131.03	400	AAQC	24%	33%
	1 hour	88.00	90th	95.03	183.03	83	CAAQS (2025)	114%	221%
	24 hour	28.00	90th	36.83	64.83	200	AAQC	18%	32%
	Annual(1)	17.00	Average	9.74	26.74	24	CAAQS (2025)	41%	111%
CO	1 hour	422.00	90th	398.43	820.43	36,200	AAQC	1%	2%
	8 hour	413.00	90th	163.15	576.15	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.46	7.46	178	AAQC	1%	4%
	1 hour	25.00	90th	1.49	26.49	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.49	4.49	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.79	26.79	50	AAQC	4%	54%
$PM_{2.5}$	24 hour	20.00	90th	1.52	21.52	27	CAAQS	6%	80%
	Annual(1)	7.70	Average	0.40	8.10	8.8	CAAQS	5%	92%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.97	5.97	500	AAQC	0%	1%
	24 hour	2.00	90th	0.18	2.18	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.10	0.30	4.5	AAQC	2%	7%
	24 hour	0.10	90th	0.02	0.12	0.4	AAQC	6%	31%
Benzene	24 hour	0.80	90th	0.21	1.01	2.3	AAQC	9%	44%
	Annual(1)	0.49	Average	0.06	0.55	0.45	AAQC	12%	121%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000286	0.000406	0.000050	AAQC	571%	811%
	Annual(1)	0.000170	Average	0.000075	0.000245	0.000010	AAQC	753%	2453%
1,3-Butadiene	24 hour	0.06	90th	0.03	0.09	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.33	3.33	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-62: Existing Conditions Maximum Concentration at Sensitive Receptor No.15

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	89.17	125.17	400	AAQC	22%	31%
	1 hour	88.00	90th	89.17	177.17	83	CAAQS (2025)	107%	213%
	24 hour	28.00	90th	19.36	47.36	200	AAQC	10%	24%
	Annual[1]	17.00	Average	4.55	21.55	24	CAAQS (2025)	19%	90%
CO	1 hour	422.00	90th	259.66	681.66	36,200	AAQC	1%	2%
	8 hour	413.00	90th	81.89	494.89	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	1.59	6.59	178	AAQC	1%	4%
	1 hour	25.00	90th	0.96	25.96	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	0.96	3.96	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.03	26.03	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.81	20.81	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.19	7.89	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.62	5.62	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.07	0.27	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.12	0.92	2.3	AAQC	5%	40%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000149	0.000269	0.000050	AAQC	298%	538%
	Annual[1]	0.000170	Average	0.000035	0.000205	0.000010	AAQC	350%	2050%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.17	3.17	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-63: Existing Conditions Maximum Concentration at Sensitive Receptor No.16

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	98.70	134.70	400	AAQC	25%	34%
	1 hour	88.00	90th	98.70	186.70	83	CAAQS (2025)	119%	225%
	24 hour	28.00	90th	47.63	75.63	200	AAQC	24%	38%
	Annual[1]	17.00	Average	14.78	31.78	24	CAAQS (2025)	62%	132%
CO	1 hour	422.00	90th	440.13	862.13	36,200	AAQC	1%	2%
	8 hour	413.00	90th	187.46	600.46	15,700	AAQC	1%	4%
SO_2	10-min[2]	5.00	90th	2.81	7.81	178	AAQC	2%	4%
	1 hour	25.00	90th	1.70	26.70	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.70	4.70	106	AAQC	2%	4%
	Annual[1]	2.80	Average	0.13	2.93	11	CAAQS (2025)	1%	27%
	Annual[1]	3.30	Average	0.13	3.43	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.65	27.65	50	AAQC	5%	55%
$PM_{2.5}$	24 hour	20.00	90th	2.01	22.01	27	CAAQS	7%	82%
	Annual[1]	7.70	Average	0.63	8.33	8.8	CAAQS	7%	95%
Acetaldehyde	0.5 hour[2]	5.00	90th	1.18	6.18	500	AAQC	0%	1%
	24 hour	2.00	90th	0.24	2.24	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.13	0.33	4.5	AAQC	3%	7%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	8%	33%
Benzene	24 hour	0.80	90th	0.28	1.08	2.3	AAQC	12%	47%
	Annual[1]	0.49	Average	0.09	0.58	0.45	AAQC	19%	128%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000369	0.000489	0.000050	AAQC	737%	977%
	Annual[1]	0.000170	Average	0.000114	0.000284	0.000010	AAQC	1142%	2842%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.43	3.43	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-64: Existing Conditions Maximum Concentration at Sensitive Receptor No.17

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	61.85	97.85	400	AAQC	15%	24%
	1 hour	88.00	90th	61.85	149.85	83	CAAQS (2025)	75%	181%
	24 hour	28.00	90th	16.11	44.11	200	AAQC	8%	22%
	Annual[1]	17.00	Average	4.12	21.12	24	CAAQS (2025)	17%	88%
CO	1 hour	422.00	90th	173.25	595.25	36,200	AAQC	0%	2%
	8 hour	413.00	90th	69.95	482.95	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.00	6.00	178	AAQC	1%	3%
	1 hour	25.00	90th	0.61	25.61	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.61	3.61	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.11	26.11	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.72	20.72	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.19	7.89	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.37	5.37	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.04	0.24	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.10	0.90	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000123	0.000243	0.000050	AAQC	245%	485%
	Annual[1]	0.000170	Average	0.000031	0.000201	0.000010	AAQC	313%	2013%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.14	3.14	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-65: Existing Conditions Maximum Concentration at Sensitive Receptor No.18

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	43.90	79.90	400	AAQC	11%	20%
	1 hour	88.00	90th	43.90	131.90	83	CAAQS (2025)	53%	159%
	24 hour	28.00	90th	13.94	41.94	200	AAQC	7%	21%
	Annual[1]	17.00	Average	3.58	20.58	24	CAAQS (2025)	15%	86%
CO	1 hour	422.00	90th	119.61	541.61	36,200	AAQC	0%	1%
	8 hour	413.00	90th	60.37	473.37	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.61	5.61	178	AAQC	0%	3%
	1 hour	25.00	90th	0.37	25.37	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.37	3.37	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.03	2.83	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.03	3.33	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.93	25.93	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.61	20.61	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.16	7.86	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.26	5.26	500	AAQC	0%	1%
	24 hour	2.00	90th	0.07	2.07	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.09	0.89	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000106	0.000226	0.000050	AAQC	213%	453%
	Annual[1]	0.000170	Average	0.000027	0.000197	0.000010	AAQC	272%	1972%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-66: Existing Conditions Maximum Concentration at Sensitive Receptor No.19

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	88.11	124.11	400	AAQC	22%	31%
	1 hour	88.00	90th	88.11	176.11	83	CAAQS (2025)	106%	212%
	24 hour	28.00	90th	22.32	50.32	200	AAQC	11%	25%
	Annual(1)	17.00	Average	5.32	22.32	24	CAAQS (2025)	22%	93%
CO	1 hour	422.00	90th	221.47	643.47	36,200	AAQC	1%	2%
	8 hour	413.00	90th	89.34	502.34	15,700	AAQC	1%	3%
SO_2	10-min(2)	5.00	90th	1.36	6.36	178	AAQC	1%	4%
	1 hour	25.00	90th	0.83	25.83	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.83	3.83	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.75	26.75	50	AAQC	4%	54%
$PM_{2.5}$	24 hour	20.00	90th	1.05	21.05	27	CAAQS	4%	78%
	Annual(1)	7.70	Average	0.27	7.97	8.8	CAAQS	3%	91%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.55	5.55	500	AAQC	0%	1%
	24 hour	2.00	90th	0.11	2.11	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.06	0.26	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	4%	29%
Benzene	24 hour	0.80	90th	0.14	0.94	2.3	AAQC	6%	41%
	Annual(1)	0.49	Average	0.03	0.52	0.45	AAQC	7%	116%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000169	0.000289	0.000050	AAQC	338%	578%
	Annual(1)	0.000170	Average	0.000040	0.000210	0.000010	AAQC	397%	2097%
1,3-Butadiene	24 hour	0.06	90th	0.02	0.08	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.20	3.20	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-67: Existing Conditions Maximum Concentration at Sensitive Receptor No.20

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	93.15	129.15	400	AAQC	23%	32%
	1 hour	88.00	90th	93.15	181.15	83	CAAQS (2025)	112%	218%
	24 hour	28.00	90th	46.53	74.53	200	AAQC	23%	37%
	Annual(1)	17.00	Average	15.50	32.50	24	CAAQS (2025)	65%	135%
CO	1 hour	422.00	90th	386.93	808.93	36,200	AAQC	1%	2%
	8 hour	413.00	90th	195.55	608.55	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	2.40	7.40	178	AAQC	1%	4%
	1 hour	25.00	90th	1.45	26.45	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.45	4.45	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.16	2.96	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.16	3.46	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	2.91	27.91	50	AAQC	6%	56%
$PM_{2.5}$	24 hour	20.00	90th	2.01	22.01	27	CAAQS	7%	82%
	Annual(1)	7.70	Average	0.67	8.37	8.8	CAAQS	8%	95%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.86	5.86	500	AAQC	0%	1%
	24 hour	2.00	90th	0.23	2.23	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.09	0.29	4.5	AAQC	2%	6%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	7%	32%
Benzene	24 hour	0.80	90th	0.31	1.11	2.3	AAQC	13%	48%
	Annual(1)	0.49	Average	0.10	0.59	0.45	AAQC	23%	132%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000356	0.000476	0.000050	AAQC	711%	951%
	Annual(1)	0.000170	Average	0.000118	0.000288	0.000010	AAQC	1185%	2885%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.42	3.42	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-68: Existing Conditions Maximum Concentration at Sensitive Receptor No.21

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	59.34	95.34	400	AAQC	15%	24%
	1 hour	88.00	90th	59.34	147.34	83	CAAQS (2025)	71%	178%
	24 hour	28.00	90th	19.27	47.27	200	AAQC	10%	24%
	Annual[1]	17.00	Average	5.21	22.21	24	CAAQS (2025)	22%	93%
CO	1 hour	422.00	90th	169.22	591.22	36,200	AAQC	0%	2%
	8 hour	413.00	90th	85.47	498.47	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	0.92	5.92	178	AAQC	1%	3%
	1 hour	25.00	90th	0.56	25.56	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.56	3.56	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.40	26.40	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20.00	90th	0.87	20.87	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.24	7.94	8.8	CAAQS	3%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.36	5.36	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.04	0.24	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.13	0.93	2.3	AAQC	6%	40%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	8%	117%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000146	0.000266	0.000050	AAQC	292%	532%
	Annual[1]	0.000170	Average	0.000039	0.000209	0.000010	AAQC	395%	2095%
1,3-Butadiene	24 hour	0.06	90th	0.02	0.08	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.17	3.17	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-69: Existing Conditions Maximum Concentration at Sensitive Receptor No.22

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	48.97	84.97	400	AAQC	12%	21%
	1 hour	88.00	90th	48.97	136.97	83	CAAQS (2025)	59%	165%
	24 hour	28.00	90th	15.72	43.72	200	AAQC	8%	22%
	Annual[1]	17.00	Average	4.22	21.22	24	CAAQS (2025)	18%	88%
CO	1 hour	422.00	90th	147.65	569.65	36,200	AAQC	0%	2%
	8 hour	413.00	90th	74.54	487.54	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.79	5.79	178	AAQC	0%	3%
	1 hour	25.00	90th	0.48	25.48	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.48	3.48	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.22	26.22	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.72	20.72	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.20	7.90	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.30	5.30	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.11	0.91	2.3	AAQC	5%	39%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	7%	116%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000119	0.000239	0.000050	AAQC	238%	478%
	Annual[1]	0.000170	Average	0.000032	0.000202	0.000010	AAQC	317%	2017%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.14	3.14	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-70: Existing Conditions Maximum Concentration at Sensitive Receptor No.23

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	79.30	115.30	400	AAQC	20%	29%
	1 hour	88.00	90th	79.30	167.30	83	CAAQS (2025)	96%	202%
	24 hour	28.00	90th	25.58	53.58	200	AAQC	13%	27%
	Annual[1]	17.00	Average	7.90	24.90	24	CAAQS (2025)	33%	104%
CO	1 hour	422.00	90th	237.02	659.02	36,200	AAQC	1%	2%
	8 hour	413.00	90th	119.74	532.74	15,700	AAQC	1%	3%
SO_2	10-min[2]	5.00	90th	1.41	6.41	178	AAQC	1%	4%
	1 hour	25.00	90th	0.86	25.86	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.86	3.86	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.09	2.89	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.09	3.39	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	1.64	26.64	50	AAQC	3%	53%
$PM_{2.5}$	24 hour	20.00	90th	1.10	21.10	27	CAAQS	4%	78%
	Annual[1]	7.70	Average	0.34	8.04	8.8	CAAQS	4%	91%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.49	5.49	500	AAQC	0%	1%
	24 hour	2.00	90th	0.13	2.13	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.05	0.25	4.5	AAQC	1%	6%
	24 hour	0.10	90th	0.02	0.12	0.4	AAQC	4%	29%
Benzene	24 hour	0.80	90th	0.19	0.99	2.3	AAQC	8%	43%
	Annual[1]	0.49	Average	0.06	0.55	0.45	AAQC	13%	122%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000194	0.000314	0.000050	AAQC	389%	629%
	Annual[1]	0.000170	Average	0.000060	0.000230	0.000010	AAQC	600%	2300%
1,3-Butadiene	24 hour	0.06	90th	0.02	0.08	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.01	0.05	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.23	3.23	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-71: Existing Conditions Maximum Concentration at Sensitive Receptor No.24

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	40.60	76.60	400	AAQC	10%	19%
	1 hour	88.00	90th	40.60	128.60	83	CAAQS (2025)	49%	155%
	24 hour	28.00	90th	13.42	41.42	200	AAQC	7%	21%
	Annual[1]	17.00	Average	3.40	20.40	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	119.74	541.74	36,200	AAQC	0%	1%
	8 hour	413.00	90th	60.44	473.44	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.65	5.65	178	AAQC	0%	3%
	1 hour	25.00	90th	0.40	25.40	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.40	3.40	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.86	25.86	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.58	20.58	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.15	7.85	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.25	5.25	500	AAQC	0%	1%
	24 hour	2.00	90th	0.07	2.07	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.10	0.90	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000102	0.000222	0.000050	AAQC	204%	444%
	Annual[1]	0.000170	Average	0.000026	0.000196	0.000010	AAQC	258%	1958%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-72: Existing Conditions Maximum Concentration at Sensitive Receptor No.25

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	50.52	86.52	400	AAQC	13%	22%
	1 hour	88.00	90th	50.52	138.52	83	CAAQS (2025)	61%	167%
	24 hour	28.00	90th	15.68	43.68	200	AAQC	8%	22%
	Annual[1]	17.00	Average	4.48	21.48	24	CAAQS (2025)	19%	90%
CO	1 hour	422.00	90th	151.39	573.39	36,200	AAQC	0%	2%
	8 hour	413.00	90th	76.41	489.41	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.85	5.85	178	AAQC	0%	3%
	1 hour	25.00	90th	0.51	25.51	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.51	3.51	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	1.05	26.05	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.68	20.68	27	CAAQS	3%	77%
	Annual[1]	7.70	Average	0.20	7.90	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.31	5.31	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.11	0.91	2.3	AAQC	5%	40%
	Annual[1]	0.49	Average	0.03	0.52	0.45	AAQC	7%	116%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000119	0.000239	0.000050	AAQC	238%	478%
	Annual[1]	0.000170	Average	0.000034	0.000204	0.000010	AAQC	340%	2040%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.14	3.14	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-73: Existing Conditions Maximum Concentration at Sensitive Receptor No.26

Contaminant	Avg. Period	Background Conc. (µg/m³)	Percentile	Maximum Modelled Conc. (µg/m³)	Cumulative Conc. (µg/m³)	AAQC/ CAAQS (2020) Standard (µg/m³)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	39.75	75.75	400	AAQC	10%	19%
	1 hour	88.00	90th	39.75	127.75	83	CAAQS (2025)	48%	154%
	24 hour	28.00	90th	12.62	40.62	200	AAQC	6%	20%
	Annual[1]	17.00	Average	3.38	20.38	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	117.36	539.36	36,200	AAQC	0%	1%
	8 hour	413.00	90th	59.23	472.23	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.65	5.65	178	AAQC	0%	3%
	1 hour	25.00	90th	0.39	25.39	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.39	3.39	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.75	25.75	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.53	20.53	27	CAAQS	2%	76%
	Annual[1]	7.70	Average	0.14	7.84	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.24	5.24	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.09	0.89	2.3	AAQC	4%	39%
	Annual[1]	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000096	0.000216	0.000050	AAQC	193%	433%
	Annual[1]	0.000170	Average	0.000026	0.000196	0.000010	AAQC	257%	1957%
1,3-Butadiene	24 hour	0.06	90th	0.01	0.07	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-74: Existing Conditions Maximum Concentration at Sensitive Receptor No.27

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	94.25	130.25	400	AAQC	24%	33%
	1 hour	88.00	90th	94.25	182.25	83	CAAQS (2025)	114%	220%
	24 hour	28.00	90th	50.10	78.10	200	AAQC	25%	39%
	Annual[1]	17.00	Average	16.55	33.55	24	CAAQS (2025)	69%	140%
CO	1 hour	422.00	90th	436.15	858.15	36,200	AAQC	1%	2%
	8 hour	413.00	90th	220.37	633.37	15,700	AAQC	1%	4%
SO_2	10-min[2]	5.00	90th	2.75	7.75	178	AAQC	2%	4%
	1 hour	25.00	90th	1.66	26.66	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.66	4.66	106	AAQC	2%	4%
	Annual[1]	2.80	Average	0.19	2.99	11	CAAQS (2025)	2%	27%
	Annual[1]	3.30	Average	0.19	3.49	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	2.87	27.87	50	AAQC	6%	56%
$PM_{2.5}$	24 hour	20.00	90th	2.09	22.09	27	CAAQS	8%	82%
	Annual[1]	7.70	Average	0.69	8.39	8.8	CAAQS	8%	95%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.94	5.94	500	AAQC	0%	1%
	24 hour	2.00	90th	0.25	2.25	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.10	0.30	4.5	AAQC	2%	7%
	24 hour	0.10	90th	0.03	0.13	0.4	AAQC	8%	33%
Benzene	24 hour	0.80	90th	0.35	1.15	2.3	AAQC	15%	50%
	Annual[1]	0.49	Average	0.12	0.61	0.45	AAQC	26%	135%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000383	0.000503	0.000050	AAQC	766%	1006%
	Annual[1]	0.000170	Average	0.000127	0.000297	0.000010	AAQC	1266%	2966%
1,3-Butadiene	24 hour	0.06	90th	0.04	0.10	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.01	0.05	2	AAQC	1%	3%
Formaldehyde	24 hour	3.00	90th	0.45	3.45	65	AAQC	1%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Air Quality Impact Assessment

Appendix H

Dundas Bus Rapid Transit (BRT)
Metrolinx, September 2021

Maximum Concentrations at Sensitive & Critical Receptors - Future No Build

CRITICAL RECEPTORS

Table H-77: Future No Build Maximum Concentration at Critical Receptor CR1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	68.77	104.77	400	AAQC	17%	26%
	1 hour	88.00	90th	68.77	156.77	83	CAAQS (2025)	83%	189%
	24 hour	28.00	90th	10.89	38.89	200	AAQC	5%	19%
	Annual(1)	17.00	Average	2.52	19.52	24	CAAQS (2025)	11%	81%
CO	1 hour	422.00	90th	30.04	452.04	36,200	AAQC	0%	1%
	8 hour	413.00	90th	14.53	427.53	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.65	5.65	178	AAQC	0%	3%
	1 hour	25.00	90th	0.39	25.39	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.39	3.39	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.20	25.20	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.08	20.08	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.20	5.20	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	22%	262%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	27%	1727%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-78: Future No Build Maximum Concentration at Critical Receptor CR2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	65.16	101.16	400	AAQC	16%	25%
	1 hour	88.00	90th	65.16	153.16	83	CAAQS (2025)	79%	185%
	24 hour	28.00	90th	10.64	38.64	200	AAQC	5%	19%
	Annual(1)	17.00	Average	2.35	19.35	24	CAAQS (2025)	10%	81%
CO	1 hour	422.00	90th	28.18	450.18	36,200	AAQC	0%	1%
	8 hour	413.00	90th	13.63	426.63	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.61	5.61	178	AAQC	0%	3%
	1 hour	25.00	90th	0.37	25.37	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.37	3.37	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.19	25.19	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.07	20.07	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.19	5.19	500	AAQC	0%	1%
	24 hour	2.00	90th	0.02	2.02	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	22%	262%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	25%	1725%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-79: Future No Build Maximum Concentration at Critical Receptor CR3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	44.84	80.84	400	AAQC	11%	20%
	1 hour	88.00	90th	44.84	132.84	83	CAAQS (2025)	54%	160%
	24 hour	28.00	90th	14.28	42.28	200	AAQC	7%	21%
	Annual(1)	17.00	Average	3.88	20.88	24	CAAQS (2025)	16%	87%
CO	1 hour	422.00	90th	47.72	469.72	36,200	AAQC	0%	1%
	8 hour	413.00	90th	23.11	436.11	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.45	5.45	178	AAQC	0%	3%
	1 hour	25.00	90th	0.27	25.27	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.27	3.27	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.03	2.83	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.03	3.33	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.44	25.44	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.15	20.15	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.13	5.13	500	AAQC	0%	1%
	24 hour	2.00	90th	0.03	2.03	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00002	0.00014	0.00005	AAQC	32%	272%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	43%	1743%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-80: Future No Build Maximum Concentration at Critical Receptor CR4

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	33.50	69.50	400	AAQC	8%	17%
	1 hour	88.00	90th	33.50	121.50	83	CAAQS (2025)	40%	146%
	24 hour	28.00	90th	6.43	34.43	200	AAQC	3%	17%
	Annual[1]	17.00	Average	1.57	18.57	24	CAAQS (2025)	7%	77%
CO	1 hour	422.00	90th	20.37	442.37	36,200	AAQC	0%	1%
	8 hour	413.00	90th	9.84	422.84	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	0.30	5.30	178	AAQC	0%	3%
	1 hour	25.00	90th	0.18	25.18	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.18	3.18	106	AAQC	0%	3%
	Annual[1]	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.18	25.18	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.06	20.06	27	CAAQS	0%	74%
	Annual[1]	7.70	Average	0.01	7.71	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.10	5.10	500	AAQC	0%	1%
	24 hour	2.00	90th	0.02	2.02	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual[1]	0.49	Average	0.00	0.49	0.45	AAQC	0%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	15%	255%
	Annual[1]	0.00017	Average	0.00000	0.00017	0.00001	AAQC	18%	1718%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-81: Future No Build Maximum Concentration at Critical Receptor CR5

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	21.42	57.42	400	AAQC	5%	14%
	1 hour	88.00	90th	21.42	109.42	83	CAAQS (2025)	26%	132%
	24 hour	28.00	90th	6.21	34.21	200	AAQC	3%	17%
	Annual(1)	17.00	Average	1.57	18.57	24	CAAQS (2025)	7%	77%
CO	1 hour	422.00	90th	21.04	443.04	36,200	AAQC	0%	1%
	8 hour	413.00	90th	9.79	422.79	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.20	5.20	178	AAQC	0%	3%
	1 hour	25.00	90th	0.12	25.12	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.12	3.12	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.18	25.18	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.06	20.06	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.06	5.06	500	AAQC	0%	1%
	24 hour	2.00	90th	0.01	2.01	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	0%	109%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000007	0.000127	0.00005	AAQC	14%	254%
	Annual(1)	0.000170	Average	0.000002	0.000172	0.00001	AAQC	18%	1718%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-82: Future No Build Maximum Concentration at Critical Receptor CR6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	129.58	165.58	400	AAQC	32%	41%
	1 hour	88.00	90th	129.58	217.58	83	CAAQS (2025)	156%	262%
	24 hour	28.00	90th	35.39	63.39	200	AAQC	18%	32%
	Annual(1)	17.00	Average	11.86	28.86	24	CAAQS (2025)	49%	120%
CO	1 hour	422.00	90th	98.50	520.50	36,200	AAQC	0%	1%
	8 hour	413.00	90th	47.86	460.86	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.31	6.31	178	AAQC	1%	4%
	1 hour	25.00	90th	0.79	25.79	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.79	3.79	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.95	25.95	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.34	20.34	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.11	7.81	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.37	5.37	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	73%	313%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	120%	1820%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.09	3.09	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-83: Future No Build Maximum Concentration at Critical Receptor CR7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	133.73	169.73	400	AAQC	33%	42%
	1 hour	88.00	90th	133.73	221.73	83	CAAQS (2025)	161%	267%
	24 hour	28.00	90th	26.03	54.03	200	AAQC	13%	27%
	Annual[1]	17.00	Average	8.44	25.44	24	CAAQS (2025)	35%	106%
CO	1 hour	422.00	90th	74.35	496.35	36,200	AAQC	0%	1%
	8 hour	413.00	90th	36.09	449.09	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.35	6.35	178	AAQC	1%	4%
	1 hour	25.00	90th	0.82	25.82	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.82	3.82	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual[1]	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.80	25.80	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.27	20.27	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.09	7.79	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.38	5.38	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00003	0.00015	0.00005	AAQC	55%	295%
	Annual[1]	0.00017	Average	0.00001	0.00018	0.00001	AAQC	87%	1787%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.06	3.06	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-84: Future No Build Maximum Concentration at Critical Receptor CR8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	23.57	59.57	400	AAQC	6%	15%
	1 hour	88.00	90th	23.57	111.57	83	CAAQS (2025)	28%	134%
	24 hour	28.00	90th	7.80	35.80	200	AAQC	4%	18%
	Annual(1)	17.00	Average	1.95	18.95	24	CAAQS (2025)	8%	79%
CO	1 hour	422.00	90th	24.42	446.42	36,200	AAQC	0%	1%
	8 hour	413.00	90th	11.81	424.81	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.27	25.27	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.09	20.09	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.07	5.07	500	AAQC	0%	1%
	24 hour	2.00	90th	0.02	2.02	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	109%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	19%	259%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	23%	1723%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-85: Future No Build Maximum Concentration at Critical Receptor CR9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	24.29	60.29	400	AAQC	6%	15%
	1 hour	88.00	90th	24.29	112.29	83	CAAQS (2025)	29%	135%
	24 hour	28.00	90th	7.48	35.48	200	AAQC	4%	18%
	Annual(1)	17.00	Average	2.07	19.07	24	CAAQS (2025)	9%	79%
CO	1 hour	422.00	90th	25.32	447.32	36,200	AAQC	0%	1%
	8 hour	413.00	90th	12.24	425.24	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.26	5.26	178	AAQC	0%	3%
	1 hour	25.00	90th	0.16	25.16	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.16	3.16	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.25	25.25	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.08	20.08	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.07	5.07	500	AAQC	0%	1%
	24 hour	2.00	90th	0.02	2.02	500	AAQC	0%	0%
Acrolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	18%	258%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	25%	1725%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

SENSITIVE RECEPTORS

Table H-86: Future No Build Maximum Concentration at Sensitive Receptor SR1

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	137.81	173.81	400	AAQC	34%	43%
	1 hour	88.00	90th	137.81	225.81	83	CAAQS (2025)	166%	272%
	24 hour	28.00	90th	44.96	72.96	200	AAQC	22%	36%
	Annual[1]	17.00	Average	14.86	31.86	24	CAAQS (2025)	62%	133%
CO	1 hour	422.00	90th	122.37	544.37	36,200	AAQC	0%	2%
	8 hour	413.00	90th	59.39	472.39	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.13	6.13	178	AAQC	1%	3%
	1 hour	25.00	90th	0.68	25.68	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.68	3.68	106	AAQC	1%	3%
	Annual[1]	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.72	25.72	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.28	20.28	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.39	5.39	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	76%	316%
	Annual[1]	0.00017	Average	0.00001	0.00018	0.00001	AAQC	125%	1825%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-87: Future No Build Maximum Concentration at Sensitive Receptor SR2

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	175.83	211.83	400	AAQC	44%	53%
	1 hour	88.00	90th	175.83	263.83	83	CAAQS (2025)	212%	318%
	24 hour	28.00	90th	42.23	70.23	200	AAQC	21%	35%
	Annual[1]	17.00	Average	13.86	30.86	24	CAAQS (2025)	58%	129%
CO	1 hour	422.00	90th	115.52	537.52	36,200	AAQC	0%	1%
	8 hour	413.00	90th	56.06	469.06	15,700	AAQC	0%	3%
SO_2	10-min[2]	5.00	90th	1.79	6.79	178	AAQC	1%	4%
	1 hour	25.00	90th	1.08	26.08	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.08	4.08	106	AAQC	1%	4%
	Annual[1]	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual[1]	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.75	25.75	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.28	20.28	27	CAAQS	1%	75%
	Annual[1]	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour[2]	5.00	90th	0.50	5.50	500	AAQC	0%	1%
	24 hour	2.00	90th	0.10	2.10	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual[1]	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	78%	318%
	Annual[1]	0.00017	Average	0.00001	0.00018	0.00001	AAQC	127%	1827%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual[1]	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.10	3.10	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-88: Future No Build Maximum Concentration at Sensitive Receptor SR3

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	137.82	173.82	400	AAQC	34%	43%
	1 hour	88.00	90th	137.82	225.82	83	CAAQS (2025)	166%	272%
	24 hour	28.00	90th	44.96	72.96	200	AAQC	22%	36%
	Annual(1)	17.00	Average	14.86	31.86	24	CAAQS (2025)	62%	133%
CO	1 hour	422.00	90th	122.37	544.37	36,200	AAQC	0%	2%
	8 hour	413.00	90th	59.39	472.39	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.13	6.13	178	AAQC	1%	3%
	1 hour	25.00	90th	0.68	25.68	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.68	3.68	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.72	25.72	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.28	20.28	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.32	2.32	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	76%	316%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	125%	1825%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.11	3.11	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-89: Future No Build Maximum Concentration at Sensitive Receptor SR4

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	175.92	211.92	400	AAQC	44%	53%
	1 hour	88.00	90th	175.92	263.92	83	CAAQS (2025)	212%	318%
	24 hour	28.00	90th	42.26	70.26	200	AAQC	21%	35%
	Annual(1)	17.00	Average	13.87	30.87	24	CAAQS (2025)	58%	129%
CO	1 hour	422.00	90th	115.58	537.58	36,200	AAQC	0%	1%
	8 hour	413.00	90th	56.09	469.09	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.79	6.79	178	AAQC	1%	4%
	1 hour	25.00	90th	1.08	26.08	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.08	4.08	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.75	25.75	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.28	20.28	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.41	2.41	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	78%	318%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	127%	1827%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.10	3.10	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-90: Future No Build Maximum Concentration at Sensitive Receptor SR5

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	46.63	82.63	400	AAQC	12%	21%
	1 hour	88.00	90th	46.63	134.63	83	CAAQS (2025)	56%	162%
	24 hour	28.00	90th	13.21	41.21	200	AAQC	7%	21%
	Annual(1)	17.00	Average	3.33	20.33	24	CAAQS (2025)	14%	85%
CO	1 hour	422.00	90th	36.02	458.02	36,200	AAQC	0%	1%
	8 hour	413.00	90th	16.96	429.96	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.41	5.41	178	AAQC	0%	3%
	1 hour	25.00	90th	0.25	25.25	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.25	3.25	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.25	25.25	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.11	2.11	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000013	0.000133	0.00005	AAQC	25%	265%
	Annual(1)	0.000170	Average	0.000003	0.000173	0.00001	AAQC	31%	1731%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-91: Future No Build Maximum Concentration at Sensitive Receptor SR6

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	114.01	150.01	400	AAQC	29%	38%
	1 hour	88.00	90th	114.01	202.01	83	CAAQS (2025)	137%	243%
	24 hour	28.00	90th	37.28	65.28	200	AAQC	19%	33%
	Annual(1)	17.00	Average	10.48	27.48	24	CAAQS (2025)	44%	114%
CO	1 hour	422.00	90th	109.77	531.77	36,200	AAQC	0%	1%
	8 hour	413.00	90th	53.19	466.19	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.14	6.14	178	AAQC	1%	3%
	1 hour	25.00	90th	0.69	25.69	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.69	3.69	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.07	2.87	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.07	3.37	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.74	25.74	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.29	20.29	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.03	5.03	500	AAQC	0%	1%
	24 hour	2.00	90th	0.27	2.27	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	77%	317%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	109%	1809%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.09	3.09	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-92: Future No Build Maximum Concentration at Sensitive Receptor SR7

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	106.16	142.16	400	AAQC	27%	36%
	1 hour	88.00	90th	106.16	194.16	83	CAAQS (2025)	128%	234%
	24 hour	28.00	90th	33.69	61.69	200	AAQC	17%	31%
	Annual(1)	17.00	Average	10.02	27.02	24	CAAQS (2025)	42%	113%
CO	1 hour	422.00	90th	100.51	522.51	36,200	AAQC	0%	1%
	8 hour	413.00	90th	48.68	461.68	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.07	6.07	178	AAQC	1%	3%
	1 hour	25.00	90th	0.65	25.65	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.65	3.65	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.06	2.86	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.06	3.36	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.60	25.60	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.25	20.25	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.07	7.77	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.03	5.03	500	AAQC	0%	1%
	24 hour	2.00	90th	0.25	2.25	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00003	0.00015	0.00005	AAQC	70%	310%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	104%	1804%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.08	3.08	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-93: Future No Build Maximum Concentration at Sensitive Receptor SR8

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	147.33	183.33	400	AAQC	37%	46%
	1 hour	88.00	90th	147.33	235.33	83	CAAQS (2025)	178%	284%
	24 hour	28.00	90th	47.23	75.23	200	AAQC	24%	38%
	Annual(1)	17.00	Average	14.66	31.66	24	CAAQS (2025)	61%	132%
CO	1 hour	422.00	90th	133.95	555.95	36,200	AAQC	0%	2%
	8 hour	413.00	90th	64.93	477.93	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.48	6.48	178	AAQC	1%	4%
	1 hour	25.00	90th	0.90	25.90	179	CAAQS (2025)	1%	14%
	1 hour	3.00	90th	0.90	3.90	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.09	2.89	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.09	3.39	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.65	25.65	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.30	20.30	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.09	7.79	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.04	5.04	500	AAQC	0%	1%
	24 hour	2.00	90th	0.35	2.35	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.05	0.85	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.02	0.51	0.45	AAQC	4%	113%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00005	0.00017	0.00005	AAQC	95%	335%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	148%	1848%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.12	3.12	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-94: Future No Build Maximum Concentration at Sensitive Receptor SR9

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	58.02	94.02	400	AAQC	15%	24%
	1 hour	88.00	90th	58.02	146.02	83	CAAQS (2025)	70%	176%
	24 hour	28.00	90th	19.02	47.02	200	AAQC	10%	24%
	Annual(1)	17.00	Average	5.10	22.10	24	CAAQS (2025)	21%	92%
CO	1 hour	422.00	90th	51.44	473.44	36,200	AAQC	0%	1%
	8 hour	413.00	90th	24.87	437.87	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.51	5.51	178	AAQC	0%	3%
	1 hour	25.00	90th	0.31	25.31	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.31	3.31	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.03	2.83	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.03	3.33	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.25	25.25	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.12	20.12	27	CAAQS	0%	75%
	Annual(1)	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.14	2.14	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00002	0.00014	0.00005	AAQC	37%	277%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	48%	1748%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.05	3.05	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-95: Future No Build Maximum Concentration at Sensitive Receptor SR10

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	324.93	360.93	400	AAQC	81%	90%
	1 hour	88.00	90th	324.93	412.93	83	CAAQS (2025)	391%	498%
	24 hour	28.00	90th	108.63	136.63	200	AAQC	54%	68%
	Annual(1)	17.00	Average	35.42	52.42	24	CAAQS (2025)	148%	218%
CO	1 hour	422.00	90th	283.67	705.67	36,200	AAQC	1%	2%
	8 hour	413.00	90th	137.86	550.86	15,700	AAQC	1%	4%
SO_2	10-min(2)	5.00	90th	3.08	8.08	178	AAQC	2%	5%
	1 hour	25.00	90th	1.87	26.87	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.87	4.87	106	AAQC	2%	5%
	Annual(1)	2.80	Average	0.21	3.01	11	CAAQS (2025)	2%	27%
	Annual(1)	3.30	Average	0.21	3.51	11	AAQC	2%	32%
PM_{10}	24 hour	25.00	90th	1.23	26.23	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.62	20.62	27	CAAQS	2%	76%
	Annual(1)	7.70	Average	0.20	7.90	8.8	CAAQS	2%	90%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.10	5.10	500	AAQC	0%	1%
	24 hour	2.00	90th	0.76	2.76	500	AAQC	0%	1%
ASRolein	1 hour	0.20	90th	0.03	0.23	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	3%	28%
Benzene	24 hour	0.80	90th	0.11	0.91	2.3	AAQC	5%	40%
	Annual(1)	0.49	Average	0.04	0.53	0.45	AAQC	8%	117%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00010	0.00022	0.00005	AAQC	204%	444%
	Annual(1)	0.00017	Average	0.00003	0.00020	0.00001	AAQC	333%	2033%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.26	3.26	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-96: Future No Build Maximum Concentration at Sensitive Receptor SR11

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	242.70	278.70	400	AAQC	61%	70%
	1 hour	88.00	90th	242.70	330.70	83	CAAQS (2025)	292%	398%
	24 hour	28.00	90th	79.64	107.64	200	AAQC	40%	54%
	Annual(1)	17.00	Average	25.27	42.27	24	CAAQS (2025)	105%	176%
CO	1 hour	422.00	90th	211.86	633.86	36,200	AAQC	1%	2%
	8 hour	413.00	90th	102.75	515.75	15,700	AAQC	1%	3%
SO_2	10-min(2)	5.00	90th	2.36	7.36	178	AAQC	1%	4%
	1 hour	25.00	90th	1.43	26.43	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.43	4.43	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.15	2.95	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.15	3.45	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.86	25.86	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.46	20.46	27	CAAQS	2%	76%
	Annual(1)	7.70	Average	0.14	7.84	8.8	CAAQS	2%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.07	5.07	500	AAQC	0%	1%
	24 hour	2.00	90th	0.57	2.57	500	AAQC	0%	1%
ASRolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	1%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	2%	27%
Benzene	24 hour	0.80	90th	0.08	0.88	2.3	AAQC	4%	38%
	Annual(1)	0.49	Average	0.03	0.52	0.45	AAQC	6%	115%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00008	0.00020	0.00005	AAQC	154%	394%
	Annual(1)	0.00017	Average	0.00002	0.00019	0.00001	AAQC	244%	1944%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.19	3.19	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-97: Future No Build Maximum Concentration at Sensitive Receptor SR12

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	141.67	177.67	400	AAQC	35%	44%
	1 hour	88.00	90th	141.67	229.67	83	CAAQS (2025)	171%	277%
	24 hour	28.00	90th	36.77	64.77	200	AAQC	18%	32%
	Annual(1)	17.00	Average	9.96	26.96	24	CAAQS (2025)	42%	112%
CO	1 hour	422.00	90th	108.30	530.30	36,200	AAQC	0%	1%
	8 hour	413.00	90th	52.45	465.45	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.39	6.39	178	AAQC	1%	4%
	1 hour	25.00	90th	0.84	25.84	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.84	3.84	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.06	2.86	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.06	3.36	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.66	25.66	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.26	20.26	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.03	5.03	500	AAQC	0%	1%
	24 hour	2.00	90th	0.33	2.33	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	73%	313%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	101%	1801%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.09	3.09	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-98: Future No Build Maximum Concentration at Sensitive Receptor SR13

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	238.30	274.30	400	AAQC	60%	69%
	1 hour	88.00	90th	238.30	326.30	83	CAAQS (2025)	287%	393%
	24 hour	28.00	90th	61.08	89.08	200	AAQC	31%	45%
	Annual(1)	17.00	Average	18.91	35.91	24	CAAQS (2025)	79%	150%
CO	1 hour	422.00	90th	174.48	596.48	36,200	AAQC	0%	2%
	8 hour	413.00	90th	84.67	497.67	15,700	AAQC	1%	3%
SO_2	10-min(2)	5.00	90th	2.41	7.41	178	AAQC	1%	4%
	1 hour	25.00	90th	1.46	26.46	179	CAAQS (2025)	1%	15%
	1 hour	3.00	90th	1.46	4.46	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.12	2.92	11	CAAQS (2025)	1%	27%
	Annual(1)	3.30	Average	0.12	3.42	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.91	25.91	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.41	20.41	27	CAAQS	2%	76%
	Annual(1)	7.70	Average	0.13	7.83	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.05	5.05	500	AAQC	0%	1%
	24 hour	2.00	90th	0.56	2.56	500	AAQC	0%	1%
ASRolein	1 hour	0.20	90th	0.02	0.22	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.01	0.11	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.07	0.87	2.3	AAQC	3%	38%
	Annual(1)	0.49	Average	0.02	0.51	0.45	AAQC	5%	114%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00006	0.00018	0.00005	AAQC	127%	367%
	Annual(1)	0.00017	Average	0.00002	0.00019	0.00001	AAQC	196%	1896%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.15	3.15	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-99: Future No Build Maximum Concentration at Sensitive Receptor SR14

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	104.96	140.96	400	AAQC	26%	35%
	1 hour	88.00	90th	104.96	192.96	83	CAAQS (2025)	126%	232%
	24 hour	28.00	90th	20.52	48.52	200	AAQC	10%	24%
	Annual(1)	17.00	Average	5.27	22.27	24	CAAQS (2025)	22%	93%
CO	1 hour	422.00	90th	59.69	481.69	36,200	AAQC	0%	1%
	8 hour	413.00	90th	28.89	441.89	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.04	6.04	178	AAQC	1%	3%
	1 hour	25.00	90th	0.63	25.63	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.63	3.63	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.36	25.36	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.15	20.15	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.25	2.25	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000022	0.000142	0.00005	AAQC	44%	284%
	Annual(1)	0.000170	Average	0.000006	0.000176	0.00001	AAQC	58%	1758%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.05	3.05	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-100: Future No Build Maximum Concentration at Sensitive Receptor SR15

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	70.58	106.58	400	AAQC	18%	27%
	1 hour	88.00	90th	70.58	158.58	83	CAAQS (2025)	85%	191%
	24 hour	28.00	90th	11.44	39.44	200	AAQC	6%	20%
	Annual(1)	17.00	Average	2.67	19.67	24	CAAQS (2025)	11%	82%
CO	1 hour	422.00	90th	31.21	453.21	36,200	AAQC	0%	1%
	8 hour	413.00	90th	15.10	428.10	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.67	5.67	178	AAQC	0%	3%
	1 hour	25.00	90th	0.41	25.41	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.41	3.41	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.23	25.23	50	AAQC	0%	50%
$PM_{2.5}$	24 hour	20.00	90th	0.09	20.09	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.17	2.17	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	25%	265%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	29%	1729%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-101: Future No Build Maximum Concentration at Sensitive Receptor SR16

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	91.13	127.13	400	AAQC	23%	32%
	1 hour	88.00	90th	91.13	179.13	83	CAAQS (2025)	110%	216%
	24 hour	28.00	90th	27.83	55.83	200	AAQC	14%	28%
	Annual(1)	17.00	Average	7.91	24.91	24	CAAQS (2025)	33%	104%
CO	1 hour	422.00	90th	77.84	499.84	36,200	AAQC	0%	1%
	8 hour	413.00	90th	37.75	450.75	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.04	6.04	178	AAQC	1%	3%
	1 hour	25.00	90th	0.63	25.63	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.63	3.63	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.05	2.85	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.05	3.35	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.53	25.53	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.20	20.20	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.21	2.21	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00003	0.00015	0.00005	AAQC	58%	298%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	84%	1784%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.07	3.07	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-102: Future No Build Maximum Concentration at Sensitive Receptor SR17

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	35.70	71.70	400	AAQC	9%	18%
	1 hour	88.00	90th	35.70	123.70	83	CAAQS (2025)	43%	149%
	24 hour	28.00	90th	9.31	37.31	200	AAQC	5%	19%
	Annual(1)	17.00	Average	2.36	19.36	24	CAAQS (2025)	10%	81%
CO	1 hour	422.00	90th	32.05	454.05	36,200	AAQC	0%	1%
	8 hour	413.00	90th	15.51	428.51	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.40	5.40	178	AAQC	0%	3%
	1 hour	25.00	90th	0.24	25.24	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.24	3.24	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.31	25.31	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	21%	261%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	27%	1727%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-103: Future No Build Maximum Concentration at Sensitive Receptor SR18

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	26.85	62.85	400	AAQC	7%	16%
	1 hour	88.00	90th	26.85	114.85	83	CAAQS (2025)	32%	138%
	24 hour	28.00	90th	8.50	36.50	200	AAQC	4%	18%
	Annual(1)	17.00	Average	2.10	19.10	24	CAAQS (2025)	9%	80%
CO	1 hour	422.00	90th	28.01	450.01	36,200	AAQC	0%	1%
	8 hour	413.00	90th	13.55	426.55	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.26	25.26	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.08	20.08	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.02	7.72	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	19%	259%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	24%	1724%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-104: Future No Build Maximum Concentration at Sensitive Receptor SR19

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	52.28	88.28	400	AAQC	13%	22%
	1 hour	88.00	90th	52.28	140.28	83	CAAQS (2025)	63%	169%
	24 hour	28.00	90th	12.70	40.70	200	AAQC	6%	20%
	Annual(1)	17.00	Average	2.93	19.93	24	CAAQS (2025)	12%	83%
CO	1 hour	422.00	90th	43.36	465.36	36,200	AAQC	0%	1%
	8 hour	413.00	90th	21.00	434.00	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.55	5.55	178	AAQC	0%	3%
	1 hour	25.00	90th	0.34	25.34	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.34	3.34	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.55	25.55	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.16	20.16	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.05	7.75	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.12	2.12	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	29%	269%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	36%	1736%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-105: Future No Build Maximum Concentration at Sensitive Receptor SR20

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	89.71	125.71	400	AAQC	22%	31%
	1 hour	88.00	90th	89.71	177.71	83	CAAQS (2025)	108%	214%
	24 hour	28.00	90th	25.38	53.38	200	AAQC	13%	27%
	Annual(1)	17.00	Average	8.28	25.28	24	CAAQS (2025)	34%	105%
CO	1 hour	422.00	90th	80.85	502.85	36,200	AAQC	0%	1%
	8 hour	413.00	90th	39.25	452.25	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.03	6.03	178	AAQC	1%	3%
	1 hour	25.00	90th	0.63	25.63	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.63	3.63	106	AAQC	1%	3%
	Annual(1)	2.80	Average	0.06	2.86	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.06	3.36	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.65	25.65	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.24	20.24	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.08	7.78	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.02	5.02	500	AAQC	0%	1%
	24 hour	2.00	90th	0.21	2.21	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.03	0.83	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	2%	111%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00003	0.00015	0.00005	AAQC	60%	300%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	98%	1798%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.06	3.06	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-106: Future No Build Maximum Concentration at Sensitive Receptor SR21

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	35.43	71.43	400	AAQC	9%	18%
	1 hour	88.00	90th	35.43	123.43	83	CAAQS (2025)	43%	149%
	24 hour	28.00	90th	11.44	39.44	200	AAQC	6%	20%
	Annual(1)	17.00	Average	3.08	20.08	24	CAAQS (2025)	13%	84%
CO	1 hour	422.00	90th	38.85	460.85	36,200	AAQC	0%	1%
	8 hour	413.00	90th	18.81	431.81	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.37	5.37	178	AAQC	0%	3%
	1 hour	25.00	90th	0.22	25.22	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.22	3.22	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.40	25.40	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.13	20.13	27	CAAQS	0%	75%
	Annual(1)	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.08	2.08	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	27%	267%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	36%	1736%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.03	3.03	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-107: Future No Build Maximum Concentration at Sensitive Receptor SR22

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	30.22	66.22	400	AAQC	8%	17%
	1 hour	88.00	90th	30.22	118.22	83	CAAQS (2025)	36%	142%
	24 hour	28.00	90th	9.81	37.81	200	AAQC	5%	19%
	Annual(1)	17.00	Average	2.61	19.61	24	CAAQS (2025)	11%	82%
CO	1 hour	422.00	90th	34.78	456.78	36,200	AAQC	0%	1%
	8 hour	413.00	90th	16.83	429.83	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.32	5.32	178	AAQC	0%	3%
	1 hour	25.00	90th	0.20	25.20	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.20	3.20	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.41	25.41	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.13	20.13	27	CAAQS	0%	75%
	Annual(1)	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.07	2.07	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	23%	263%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	32%	1732%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-108: Future No Build Maximum Concentration at Sensitive Receptor SR23

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	51.37	87.37	400	AAQC	13%	22%
	1 hour	88.00	90th	51.37	139.37	83	CAAQS (2025)	62%	168%
	24 hour	28.00	90th	16.86	44.86	200	AAQC	8%	22%
	Annual(1)	17.00	Average	5.17	22.17	24	CAAQS (2025)	22%	92%
CO	1 hour	422.00	90th	53.46	475.46	36,200	AAQC	0%	1%
	8 hour	413.00	90th	25.92	438.92	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.59	5.59	178	AAQC	0%	3%
	1 hour	25.00	90th	0.36	25.36	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.36	3.36	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.04	2.84	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.04	3.34	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.55	25.55	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.19	20.19	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.06	7.76	8.8	CAAQS	1%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.12	2.12	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.02	0.82	2.3	AAQC	1%	36%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	2%	110%
Benzo(a)pyrene	24 hour	0.000120	90th	0.000020	0.000140	0.00005	AAQC	40%	280%
	Annual(1)	0.000170	Average	0.000006	0.000176	0.00001	AAQC	62%	1762%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.04	3.04	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-109: Future No Build Maximum Concentration at Sensitive Receptor SR24

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	24.88	60.88	400	AAQC	6%	15%
	1 hour	88.00	90th	24.88	112.88	83	CAAQS (2025)	30%	136%
	24 hour	28.00	90th	8.17	36.17	200	AAQC	4%	18%
	Annual(1)	17.00	Average	2.08	19.08	24	CAAQS (2025)	9%	80%
CO	1 hour	422.00	90th	26.10	448.10	36,200	AAQC	0%	1%
	8 hour	413.00	90th	12.62	425.62	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.26	5.26	178	AAQC	0%	3%
	1 hour	25.00	90th	0.16	25.16	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.16	3.16	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.32	25.32	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.10	20.10	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	19%	259%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	25%	1725%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-110: Future No Build Maximum Concentration at Sensitive Receptor SR25

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	31.21	67.21	400	AAQC	8%	17%
	1 hour	88.00	90th	31.21	119.21	83	CAAQS (2025)	38%	144%
	24 hour	28.00	90th	9.68	37.68	200	AAQC	5%	19%
	Annual(1)	17.00	Average	2.78	19.78	24	CAAQS (2025)	12%	82%
CO	1 hour	422.00	90th	32.89	454.89	36,200	AAQC	0%	1%
	8 hour	413.00	90th	15.92	428.92	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.33	5.33	178	AAQC	0%	3%
	1 hour	25.00	90th	0.20	25.20	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.20	3.20	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.02	2.82	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.02	3.32	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.43	25.43	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.13	20.13	27	CAAQS	0%	75%
	Annual(1)	7.70	Average	0.04	7.74	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.07	2.07	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	1%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	22%	262%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	32%	1732%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-111: Future No Build Maximum Concentration at Sensitive Receptor SR26

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	24.72	60.72	400	AAQC	6%	15%
	1 hour	88.00	90th	24.72	112.72	83	CAAQS (2025)	30%	136%
	24 hour	28.00	90th	8.20	36.20	200	AAQC	4%	18%
	Annual(1)	17.00	Average	2.12	19.12	24	CAAQS (2025)	9%	80%
CO	1 hour	422.00	90th	25.45	447.45	36,200	AAQC	0%	1%
	8 hour	413.00	90th	12.31	425.31	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	0.25	5.25	178	AAQC	0%	3%
	1 hour	25.00	90th	0.15	25.15	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.15	3.15	106	AAQC	0%	3%
	Annual(1)	2.80	Average	0.01	2.81	11	CAAQS (2025)	0%	26%
	Annual(1)	3.30	Average	0.01	3.31	11	AAQC	0%	30%
PM_{10}	24 hour	25.00	90th	0.26	25.26	50	AAQC	1%	51%
$PM_{2.5}$	24 hour	20.00	90th	0.09	20.09	27	CAAQS	0%	74%
	Annual(1)	7.70	Average	0.03	7.73	8.8	CAAQS	0%	88%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.01	5.01	500	AAQC	0%	1%
	24 hour	2.00	90th	0.06	2.06	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.00	0.20	4.5	AAQC	0%	4%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	0%	25%
Benzene	24 hour	0.80	90th	0.01	0.81	2.3	AAQC	0%	35%
	Annual(1)	0.49	Average	0.00	0.49	0.45	AAQC	1%	110%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00001	0.00013	0.00005	AAQC	18%	258%
	Annual(1)	0.00017	Average	0.00000	0.00017	0.00001	AAQC	25%	1725%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.02	3.02	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

Table H-112: Future No Build Maximum Concentration at Sensitive Receptor SR27

Contaminant	Avg. Period	Background Conc. (µg/m^3)	Percentile	Maximum Modelled Conc. (µg/m^3)	Cumulative Conc. (µg/m^3)	AAQC/ CAAQS (2020) Standard (µg/m^3)	Standard Source	Max % of AAQC/ CAAQS (2020) Standard	Cumulative% of AAQC/ CAAQS (2020) Standard
NO_2	1 hour	36.00	90th	98.72	134.72	400	AAQC	25%	34%
	1 hour	88.00	90th	98.72	186.72	83	CAAQS (2025)	119%	225%
	24 hour	28.00	90th	32.57	60.57	200	AAQC	16%	30%
	Annual(1)	17.00	Average	10.99	27.99	24	CAAQS (2025)	46%	117%
CO	1 hour	422.00	90th	98.57	520.57	36,200	AAQC	0%	1%
	8 hour	413.00	90th	47.89	460.89	15,700	AAQC	0%	3%
SO_2	10-min(2)	5.00	90th	1.22	6.22	178	AAQC	1%	3%
	1 hour	25.00	90th	0.74	25.74	179	CAAQS (2025)	0%	14%
	1 hour	3.00	90th	0.74	3.74	106	AAQC	1%	4%
	Annual(1)	2.80	Average	0.08	2.88	11	CAAQS (2025)	1%	26%
	Annual(1)	3.30	Average	0.08	3.38	11	AAQC	1%	31%
PM_{10}	24 hour	25.00	90th	0.77	25.77	50	AAQC	2%	52%
$PM_{2.5}$	24 hour	20.00	90th	0.31	20.31	27	CAAQS	1%	75%
	Annual(1)	7.70	Average	0.10	7.80	8.8	CAAQS	1%	89%
Acetaldehyde	0.5 hour(2)	5.00	90th	0.03	5.03	500	AAQC	0%	1%
	24 hour	2.00	90th	0.23	2.23	500	AAQC	0%	0%
ASRolein	1 hour	0.20	90th	0.01	0.21	4.5	AAQC	0%	5%
	24 hour	0.10	90th	0.00	0.10	0.4	AAQC	1%	26%
Benzene	24 hour	0.80	90th	0.04	0.84	2.3	AAQC	2%	37%
	Annual(1)	0.49	Average	0.01	0.50	0.45	AAQC	3%	112%
Benzo(a)pyrene	24 hour	0.00012	90th	0.00004	0.00016	0.00005	AAQC	79%	319%
	Annual(1)	0.00017	Average	0.00001	0.00018	0.00001	AAQC	132%	1832%
1,3-Butadiene	24 hour	0.06	90th	0.00	0.06	10	AAQC	0%	1%
	Annual(1)	0.04	90th	0.00	0.04	2	AAQC	0%	2%
Formaldehyde	24 hour	3.00	90th	0.08	3.08	65	AAQC	0%	5%

Notes:

[1] Annual averages shown as the 5-year average for all modelled years (2016 - 2020)

[2] Conversion between hourly average and shorter time periods established using the MECP Guideline A-10, Section 7.1.2 formula: $C_0 = C_1 \times (t_1/t_0)^{0.28}$

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Appendix I

Isopleth Figures

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Mississauga East - Priority Area

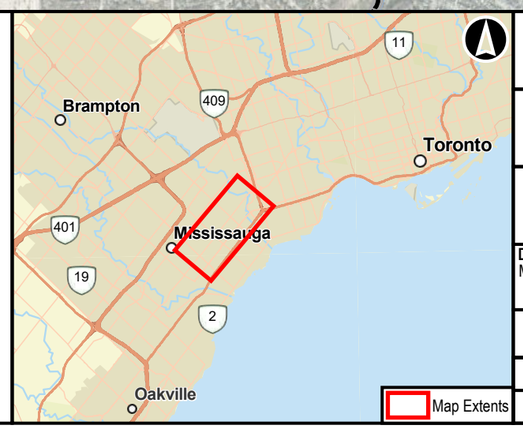
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Acetaldehyde µg/m3/1-Hour

- 6.00
- 8.00
- 10.00
- 30.00
- 50.00
- 60.00
- 80.00

Notes:
Acetaldehyde concentrations are presented with a multiplyer of 1000x



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Acetaldehde: 1 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I1

Project Location: S:\PR\Dundas\BRT_EGIS\GIS\Data\PR-60645291-DundasBRT\gis-Layouts\Air Quality_Mississauga_IsoconcContourMapping-R00-60645291
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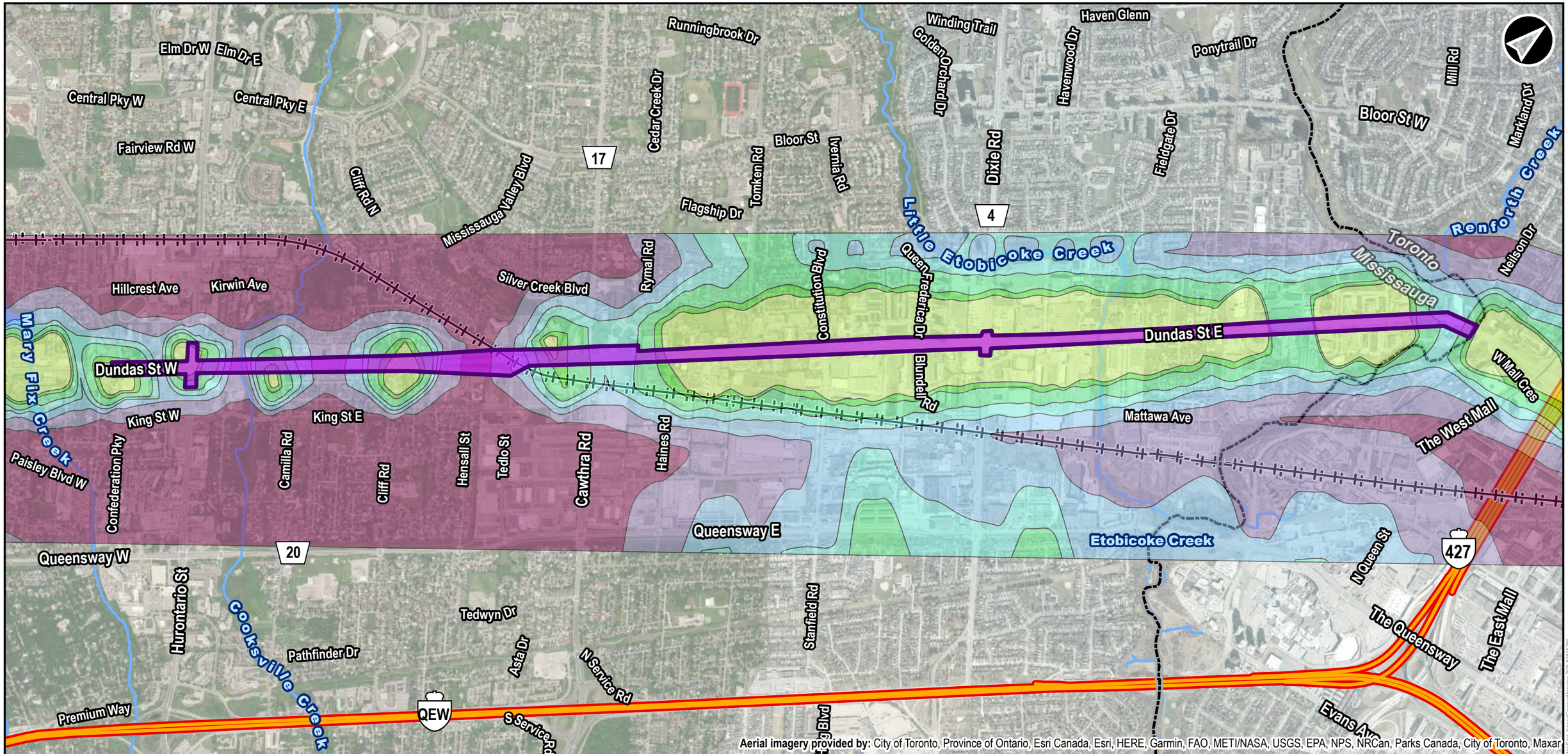


Legend

Mississauga East - Priority Area

Base Layers

Municipal Boundary

Railway

Primary Highway

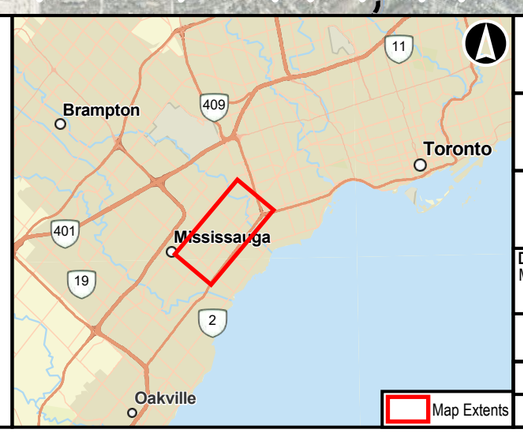
Waterbody

Watercourse

Isoconcentration Contours
Acetaldehyde µg/m3/24-hour

- < 4.00
- 4.00
- 5.00
- 6.00
- 7.00
- 9.00
- 10.00

Notes:
Acetaldehyde concentrations are presented with a multiplyer of 1000x



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Acetaldehde: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I2

Project Location: S:\HA\Dundas\BRT_60645291\Data\PRJ-60645291-DundasBRT.aprx Layout: Air Quality - MissEast_IsoconcContourMapping-R00-v06645291
Date Saved: 9/10/2021 5:36 PM User: oravs

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

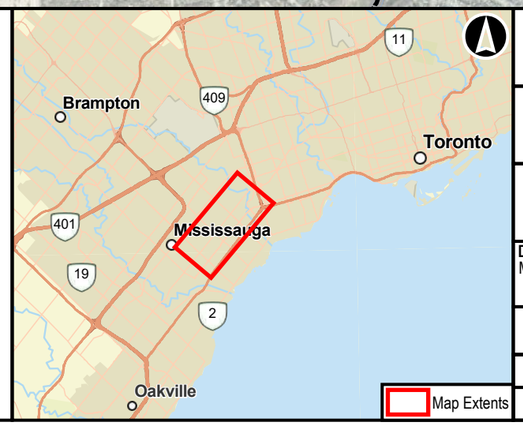
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Acrolein µg/m3/1 hour

- < 4.00
- 4.00
- 5.00
- 6.00
- 7.00
- 9.00
- 10.00

Notes:
Acrolein concentrations are presented with a multiplier of 10,000x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Acrolein: 1 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I3

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Mississauga East - Priority Area

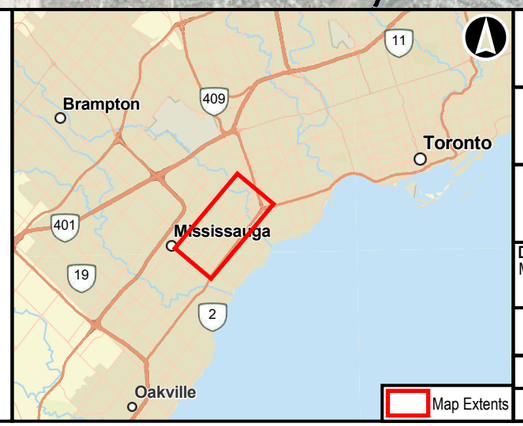
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Acrolein µg/m3/24 hour

- < 0.70
- 0.70
- 0.90
- 1.00
- 2.00
- 5.00
- 6.00
- 8.00

Notes:
Acrolein concentrations are presented with a multiplier of 10,000x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Acrolein: 24 hour

0 200 400 800 1,200 M

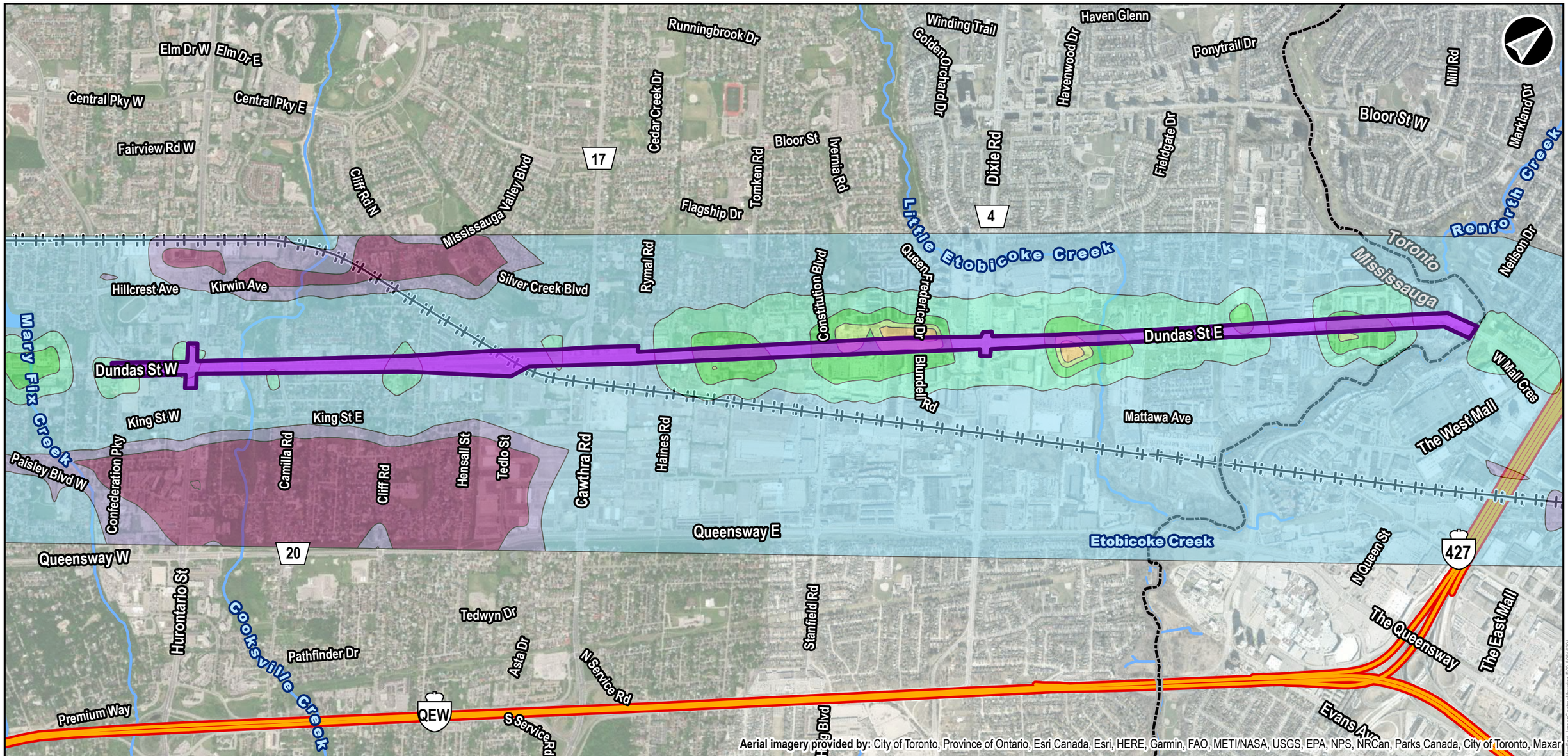
NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I4



Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

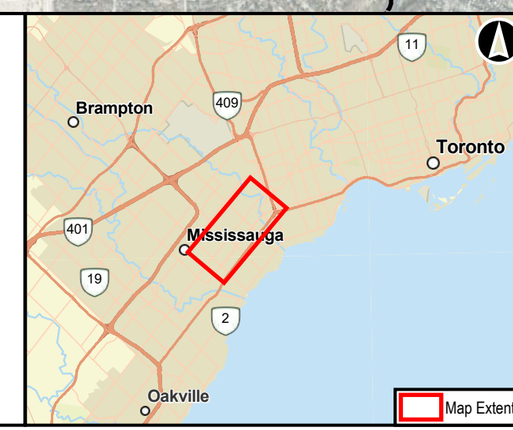
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Benzene µg/m3/24 hour

- < 0.90
- 0.90
- 1.00
- 3.00
- 5.00
- 7.00
- 8.00

Notes:
Benzene concentrations are presented with a multiplyer of 10,000x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Benzene: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I5

Project Location: E:\Pit_\Dundas\BRT_60645291\Data\Pit_60645291\Dundas\BRT.aprx \ Layout: Air Quality - Mississauga East_IsoconcentrationMapping-R00-60645291
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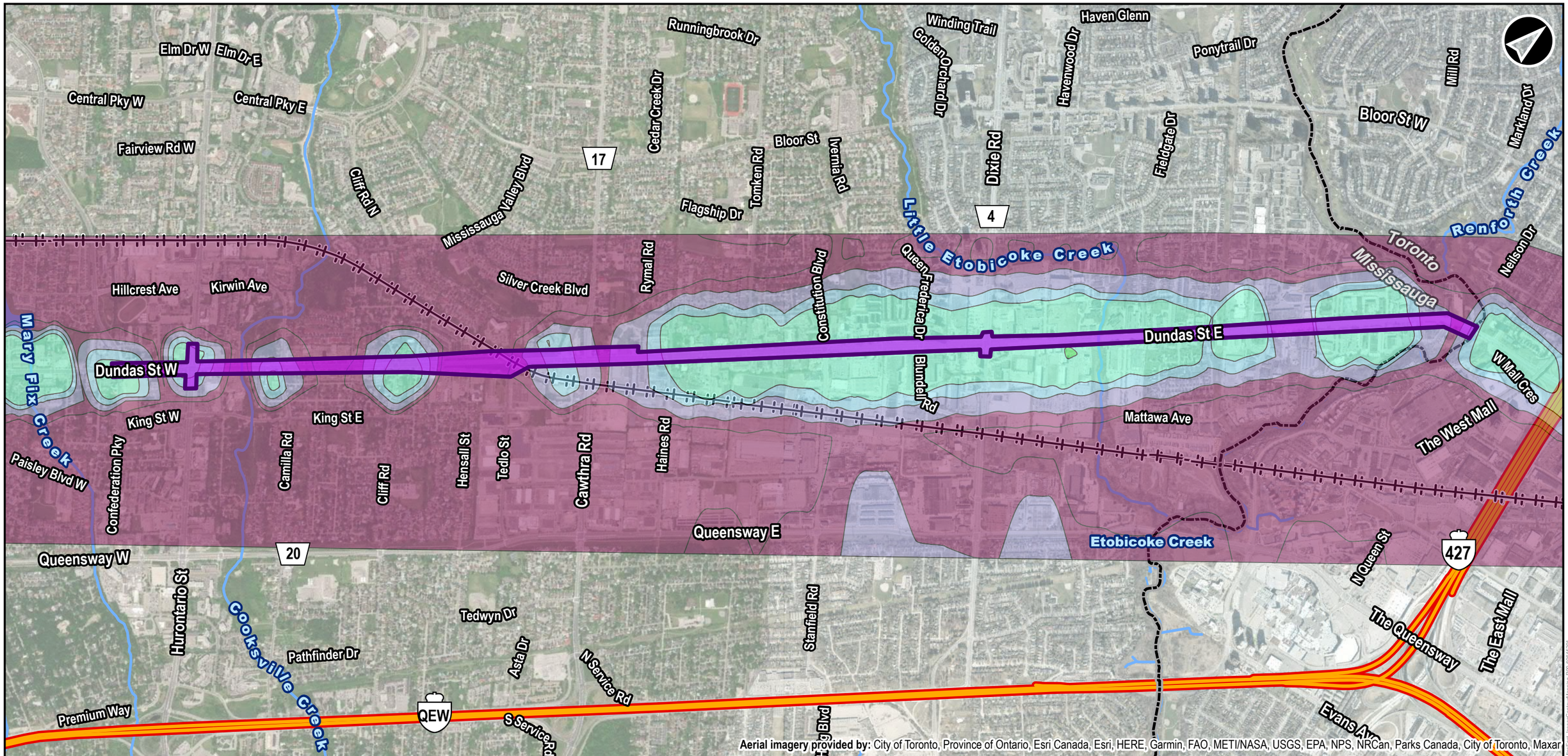


Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Mississauga East - Priority Area

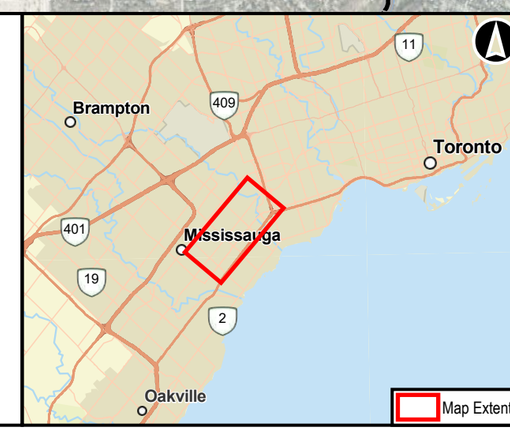
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Benzene µg/m3/Annual

- < 0.60
- 0.60
- 0.80
- 1.00
- 3.00

Notes:
Benzene concentrations are presented with a multiplyer of 10,000x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Benzene: Annual

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I6

Project Location: E:\PR-Dundas\BRT_60645291\Data\PRL-60645291-Dundas\BRT.aprx Layout: Air Quality - MiscEvent_IsoconcContourMapping-R00-60645291
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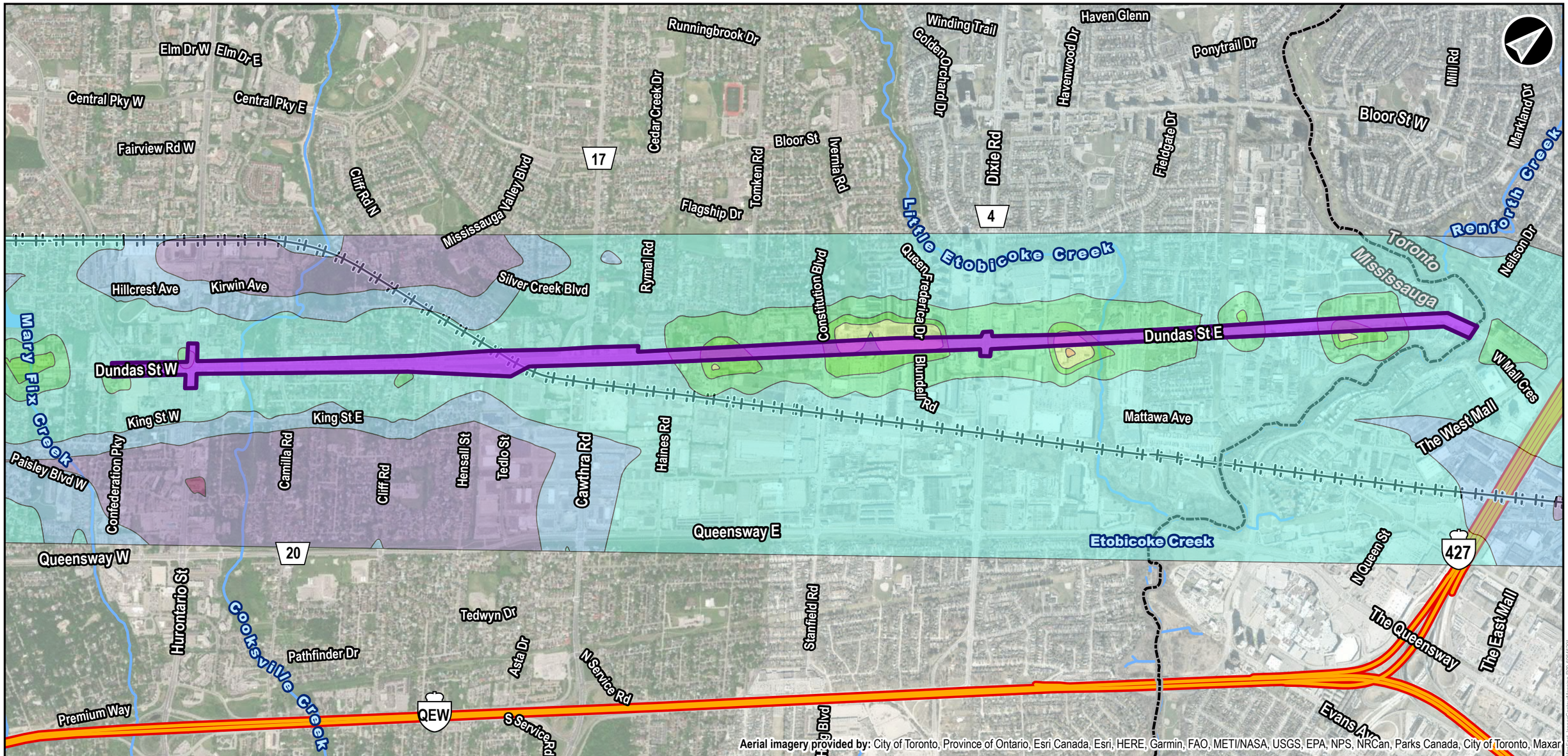


Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

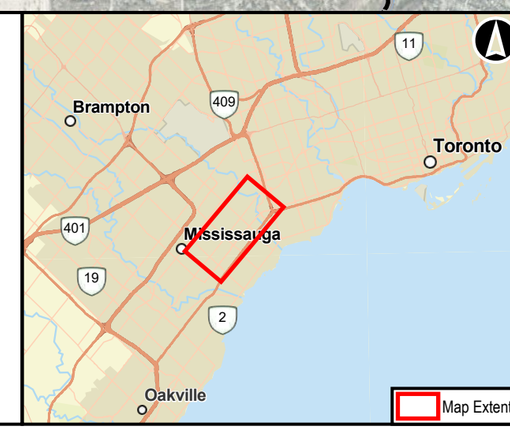
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Benzoapyrene µg/m3/24-Hour

- < 0.05
- 0.06
- 0.08
- 0.10
- 0.30
- 0.50
- 0.60
- 0.80

Notes:
Acetaldehyde concentrations are presented with a multiplyer of #_#x



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Benzo(a)pyrene: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

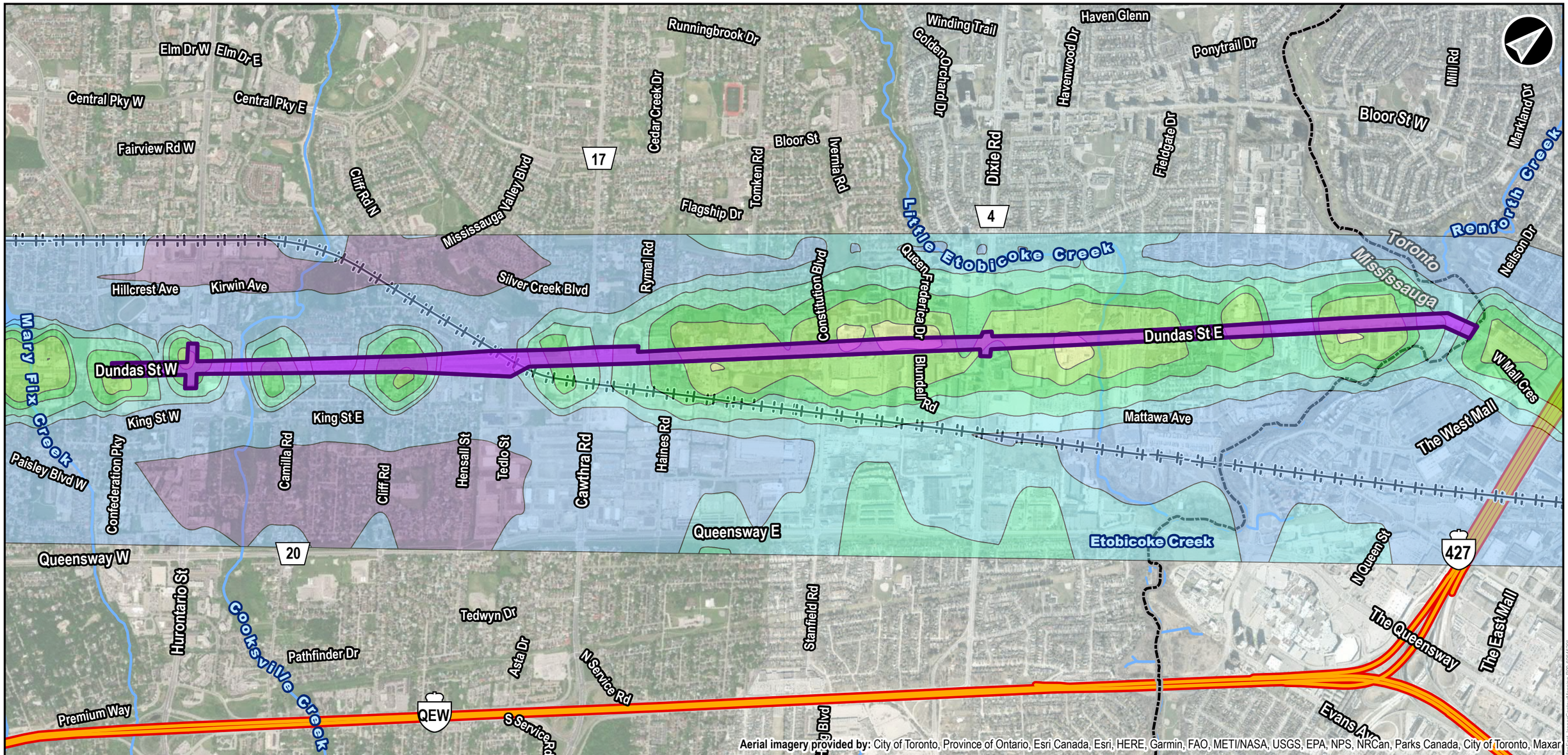
Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I7

Project Location: E:\P:\Dundas\BRT_2020\2021\Data\PRJ_60645291\DundasBRT\Layout: Air Quality_MiddleEast_IsoconcContourMapping-H30-60645291
Date Saved: 9/10/2021 5:36 PM User: draws



Legend

Mississauga East - Priority Area

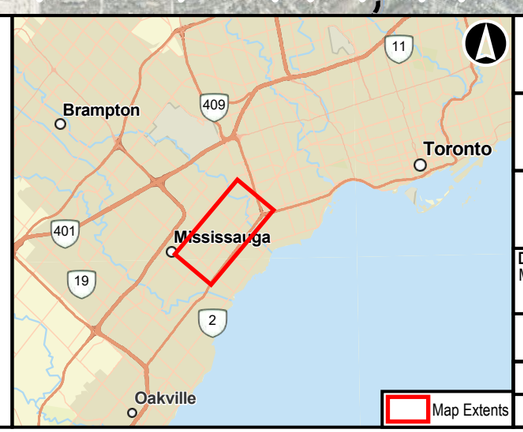
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Benzo(a)pyrene µg/m3/Annual

- 0.01
- 0.02
- 0.04
- 0.05
- 0.07
- 0.10
- 0.20

Notes:
Benzo(a)pyrene concentrations are presented with a multiplyer of 1000x



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Benzo(a)pyrene: Annual

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I8

Project Location: I:\P\P-A\Dundas\BRT_2016\5291\Data\PRJ\60645291\Dundas\BRT.aprx Layout: Air Quality - MissEast_IsoconcContourMapping R00-60645291
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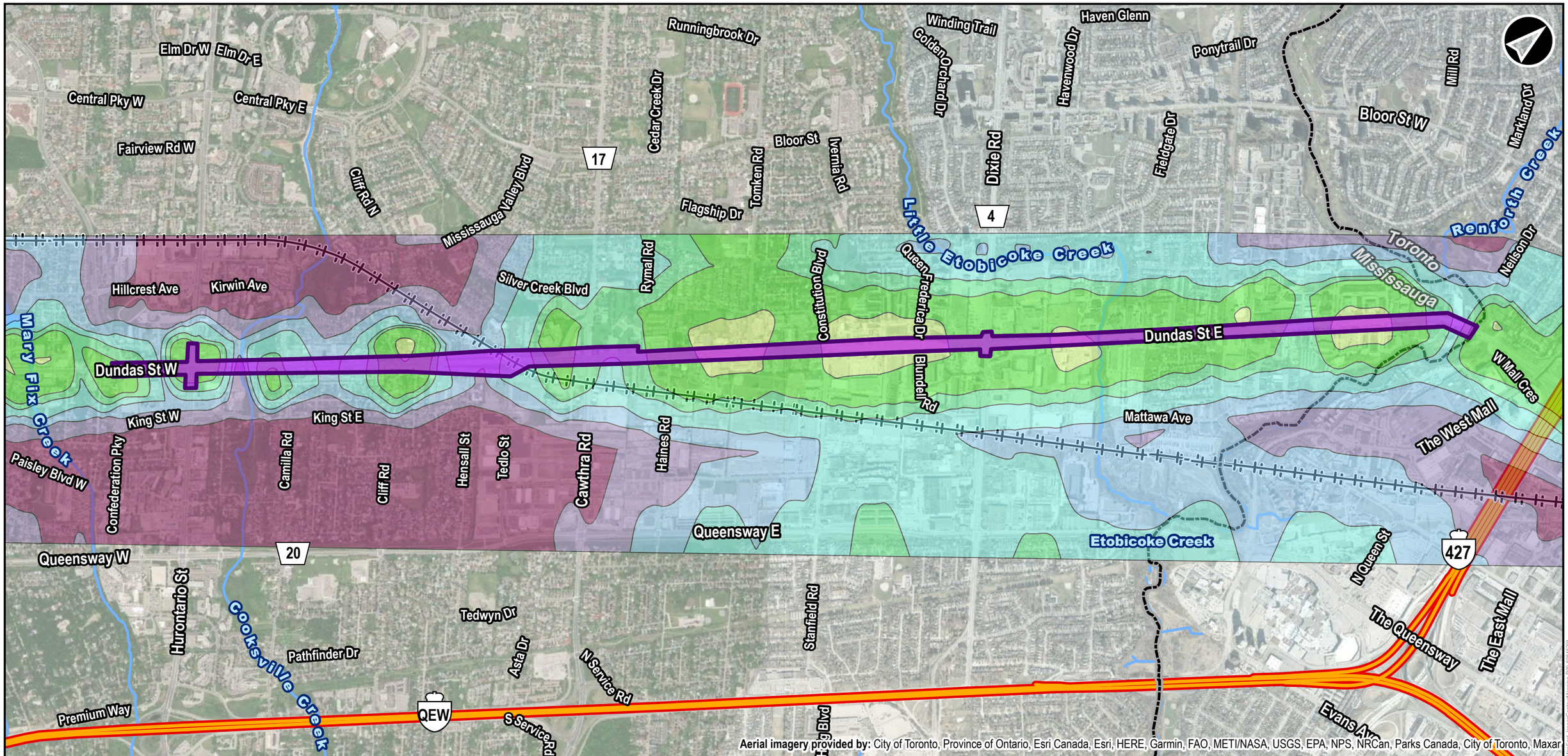


Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

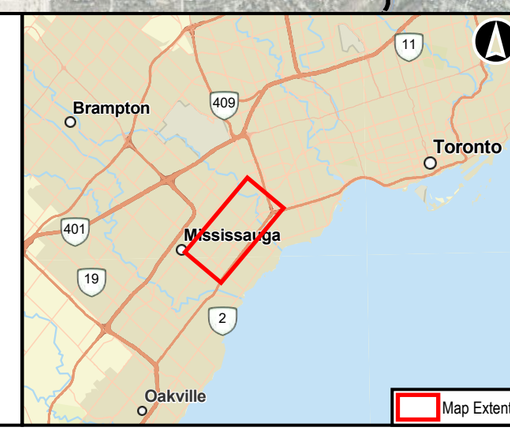
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
CO µg/m3/1-Hour

- <40.00
- 40.00
- 50.00
- 60.00
- 80.00
- 100.00
- 200.00

Notes:
CO concentrations are presented with a multiplier of 1x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
CO: 1 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

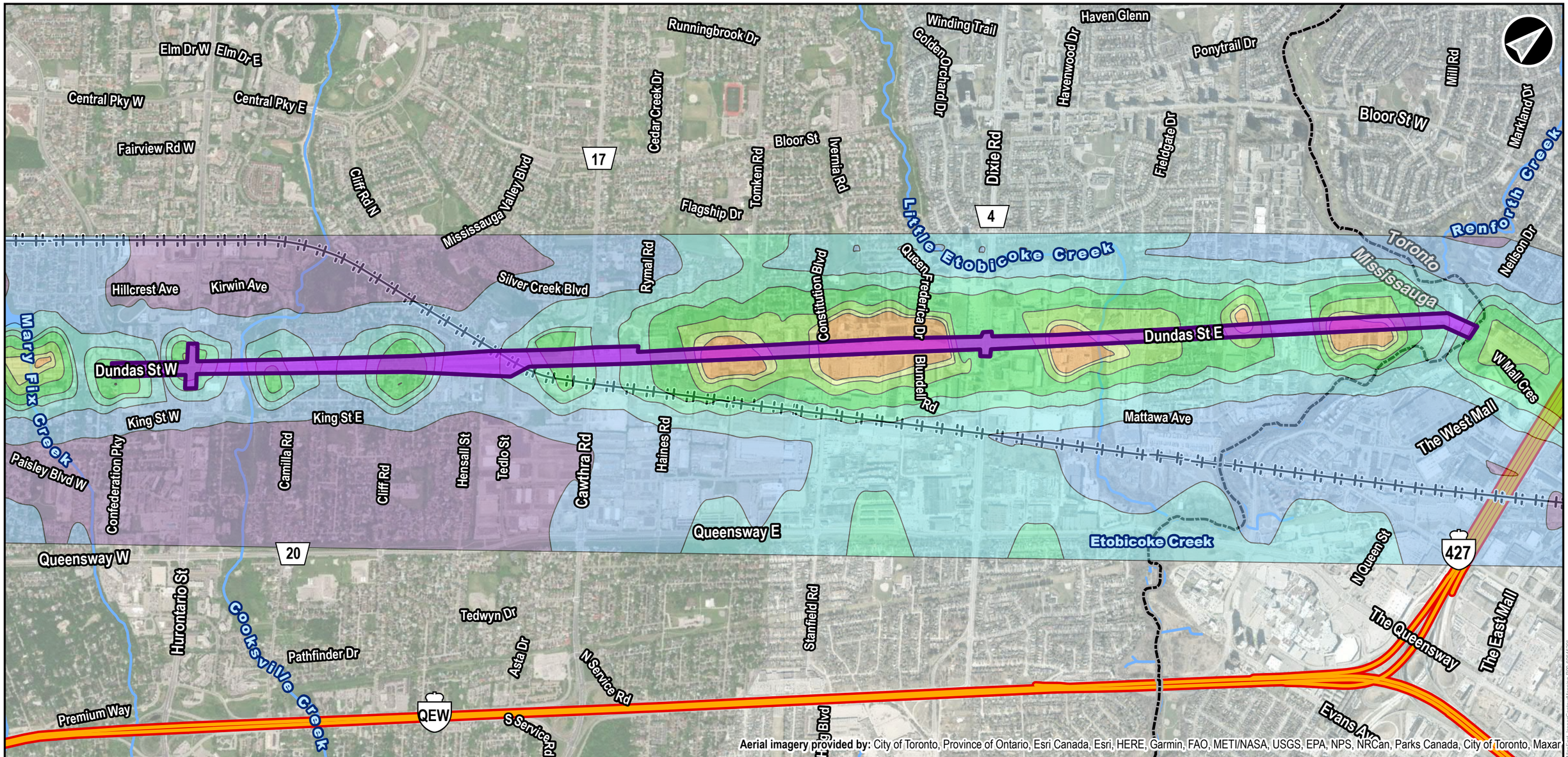
Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I9

Project Location: E:\Pit_\Dundas\BRT_60645291\Data\Pit_60645291\Dundas\BRT.aprx\Layout_Air Quality_MississaugaEast_IsoconcentrationMapping-R00-60645291
Date Saved: 8/10/2021 5:36 PM User: cravs



Legend

Mississauga East - Priority Area

Base Layers

Municipal Boundary

Railway

Primary Highway

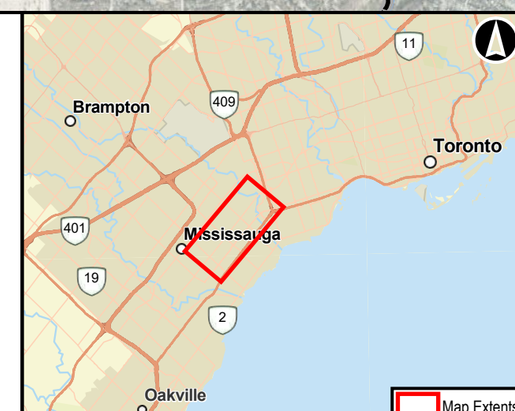
Waterbody

Watercourse

Isoconcentration Contours
CO µg/m3/8-Hour

- 10.00
- 20.00
- 30.00
- 40.00
- 50.00
- 70.00
- 90.00
- 100.00

Notes:
CO concentrations are presented with a multiplier of 1x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
CO: 8 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I10

Project Location: E:\PE\Dundas\BRT_60645291\Data\PEL\60645291 - Dundas\BRT\Layers\Layout\ Air Quality - Mississauga_IsoconcMapping\ROB-60645291
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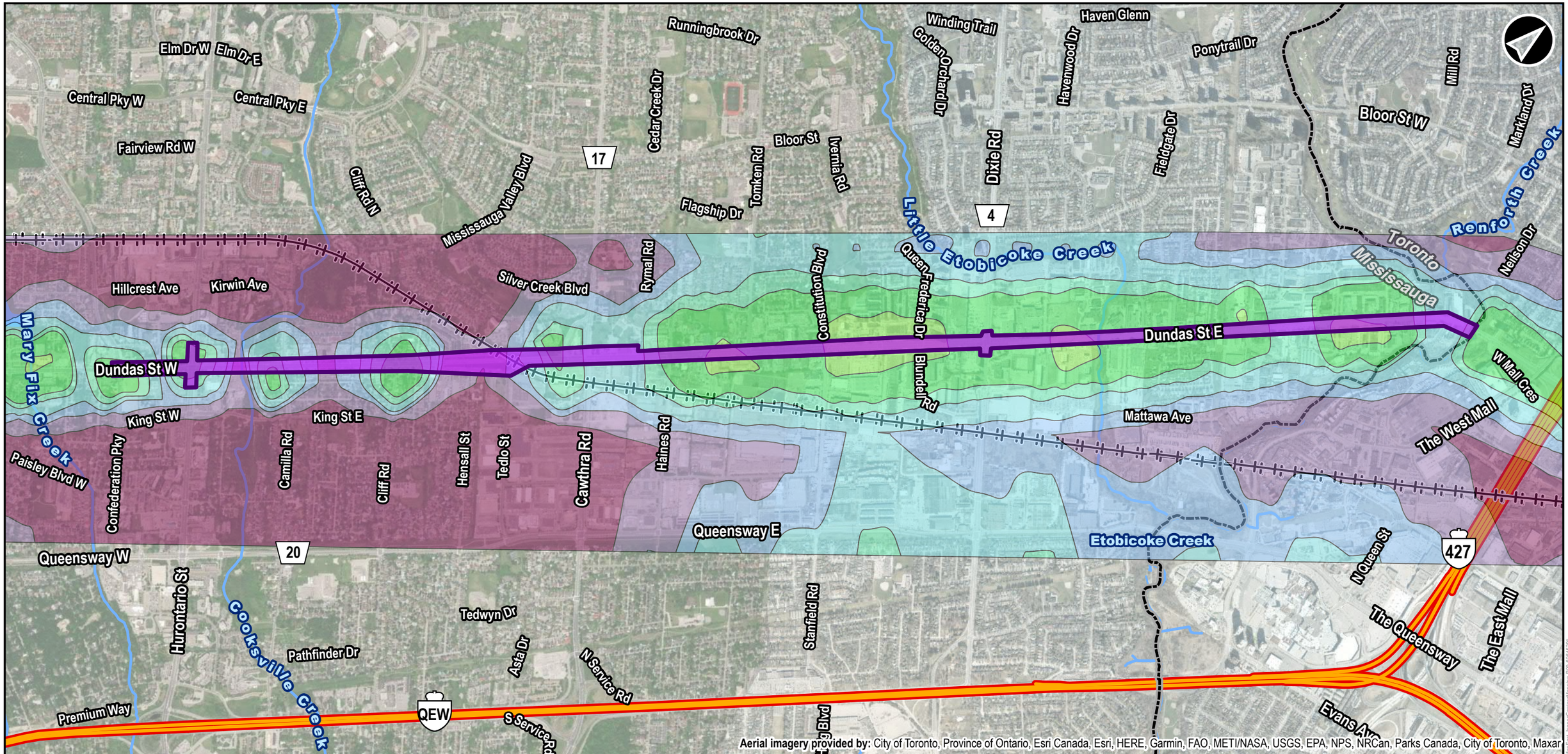


Legend

Mississauga East - Priority Area

Base Layers

Municipal Boundary

Railway

Primary Highway

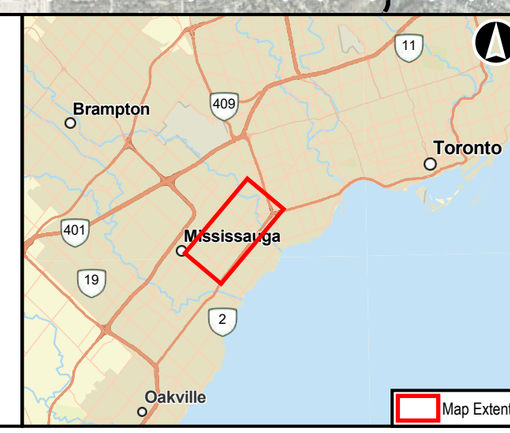
Waterbody

Watercourse

Isoconcentration Contours
Formaldehyde µg/m3/24-Hour

- < 4.00
- 4.00
- 5.00
- 6.00
- 8.00
- 10.00
- 20.00

Notes:
Formaldehyde concentrations are presented with a multiplyer of 1000x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
Formaldehyde: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I11

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Mississauga East - Priority Area

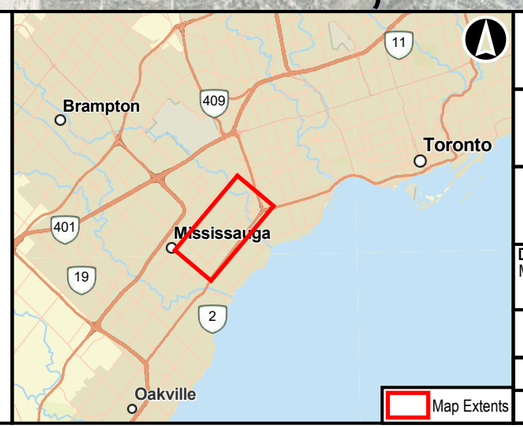
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Nitrogen Oxide µg/m3/Annual

- < 5.00
- 5.00
- 6.00
- 8.00
- 10.00
- 30.00

Notes:
NOx concentrations are presented with a multiplier of 1x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
NO2: Annual

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

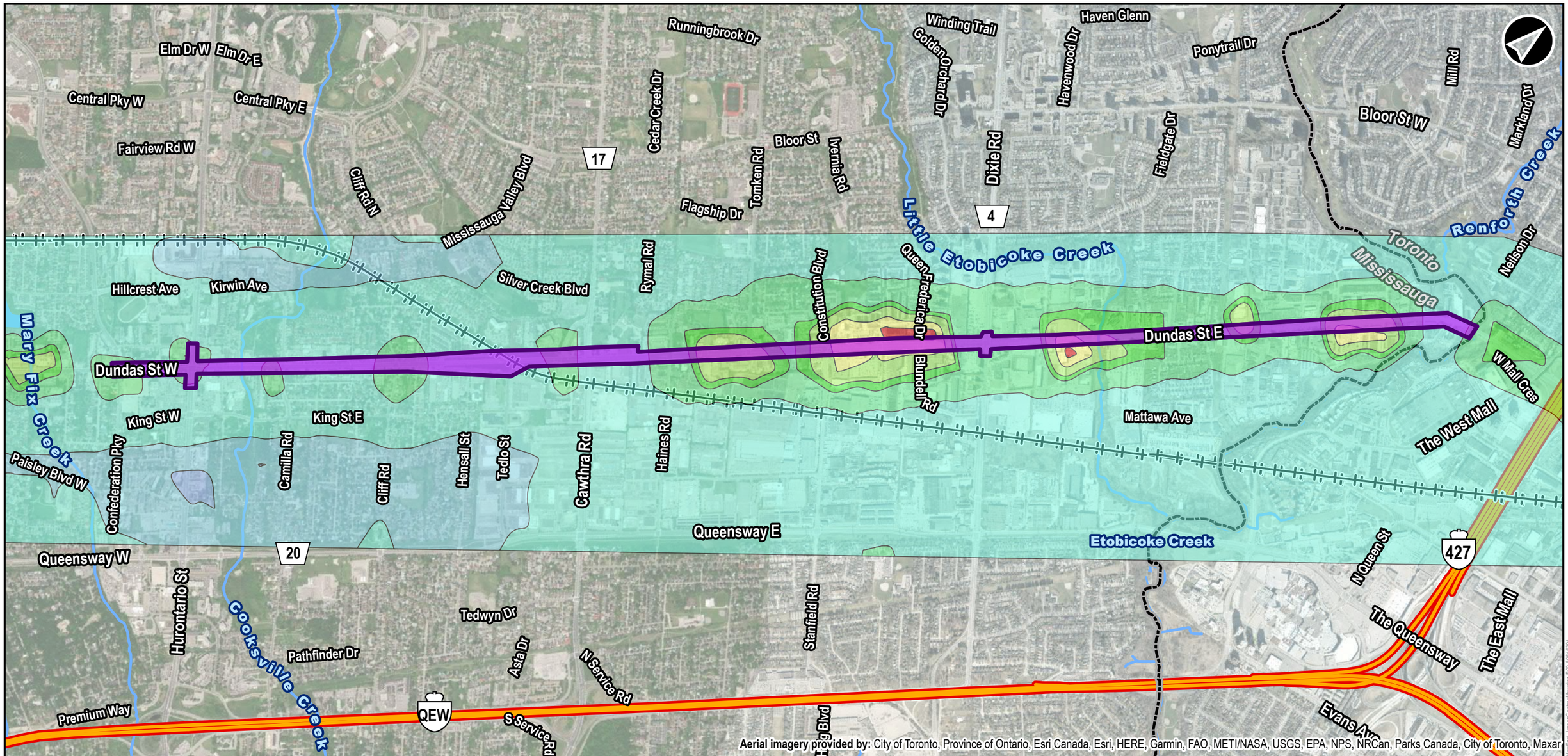
Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I12

Project Location: E:\PR_Dundas\BRT_EA\60645291\Data\PRJ_60645291_DundasBRTExpr\Layout: Air Quality_MississaugaEast_IsoconcContourMapping-R00-60645291
Date Saved: 9/10/2021 5:36 PM User: orawa



Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

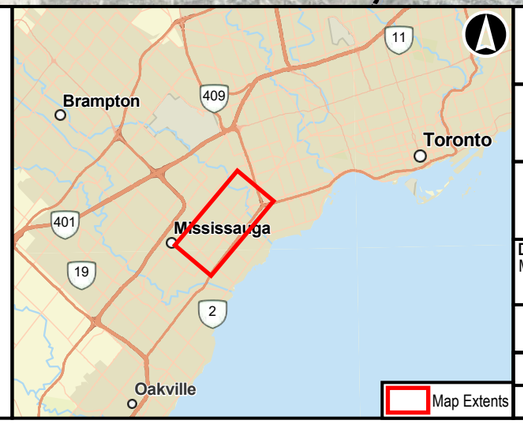
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Nitrogen Oxide µg/m3/24-Hour

- 6.00
- 8.00
- 10.00
- 30.00
- 50.00
- 60.00
- 80.00
- > 80.00

Notes:
NOx concentrations are presented with a multiplier of 1x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
NO2: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

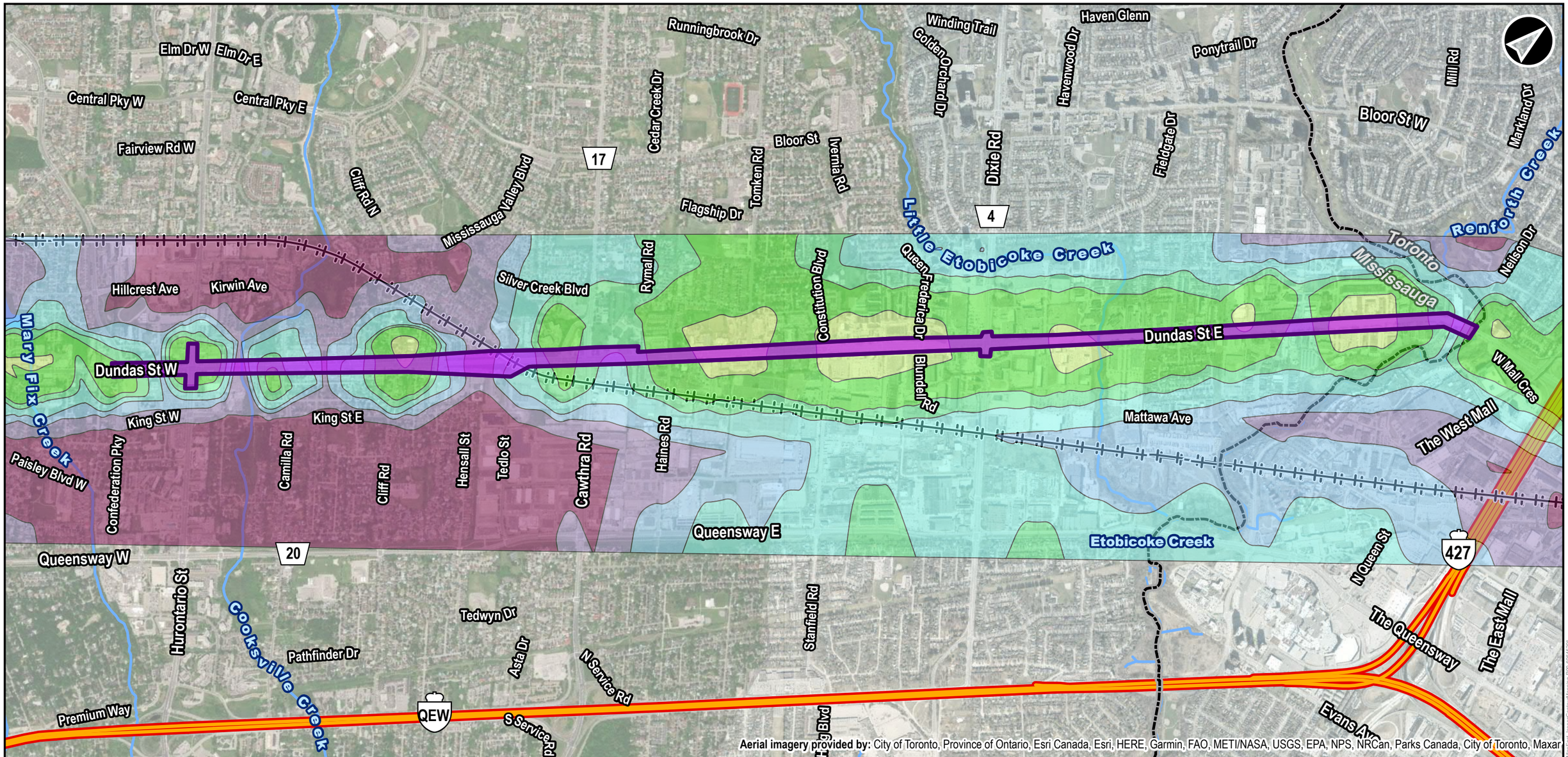
Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I13

Project Location: E:\PROJ\Dundas\BRT_EA\04-GIS\1Data\PIL-4004-GIS\1-Dundas\BRT\aprx Layout: Air Quality - Milestone_SecondContourMapping-1100-20240201
Date Saved: 9/10/2021 5:36 PM User: orawa



Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

Mississauga East - Priority Area

Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Nitrogen Oxide µg/m3/1-Hour

- < 40.00
- 40.00
- 50.00
- 60.00
- 80.00
- 100.00
- 200.00

Notes:
NOx concentrations are presented with a multiplier of 1x.

Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
NO2: 1 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I14

Project Location: E:\PS\Dundas\BRT_60645291\Data\PS-Models\Dundas\BRT.aprx Layout: Air Quality - Mississauga_IsoconcentrationMapping-R00-60645291
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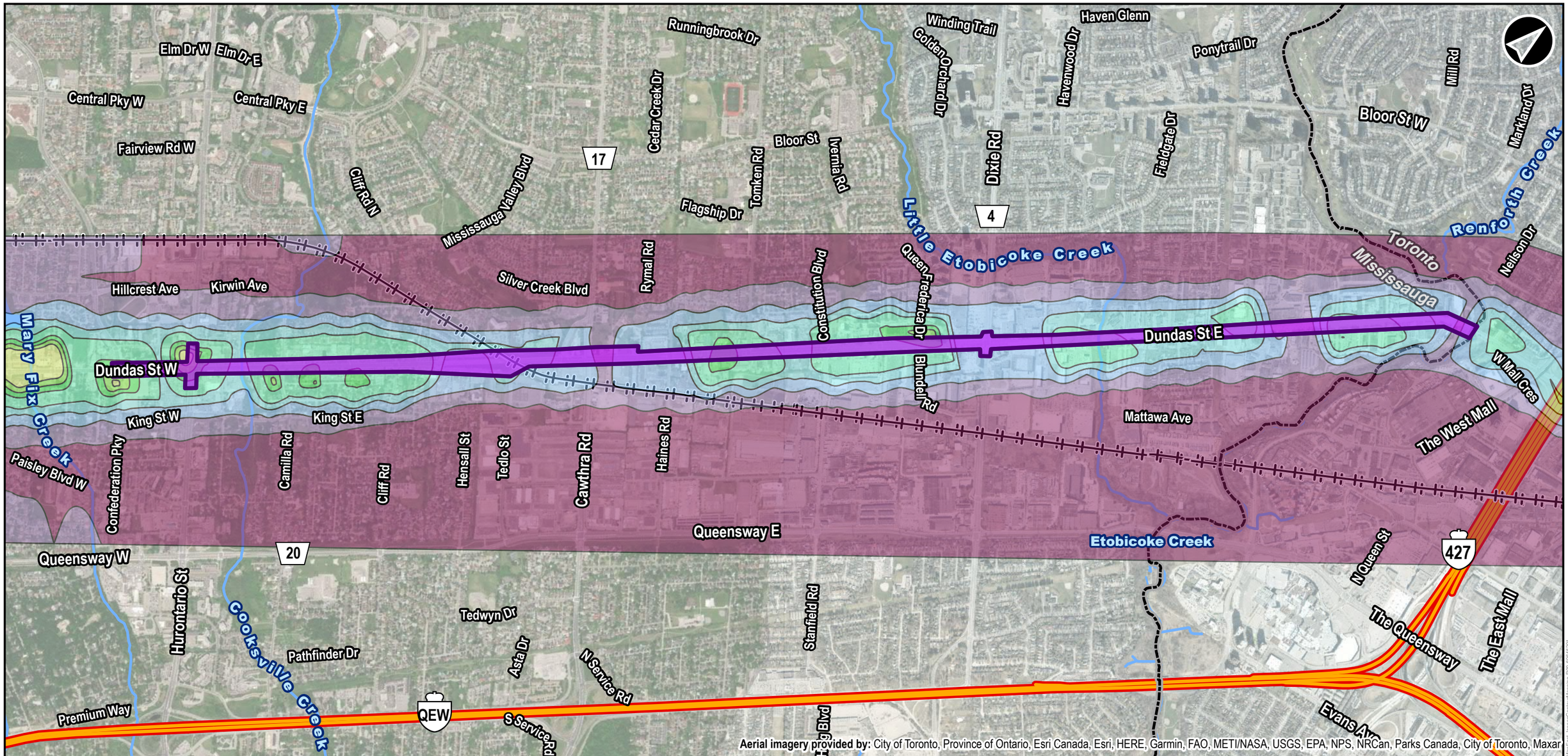


Legend

Mississauga East - Priority Area

Base Layers

Municipal Boundary

Railway

Primary Highway

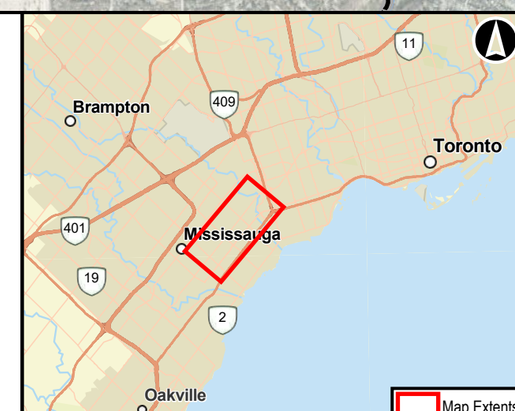
Waterbody

Watercourse

Isoconcentration Contours
PM 10 µg/m3/24-Hour

- < 0.30
- 0.30
- 0.40
- 0.50
- 0.60
- 0.80
- 0.90
- 1.00

Notes:
PM 10 concentrations are presented with a multiplier of 10x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
PM10: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I15

Project Location: E:\Proj\Dundas\BRT_2020\2021\Data\PRJ\60645291\DundasBRT\Figure Layouts\Air Quality\Mississauga_IsoconcentrationMapping\F05-60645291
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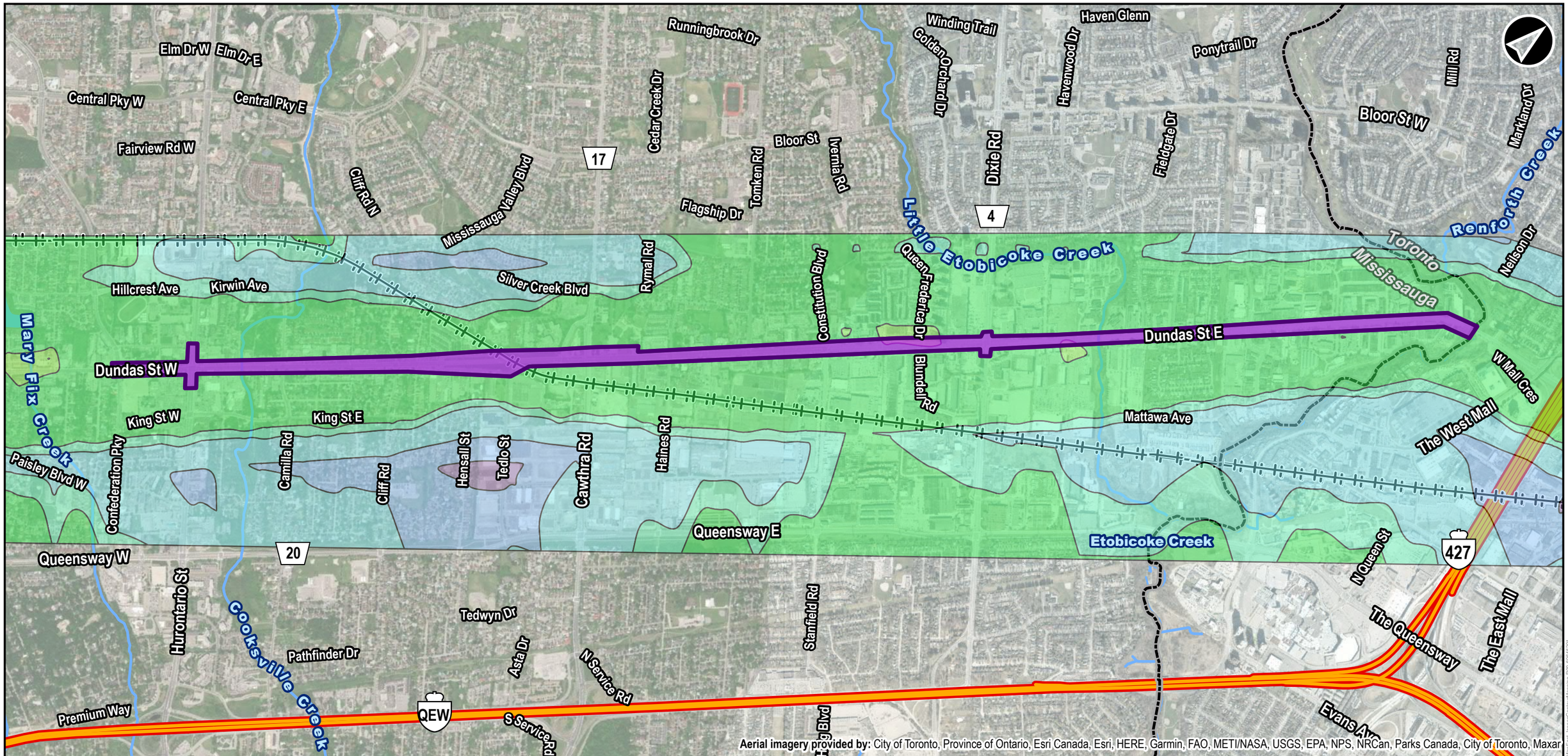


Legend

- Mississauga East - Priority Area

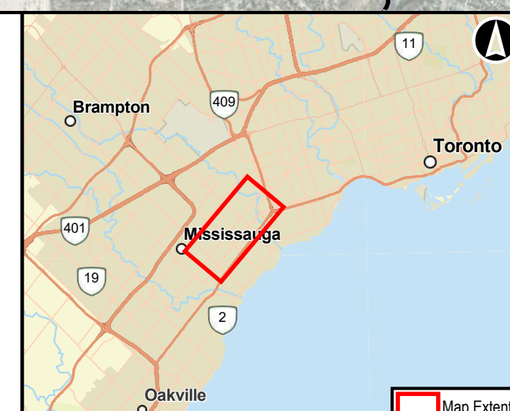
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
PM 2.5µg/m3/24-hour

- 0.50
- 0.60
- 0.70
- 0.90
- 1.00
- 4.00
- 5.00

Notes:
PM 2.5 concentrations are presented with a multiplier of 10x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
PM25: 24 hour

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I16

Project Location: E:\Proj\Dundas\BRT_2020\2021\Data\PRJ_60645291\Dundas\BRT\Figure Layouts\ Air Quality_MiseEast_IsoconContourMapping.mxd
Date Saved: 9/10/2021 5:36 PM User: draws

Aerial imagery provided by: City of Toronto, Province of Ontario, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar

Legend

- Mississauga East - Priority Area

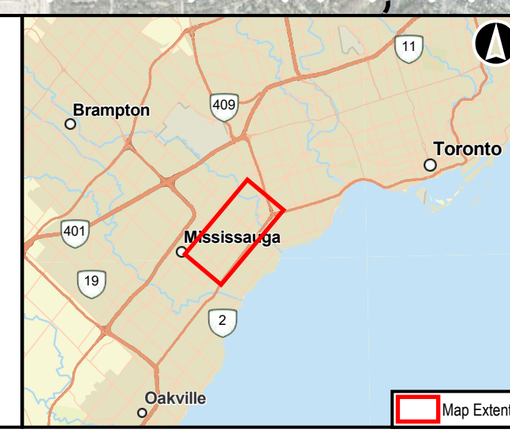
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
PM 2.5 µg/m3/Annual

- 0.10
- 0.20
- 0.40
- 0.50
- 0.80
- 0.90
- 1.00

Notes:
PM 2.5 concentrations are presented with a multiplier of 10x.



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
PM25: Annual

0 200 400 800 1,200 M

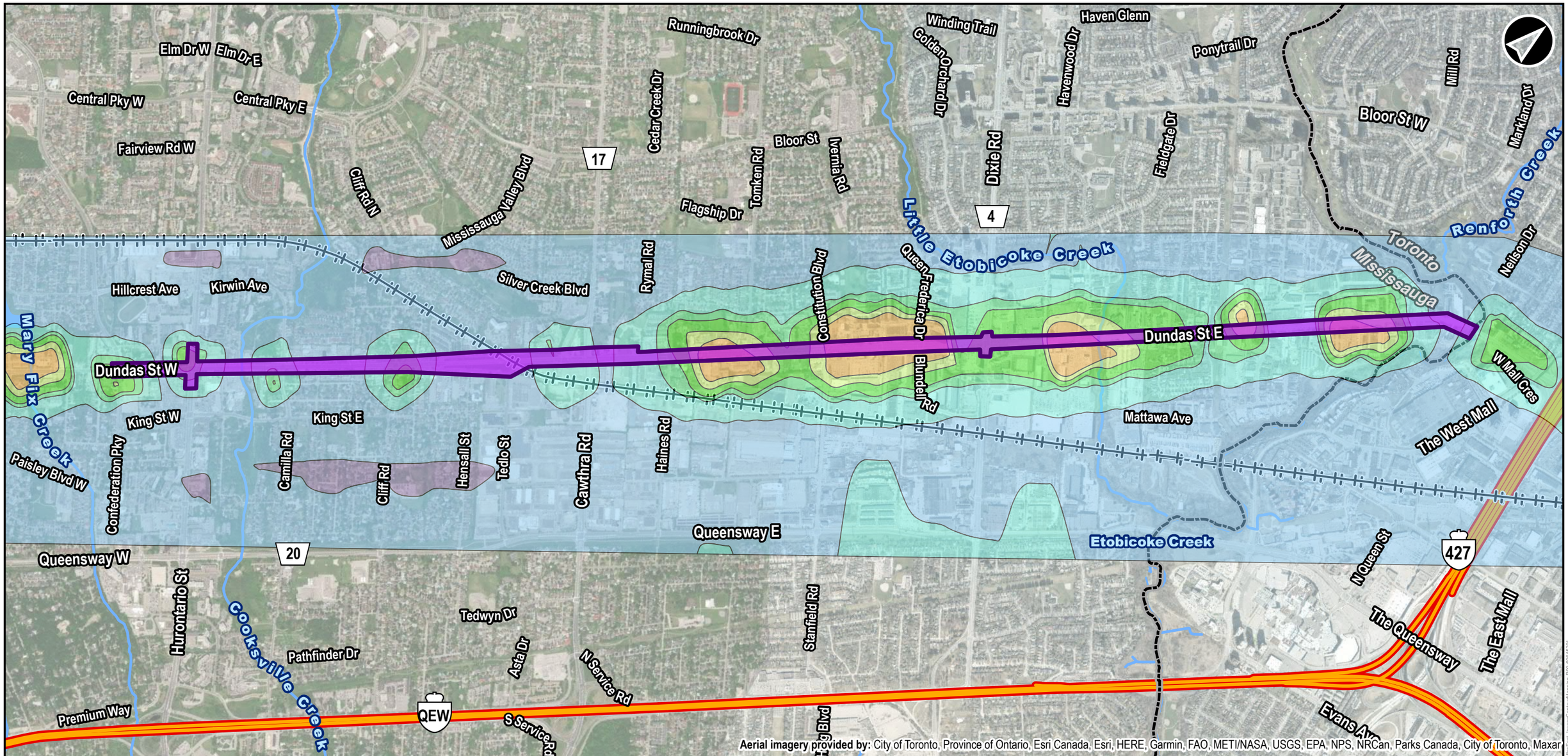
NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I17



Legend

- Mississauga East - Priority Area

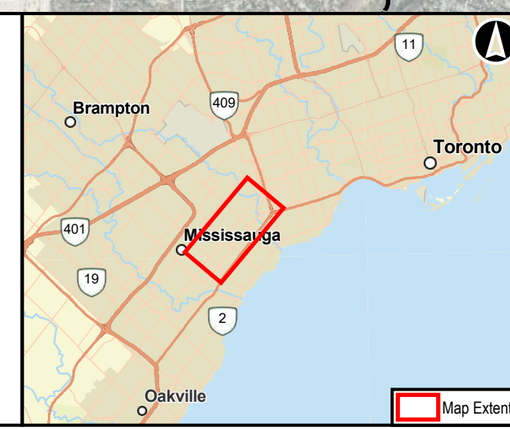
Base Layers

- Municipal Boundary
- Railway
- Primary Highway
- Waterbody
- Watercourse

Isoconcentration Contours
Sulfur Dioxide µg/m3/Annual

- 0.08
- 0.10
- 0.30
- 0.50
- 0.60
- 0.80
- 1.00

Notes:
Sulfur Dioxide concentrations are presented with a multiplier of 1000x



Dundas Bus Rapid Transit
Mississauga East - Priority Area

Isoconcentration Contours
Future Build Model
SO2: Annual

0 200 400 800 1,200 M

NAD 1983 UTM Zone 17N

Data Sources
MECP, MMAH, ESRI, AECOM

METROLINX | AECOM

Sep, 2021	1:20,000
P:60645291	Rev:00

Figure: I18

Project Location: E:\PK-Dundas\BRT_project\01\Data\PRJ-60645291-DundasBRT-aprx Layout: Air Quality - MissEast_IsoconcContourMapping-H05-60645291
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Appendix J

Construction Emissions Assessment

Air Quality Impact Assessment
Appendix J

Dundas Bus Rapid Transit (BRT)
Metrolinx, September 2021

Construction Equipment Operation Emissions

Table J-1: Construction Equipment Operation Emissions

						Emission Rates (g/hp-hr)								Emission Rates (g/day)							
						Diesel	Diesel	Gasoline	Gasoline	CNG	CNG	LPG	LPG	Diesel	Diesel	Gasoline	Gasoline	CNG	CNG	LPG	LPG
Equipment Description	**Units per Operation**	**Equipment Rating (hp)**	**Load Factor (%)**	**hr/day**	**General Notes**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**
Road Works Operation - Existing Asphalt Removal and Site Preparation																					
Excavator	2	232	80	12		0.015154	0.014700	-	-	-	-	-	-	67.503062	65.477996	-	-	-	-	-	-
Pickup Truck	5	225	50	12		0.017830	0.017295	-	-	-	-	-	-	120.354495	116.743877	-	-	-	-	-	-
Dump Truck	2	250	80	12		0.452544	0.438967	0.126697	0.116561	-	-	-	-	2172.210943	2107.043213	608.146561	559.494727	-	-	-	-
Impact Hammer	2	250	80	12	4t hammer	0.259927	0.252129	9.235880	8.497013	-	-	-	-	1247.651145	1210.221162	44332.222794	40785.664209	-	-	-	-
Loaders	2	83	80	12	9t capacity	0.039495	0.038310	0.069646	0.064074	-	-	0.058039	0.058039	62.939465	61.051306	110.988251	102.109043	-	-	92.490337	92.490337
Bulldozer	1	190	80	12		0.024251	0.023524	-	-	-	-	-	-	44.234679	42.907630	-	-	-	-	-	-
Road Milling Machine (Cold Recycling Machine)	1	480	85	12		0.050643	0.049124	0.343438	0.315963	-	-	0.056579	0.056579	247.947577	240.508850	1681.473639	1546.953175	-	-	277.012365	277.012365
Portable Light Generator	5	27	15	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	34.578561	33.541176	67.880662	62.450116	-	-	-	-
Backup Alarms (Tonal)	14	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**3,997**	**3,877**	**46,801**	**43,057**	**0**	**0**	**370**	**370**
Road Works Operation - Paving New Asphalt																					
Dump Truck	2	250	50	12		0.452544	0.438967	0.126697	0.116561	-	-	-	-	1357.631839	1316.902008	380.091601	349.684205	-	-	-	-
Pickup Truck	5	225	80	12		0.017830	0.017295	-	-	-	-	-	-	192.567191	186.790203	-	-	-	-	-	-
Bottom/Belly Dump Truck	1	250	80	12	Assumed same as regular dump truck	0.452544	0.438967	0.126697	0.116561	-	-	-	-	1086.105471	1053.521607	304.073281	279.747364	-	-	-	-
Grader	1	275	85	12		0.013858	0.013443	-	-	-	-	-	-	38.872755	37.706553	-	-	-	-	-	-
Asphalt Roller	2	194	85	12	18t Capacity	0.039266	0.038088	0.105838	0.115041	-	-	0.058157	0.058157	155.399503	150.737600	418.862800	455.286553	-	-	230.163108	230.163108
Water Truck	1	150	50	12	Estimated, reference data doesn't have HP Data	0.017830	0.017295	-	-	-	-	-	-	16.047266	15.565850	-	-	-	-	-	-
Asphalt Paver	1	150	85	12		0.026597	0.025799	0.116659	0.107327	-	-	0.057756	0.057756	40.694069	39.473219	178.488971	164.209814	-	-	88.365955	88.365955
Road Sweeper	2	70	50	12		0.019874	0.019278	0.167618	0.154208	0.057656	0.057656	0.058209	0.058209	16.693964	16.193150	140.799083	129.535129	48.430967	48.430967	48.895683	48.895683
Portable Light Generator	5	27	50	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	115.261870	111.803921	226.268874	208.167055	-	-	-	-
Backup Alarms (Tonal)	13	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**1,662**	**1,612**	**2,505**		**97**		**735**	
Station Construction Operation - Installation																					
Flatbed Truck	1	362	80	12		0.017830	0.017295	-	-	-	-	-	-	61.963843	60.104937	-	-	-	-	-	-
Crane	1	230	80	12	Tracked Mobile Crane LS-98A (35 ton)	0.028050	0.027209	0.073352	0.067484	-	-	0.056432	0.056432	61.934447	60.076477	161.961469	149.004330	-	-	124.602512	124.602512
Power Generator	1	268	85	12	200 kW based on CAT 3406 engine	0.091261	0.088523	0.067816	0.062391	0.056338	0.056338	0.056338	0.056338	249.469957	241.985657	185.382406	170.551785	154.005907	154.005907	154.005628	154.005628
Concrete Mixer Truck	1	225	80	12		0.203527	0.209822	0.159211	0.146474	-	-	-	-	439.619354	453.215660	343.894939	316.383306	-	-	-	-
Portable Light Generator	5	27	15	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	34.578561	33.541176	67.880662	62.450116	-	-	-	-
Welding Generator	5	4	80	12	Diesel Generator (18kg)	0.203527	0.209822	0.159211	0.146474	-	-	-	-	39.077276	40.285836	30.568439	28.122961	-	-	-	-
Pickup Truck	5	225	50	12		0.017830	0.017295	-	-	-	-	-	-	120.354495	116.743877	-	-	-	-	-	-
Backup Alarms (Tonal)	6	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**1,007**	**1,006**	**1,516**		**308**		**557**	
Soil Exacavation and Stockpiling																					
Excavator	2	232	80	12		0.015154	0.014700	-	-	-	-	-	-	67.503062	65.477996	-	-	-	-	-	-
Bulldozer	1	190	80	12		0.024251	0.023524	-	-	-	-	-	-	44.234679	42.907630	-	-	-	-	-	-
Loaders	2	83	80	12	9t capacity	0.039495	0.038310	0.069646	0.064074	-	-	0.058039	0.058039	62.939465	61.051306	110.988251	102.109043	-	-	92.490337	92.490337
Portable Light Generator	5	27	15	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	34.578561	33.541176	67.880662	62.450116	-	-	-	-
Dump Truck	2	250	50	12		0.452544	0.438967	0.126697	0.116561	-	-	-	-	1357.631839	1316.902008	380.091601	349.684205	-	-	-	-
Pickup Truck	2	225	50	12		0.017830	0.017295	-	-	-	-	-	-	48.141798	46.697551	-	-	-	-	-	-
Backup Alarms (Tonal)	9	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**2,622**	**2,573**	**2,589**		**308**		**742**	

Table J-1: Construction Equipment Operation Emissions

						Emission Rates (g/hp-hr)								Emission Rates (g/day)							
						Diesel	Diesel	Gasoline	Gasoline	CNG	CNG	LPG	LPG	Diesel	Diesel	Gasoline	Gasoline	CNG	CNG	LPG	LPG
Equipment Description	**Units per Operation**	**Equipment Rating (hp)**	**Load Factor (%)**	**hr/day**	**General Notes**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**	**PM10**	**PM2.5**
Culvert Construction																					
Flatbed Trucks	1	360	80	12		0.017830	0.017295	-	-	-	-	-	-	61.621501	59.772865	-	-	-	-	-	-
Excavator	1	500	80	12		0.015154	0.014700	-	-	-	-	-	-	72.740368	70.558186	-	-	-	-	-	-
Loaders	1	83	80	12		0.039495	0.038310	0.069646	0.064074	-	-	0.058039	0.058039	31.469733	30.525653	55.494126	51.054522	-	-	46.245169	46.245169
Dump Truck	2	250	80	12		0.452544	0.438967	0.126697	0.116561	-	-	-	-	2172.210943	2107.043213	608.146561	559.494727	-	-	-	-
Compactors	1	300	80	12		0.230468	0.223553	0.537666	0.494653	-	-	-	-	663.746953	643.833570	1548.479334	1424.601348	-	-	-	-
Water Pumps	2	27	100	12		0.091261	0.088523	0.067816	0.062391	0.056338	0.056338	0.056338	0.056338	59.136864	57.362711	43.944907	40.429308	36.507107	36.507107	36.507041	36.507041
Portable Light Generator	5	27	15	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	34.578561	33.541176	67.880662	62.450116	-	-	-	-
Backup Alarms (Tonal)	5	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**3,096**	**3,003**	**4,462**		**73**		**166**	
Bridge Construction																					
Compressor	2	60	80	12		0.230468	0.223553	0.537666	0.494653	-	-	-	-	265.498781	257.533428	619.391733	569.840539	-	-	-	-
Crane	2	230	80	12		0.028050	0.027209	0.073352	0.067484	-	-	0.056432	0.056432	123.868894	120.152954	323.922938	298.008660	-	-	249.205024	249.205024
Dump Truck	2	250	80	12		0.452544	0.438967	0.126697	0.116561	-	-	-	-	2172.210943	2107.043213	608.146561	559.494727	-	-	-	-
Flatbed Truck	2	360	80	12		0.017830	0.017295	-	-	-	-	-	-	123.243003	119.545730	-	-	-	-	-	-
Concrete Mixer Truck	2	225	80	12		0.203527	0.209822	0.159211	0.146474	-	-	-	-	879.238708	906.431321	687.789879	632.766613	-	-	-	-
Man Lift	2	67	50	12		0.028050	0.027209	0.073352	0.067484	-	-	0.056432	0.056432	22.552217	21.875674	58.975100	54.257011	-	-	45.371567	45.371567
Impact Pile Driver	1	249	80	12		0.259927	0.252129	9.235880	8.497013	-	-	-	-	621.330270	602.690139	22077.446951	20311.260776	-	-	-	-
Excavator	1	232	80	12		0.015154	0.014700	-	-	-	-	-	-	33.751531	32.738998	-	-	-	-	-	-
Concrete Mixer	1	225	80	12		0.203527	0.209822	0.159211	0.146474	-	-	-	-	439.619354	453.215660	343.894939	316.383306	-	-	-	-
Concrete Pump Truck	1	229	80	12		0.203527	0.209822	0.159211	0.146474	-	-	-	-	447.434809	461.272828	350.008627	322.007899	-	-	-	-
Power Generator	1	268	90	12		0.091261	0.088523	0.067816	0.062391	0.056338	0.056338	0.056338	0.056338	264.144661	256.220107	196.287253	180.584243	163.065078	163.065078	163.064782	163.064782
Portable Light Generator	3	27	15	12		0.142299	0.138030	0.279344	0.256996	-	-	-	-	20.747137	20.124706	40.728397	37.470070	-	-	-	-
Backup Alarms (Tonal)	11	NA	15	12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
													TOTAL	**2,729**	**2,755**	**45,610**		**326**		**417**	

Day = 07:00h to 23:00h

Night = 23:00h to 07:00h

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Appendix K

Construction Monitoring and Mitigation Guidance Documents

CHEMINFO

Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities

March, 2005

Prepared by:

Cheminfo Services Inc.
315 Renfrew Dr., Suite 302
Markham, Ontario
L3R 9S7

In conjunction with the
Construction and Demolition Multi-stakeholder Working Group

Prepared for:

Environment Canada
Transboundary Issues Branch

CHEMINFO

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CHEMINFO

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Glossary of Terms

Actions to Reduce Emissions - Any applications of technologies or practices that contribute to reducing pollutant releases to the environment.

Active Operation - activity capable of generating fugitive dust, including any open storage pile, earthmoving activity, construction/demolition activity, disturbed surface area, and non-emergency movement of motor vehicles on unpaved roadways and parking lots.

Anemometer – device used to measure wind speed and direction.

Apron – material (e.g., asphalt, gravel) that covers a distance of the path travelled by construction vehicles at the entry/exit points from construction sites.

Asphalt – a brownish-black solid or semisolid mixture of bitumen obtained from native deposits or as a petroleum by-product and used in roofing and road building.

Bulk Material - any material including but not limited to earth, rock, silt, sediment, sand, gravel, soil, fill, aggregate less than 2 inches in length or diameter, dirt, mud, demolition debris, trash, cinders, pumice, saw dust and dry concrete, which are capable of producing fugitive dust at a construction site.

Coal Tar Pitch – a thick, dark, and sticky substance obtained from the distillation residue of coal tar.

Construction Activities – any on-site activities preparatory to or related to the building, alteration, rehabilitation or improvement of property, including, but not limited to the following activities: grading, excavation, trenching, loading, vehicular travel, crushing, blasting, cutting, planning, shaping, breaking, equipment staging/storage areas, weed abatement activities or adding or removing bulk materials from storage piles.

Cutback Asphalt – asphalt cement that has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.

Demolition Activities – the wrecking or taking out of any load-supporting structural member of a structure or building and related handling operations or the intentional burning of any structure or building.

Disturbed Surface Area – portion of the earth's surface having been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust. Disturbed surface area does not include areas restored to a natural state with vegetative ground cover and soil characteristics similar to adjacent natural conditions.

Dust Emissions - Releases to air of fine particulate matter (usually PM_{10}, $PM_{2.5}$)

Dust Generating Operation - any activity capable of generating fugitive dust, including but not limited to, land clearing, earthmoving, weed abatement by discing or blading, excavating, construction, demolition, material handling, storage and/or transporting operations, vehicle use and movement, the operation of any outdoor equipment or unpaved parking lots.

Dust Suppressant – water, hygroscopic materials, or non-toxic chemical stabilizers used as soil treatment to reduce fugitive dust emissions.

Earthmoving Operation – the use of any equipment for an activity which may generate fugitive dust, such as, but not limited to, cutting and filling, grading, levelling, excavating, trenching, loading or unloading of bulk materials, demolishing, blasting, drilling, adding to or removing bulk materials from open storage piles, back filling, soil mulching, landfill operations, or weed abatement by discing or blading.

Emulsified Asphalt – an emulsion of asphalt cement and water that contains a small amount of an emulsifying agent. It is a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion and minute globules of asphalt form the discontinuous phase.

Freeboard - the vertical distance between the top edge of a cargo container area and the highest point at which the bulk material contacts the sides, front and back of the container.

Fugitive Dust – any particulate matter becoming airborne, other than being emitted from an exhaust stack, directly or indirectly as a result of human activity.

Gravel Pad - a layer of washed gravel, rock or crushed rock which is at least one inch or larger in diameter, maintained at the point of intersection of a paved public roadway and a work site or source entrance to dislodge mud, dirt and/or debris from the tire of the motor vehicles or haul trucks prior to leaving the work site.

Grizzly - a device maintained at the point of intersection of a paved public roadway and a work site or source entrance to dislodge mud, dirt and/or debris from the tires of the motor vehicles or haul trucks prior to leaving the work site.

Haul Truck - any fully or partially open-bodied self propelled vehicle including any non-motorized attachments, such as but not limited to trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle used for transporting bulk material.

High Wind Conditions – when instantaneous wind speeds exceed 25 mph (40 kph).

Inactive Disturbed Surface Area – any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 10 consecutive days.

Microgram (μg) – a metric unit of mass equal to one-millionth of a gram.

Micron - a metric unit of length equal to one millionth of a meter or 1/100th the width of a human hair.

Off-road Vehicle - any self-propelled conveyance specifically designed for off-road use, including not limited to, bulldozers, loaders, excavators, graders, off-road trucks, forklifts, all-terrain vehicles, utility vehicles, snow blowers and portable generator sets. A complete list of off-road vehicles and equipment can be found at the following website:
www.ec.gc.ca/transport/offroad2004/offRoad_full_listing_e.htm

Opacity - the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Open Storage Pile – any accumulation of bulk material with 5% or greater silt content not fully enclosed, covered or chemically stabilized, and attaining a height of three feet or more and a total surface area of 500 or more square feet.

Particulate Matter (PM) – the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Some particles are large or dark enough to be seen as dust or smoke. Others are so small that individually they can only be detected with an electron microscope.

PM_{10}, - particulate matter that is less than 10 microns in diameter.

$PM_{2.5}$ - particulate matter that is less than 2.5 microns in diameter.

Power Take-off Equipment - an accessory that is mounted onto a transmission, allowing power to be transferred outside the transmission to a shaft or a driveline. Some examples of vehicles with power take-off equipment are cement mixers, trucks with hydraulic winches, car carriers, mobile cranes and sewer cleaning trucks.

Porosity –the fabric or materials of the fence/barrier will be greater than 50% of the entire surface area. The holes in the fence/barrier will be less than 50% of the entire surface area.

Practice for Emission Reduction - a pre-emptive or concurrent technique, or procedure to minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust. Example: Driving slowly over unpaved road.

Public Roadway - any roadways that are open to public travel.

Road Construction - the use of any equipment for the paving or new construction of a road surface, street or highway.

Roofing Kettle – A device used to heat and melt asphalt or coal tar pitch so that the asphalt or coal tar pitch can be applied onto a rooftop to provide a protective coating.

Silt – any bulk material with a particle size less than 75 microns in diameter that passes through a Number 200 sieve as determined by the American Society of Testing Materials (ASTM) Test Method C136.

Stabilized – a condition where the soil surface is wet, crusted, covered or otherwise secured, so that dust particles do not become airborne even in high wind.

Stabilized Surface – any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized.

Surfactant – a compound or element that reduces the surface tension of a liquid. The term is used in this document to describe wetting and spray adjuvants designed to promote the economical application of water to hydrophobic soils. Surfactants prevent drifting, decrease run-off, increase the penetrating and wetting properties, and promote more even, consistent spray patterns.

Technology For Emission Reduction – a piece of equipment, substance, device or related contrivance that serves to reduce emissions through its utilization. Example: application of dust suppressants on unpaved roads.

Trackout/Carryout – any and all bulk materials that adhere to and agglomerate on the exterior surface of motor vehicles, haul trucks, and/or equipment (including tires) and that have fallen onto a paved roadway. Material can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

Trackout Control Device - a gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and a paved roadway that controls or prevents vehicular trackout.

Transfer Point – a point in a conveying operation where an aggregate or other similar material is transferred to or from a belt conveyor, except where the material is being transferred to a stockpile.

Unpaved Road – any straight or curved length of well-defined travel way for motor vehicles not covered by one of the following: concrete, asphaltic concrete, or asphalt.

Wind Barrier - any structure put up along a source's boundaries to reduce the amount of wind blown dust leaving the site. Creating a wind barrier includes but is not limited to installing wind fencing, construction of berms, planting trees, or parking on-site equipment so that it blocks the wind.

Wind Fencing - a 1 to 1.5 metre (3 to 5 foot) barrier with 50% or less porosity located adjacent to roadways or urban areas.

Work Practices - a technique or operational procedure used to minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust.

Wheel Shaker – a device capable of spreading the tread on tires and shaking the wheels and axles of vehicles for the purpose of releasing mud, soil and rock from the tires and undercarriage to prevent tracking those materials onto paved surfaces.

Wheel Washer – a station or device, either temporary or permanent, that utilizes a bath or spray of water for the purpose of cleaning mud, soil, and rock from the tires and undercarriage of vehicles to prevent tracking those materials onto paved surfaces.

List of Acronyms

CAC	Criteria Air Contaminants (PM, PM_{10}, $PM_{2.5}$, SOx, NOx, CO, VOC, Ammonia)
CCME	Canadian Council Of Ministers Of The Environment
C&D	Construction and Demolition
CEPA-99	Canadian Environmental Protection Act-1999
C&DWG	Construction and Demolition Multi-stakeholder Working Group
CO	Carbon Monoxide
COH	Coefficient of Haze
CWS	Canada-Wide Standard
EC	Environment Canada
EIA	Environmental Impact Assessment
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse Gas
HEPA	High Efficiency Particulate Arrestor
HVLP	High Volume Low Pressure (Coating spray equipment)
JIA	Joint Initial Actions
kph	Kilometers per hour
KCAC	Keeping Clean Areas Clean
mph	Mile per hour
NOx	Nitrogen Oxides
PAH	Polycyclic Aromatic Hydrocarbons
PM	Particulate Matter
PM_{10}	Particulate Matter Less Than or Equal to 10 Microns in Diameter
$PM_{2.5}$	Particulate Matter Less Than or Equal to 2.5 Microns in Diameter
ppb	Parts Per Billion
ppm	Parts Per Million
SO_2	Sulphur Dioxide
VOC	Volatile Organic Compounds
TPM	Total Particulate Matter
TSP	Total Suspended Particulates
$\mu g/m^3$	Micrograms Per Cubic Meter (A microgram is one-millionth of a gram)
µm	Micron (one-millionth of a meter)

1. Introduction

1.1 Background

Construction and demolition activities emit pollutants that contribute to poor air quality and ground level ozone formation. The major pollutants emitted are particulate matter (PM), volatile organic compounds (VOCs), nitrogen oxides (NO_x) and sulphur dioxide (SO_2). Current emission estimates prepared by Environment Canada show that construction activities represent approximately 20% of total PM_T emissions and 15% of total PM_{10} emissions in Canada. Information on Canada's PM and other Criteria Air Contaminant (CAC) emissions inventories can be found at: http://www.ec.gc.ca/pdb/cac/cac_home_e.cfm.

Extensive scientific studies indicate that there are significant health and environmental effects associated with emissions of PM and other criteria air contaminants. As a result, the Canada-wide Standards (CWS) for PM and Ozone were signed in June 2000 by the Canadian Council of Ministers of the Environment (CCME). The CWS for $PM_{2.5}$ is 30 $\mu g/m^3$ averaged over 24 hours, to be achieved by 2010. The CWS for ozone is 65 ppb averaged over 8 hours, to be achieved by 2010.

Provinces, the territories, and the federal government are committed to emissions reduction in order to achieve all aspects of the CWS in Canada. As a result, the federal government is seeking the assistance of the construction and demolition sector in contributing their share to the emission reductions that have to be achieved in order to meet the CWS in 2010.

Included within the CWS are a series of Joint Initial Actions aimed at reducing PM emissions as well as precursor emissions to PM and ground level ozone. The Joint Initial Action for the construction and demolition sector included the development of a document that reflected the best current dust minimization and suppression methods available for use across Canada by authorities involved with construction and demolition activities.

Since construction and demolition activities are common to most jurisdictions and affect many communities across Canada, Environment Canada established the Construction and Demolition Multi-stakeholder Working Group to assist in the development of this Best Practices document.

1.2 Scope and Applicability

Technologies and work practices contained in this Best Practices document can be applied to reduce emissions from construction and demolition activities. These technologies and practices cover the full spectrum of construction project phases including design, site preparation, fabrication, landscaping, demolition and deconstruction, and renovation.

The focus of the document is on actions that can achieve reductions in PM and VOC emissions. This Best Practices document provides descriptions of a large number of technologies and practices that can address emissions of PM/VOCs, as well as some practices that may lead to reductions in sulphur oxides, nitrogen oxides and greenhouse gas emissions. These technologies/practices include both pollution prevention practices as well as options that control pollution after it has been generated. In the hierarchy of emissions reduction, pollution prevention practices are generally preferable and typically result in lower costs (or higher savings) than control options.

There are issues to take into consideration with respect to implementing the various technologies/practices to achieve PM and VOC emission reductions. These issues can include cost to implement, environmental consequences, and other factors that should be evaluated prior to selecting and implementing emission reduction options. For example, some of the practices to reduce PM emissions (e.g., application of water, dust suppressants) can facilitate the occurrence of other (just as serious) environmental issues. These are discussed further in Chapter 4.

This document should be useful to project owners, designers, managers, foremen, supervisors, contractors, and equipment operators interested in minimizing PM, VOC and other pollutant emissions at project sites. Provincial, municipal as well as federal government authorities concerned with minimizing potential emissions from construction and demolition activities can also use this document as a source of information to identify project-specific options that can be outlined in tender documents, so that all construction firms are bidding on the same scope of work.

1.3 Purpose of the Document

The purpose of this document is to provide a description of technologies and work practices that can reduce emissions associated with construction and demolition activities. Construction organizations and government authorities can evaluate these technologies and work practices in context of project-specific circumstances, which are often unique.

The intent of the document is not for organizations involved with construction and demolition activities to apply all of the technologies and practices described in the document. It is recognized that adoption of all elements of the document would not be economically feasible. Construction organizations, as well as government authorities need to consider economic, environmental, and technical circumstances in choosing the elements of the document that best suit the unique features of each project. Given the broad scope, diverse nature and unique environmental context of each construction project, it is not practical to prescribe in this document the actions and management requirements that should be undertaken for each project site.

1.4 Costs and Savings

Typically, there will be additional costs involved with reducing PM emissions (as well as emissions of other pollutants) from the construction and demolition sector. Since many of the firms within this sector are small to medium in size, operating on thin profit margins, these additional costs can represent a significant financial burden.

However, construction companies in Canada already apply quite a number of work practices to reduce emissions. A recent survey of 17 small and large Canadian construction and demolition firms, by Cheminfo Services, found all were taking actions to reduce PM emissions.

Information related to the costs of achieving emission reductions within the Canadian construction and demolition sector can be found in the following publications available from Environment Canada:

- Cheminfo Services Inc., *Socio-economic Analysis of Emission Reductions in the Canadian Construction Industry*, March, 2005.
- Senes Consultants Ltd., *Foundation Analysis Report for the Canadian Construction and Demolition Sector*, March, 2004.

Construction companies can realize numerous benefits by reducing PM/dust and other pollutant emissions. Benefits may include: improved productivity, reduction in lost-time incidents for employees, improved corporate image and differentiation from competitors, avoided unnecessary involvement with regulators, as well as development and transfer/sale of knowledge and technology.

1.5 Acknowledgements and Further Information

This Best Practices document was developed with input from the Construction and Demolition Multi-stakeholder Working Group and its subcommittees, consisting of industry representatives, government personnel, and environmental non-government organizations (see Chapter 9 for the list of working group members). The contributions of all participants who assisted in developing this Best Practices document are gratefully acknowledged.

Inquiries and comments on this Best Practices document as well as requests for additional copies of the document should be directed to:

Manager, Federal Smog Program
Transboundary Air Issues Branch
Environment Canada
Place Vincent Massey
351 St. Joseph Blvd., 11th Floor
Hull, Quebec K1A 0H3
Fax: (819) 953-8963

2. Preparation of an Environmental Management Plan

2.1 Introduction

The development of a site-specific environmental management plan is recommended before any construction or demolition activities are initiated. An environmental management plan is a way to organize and document:

- the objectives to be achieved;
- the methods to be applied in addressing potential emissions;
- the people responsible for managing and implementing the plan; and
- the records to be maintained that can demonstrate adoption of actions contained in the Best Practices document, as well as compliance with any government environmental requirements.

Environmental management plans can range in size and detail depending upon the scope of the project. Ideally, the environmental management plan should address all pollutants to all media (air, water and soil), as well as management of solid and liquid wastes. It is therefore possible that the environmental management plan for air pollutants may be a component of a broader environmental strategy or even an Environmental Impact Assessment (EIA).

2.2 Contents of the Plan

The plan should first document the size, location, timing, prevailing winds, geographical features, landscape, and nature of the construction activities and relate them to communities and ecosystems that will be sensitive to potential emissions from the site. It is important to identify/recognize the target receptors that are in need of environmental protection from the potential emissions from construction activities. The evaluation and measurement of existing (pre-construction) environmental conditions can serve as a useful baseline of the environmental quality that is to be preserved during the various phases of construction. Prevention and reduction objectives should be documented relative to the anticipated emissions from construction activities to be undertaken. These can be qualitative (e.g., visual, zero neighbour complaints) as well as quantitative (e.g., maximum concentrations in air in or around the site, dust plume height).

The plan should include site-specific design elements, operating practices, specific technologies, products, and equipment that will be applied to prevent or control emissions. Differences in linear and area surface disturbances should be taken into account when identifying dust mitigation measures. In keeping with environmental principles, pollution prevention practices are preferred to controls that contain the pollution after it has been generated. Typically, pollution prevention practices are less costly to implement.

The plan should identify the frequency and duration over which these emission reduction practices are employed (e.g., one day, one week, one month, one year). The plan should also document any measurement, monitoring, and record keeping that will be used during the course of the project. Keeping records will allow construction site owners, managers, and operators to demonstrate compliance with local by-laws, permits, and other government environmental requirements. Records can also be used to show community members the actions that are being undertaken and their effectiveness in preserving the quality of their environment.

2.3 Further Information

To assist in the preparation of an environmental management plan, those within the construction industry are encouraged to obtain and review:

- Canadian Construction Association's, "A Guide on Construction Environmental Management Planning" (http://www.cca-acc.com/documents/ccalist.html).
- Alberta Transportation's, "Environmental Construction Operations Plan (ECO PLAN) Framework (http://www.trans.gov.ab.ca/Content/doctype245/production/eco5.pdf).

3. Index of Actions to Mitigate Emissions from the Construction and Demolition Sector

3.1 Introduction

The construction and demolition sector is a very diverse industry with project sites ranging in size from single family dwelling additions to multi-billion dollar heavy engineering projects. In addition, emissions occur at many different stages during construction and demolition operations, irrespective of the size and scope of the project. These and other factors result in challenges in presenting a Best Practices document that is comprehensive and representative of all potential construction situations, while being reader-friendly and concise.

Many of the work practices and technologies that are identified and described in this Best Practices document can be applied irrespective of the size and scope of the construction and demolition project. For example, most of the actions to address dust emitted from storage piles can be applied at just about any construction site. Therefore, it is useful to identify and describe the practices/technologies contained in this document according to emission sources. This should allow readers to quickly scan the Table of Contents and identify the pages in the Best Practices document where actions to mitigate emissions from specific sources can be found. This presentation also ensures that the Best Practices document is kept concise (i.e., avoids repeating the same practices).

One of the challenges associated with grouping and describing the work practices/technologies by emissions source is that there are some differences between the PM mitigation options that can be utilized by different segments of the industry. For instance, some actions that may be applicable to road construction companies are not relevant for firms that are building residential homes.

It is difficult to identify where these distinctions are located within the Best Practices document when the practices/technologies are grouped by emission source. The Construction and Demolition Multi-stakeholder Working Group recommended that some method be applied to the Best Practices document to allow those in the industry to quickly identify which work practices/technologies are most relevant for their particular operations.

As a result, a series of cross-referenced tables have been prepared and presented in this chapter. These tables enable various construction firms to quickly identify the practices/technologies that are relevant for their operations. The utilization of this approach has allowed the various work practices to be presented in this Best Practices document both by emission source as well as by construction and demolition segment.

3.2 Presentation of Cross-Referenced Tables

The segmentation of the construction industry that has been chosen for this document is as follows:

- Residential Building Construction Operations;
- Industrial, Commercial and Institutional Construction Operations;
- Road-building and Other Heavy Construction Operations; and
- Demolition and Deconstruction.

The work practices/technologies that are relevant for firms within these segments are presented in tables on the following four pages. Note that the use of pollution prevention practices to mitigate emissions are preferred and consequently these options have been bolded in the various tables.

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Table 1: Summary of Practices for Residential Building Construction Operations

Guidance On	Practices to Reduce Emissions	Page
Water Application	**Wide range of practices applied to site preparation, storage, etc.**	9-10
Dust Suppressants	**Wide range of practices applied to site preparation, storage, etc.**	9, 11
Design	**Plan for minimizing dust generation**	12
	Choose building materials to reduce dust generation	12
	Minimize distances travelled for delivery of materials	14
	Use green building materials	14
	Design and construct for maximum energy efficiency	15
Site Preparation	**Grade the construction site in phases**	16
	Utilize wind fencing	16
	Stabilize surfaces of completed earthworks with vegetation	16
	Stabilize earthworks with stone/soil/geotextiles	17
	Create ridges to prevent dust	17
	Compact disturbed soil	17
	Eliminate open burning	17
	Reduce certain activities during windy conditions	18
Storage Piles	**Storage pile activity should be conducted downwind**	18
	Utilize enclosures/coverings for storage piles	18
	Utilize wind fences/screens for storage piles	18
	Use vegetation cover as a wind break	19
	Properly shape storage piles	19
	Properly schedule the delivery of landscaping materials	19
Vehicles and Equipment	Use diesel particulate filters, fuel-borne catalysts, diesel oxidation catalysts	27-28
	Ensure catalytic converters are operating efficiently	28
	Evaluate alternative technologies to reduce emissions	28
	Properly maintain engines and exhaust systems	29
	Use low sulphur diesel	29
	Alternative fuels should be utilized where feasible	29
	Reduce or eliminate idling time	30
	Evaluate alternatives for heat and air conditioning	30
	Minimize cold starts	30
	Evaporative losses should be minimized	31
Asphalt Roofing	**Temperatures of material inside kettles should be minimized**	38
	Close fitting lids on roofing kettles should be used	38
	Kettle should be kept closed	38
	Roofing kettles should be equipped with afterburners	38

Guidance On	Practices to Reduce Emissions	Page
Material Handling & Transfer Systems	**Control mud and dirt trackout and carryout**	19
	Minimize material drop at the transfer point and enclosure	21
	Utilize foam suppression systems	21
	Secure loads on haul trucks	21
	Prevent PM emissions from spills	22
	Minimize material handling operations	22
	Capture fugitive dust emissions	22
	Utilize wind barriers	22
	Reduce certain activities during windy conditions	22
Road Surfaces	**Establish on-site vehicle restrictions**	23
	Surface improvements to unpaved road surfaces	23
	Proper maintenance of unpaved roads	23
	Work practices associated with de-icing materials	23
Fabrication	**Cutting, grinding and drilling**	24
	Avoiding cutting and grinding	24
	Sand and grit blasting and façade cleaning	24
	Concrete cutting	25
	Mixing processes	25
	Internal and external finishing and refurbishment	25
Surface Coatings	**Durable and high performance coatings with a low VOC content should be used**	32
	Minimize emissions from storage, handling & preparation	33
	Minimize coatings wastage through spillage/splashing	34
	Surface to be coated should be properly prepared	34
	Paint heaters should be used instead of paint thinners	34
	Technologically advanced spray-guns should be utilized	34
	Apply correct application techniques	35
	Proper technique should be used when cleaning spray guns	35
	Alternative coating application techniques should be used	36
	Alternative cleaners or low-VOC cleaners should be used	36
	Solvents used for cleaning should be minimized	36
	Paint colour changes should be optimized	36
	Alternative finishing practices should be used	37

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Table 2: Summary of Practices for Industrial, Commercial and Institutional Operations

Guidance On	Practices to Reduce Emissions	Page
Water Application	**Wide range of practices applied to site preparation, storage, etc.**	9-10
Dust Suppressants	**Wide range of practices applied to site preparation, storage, etc.**	9, 11
Design	**Plan for minimizing dust generation**	12
	Choose building materials to reduce dust generation	12
	Minimize distances travelled for delivery of materials	14
	Use green building materials	14
	Design and construct for maximum energy efficiency	15
Site Preparation	**Grade the construction site in phases**	16
	Utilize wind fencing	16
	Stabilize surfaces of completed earthworks with vegetation	16
	Stabilize earthworks with stone/soil/geotextiles	17
	Create ridges to prevent dust	17
	Compact disturbed soil	17
	Eliminate open burning	17
	Reduce certain activities during windy conditions	18
Storage Piles	**Storage pile activity should be conducted downwind**	18
	Utilize enclosures/coverings for storage piles	18
	Utilize wind fences/screens for storage piles	18
	Use vegetation cover as a wind break	19
	Properly shape storage piles	19
	Properly schedule the delivery of landscaping materials	19
Vehicles and Equipment	Use diesel particulate filters, fuel-borne catalysts, diesel oxidation catalysts	27-28
	Ensure catalytic converters are operating efficiently	28
	Evaluate alternative technologies to reduce emissions	28
	Properly maintain engines and exhaust systems	29
	Use low sulphur diesel	29
	Alternative fuels should be utilized where feasible	29
	Reduce or eliminate idling time	30
	Evaluate alternatives for heat and air conditioning	30
	Minimize cold starts	30
	Evaporative losses should be minimized	31
Asphalt Roofing	**Temperatures of material inside kettles should be minimized**	38
	Close fitting lids on roofing kettles should be used	38
	Kettle should be kept closed	38
	Roofing kettles should be equipped with afterburners	38

Guidance On	Practices to Reduce Emissions	Page
Material Handling & Transfer Systems	**Control mud and dirt trackout and carryout**	19
	Minimize material drop at the transfer point and enclosure	21
	Utilize foam suppression systems	21
	Secure loads on haul trucks	21
	Prevent PM emissions from spills	22
	Minimize material handling operations	22
	Capture fugitive dust emissions	22
	Utilize wind barriers	22
	Reduce certain activities during windy conditions	22
Road Surfaces	**Establish on-site vehicle restrictions**	23
	Surface improvements to unpaved road surfaces	23
	Proper maintenance of unpaved roads	23
	Work practices associated with de-icing materials	23
Fabrication	**Cutting, grinding and drilling**	24
	Avoiding cutting and grinding	24
	Sand and grit blasting and façade cleaning	24
	Concrete cutting	25
	Mixing processes	25
	Internal and external finishing and refurbishment	25
Surface Coatings	**Durable and high performance coatings with a low VOC content should be used**	32
	Minimize emissions from storage, handling & preparation	33
	Minimize coatings wastage through spillage/splashing	34
	Surface to be coated should be properly prepared	34
	Paint heaters should be used instead of paint thinners	34
	Technologically advanced spray-guns should be utilized	34
	Apply correct application techniques	35
	Proper technique should be used when cleaning spray guns	35
	Alternative coating application techniques should be used	36
	Alternative cleaners or low-VOC cleaners should be used	36
	Solvents used for cleaning should be minimized	36
	Paint colour changes should be optimized	36
	Alternative finishing practices should be used	37

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Table 3: Summary of Practices for Road-building and Other Heavy Construction Operations

Guidance On	Practices to Reduce Emissions	Page
Water Application	**Wide range of practices applied to site preparation, storage, etc.**	9-10
Dust Suppressants	**Wide range of practices applied to site preparation, storage, etc.**	9, 11
Design	**Plan for minimizing dust generation**	12
	Choose building materials to reduce dust generation	12
	Mitigate traffic congestion	13
	Minimize distances travelled for delivery of materials	14
	Use green building materials	14
	Design and construct for maximum energy efficiency	15
Site Preparation	**Grade the construction site in phases**	16
	Utilize wind fencing	16
	Stabilize surfaces of completed earthworks with vegetation	16
	Stabilize earthworks with stone/soil/geotextiles	17
	Create ridges to prevent dust	17
	Compact disturbed soil	17
	Eliminate open burning	17
	Reduce certain activities during windy conditions	18
Storage Piles	**Storage pile activity should be conducted downwind**	18
	Utilize enclosures/coverings for storage piles	18
	Utilize wind fences/screens for storage piles	18
	Use vegetation cover as a wind break	19
	Properly shape storage piles	19
	Properly schedule the delivery of landscaping materials	19
Vehicles and Equipment	Use diesel particulate filters, fuel-borne catalysts, diesel oxidation catalysts	27-28
	Ensure catalytic converters are operating efficiently	28
	Evaluate alternative technologies to reduce emissions	28
	Properly maintain engines and exhaust systems	29
	Use low sulphur diesel	29
	Alternative fuels should be utilized where feasible	29
	Reduce or eliminate idling time	30
	Evaluate alternatives for heat and air conditioning	30
	Minimize cold starts	30
	Evaporative losses should be minimized	31
Hot Mix Asphalt Production	**Maintenance, inspections, calibration, low-sulphur fuels**	31-32
Asphalt Concrete Paving	**Minimization of cutback and emulsified asphalts, other options**	37

Guidance On	Practices to Reduce Emissions	Page
Material Handling & Transfer Systems	**Control mud and dirt trackout and carryout**	19
	Minimize material drop at the transfer point and enclosure	21
	Utilize foam suppression systems	21
	Secure loads on haul trucks	21
	Prevent PM emissions from spills	22
	Minimize material handling operations	22
	Capture fugitive dust emissions	22
	Utilize wind barriers	22
	Reduce certain activities during windy conditions	22
Road Surfaces	**Establish on-site vehicle restrictions**	23
	Surface improvements to unpaved road surfaces	23
	Proper maintenance of unpaved roads	23
	Work practices associated with de-icing materials	23
Fabrication	**Cutting, grinding and drilling**	24
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	Sand and grit blasting and façade cleaning	24
	Concrete cutting	25
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	Internal and external finishing and refurbishment	25
Surface Coatings	**Durable and high performance coatings with a low VOC content should be used**	32
	Minimize emissions from storage, handling & preparation	33
	Minimize coatings wastage through spillage/splashing	34
	Surface to be coated should be properly prepared	34
	Paint heaters should be used instead of paint thinners	34
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	Apply correct application techniques	35
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Table 4: Summary of Practices for Demolition and Deconstruction Operations

Guidance On	Practices to Reduce Emissions	Page
Water Application	**Wide range of practices applied to site preparation, storage, etc.**	9-10
Dust Suppressants	**Wide range of practices applied to site preparation, storage, etc.**	9, 11
Storage Piles	**Storage pile activity should be conducted downwind**	18
	Utilize enclosures/coverings for storage piles	18
	Utilize wind fences/screens for storage piles	18
	Use vegetation cover as a wind break	19
	Properly shape storage piles	19
Material Handling & Transfer Systems	**Control mud and dirt trackout and carryout**	19
	Minimize material drop at the transfer point and enclosure	21
	Utilize foam suppression systems	21
	Secure loads on haul trucks	21
	Prevent PM emissions from spills	22
	Minimize material handling operations	22
	Capture fugitive dust emissions	22
	Utilize wind barriers	22
	Reduce certain activities during windy conditions	22
Road Surfaces	**Establish on-site vehicle restrictions**	23
	Surface improvements to unpaved road surfaces	23
	Proper maintenance of unpaved roads	23
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Guidance On	Practices to Reduce Emissions	Page
Demolition and Deconstruction	**Apply deconstruction techniques**	26
	Minimize drop heights for debris	26
	Enclose chutes and cover bins	26
	Use fogging systems	26
	Barriers to prevent dispersion	26
	Avoid blasting when feasible	26
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Vehicles and Equipment	Use diesel particulate filters, fuel-borne catalysts, diesel oxidation catalysts	27-28
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	Evaluate alternative technologies to reduce emissions	28
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	Evaluate alternatives for heat and air conditioning	30
	Minimize cold starts	30
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4. Using Water and Chemical Dust Suppressants at Construction Sites

4.1 Introduction

There are numerous PM emission sources at construction sites where water and various chemical dust suppressants can be applied in order to reduce emissions. For instance, water/dust suppressants can be applied to mitigate fugitive dust from site preparation, storage piles, materials handling and transfer, unpaved roads, etc. The discussion related to the utilization of these dust control options has been confined to this chapter. This serves to reduce the length of the Best Practices document and also makes the document more reader-friendly.

The application of water is typically the most common dust control method that is employed by construction companies across Canada. Practically all construction companies that are implementing options to reduce dust are applying water to mitigate dust generation from at least one emission source on their construction site. Water can be applied by a variety of methods, for instance trucks, water pulls, water canons, hoses, fire hydrants, sprinklers, etc.

A variety of chemical dust suppressants are available to suppress fugitive dust emissions from construction sites. While being more expensive that water, they are also more effective in suppressing dust and have to be applied much less frequently. Examples of dust suppressants include the following: (i) liquid polymer emulsions (ii) agglomerating chemicals (e.g., lignosulfonates, polyacrylamides); (iii) cementitious products (e.g., lime-based products, calcium sulphate); (iv) petroleum based products (e.g., petroleum emulsions); and (v) chloride salts (e.g., calcium chloride and magnesium chloride).

While the application of water and chemical dust suppressants are proven and effective options for mitigating dust, they have to be applied judiciously. Their usage, while mitigating dust, can trigger other (just as serious) environmental consequences. It is important to keep these environmental consequences in mind when deciding on the extent to which water and chemical dust suppressants are to be utilized.

4.2 Factors to Consider

The following potential environmental impacts of applying chemical dust suppressants must be taken into consideration before application:

- the hazardous, biodegradable and water-soluble properties of the substance;
- the effect their application could have on the surrounding environment, including water-bodies (e.g., surface water pollution from runoff, contaminated ground water, pH) and wildlife (e.g., fisheries); and
- whether the use of chemicals has been limited due to nearby watershed considerations for protection of fish and fish habitat from surface runoff.

There are potential environmental consequences resulting from the over-application of water that must be considered. These include: runoff problems; soil instability; spreading of contaminants in the environment (e.g., oil or coolant from engines), and erosion. In addition, consideration should be given to water conservation or water allocation limitations in areas where construction occurs.

The over-application of water can also lead to equipment mobility problems and reduce the ability of earth-moving equipment to efficiently move saturated soils. If the moisture contents of soils used in construction are sufficient, water may not always need to be added prior to handling, crushing, etc.

Table 5: Guidance on Applying Water at Construction Sites

Stage	Guidance on the Application of Water
Site Preparation	• Water may be applied prior to earthmoving activities to increase the moisture content of the soils thereby increasing their stability. The pre-application of water may be to the depth of the proposed cuts or equipment penetration. The area should continue to be pre-wetted if it is not moist to the depth of the cut. • After grading the construction site, water should be applied within active earth-moving areas at sufficient frequency and quantity to prevent visible emissions from extending more than 30 meters from the point of origin. Schedule thorough and consistent watering that does not run off the site throughout the duration of the construction project. At the end of each workday, water trucks may treat all exposed areas to create a stabilizing crust on the soil. Water may also be applied at the end of the day to soak the next day's work area. Water may be applied into the backfill material until the optimum moisture level is reached. • Water may be applied continuously in front of earthmoving equipment by means of water truck/water pull. If the soil is dry, the earthmoving equipment should cease further disturbance when the water truck/water pull runs out of water and should not resume until the water truck/water pull is operational again. Optimally, one water truck may work for every 1-3 pieces of heavy earthmoving equipment that are in operation, depending on soil and weather conditions (if practical). • Water may be applied on a daily basis to all inactive disturbed surface areas, where there has been no activity for seven days or more days. Water may be applied with sufficient frequency to prevent visible emissions (at least every 2 hours). Automatic sprinkler or spray bar systems are optimal in these areas. • Construction sites should employ a sufficient number of water trucks and have back-up water trucks available if the site experiences dust control problems. • Perimeter watering system or fence line misting consisting of portable irrigation equipment may be applied to mitigate dust impacting surrounding residences and businesses.
Storage Piles	• For some materials, hard crusts can be built-up on storage piles by application of water. Crusts reduce the dust blown off the storage piles. Care is required to avoid application of water to a degree that may erode or settle the fines to the bottom of the pile. • Water may be applied to at least 80% of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust. • Storage piles that are greater than 2.5 metres (8 feet) in height and not covered may have a road bladed to the top to allow water truck access or should have an operational water irrigation system that is capable of complete stockpile coverage (water truck access on large volume aggregate storage piles is unrealistic).
Material Handling and Transfer Systems	• Material to be transported may be mixed with water prior to loading and/or the entire surface area of material may be watered after loading. Water should be available while loading and unloading in order to prevent visible dust plumes. • Material may be tested to determine moisture content and silt loading. Only materials that have optimum moisture content should be crushed or screened. • Materials may be sprayed with water 15 minutes prior to handling and/or at points of transfer. • Water may be applied at the feed and/or intermediate points in the conveyor system as needed. • Washing separated or screened materials are effective in controlling fugitive dust emissions from chutes and conveyors. • Hollow cone nozzles are believed to produce the greatest control while minimizing clogging when using wet suppression systems. Optimal droplet size for surface impaction and fine particle agglomeration is about 500 µm - finer droplets are affected by drift and surface tension and appear to be less effective. • Application of water sprays to the underside of a conveyor belt improves the performance of wet suppression systems at belt-to-belt transfer points.
Road Surfaces	• Water may be applied to all unpaved roads used for vehicular traffic at least once per every two hours of active operations (i.e., 3 times per normal 8 hour working day). If the area is inaccessible to water trucks due to slope conditions or other safety factors, watering may be conducted with hoses or sprinkler systems. Runoff should be controlled so it does not saturate the surface of the unpaved haul road, therefore increasing the potential of trackout. • Control efficiency of water depends on: (i) amount (per unit road surface area) of water added during each application; (ii) period of time between applications; (iii) weight, speed and number of vehicles traveling over the watered road during the period between applications; and (iv) metrological conditions that affect evaporation.
Demolition and Deconstruction	• Water may be applied at the following times/locations in order to minimize dust generation: (i) the exterior of building surfaces prior to initiating demolition activities as well as continuously during the knock down phase. It has been suggested that all exterior surfaces of the building, up to six stories in height (where feasible), may be wetted before and during the use of the wrecking ball; (ii) debris pile immediately following blasting and as needed afterwards; (iii) debris during handling and haulage operations; (iv) the surrounding surface area following demolition; (v) unpaved road surfaces within 30 meters of the demolition site, 1 hour prior to the actual demolition; and (vi) unpaved surface areas where equipment will operate.

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Table 6: Guidance on Applying Dust Suppressants/Chemical Stabilizers

Stage	Guidance on the Application of Dust Suppressants/Chemical Stabilizers
Site Preparation	• Chemical stabilizers may be applied to graded areas within 5 working days of grading completion. In addition, if an area having 0.2 hectares or more of disturbed surface area remains unused for 7 or more days, the surface area should be stabilized. Chemical stabilizers are generally only effective in areas that are not subject to daily disturbances. Vehicle traffic and disturbance of stabilized soils should be limited through the use of fencing, ditches, barriers, barricades and/or wind barriers. • Chemical stabilizers should be applied according to the manufacturers specifications. • The effectiveness and longevity of chemical stabilizers can be affected by the rate of application, soil pH, moisture levels in the air or soil, amount of sunlight, plant growth and traffic. • Construction operators may consider the addition of water-soluble surfactants to water. These surfactants increase the wetting power of water by breaking down the initial resistance of dry soils to water. Surfactants are relatively inexpensive and greatly decrease the amount of water necessary during dust control operations.
Storage Piles	• Disturbed areas of a construction site, including storage piles of fill dirt and other bulk materials, that are not being actively utilized for construction purposes for a period of 7 calendar days or more, should be stabilized with a chemical dust stabilizer or suppressant. • A much more effective technique (than applying water to the storage pile) is to apply chemical agents (such as surfactants) directly to the storage pile, which permit more extensive wetting. Surfactants allow particles to more easily penetrate the water droplet and increase the total number of droplets, thus increasing total surface area and contact potential. • Foam can be used instead of chemical surfactants to reduce fugitive dust emissions from storage piles (as well as material handling operations). Foam is generated by adding a chemical (i.e., detergent-like substance) to a relatively small quantity of water that is then vigorously mixed to produce small bubbles, high-energy foam.
Material Handling & Transfer	• Dust suppressants should be applied and maintained prior to and after to stabilize screened materials and surrounding area after screening. • Material being transported in a vehicle should be sprayed with a dust suppressant.
Road Surfaces	• The control effectiveness of chemical dust suppressants depends on: (i) the dilution rate used in the mixture; (ii) the application rate (volume of solution per unit road surfaced area); (iii) the time between applications; (iv) the size, speed and amount of traffic during the period between applications; and (v) meteorological conditions (rainfall, freeze/thaw cycles, etc.) during the period. • Chemical dust suppressants have much less frequent reapplication requirements as compared to water. • Dust suppressants are generally applied to the road surface as a water solution and should be uniformly applied to all areas disturbed by vehicles. When used to stabilize heavily trafficked areas, dust suppressants typically require ground preparation prior to application and reapplication 1-4 times a year to remain effective. • Because most chemical products need to soak into the soil, they generally require above-freezing temperatures to work (exceptions include magnesium chloride and calcium chloride). Calcium chloride and magnesium chloride are the most commonly used dust suppressants for unpaved roads. Proper road surface preparation, grading and scarification is required before applying calcium chloride or magnesium chloride. It should be noted that calcium chloride and magnesium chloride use may be restricted in certain areas by municipal or provincial authorities. Environment Canada's *Best Practices For The Use And Storage Of Chloride-Based Dust Suppressants*, (March 2004) provides guidance on the application of chloride-based dust suppressants. • For greatest effectiveness and lowest cost it is important to follow the manufacturer's instructions for mixing and applying these chemicals. • PVA polymers, acrylic copolymers, and water-emulsified petroleum resins, etc. can also be used to mitigate dust generation on unpaved roads. • Surfactants can be added to the watering operation to increase fugitive dust control. Surfactants are agents that break the surface tension of the water that allows for better penetration and saturation of the soil particles.
Demolition and Deconstruction	• Dust suppressants/chemical stabilizers may be applied during the following situations: (i) unpaved surface areas within 30 meters (100 feet) where materials from demolition will fall; (ii) debris piles immediately following blasting and periodically afterwards; (iii) the surrounding area following demolition; and (iv) unpaved surface areas where equipment will operate.

5. Design Considerations to Reduce Emissions from Construction and Buildings

5.1 Introduction

Proper planning during the design stage of construction projects can effectively reduce emissions generated during construction and lifecycle emissions. Suitable design can also minimize emissions during demolition or deconstruction. Design considerations to reduce emissions associated with construction projects include the following:

- site planning;
- building materials used;
- minimizing vehicle traffic congestion;
- minimizing distances travelled for delivery of construction materials;
- utilizing "green" building materials; and
- constructing buildings to maximize energy efficiency.

5.2 Plan for Minimizing Dust Generation

Site planning should be conducted in order to maximize construction efficiency and consequently minimize emissions. The layout of the construction site should be designed to minimize fugitive dust generation potential, including access roads, entrances and exits, storage piles, vehicle staging areas, and other potential sources of dust emissions.

One of the most critical design considerations that should be implemented is to develop a site dust management plan. The dust management plan should identify potential fugitive emission sources from the construction operation. This can be accomplished by starting with a facility site map. All paved haul roads, unpaved haul roads, stockpiles, material transfer points, material conveyances, parking lots, staging areas, and other open areas subject to wind erosion should be identified on the map. The prevailing wind direction should also be identified on the map.

Daily traffic volumes should be studied in order to determine whether roads and open areas are used frequently or occasionally. Daily routine traffic modifications should be considered that will reduce traffic in some areas or eliminate it altogether. The appropriate dust control method for each source identified on the map should be determined. For each source and each control method identified, the frequency of application should be defined. A self-inspection checklist should be prepared in order to be able to record the scheduled applications.

Other site planning considerations that can serve to reduce dust generation during the construction project, include the following:

- before construction operations are initiated, a survey should be conducted that assesses materials/tools/equipment to be used/handled. Decisions can then be make with respect to appropriate materials/tools/equipment that will serve to minimize dust generation; and
- infrastructure repair and maintenance should be co-ordinated – e.g., water, sewer and electrical underground work should be carried out in sequence rather than having to dig up and repave the road several times.

Sensitive receptors in the area (e.g., schools, hospitals, wildlife in urban areas, etc.) that require environmental protection from dust generation should be identified and taken into consideration when designing dust mitigation strategies.

5.3 Choose Building Materials to Reduce Dust Generation

The proper choice of building materials to be used at construction sites can serve to reduce the generation of fugitive dust during the construction phase as well

as during the lifetime of the structure. Pre-fabricated materials and modular construction units should be used whenever possible. These units are delivered to the construction site in a finished state, which reduces the amount of cutting, grinding, etc. (and consequently on-site dust emissions) that is required at the construction site. Potential emissions at the factory where the pre-fabricated materials/modular construction units are made should be suitably addressed through effective pollution control measures. It is easier to implement emission reductions at large enclosed permanent facilities than at open construction sites.

Examples of pre-fabricated components include pre-mixed brick mortar, exterior wall systems and shot-crete. Shot-crete is a concrete product sprayed in place for footings on buildings. Shot-crete can be mixed on-site or premixed and delivered to the site ready for use. Using pre-mixed shot-crete reduces the emissions associated with its preparation on site. This can involve emissions associated with storage, handling and mixing of cement and aggregates. The use of modular components (e.g., walls that can be dismantled) minimizes waste and dust generated during retrofits of a floor or deconstruction of the building.

Improving construction quality increases the service life of buildings and other constructed structures. This reduces the need for maintenance, rehabilitation and reconstruction of structures. Often rehabilitation and reconstruction can produce more emissions than the original construction. Therefore, improving construction quality provides numerous lifecycle emissions benefits.

New developments in material science and their applications continue to provide opportunities for construction operations to reduce emissions. Continual improvements are being made to the quality and durability of construction materials. Increased material durability results in extended service life of structures, pavements, etc. and consequently reduced lifecycle emissions (as less frequent repairs and replacement of materials is required as well as the fact that the overall structure will last longer). The most advanced construction materials should be used, whenever possible, in construction projects.

Many North American jurisdictions are promoting the use of recycled materials. Currently, several existing material specifications, including asphalt, concrete, and granular, allow for partial incorporation of recycled material. Material specifications should require that the contractor use a greater percentage of recycled material for some construction operations including hot mix paving and resurfacing, concrete structures and general concrete construction, and the construction of granular base and ‘shouldering’ operations. Fly-ash (by-product of coal combustion at electric power generation stations) which is used as a replacement for Portland cement in ready-mix concrete can also result in reduced lifecycle emissions as it reduces the amount of Portland cement that has to be produced.

All of these options can result in reduced lifecycle emissions. It should be noted that care must be exercised to ensure that the increased use of recycled material does not result in reduced stability and safety of structures.

When designing walls, standard dimensions should be incorporated to match standard dimension modules. This reduces the amount of material cutting and related dust emissions. For dry wall systems, “dustless” filler compound is available to joint filling. This reduces the amount of dust generated during sanding of joints.

5.4 Mitigate Traffic Congestion

Traffic delays result from road closures, lane closures, and lane narrowing which cause vehicle speed reduction on roads and highways. Delays result in increased emissions from vehicle engines travelling slowly through the construction zone. Options to consider that increase traffic flow and thereby mitigate potential emissions are: adding a new lane on the shoulder; carrying out activities one lane at a time; and re-routing traffic.

Rapid on-site construction would reduce the duration of traffic interference and therefore reduce emissions from traffic delay. Several strategies have been investigated by the U.S. Transportation Research Board to reduce the duration of on-site road construction. In addition to ways of improving production rates, off-site fabrication of structures

such as bridges also reduce on-site construction time. Off-site fabrication of structural components can also enhance the quality of work, as the production takes place in controlled settings and external factors such as weather and traffic do not interfere. Enhanced structural quality will result in extended lifecycle of structures and thus result in reduced lifecycle emissions.

5.5 Minimize Distances Travelled for Delivery of Materials

The delivery of materials such as concrete, asphalt and aggregates to construction sites can generate significant amounts of road dust and result in increased vehicle emissions, especially for sites that are relatively far from material manufacturers. Some material deliveries can be eliminated by establishing temporary, portable concrete and/or asphalt plants, located on construction sites. This practice may be feasible for large-size projects that require substantial quantities of these materials. However, in many cases these portable plants will not be feasible due to the costs involved (e.g., installation, permitting, etc.). Establishing temporary plants would reduce the number of transport trucks travelling on public and on-site roads.

5.6 Use Green Building Materials

Green building materials should be selected whenever possible in order to reduce emissions associated with the lifecycle of the building. Alternative paints, flooring, windows, insulation, walls, and other construction materials should be evaluated. There is an extensive amount of information on green building materials located on the internet. The following sites can be accessed to help identify green building materials that are most applicable and appropriate for specific construction activities:

- Canadian Green Building Council (http://www.cagbc.org/);
- Leadership in Energy and Environmental Design (LEED Canada) (http://www.cagbc.ca/building_rating_systems/leed_rating_system.php);
- Canadian Construction Association's Green Building Resource Centre (http://www.cca-acc.com);
- Athena Sustainable Materials Institute (http://www.athenasmi.ca/)
- Master Painters Institute (http://www.paintinfo.com/mpi/)
- Canadian Mortgage and Housing Corporation Healthy Housing (http://www.cmhc.ca/en/imquaf/hehosu/index.cfm)
- Green Globes Canada http://www.greenglobes.com/design/homeca.asp
- U.S. Green Building Council (http://www.usgbc.org/);
- Leadership in Energy and Environmental Design (LEED U.S.) (http://www.usgbc.org/LEED/LEED_main.asp).
- Environmental Choice Program (www.environmentalchoice.com)

5.6.1 Choosing Road Surface Type

The best road surface for reduction of emissions depends largely on the situation (the type of surface put on a road, such as gravel, chip seal, or concrete, is based on the level of traffic and amount of heavy loads carried). Different surface types require different amounts of aggregate materials as a base (concrete pavement structures have less aggregate than asphalt structures). Proximity of aggregate materials also plays a role in the cost of the pavement structure and potentially on the pavement chosen. The amount of digging and earth moving also varies according to road surface type. Less subgrade width is normally required for a concrete pavement than an asphalt pavement. In addition, less blasting is required due to the narrower subgrade.

5.7 Design and Construct for Maximum Energy Efficiency

There are many opportunities to improve the energy efficiency of buildings and consequently reduce their lifecycle emissions (e.g., selection of appliances, heating and cooling, home electronics, lighting, office equipment, etc.). The following resources should be accessed in order to identify additional information:

- The Canadian *Model National Energy Code for Buildings* is a model energy efficiency code published in September 1997 by the National Research Council of Canada (NRCC). The code sets minimum energy efficiency standards for commercial building construction in Canada. Details on how to obtain the *Model National Energy Code for Buildings* can be found at http://irc.nrc-cnrc.gc.ca/catalogue/energy2.html.
- The Model National Energy Code of Canada for Houses provides assistance in designing energy-efficient housing that minimize air-conditioning and heating bills given construction cost trade-offs. This code applies to single family houses of three story's or less, and to additions of more than $10m^2$. Details on how to obtain the Model National Energy Code of Canada for Houses can be found at: http://irc.nrc-cnrc.gc.ca/catalogue/energy1.html.
- Natural Resources Canada's R-2000 Program promotes the use of cost-effective energy-efficient building practices and technologies. (http://oee.nrcan.gc.ca/r-2000/).

6. Reducing Fugitive Dust Emissions From Construction and Demolition Sites

6.1 Introduction

This section of the Best Practices document identifies and describes various technologies and work practices that can be applied to minimize fugitive dust emissions during construction and demolition activities. The various actions have been described under the following construction activities that generate fugitive dust emissions:

- Site preparation;
- Storage piles;
- Material handling and transfer systems;
- Road surfaces;
- Fabrication processes; and
- Demolition and deconstruction.

6.2 Site Preparation

Site preparation steps such as earthworks, excavation, soil stripping, clearing and grubbing, earthmoving and landscaping, can result in significant dust emissions, especially during dry weather periods and particularly if followed by high winds. Outlined below are various work practices and technologies that may be employed prior to, during and after the site preparation process in order to minimize dust emissions.

6.2.1 Grade the Construction Site in Phases

Each area of the construction site should be graded separately (i.e., not all at once), timed to coincide with the actual construction in that area. This allows vegetation and cover to remain intact within the construction zone, until just prior to construction occurring on that segment of the construction site. Construction should be started at the location that is upwind from the prevailing wind direction. Phasing is considered to be especially critical for project sites greater than 40 hectares in size.

6.2.2 Utilize Wind Fencing

Permanent perimeter or temporary interior fencing should be installed within construction sites as early in the construction operation as possible. Detailed guidance on wind fencing includes the following:

- One to two-meter barriers with 50% or less porosity, berms or equipment should be located adjacent to roadways or urban areas.
- The bottom of wind fences should be sufficiently anchored to the ground to prevent material from blowing underneath the fence.
- Barriers placed at right angles to prevailing wind currents at intervals of 15 times the barrier height are suggested to be the most effective in controlling wind erosion.
- Windbreaks and fabric fences should be maintained in an upright and functional condition at all times until no longer needed.
- All accumulated material on the windward side of the windbreak should be periodically removed to prevent failure of the windbreak.

Examples of wind fencing include: trees or shrubs left in place during site clearing; sheets of plywood; wind-screen material such as that used around tennis courts; snow fences; hay bales; crate walls; sediment walls; burlap fences; etc. Block walls, if part of the final project, can replace wind fencing during the site construction phase.

6.2.3 Stabilize Surfaces of Completed Earthworks with Vegetation

Surfaces of completed earthworks (including landscaping) should be re-vegetated (i.e., seeded and mulched) within 10 days after active operations have ceased.

Ground cover should be of sufficient density to expose less than 30% of un-stabilized ground within 90 days of planting, and all times thereafter. Such restoration control measure(s) should be maintained

and reapplied, if necessary, so that a stabilized surface is formed within 8 months of the initial application. Ground cover should be established prior to final occupancy. The area should be restored such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions (e.g., reseed using native grasses). Care must be taken to avoid introducing or promoting the spread of noxious weeds and plants. Prevent motor vehicle and/or off-road vehicle trespassing, parking, and/or access, by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.

Temporary seeding and mulching may be applied to cover bare soil and to prevent wind erosion. The soil must be kept moist to establish cover. Mulch can protect the soil surface until newly seeded vegetation can take over and improves the chance of getting a good grass stand quickly. Some types of mulch require tilling to integrate them into the upper layer of soil, if they are to be effective in dust control. Light mulches such as straw should be tacked in place, either mechanically or by application of a chemical tacking agent. Areas to be reseeded should be mulched as described below:

- Hay mulch – perennial native or introduced grasses of fine-stemmed varieties should be used. At least 65% of the herbage by weight of each bale of hay should be 10 inches long in length or longer. Rotted, brittle or mouldy hay are not acceptable. Hay should be properly cured prior to use. Hay that is brittle, short fibered or improperly cured is not acceptable. Hay mulch should be crosshatched crimped to a minimum depth of two inches.
- Straw mulch – small grain plants such as wheat, barley, rye or oats should not be used. Alfalfa or the stalks of corn, maize or sorghum are not acceptable. Material which is brittle, shorter than 10 inches or which breaks or fragments during the crimping operation are not considered acceptable. Straw mulch should be crosshatched crimped to minimum depth of two inches.
- Gravel mulch –should be a maximum of three quarters to one inch in diameter and must have been crushed or screened with a minimum of one angular face.

It is recommended that existing trees and large shrubs (and other live perennial vegetation) be allowed to remain in place to the greatest extent possible during site grading processes. Perimeter vegetation should be planted early.

6.2.4 Stabilize Surfaces of Completed Earthworks with Stone/Soil/Geotextiles

The following materials may be used to stabilize surfaces, when re-vegetation is not possible (e.g., highly erodible soils):

- Stone (coarse gravel or crushed stone) can be an effective dust deterrent. The sizes of the stone can affect the amount of erosion that takes place. In areas of high wind, small stones are not as effective as large stones (e.g., 8 inches).
- Topsoil uses less erodible soil material placed on top of highly erodible soils.
- Geotextiles can be used on graded sloped surfaces to prevent wind and water erosion.

6.2.5 Create Ridges to Prevent Dust

A disk or other implement may be run on contours of slopes to disturb the soil and leave ridges as well as bring clods of soil to the surface. These ridges deflect and raise wind 5 or 6 inches above the soil surface. Plowing should begin on the windward side of the site using chisel-type plows spaced about 12 inches apart, spring tooth harrows, or similar plows.

6.2.6 Compact Disturbed Soil

Disturbed soil may be compacted with rollers or other similar equipment in order to reduce the erosion potential of the area.

6.2.7 Eliminate Open Burning

Open burning of vegetative waste or other burn materials (e.g., trash, demolition debris, etc.) should not be carried out at the construction site. Open burning is typically prohibited because it can cause air pollution that is harmful to human health and the environment, and endanger property. Waste materials disposed of via open burning typically consist of plastics, other synthetics and chemicals. The low-temperature burning of these materials leads to incomplete combustion and emissions of several

toxics. In addition, emissions from open burning are highly concentrated.

Municipalities have preferred management approaches to vegetative waste depending on local circumstances. These can include mulching, firewood, resale for cost recovery, used at waste to energy facilities, etc. Operators should determine local preferences for addressing vegetative waste and ensure that this approach reduces dust generation.

During site clearing, vegetative material may be chipped and then stored for subsequent use as cover material for vehicle access lanes or storage piles.

6.2.8 Where Possible, Reduce Certain Activities During Windy Conditions

During times of windy conditions, where feasible, construction operations that generate greater levels of dust may be avoided or reduced. Instead, these activities can be conducted when more favourable weather conditions occur. Increased application of other dust suppressant techniques may also be considered in times of very windy weather.

6.3 Storage Piles

Several work practices can be employed to mitigate fugitive dust emissions resulting from storage piles. These work practices primarily reduce the exposure of storage piles to wind.

6.3.1 Storage Pile Activities Should be Conducted Downwind

Storage pile activity (i.e., loading and unloading) should be confined to the downwind side of the storage pile. This practice applies to areas around the storage pile as well as the pile itself. Storage piles should also be located away from downwind site boundaries.

6.3.2 Utilize Enclosures/Coverings for Storage Piles

Enclosures or the covering of inactive piles are effective in reducing wind erosion and controlling fugitive dust emissions from storage piles. Enclosures can either fully or partially enclose the source. Examples of enclosures used for reducing fugitive dust emissions from storage piles include:

- three-sided bunkers that are at least as high as the stockpiled materials. The sides' length must be no less than equal to the length of the pile; the sides distance from the pile must be no more than twice the height of the pile; the sides height must be equal to the pile height; and the material of which the sides are made must be no more than 50% porous;
- storage silos (in lieu of open piles). Bulk cement, bentonite and similar fine dry materials (e.g., less than 3 millimetres in particle size) should be stored in silos. Silos should be equipped with particulate matter emission control technology (e.g., fabric filters); and
- open-ended buildings or completely enclosing the pile within a building furnished with particulate matter emission control technology.

Tarpaulins, plastic, or other material can also be used as a temporary covering. When these temporary coverings are used, they should be anchored to prevent the wind from removing them. Small or short-term inactive storage piles should be enclosed or kept under sheeting while larger inactive storage piles should be shrouded, capped or grassed over. For example, turf removed early in the construction project may be re-used to grass over long-term inactive storage piles. It should be noted that enclosures/coverings may not be suitable under certain conditions.

6.3.3 Utilize Wind Fences/Screens for Storage Piles

Porous wind fences/screens provide an area of reduced wind velocity that reduces wind erosion potential and fugitive dust emissions from the exposed surface on the leeward side of the fence/screen. Wind fences/screens reduce the turbulence generated by ambient winds in an area the length of which is many times the physical height of the fence. It should be noted that wind fences/screens may not be suitable under certain conditions.

Wind fences/screens can either be man-made structures (e.g., wind fences, berms, parking construction equipment in a position to block the wind) or vegetative (see below) in nature and are

considered to be very cost effective since they incur little or no operating and maintenance costs.

The level of emission reductions achieved with wind fences/screens depends upon the physical dimensions of the fence relative to the source being controlled (e.g., storage pile). The length of the wind fence/screen should be no less than the length of the pile and the height must be equal to or greater than the height of the pile.

A vertically-abrupt barrier will provide large reductions in velocity for relatively short leeward distances, whereas porous barriers provide smaller reductions in velocity but for more extended distances. If complete control is desired, then barriers must be placed at frequent intervals. In addition, the direction of wind influences the size and location of the protected areas. The area of protection is greatest for winds perpendicular to the barrier length and least for winds parallel with the barrier.

A porosity (i.e., percent open area) of 50% achieves optimum results for most applications. The porosity can be achieved by vertical or horizontal slatting or by a mesh structure, as long as the element size is no more that about a fifth of the fence height. Some research has indicated that for a small soil storage piles, a screen length of five times the pile diameter, a screen to pile distance of twice the pile height and a screen height equal to the pile height is optimal.

In addition to storage piles, wind fences/screens can be used to mitigate fugitive dust emissions from a wide variety of other fugitive dust sources (e.g., variety of exposed areas, materials handling operations, etc.). Since fences and screens can be portable, they are therefore capable of being moved around the site, as needed.

6.3.4 Use Vegetation Cover as a Wind Break

Vegetation can be grown on and around storage piles in order to mitigate fugitive dust emissions. Vegetative cover that can act as a windbreak may consist of perennial grass, trees or shrubs in 1 to 10 rows. One, two, three, and five-row barriers of trees are found to be the most effective arrangement for planting to control wind erosion. The type of tree species planted also has considerable influence on the effectiveness of a windbreak. In arid and semiarid regions where rainfall is insufficient to establish vegetative cover, mulching may be used to conserve moisture, prevent surface crusting, reduce runoff and erosion, and help establish vegetation.

Storage piles can also be situated in order to take advantage of existing landscape features and vegetation, which can act as a windbreak.

6.3.5 Properly Shape Storage Piles

Storage piles should be maintained so that they do not have steep sides or faces. In addition, sharp changes of shape in the final storage pile should be avoided. The disturbance of storage piles should also be minimized where feasible.

6.3.6 Properly Schedule the Delivery of Landscaping Materials

Material should not be ordered unless it will be used shortly after delivery. This will minimize storage time and reduce the potential for emissions.

6.4 Material Handling and Transfer Systems

There are many actions that can be employed to mitigate dust emissions resulting from material handling and transfer operations such as crushing, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyor bagging operations, storage bins, and fine product truck and railcar loading operations.

6.4.1 Control Mud and Dirt Trackout and Carryout

Mud and dirt trackout/carryout from construction sites can account for a temporary but substantial increase in paved road emissions in many areas. Elimination of trackout/carryout can thus significantly reduce paved road emissions. There are several techniques that can be employed to remove material from truck underbodies and tires prior to leaving the site as well as techniques to periodically remove mud/dirt trackout/carryout from paved streets at the access point(s).

6.4.1.1 Street Cleaning

The accumulation of mud, dirt or similar debris that is deposited on paved roads (including shoulders) adjacent to the site should be removed. This cleaning should occur at the end of each workday, or at a minimum of once every 24 hours when operations are occurring. In urban areas, this cleaning should be undertaken immediately if the trackout/carryout extends more than 10 metres (33 feet) onto the paved public road. If the trackout/carryout extends less than 10 metres, clean up should occur at the end of the workday. In addition to public roads that are located outside of the construction site, accumulated mud and dirt should also be frequently removed from the paved interior roads to prevent trackout/carryout onto the paved public roadway.

The recommended street cleaning can be conducted by: manually broom sweeping and picking up material; rotary brush or broom accompanied with or preceded by sufficient wetting; vacuum sweeping; water flushing; and water sweeper. If wet systems are used, the runoff should be controlled so it does not saturate the surface of the adjacent unpaved haul road.

Vehicle waiting areas should also be regularly inspected and kept clean by brushing or vacuum sweeping.

Street sweeping technology should be selected that is most efficient in the use of water while at the same time minimizes dust generation. Since vacuum sweepers are more effective in removing smaller, finer soil particles, they have replaced conventional broom sweepers.

Municipalities often operate street sweeping equipment. These municipalities should coordinate timing, costs and use of the equipment to ensure street clean-up occurs as soon as dust generating activity is completed or during the tracking period.

6.4.1.2 Haul Roads

Paved haul roads or gravel strips should be created early in the project. These haul roads are designed to limit mud and dirt deposits on public paved roads. The paved or gravel haul roads should be maintained at the point of the intersection of a paved public roadway and a work site entrance. Haul roads enable construction vehicles to clean their tires before movement to a more heavily travelled paved public roadway.

When paving, the surface should extend at least 30 meters into the site and be at least 7 meters wide (23 feet wide). Mud and dirt deposits accumulating on paved interior roads should be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto paved public roads.

When using a gravel bed, washed gravel, rock, crushed rock or other low silt (<5%) content material should be used (minimum size – one inch in diameter, preferably between 1 and 3 inches in diameter) and maintained in a clean condition to a depth of at least six inches and extending at least 7 meters wide and at least 15 meters long and a minimum of 6 inches deep. The gravel bed should cover the full width of the unpaved exit surface. When installing the gravel bed ensure that it is properly graded. The gravel should be re-screened and washed or additional gravel should be applied in order to maintain effectiveness. Any gravel deposited onto a public paved road travel lane or shoulder should be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.

Installation/stabilization of curbing and/or paving of road shoulders can prevent tracking of dirt from construction sites.

6.4.1.3 Trackout Control Devices

There are various trackout control devices that can be installed in order to remove mud, dirt, etc. from truck tires and the undercarriage of motor vehicles and/or haul trucks prior to leaving the work site, for instance a grizzly or a wheel washing system. It should be noted that track-out control devices require environmental management plans to control surface deposition.

A grizzly is also known as a wheel shaker/wheel spreading device and consists of raised dividers (rails, pipe or grates) that are at least three inches tall, at least six inches apart, at least 8 meters long and 3 meters wide. Wheel washers may be adjusted

to spray the entire vehicle including bulk-stored material in haul vehicles. Grizzlies and wheel washers should be cleaned/maintained on a regular basis to ensure their effectiveness.

These systems should be installed on all work sites with a disturbed surface area of 3 hectares or more and from all work sites where 75 cubic metres (~100 cubic yards) of bulk materials are hauled on/or off-site per day. All traffic should be routed over the installed trackout control devices.

6.4.1.4 Truck Wash

A truck wash, using hoses and ample water supply, should be installed at access points to remove mud/dirt from vehicles prior to exiting the site. The wheels and the body of each truck can then be cleaned to remove spilled materials after the truck has been loaded and prior to leaving the construction site. Vehicles may be washed prior to each trip. Construction equipment may also be washed at the end of each work day. It should be noted that truck wheel washes require environmental management plans to control surface runoff of wheel wash water.

6.4.1.5 Site Restrictions

Some site restrictions that should be considered to minimize trackout/carryout include the following:

- confine load-in/load-out procedures to leeward (downwind) side of the material;
- designate a single site entrance and exit; and
- ensure that vehicles stay on established traffic routes within the construction site.

6.4.2 Minimize Material Drop at the Transfer Point and Enclosure

When loading materials onto vehicles and conveyors, the drop heights should be kept to a minimum and enclosed whenever possible. Where feasible, transfer points and conveyor belts should be totally enclosed (or conveyor belts are to be equipped with no less than 210 degrees of enclosure) on the top and sides as needed and the collected emissions directed to particulate matter control equipment (i.e., baghouse or similar control device) at all times when the conveyors are in operation. The distance between material transfer points should also be minimized.

Conveyor belts should be equipped with belt wipers and hoppers of proper size to prevent excessive spills. Conveyor belts as well as the ground under conveyors should be periodically cleaned to remove residue material. The speed of the conveyor belt should also be restricted to minimize spills.

6.4.3 Utilize Foam Suppression Systems

Foam systems (combination of water and a chemical surfactant) may be used on material transfer systems to mitigate dust generation. The surfactant, or surface active agent, reduces the surface tension of the water. As a result, the quantity of liquid needed to achieve good control is reduced. The primary advantage of foam systems is that they provide equivalent control at lower moisture addition rates than water spray systems.

Some specific application guidelines for foam systems include the following:

- Foam can be made to contact the aggregate material by any means (high velocity impact is not required);
- Foam should be distributed throughout the product material - inject the foam into free-falling material rather than cover the product with foam; and
- Amount applied should allow all of the foam to dissipate. Presence of foam with the product indicates that either too much foam has been used or it has not been adequately dispersed within the material.

6.4.4 Secure Loads on Haul Trucks

There are several work practices that can be employed to minimize the amount of fugitive dust emissions that occur from the transportation of aggregate material within a construction site.

6.4.4.1 Partial or Total Enclosures

The entire surface area of hauled bulk materials should be covered with an anchored tarp, plastic or other material whether the cargo container is empty or full. Alternatively, completely enclosed trucks can be used. For instance, the transport of fine powdery material should be carried out in closed tankers, while dusty materials and aggregates should be transported in enclosed or sheeted vehicles.

Where feasible, the cargo compartment of haul trucks should be cleaned and/or washed at the delivery site before/after loading or unloading. This practice can be applied judiciously, for instance to specific trucks that appear to be particularly dirty (i.e., not necessary for some trucks that appear to be quite clean).

The cargo compartment of all haul trucks should be constructed and maintained so that spillage and loss of bulk material cannot occur from holes or other openings in the cargo compartment's floor, side and/or tailgate or bottom dump gate. Seals on any openings used to empty the load including, but not limited to, bottom-dump release gates and tailgates should be properly maintained to prevent the loss of bulk material from those areas. Belly-dump truck seals should be checked regularly, with any trapped rocks removed in order to prevent spillage.

6.4.4.2 Freeboard

If feasible, trucks may be loaded such that the freeboard is not less than 7 cm (~3 inches). In other words, trucks may be loaded so that no part of the load that makes contact with any sideboard, side panel or rear part of the load comes within 7 cm (~3 inches) of the top part of the enclosure for bulk materials.

6.4.4.3 Loader Bucket

Aggregate material should be emptied from the loader slowly, keeping the bucket close to the truck while dumping (to minimize drop height).

6.4.5 Prevent PM Emissions from Spills

Spillage of material caused by storage pile load-out and maintenance equipment can significantly increase fugitive dust emissions associated with vehicle traffic. If spillage cannot be prevented due to the intense use of mobile equipment in the storage pile area, then the following work practices should be adhered to:

- Methods and equipment to immediately clean-up accidental spillages of dusty or potentially dusty materials should be readily available. If necessary, use audible and visual alarm systems;
- A vacuum truck should be used to clean up spills of cement powder and similar dusty materials; and
- The material transfer site (as well as the entire construction site) should be regularly inspected for spills. There should be regular removal of spilled material in areas within 100 metres of the storage pile. Consider designating an individual to be responsible for spill response and clean-up as well as reporting requirements.

6.4.6 Minimize Material Handling Operations

The number of material handling operations should be kept to a minimum by ensuring that dusty material is not moved or handled unnecessarily. Process speeds should be minimized in order to reduce fugitive dust emissions.

6.4.7 Capture Fugitive Dust Emissions

Fugitive dust emissions escaping through building openings where material handling operations occur may be controlled by installing a removable filters over appropriate building openings, capturing emissions within the building by a proper hood system and conveying the dust through a duct to particulate collection systems.

6.4.8 Utilize Wind Barriers

Where practical, wind barriers may be installed with a porosity of no less than 50% upwind of screening operations to the height of the drop point.

6.4.9 Where Possible, Reduce Certain Activities During Windy Conditions

During very windy conditions, where feasible, specific material handling/transfer activities that generate greater levels of dust may be avoided or reduced. Instead, these activities can be conducted when more favourable weather conditions occur. Increased application of water or other dust suppression techniques may also be considered, if it is not possible to reschedule activities.

6.5 Road Surfaces

The following work actions can be employed to reduce the potential for fugitive dust emissions from the various road surfaces located within construction sites. Examples of these road surfaces include

unpaved roads, haul routes, parking lots, equipment staging areas, etc. An evaluation should be made to determine which road surfaces, if treated, would mitigate the most dust (likely all unpaved surfaces cannot be treated).

6.5.1 Establish On-site Vehicle Restrictions

Vehicle restrictions limit the amount and type (e.g., restriction of roads to certain vehicle types or vehicles under a certain weight) of traffic present on unpaved roads or lowers the mean vehicle speed travelling on the road. For instance, reducing the amount of trips (e.g., by 50%) will reduce the generation of fugitive dust from unpaved road surfaces. General site traffic should also be limited to established haul routes which have been watered or treated and unnecessary vehicle movements and manoeuvring should be avoided. Barriers should be utilized to prevent motor vehicle and/or off-road vehicle trespassing, parking, and/or access, by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees, or other effective control measures.

Construction sites should limit the speed of vehicles travelling on unpaved access/haul roads within construction sites to a maximum of 16-24 kilometres per hour (10-15 miles per hour) and to 10 kilometres per hour (6 miles per hour) on unmade surfaces. Speed limit signs should be posted at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs should also be posted at least every 150 meters (500 feet) and should be readable in both directions of travel along uncontrolled unpaved access/haul roads.

6.5.2 Surface Improvements to Unpaved Road Surfaces

Paving of the internal roadway network including roads and parking lots (using recycled asphalt, asphaltic concrete or concrete) early in a project's development phase will significantly reduce fugitive dust emissions. If an internal roadway network is paved, employees are to be instructed to park only on paved areas. It should be noted that paving internal roadways has significant costs and will only be feasible in certain situations, for instance when work is to be carried out at a site for a significant time-period. Alternatively, the unpaved road can be double chipped and sealed and subsequently maintained on an as needed basis.

If not paved, the road surface should be covered with material that has a low silt content (i.e., less than 5%) to a depth of three or more inches. Examples include gravel, slag, recrushed/recycled asphalt and road carpets. Gravel should be used in areas where paving, chemical stabilization or frequent watering is not feasible. These roads should be gravelled on a regular basis.

Vegetative cover has been suggested as a surface improvement for very low traffic volume roads.

6.5.3 Proper Maintenance of Unpaved Roads

The edges of roads and footpaths should be cleaned regularly, using brooms and damping as necessary. Weekly scraping of roads with a grader may be undertaken to clear off dirt and debris.

6.5.4 Work Practices Associated with De-icing Materials

Some work practices to reduce fugitive dust emissions associated with de-icing operations within construction sites include the following:

- Use of de-icing materials with either a lower initial silt content or greater resistance to forming silt-size particles will result in lower road surface silt loadings and subsequently lower fugitive dust emissions;
- Plow road surfaces instead of sanding;
- Sand and chips remaining from road de-icing should be swept-up and transported to a designated storage area for reuse; and
- Improvements in planning and application techniques limit the amount of de-icing material that has to be applied to roads on a construction site.

6.6 Fabrication Processes

Outlined below are work practices that may be applied to reduce fugitive dust emissions from the various fabrication processes that occur at construction sites. A common work practice to

reduce fugitive dust emissions (among many of these fabrication processes) is the use of high efficiency particulate arrestors (HEPA). HEPA filters control fine particulate matter emissions from dry work on concrete such as blasting, crushing, jack-hammering, grinding, boring holes, sandblasting, polishing, and sawing. HEPA filters can capture 95% of silica dust.

Enclosures should also be used whenever possible as they are an effective way to prevent the transport of dust throughout buildings and from buildings to the environment. Wood frame and plastic film enclosures can be designed with negative pressure to ensure that dust does not flow out of the enclosed space. The potential of increased workplace exposure to dust must be considered when utilizing enclosures inside structures.

Ducting systems should be cut-off to prevent the circulation of dust during construction and renovation activities.

Material drop heights for building debris should be minimized whenever possible. When debris is being dropped from high levels, this material should be dropped over several sequential stages instead of the entire distance at once. Chutes that are used to drop materials to the ground level should be enclosed, if feasible. In addition, bins that are used to receive materials should also be covered when not in use.

6.6.1 Cutting, Grinding and Drilling

Work practices to minimize fugitive dust emissions from various cutting, grinding and drilling operations include the following:

- Use prefabricated materials whenever possible, to avoid the necessity of using these processes on the construction site;
- Apply water sprays in conjunction with cutting equipment;
- Avoid cutting out errors and re-bars;
- Always try to fill whenever possible rather than cutting back oversized work;
- Always use dust extraction/minimization systems with angle grinders and disc cutters;
- When cutting roadways, pavements, blocks, etc., a diamond bladed floor saw with water pumped through the system should be used; and
- When raking out mortar/pointing, a mortar raking kit, fitted on to a standard 5 inch (13 centimeter) angle grinder can be used on soft mortar. For hard mortar, a super-saw with oscillating blades can be used.

6.6.1.1 Design Considerations to Avoid Grinding and Cutting

If possible cutting and grinding should be avoided through the design and other techniques, such as:

- Designing tolerances for infilling rather than cutting back oversize work;
- Increasing the size of concrete pours to reduce the need for grinding;
- Use of bonding agents;
- Designing the concrete components themselves to affect interfaces; and
- Using wet grit blasting for outside work.

Should grinding be necessary, PM emissions can be mitigated by: (i) fitting tools with dust bags; (ii) pre-washing work surfaces; (iii) screening off areas to be ground; and (iv) vacuuming up, as opposed to sweeping away, residual dust.

6.6.2 Sand and Grit Blasting and Façade Cleaning

6.6.2.1 Utilize Wet or Other Processes That Minimize Dust Generation

When sand, grit or shot blasting or façade cleaning, wet processes (e.g., high pressure water blasting or water blasting supplemented by abrasives) should be used whenever possible. Wet processes introduce water into the air/grit stream, which reduces dust generation. In addition, it should be ensured that the slurries do not dry out. Spent abrasive materials should be wetted and periodically removed from the job site. Hydroblasting, vacuum blasting and centrifugal wheel blasting are also alternatives that reduce fugitive dust generation vs. dry blasting.

6.6.2.2 Utilize Enclosures

If dry grit blasting is necessary, then curtains, enclosures or shrouds should be erected to completely surround the blasting operation. This includes the area around and underneath the operation. The ground cannot be used as the bottom of the enclosure unless completely covered with plastic sheeting or a tarpaulin. The enclosure should be constructed of

flexible material such as tarpaulins or containment screens which are specifically designed for this purpose or for rigid materials such as plywood. All materials should be maintained free of tears, cuts or holes.

All debris which has been collected by this operation or which has fallen to the ground should be collected and subsequently disposed of. Collection and storage should be done as often as needed, but as a minimum, at the end of each workday. Storage should be in steel dumpsters or drums. All containers should include lids that should be secured at the end of each workday.

Dry blasting should be conducted indoors, where possible, with enclosures equipped with emission controls. Negative pressure dust collectors should also be used in conjunction with enclosures and keep doors closed to reduce fugitive dust emissions.

6.6.2.3 Stabilize Particulate Matter in Surrounding Area Following Blasting

Particulate material from the surrounding area should be cleaned up during and following blasting activities. Water or a dust suppressant should be applied to the disturbed soils after blasting as well.

6.6.2.4 Alternative Abrasive Material Should be Used

More durable abrasives with lower dust generation potential should be used, such as non-friable abrasives. The reuse of abrasives containing high quantities of fines and/or toxic compounds should be avoided.

6.6.3 Concrete Cutting

Concrete cutting operations use diamond or abrasive discs for hand-cutting operations and a Vermeer grinder wheel mounted on a construction vehicle for large cutting or trenching operations. The use of water in sufficient quantities to wet the cutter, the immediate surrounding work area, and the fugitive dust immediately emanating from the cutting operation is effective (e.g., use of a wet vacuum system). This work practice also applies to asphalt cutting as well.

Enclosures, curtains or shrouds surrounding the work area that contain the emission of fugitive dust may also be utilized. In this case, the surface dust created should be promptly cleaned from the surface using a wet sweeping process. A vacuum should be used to collect dust when cutting materials.

6.6.4 Mixing Processes

Actions that can be employed to mitigate the generation of PM emissions from mixing operations include the following:

- Utilization of pre-mixed concrete, plasters and masonry compounds will serve to reduce on-site PM emissions generation;
- Use correctly-sized pre-cast sections in order to reduce the need for cutting and drilling on the construction site;
- Enclosed or protected areas should be used to mix concrete or bentonite slurries;
- Fine materials should be palletized and shrink wrapped when possible;
- Keep foundations moist; and
- Use larger pours of concrete rather than repeated small pours.

6.6.5 Internal and External Finishing and Refurbishment

Dust suppression/collection equipment should be attached when using sanding and cutting machinery. In addition, vacuum cleaning should be used whenever possible. When installing fire-proofing or insulation material, dust suppressants should be used when blowing fibres into empty spaces or encapsulated materials should be used instead.

Floor sweeping can generate dust. Inside of homes should be power vacuumed of dust and debris. When cleaning after work has been completed, damp sweeping using fine mist can also be utilized. Dry sweeping should only be utilized with vacuum extraction methods attached. Floor sweeping compounds can also be used where appropriate, or wet sawdust can be used.

6.7 Demolition and Deconstruction

Unique work practices and technologies that can be applied to reduce fugitive dust emissions from demolition and deconstruction activities are outlined below. There are many additional actions that can also be employed, but those common to demolition and construction activities are not repeated within this section. Demolition firms are encouraged to review Section 4 in order to identify additional actions that can be employed to reduce fugitive dust emissions from their operations.

6.7.1 Apply Deconstruction Techniques

Buildings that must be taken down should, to the extent possible, be deconstructed rather than demolished so that materials can be reused in other buildings. Deconstruction generally results in lower fugitive dust emissions compared to demolition.

6.7.2 Minimize Drop Heights for Debris

Material drop heights for building debris should be minimized whenever possible. When debris is being dropped from high levels, this material should be dropped over several sequential stages instead of the entire distance at once.

6.7.3 Enclose Chutes and Cover Bins

Chutes that are used to drop demolished materials to the ground level should be enclosed, if feasible. In addition, bins that are used to receive materials should also be covered when not in use.

6.7.4 Use Fogging Systems

A fogging system can be used to direct fog into the fugitive dust area. If fog droplets and airborne dust mix, dust particles stick to the water droplets thereby adding weight to the dust particles. The increased mass of the dust particles causes them to fall out of the air. Fogging systems can only be used in an area that has a pocket or cover.

6.7.5 Barriers to Prevent Dispersion

Enclosures, curtains or shrouds can be utilized during the demolition phase to confine dust generation. Negative pressure dust collectors can be used to collect the dust that has been confined by the enclosures, etc. Enclosures, curtains or shrouds may be impractical during demolition activities lasting a few days or less.

Prior to blasting, buildings should be screened with suitable debris screens and sheets.

6.7.6 Avoid Blasting When Feasible

Blasting with explosives has the potential to generate large amounts of fugitive dust emissions in a very short period of time. Blasting should be avoided and other demolition and deconstruction methods used wherever possible. It is noted that in some instances, blasting is the safest manner in which to quickly bring down a structure.

Blasting operations can significantly reduce the size of the building and its component materials. The generation of a large amount of fugitive dust in the short term through blasting may reduce the potential for prolonged periods of fugitive dust emissions that would otherwise occur in ongoing size reduction operations.

6.7.7 Vacuum Debris

Vacuums or similar cleaning devices should be used to thoroughly clean blast debris from paved and other surfaces following blasting operations. An industrial vacuum should be used to clean debris prior to the use of high pressure air to blow soil and debris.

6.7.8 Work Practices for Loading Debris

Loaders should tip debris into haulage trucks with a minimum fall distance to minimize dust emissions from tumbling debris. If possible, fine debris should be placed into the truck bin first, followed by larger debris on top. Alternatively, if possible, dry debris should be placed into the truck bin first, followed by wet debris on top. Debris loads should be balanced in truck bins. Debris loads should not be compacted using the impact of a loader bucket.

6.7.9 Avoid Prolonged Storage of Debris

Avoid prolonged storage of debris on site and its exposure to wind.

Waste and refuse bins should be covered when they are being removed from the construction site.

7. Reducing Other Emissions at Construction and Demolition Sites

7.1 Introduction

This chapter of the Best Practices document identifies actions that can reduce emissions from construction and demolition activities, beyond fugitive dust emissions. Three separate emission source categories are addressed in this section of the Best Practices document, specifically:

- Vehicle and equipment engines;
- Hot mix asphalt production at portable plants; and
- Volatile organic compounds (hydrocarbon solvents).

While the focus of this chapter is on emissions other than PM, the section on vehicle and equipment engines identifies actions that can also reduce particulate matter emissions from vehicle and equipment stacks (i.e., not fugitive PM emissions).

7.2 Vehicle and Equipment Engines

Road and heavy engineering construction activities rely on the utilization of a wide range of mobile equipment, such as bulldozers, graders, dump trucks, pavers, excavators, and bobcats. The engine exhaust from these vehicles, especially from those operating on diesel fuel, represent a source of particulate and other emissions (e.g., SO_2, NO_x, VOC, PAH, CO_2) from the construction site. Outlined below are technologies and work practices that can be employed to reduce these emissions. Construction companies are advised to ensure that their warranties on vehicles will not be voided, should they be retrofitted with emission control technologies or use of alternative fuels.

It should be noted that Environment Canada, through the Federal Agenda on Cleaner Vehicles, Engines and Fuels is establishing initiatives, including regulatory measures under the *Canadian Environmental Protection Act, 1999*, that are designed to reduce emissions from the various off-road vehicles and engines that are typically used at road and heavy engineering construction sites. The *Off-Road Compression-Ignition Engine Emission Regulations* introduce emission standards for new diesel engines such as those typically found in construction, mining, farming and forestry machines. The Regulations apply to engines of the 2006 and later model years. In addition, the *Off-Road Small Spark-Ignition Engine Emission Regulations* establish emission standards for small spark-ignition engines rated up to 19 kW (25 hp). Small spark-ignition engines are typically gasoline-fuelled engines found in lawn and garden machines, in light-duty industrial machines (e.g., generator sets, welders, pressure washers, etc.), and in light-duty logging machines. These Regulations apply to 2005 and later model-year engines. Further information can be obtained by visiting Environment Canada's CEPA Environmental Registry website at www.ec.gc.ca/CEPARegistry/regulations or calling the Inquiry Centre at 1-800-668-6767. Note that these Regulations do not set limits for GHG emissions.

7.2.1 Use Diesel Particulate Filters

The use of state-of-the-art catalyzed diesel particulate filters can significantly reduce particulate matter emissions from the exhaust of diesel-powered vehicles or equipment. Particulate traps can come equipped on newly purchased vehicles or can be installed on the existing fleet of diesel-powered vehicles operated by a construction company (i.e., retrofit existing vehicles).

All new diesel-powered vehicles should use state-of-the-art catalyzed diesel particulate filters. All existing vehicles should be evaluated, and wherever technically feasible and cost effective, retrofitted with diesel particulate filters.

Catalyst-based diesel particulate filters use catalyst materials to reduce the temperature at which collected diesel particulate matter oxidizes. The catalyst material can either be directly incorporated

into the filter system, or can be added to the fuel as a fuel-borne catalyst (see below). Catalyst-based diesel particulate filters can be used with diesel fuels of varying sulphur content. However, very low sulphur fuel (i.e., no more than 15 mg/kg) should be used with vehicles equipped with these filters in order to achieve optimal emission reduction results.

7.2.2 Use Fuel-Borne Catalysts

Fuel-borne catalysts may be used to reduce the emissions of PM, NO_x, VOC and carbon monoxide from off-road diesel-fueled engines. These products typically contain an in-line solid metal oxidation/fuel modification catalyst that changes the composition of diesel fuel immediately prior to its use in an engine. Subsequent combustion of the modified fuel results in a reduction of both the elemental carbon and soluble organic fraction of diesel particulate matter, as compared to untreated fuel.

Another version of this technology is a concentrated liquid fuel-borne catalyst containing 4 to 8 parts per million of fuel-soluble platinum and cerium metal that reduces diesel particulate matter emissions from diesel-fueled engines. The fuel-borne catalyst catalyzes the rate of soot oxidation and lowers the temperature at which soot oxidation takes place.

7.2.3 Use Diesel Oxidation Catalysts

A diesel oxidation catalyst uses a catalytic substance (such as platinum or palladium) to accelerate chemical reactions. When exhaust gases contact the catalyst, the residual hydrocarbons and carbon monoxide are oxidized. The hydrocarbon oxidation also extends to such materials as polycyclic aromatic hydrocarbons (PAH) and the soluble organic fraction of diesel particulates. Diesel oxidation catalysts should be used by construction companies to reduce emissions associated with their diesel-powered vehicles.

The sulphur content of diesel fuel is critical for the performance of diesel oxidation catalysts. The catalyst used to oxidize the soluble organic fraction can also oxidize sulphur dioxide to form sulphate particulate, which is measured as part of particulate matter. Active diesel oxidation catalysts can also oxidize nitric oxide to from nitrogen dioxide. Catalysts have been developed that selectively oxidize the soluble organic fraction, carbon monoxide and PAH, while minimizing the oxidation of sulphur dioxide and nitric oxide. In general, diesel fuel with a sulphur content of 500 mg/kg by weight or less is recommended for any retrofit program.

7.2.4 Ensure Catalytic Converters are Operating Efficiently

Catalytic converters are used in gasoline-powered engines to reduce emissions (e.g., carbon monoxide, nitrogen oxides, volatile organic compounds) associated with vehicle operation. A catalytic converter changes these gases to carbon dioxide, nitrogen, oxygen, and water. Construction operations should ensure that the most advanced catalytic converters are installed on their gasoline-powered vehicles and that these converters are operating to their maximum efficiency.

Practices that serve to reduce the effectiveness of catalytic converters on gasoline-powered construction vehicles should be avoided. For instance, some engine oil additives or engine problems that cause the mixture or the temperature of the exhaust gases to change reduce the effectiveness and life of the catalytic converter. For instance, the over-use of fuel additives can shorten the life of a catalytic converter considerably. Gasket sealers and cements can also poison a converter. In addition, any time an engine is operating outside proper specifications, unnecessary wear and damage may be caused to the catalytic converter as well as the engine itself.

7.2.5 Evaluate Alternative Technologies to Reduce Emissions from Vehicle Engines

There are various emission control technologies at various stages of commercialization, a few of which are described below. These or others should be evaluated for utilization on construction vehicles.

- Selective catalytic reduction (SCR) technology was developed to mitigate NO_x emissions from stationary sources. Recently, SCR technology has been applied to selected large mobile sources. A chemical agent (ammonia or urea) is injected upstream of the SCR catalyst. It reacts with NO_x, reducing it to harmless products. SCR

can also provide reductions in particulate matter and volatile organic compound emissions.

- Exhaust gas recirculation routes a portion of the exhaust to the charger inlet or intake manifold. In most systems, an intercooler lowers the temperature of the recirculated gas. The cooled recirculated gas, which has a higher heat capacity than air and contains less oxygen, lowers the combustion temperature in the engine and reduces NO_x formation.
- Lean NO_x catalysts introduce a small amount of diesel fuel into the exhaust stream. This diesel fuel acts as a reducing agent for the catalytic conversion of NO_x to nitrogen. The catalytic substrate is usually a porous material, often made up of zeolite, which provides microscopic sites for fuel (hydrocarbon rich) to react and reduce potential NO_x emissions.

7.2.6 Properly Maintain Engines and Exhaust Systems

Vehicle and equipment engines should be properly maintained to reduce exhaust emissions of CO, VOCs, and PM. Equipment that is in good condition will also reduce fuel consumption. Equipment should be inspected prior to the start of a project. While equipment is on site, a daily inspection should be conducted and parts and hoses showing signs of wear should be promptly replaced. Damaged parts should also be repaired or replaced.

Contractors should be asked to provide maintenance records for their fleet as part of the contract bid and at regular intervals throughout the life of the contract.

7.2.7 Use Low Sulphur Diesel

The sulphur content in off-road diesel is not currently regulated at the national level in Canada. However, voluntary standards set a 5,000 mg/kg specification for sulphur in off-road diesel. The U.S. Environmental Protection Agency finalized an off-road regulation that will limit the level of sulphur in off-road diesel fuel to 500 mg/kg starting in 2007, reduced to 15 mg/kg in 2010. Environment Canada has proposed the *Amendment to the Sulphur in Diesel Fuel Regulations* in October, 2004 to control the level of sulphur in off-road diesel fuel, in alignment with the proposed U.S. standards. Further information on the proposed regulations can be obtained by visiting Environment Canada's CEPA Environmental Registry website: **www.ec.gc.ca/CEPARegistry/regulations**.

It should also be noted that the California Air Resources Board presently has a limit of 500 mg/kg for off-road diesel reduced to 15 mg/kg limit starting in 2006. In addition, the City of Montreal prohibits the use of diesel fuel that has sulphur content in excess of 500 mg/kg for all engines and vehicles.

Low sulphur fuels can improve air quality in two distinct ways: (i) by reducing vehicle emissions of SO_2 and PM due to lower sulphur levels; and (ii) by increasing the effectiveness of existing emission control devices and enabling the use of more advanced emission control devices.

Off-road diesel fuel currently contains a sulphur content of approximately 1,000-3,000 mg/kg in Canada. Diesel fuel with much lower sulphur levels is currently available in Canada. For instance, the current Sulphur in Diesel Fuel Regulations requires that the concentration of sulphur in diesel fuel produced or imported for use in on-road vehicles not exceed 500 mg/kg until May 31, 2006; and 15 ppm after May 31, 2006. Therefore, construction companies are encouraged to use the low sulphur diesel fuel that has been primarily produced for on-road vehicles. A Low Sulphur Fuels Procurement Guide available to aid in the purchase of low sulphur diesel fuel is available at:
www.ec.gc.ca/energ/ecology/LSF/ecological_measures_e.cfm

7.2.8 Alternative Fuels Should be Utilized Where Feasible

There are several alternative fuels that should be used to reduce the level of emissions that otherwise would have occurred with the use of diesel fuel (or gasoline). Alternative fuels that could be used include biodiesel, ethanol, propane, natural gas and various fuel additives. Electricity can also be used, primarily for equipment purposes, however also for vehicles. Biodiesel is described in greater detail below.

Biodiesel can be used in pure form or it can be mixed with diesel fuel (e.g., B20, which is a mixture of 20% biodiesel and 80% standard diesel). Biodiesel reduces

the carbonaceous fraction of diesel particulate matter through improved in-cylinder combustion, which is primarily attributed to biodiesel's high oxygen content. B20 can be used without changes to diesel engines or the fuel distribution infrastructure. However, the use of pure biodiesel may require changing some engine seals and fuel lines in older engines. Biodiesel generally contains no sulphur or aromatics, however it may increase NO_x emissions by 5-10%.

7.2.9 Reduce or Eliminate Idling Time

Idling of off-road vehicles on construction sites is often practised for the following reasons:

- to provide heat or air conditioning for the vehicle;
- to keep the fuel and engine warm in cold weather to avoid cold starting;
- while being actively operated such as when waiting to load and unload commodities; and
- trucks and truck-trailer combinations may need to idle in order to operate auxiliary equipment, including power take-off (PTO) equipment.

The reduction of idling provides benefits (besides environmental) in terms of reduced fuel consumption and engine wear and consequently the saving of money to the owner/operator. The idling of off-road engines when the vehicle is not moving, or when the off-road equipment is not performing work, should be limited to less than 5 minutes at any one location. Construction companies are encouraged to institute an anti-idling campaign. Additional details can be located at http://oee.nrcan.gc.ca/idling/home.cfm.

Technologies are available which automatically shut the engine off after a preset time. These idling control technologies should be used where economical. The installation of such systems on construction vehicles avoids the reliance on the operators to comply with a time limitation. Additional details on alternatives to truck idling can be located at:
http://www.ctre.iastate.edu/pubs/truck_idling/index.htm

The City of Toronto has a by-law not allowed vehicles to idle for more than three minutes in a sixty-minute period.

7.2.10 Evaluate Alternatives for Heat and Air Conditioning for Off-Road Vehicles

There are technology-based alternatives to the provision of heat/air conditioning through idling. Examples of available technologies include auxiliary power systems or main engines and on-board electrification. The purpose of these alternative technologies is to displace the use of the higher polluting main engine for providing power and comfort to the cab. These systems are typically used by on-road tractor trailers, however there may be opportunities now or in the future for utilization within construction vehicles.

An auxiliary power system typically consists of an engine and compressor to supply electrical power and climate control to the truck cab. The unit is generally installed in place of one fuel tank and weighs approximately 140 kilograms. There are several methods to power an auxiliary power system including diesel fuel and electrical power. Several heavy-duty diesel engine manufacturers are developing integrated auxiliary power systems for their engines that will be available as an OEM option. Auxiliary power systems are designed as self-contained units that require no external power source other than fuel.

On-board electrification is an alternative to provide the power for HVAC climate control and to power ancillary devices. A simple outlet on the perimeter of the truck space typically supplies the 110-volt or 220-volt power. In order to use on-board electrification for climate control, the purchase of additional equipment may be needed. It should be noted that there are systems that can be powered alone by 110-volt power such as a space heater or small cooler but there are questions as to the practicality of such devices for this use.

7.2.11 Minimize Cold Starts

Both the combustion efficiency of the engine and the effectiveness of the emission control device are at a minimum during a cold start and therefore emissions tend to be high. In order to correct this problem, engine block heaters and pre-heated catalytic converters (using an electrical heat source) may be retrofitted onto engines for more efficient combustion

and more complete oxidation of the exhaust in the catalytic converters.

Note that minimizing cold starts does not mean increasing idling times.

7.2.12 Evaporative Losses Should be Minimized

Evaporative losses from construction equipment are primarily associated with the fuel tanks. There are evaporative emission control technologies that can reduce such emissions by as much as 96%. These technologies include: (i) the closed fuel system (modified tank); (ii) tank ventilation to carbon canisters; and (iii) tank filled with expanded metal mesh. These technologies can be retrofitted to the existing fleet of construction vehicles as well as installed on new vehicles.

7.3 Hot Mix Asphalt Production at Portable Plants

The Canadian Construction Association has recently published *Environmental Best Practices Guide for Hot Mix Asphalt Plants*, which details various work practices and technologies that should be employed to minimize emissions of particulate matter, gaseous emissions, odour, and noise. This document should be consulted for additional details on practices that can be employed to minimize the environmental impact of portable hot mix asphalt plants.

The focus of this section is on work practices to reduce gaseous emissions from portable hot mix asphalt plants (work practices to reduce particulate matter emissions were discussed in Chapter 6). These gaseous emissions occur from the combustion process employed at portable hot mix asphalt plants, which is used to dry aggregate prior to it being mixed with asphalt. Gaseous emissions include sulphur oxides, nitrogen oxides, carbon monoxide and volatile organic compounds. The various work practices outlined below have been summarized from the document published by the Canadian Construction Association. For more extensive and detailed information, this document should be reviewed. It should be noted that recommendations are provided later in this Best Practices document concerning actions to mitigate emissions from hot mix asphalt operations at construction sites.

7.3.1 Maintain Proper Air to Fuel Ratio in the Combustion System

The proper air to fuel ratio in the combustion system should be maintained in order to completely and efficiently burn the fuel provided. Incomplete burning of fuel results in higher levels of carbon monoxide and volatile organic compounds.

7.3.2 Burner and Air Systems Should be Regularly Inspected and Maintained

The burner and air systems should be regularly inspected and maintained in order to ensure that fuel consumption is reduced and carbon monoxide and volatile organic compound emissions are minimized. Qualified personnel should perform tune-ups or repairs to the burner system as necessary and a tune-up should be conducted annually to ensure efficiency. The following inspections of the burner system are recommended to ensure that these parts are functioning according to manufacturer's specifications:

- all burner valves and linkages;
- fuel pressure, air-fuel ratios, and combustion air pressure;
- all moving parts are lubricated;
- all filter systems and stainers are regularly maintained;
- nozzles are clear of foreign materials; and
- blowers.

Leaking air directly affects the air to fuel ratio, thereby resulting in inefficient combustion and higher emissions. Therefore, drum and duct air seal points (i.e., the air systems) should be regularly inspected and maintained. Air leaks furthest from the burner result in the most negative impacts on the combustion process.

7.3.3 Conduct Regular Inspections of Other Equipment

Other equipment within portable hot mix asphalt plants (apart from the burner and air systems) should be regularly inspected and maintained to ensure that the combustion process operates to its maximum

efficiency. Regular inspections of the following equipment should be conducted to ensure that it is operating properly and to manufacturer's specifications:

- damper - key component in controlling the fuel to air ratio;
- dryer flights - proper veiling of aggregate enables the burner system to work at optimum levels;
- primary and secondary collectors - for material build-up that may reduce the flow of air throughout the system; and
- hot oil heater systems – ensure that hot oil heater burner systems are clean and hot oil heater lines are working properly. The hot oil heater should be tested annually to ensure oxidation is not taking place.

7.3.4 Aggregate Should Not be Allowed to Pass Through Combustion Zone

Aggregate should never be allowed to veil or pass through the combustion zone of the burner's flame. If this occurs incomplete combustion will result, leading to increased carbon monoxide and volatile organic compound (VOC) emissions.

7.3.5 Thermocouples and Other Sensors Should be Regularly Calibrated

Thermocouples and other sensors are installed to monitor temperature and pressure change within the burner system. Thermocouples and other sensors should be regularly calibrated to ensure that they are functioning at their optimum levels.

7.3.6 Low Sulphur Fuels Should be Used

Low sulphur fuels should be utilized to the extent possible in portable hot mix asphalt plants in order to reduce SO_2 emissions (as well as particulate matter emissions).

7.4 Volatile Organic Compounds

Volatile organic compounds (VOCs) are primarily emitted from the construction and demolition sector through the following sources: (i) architectural surface coatings; (ii) traffic marking operations; (iii) asphalt concrete paving; and (iv) asphalt roofing kettles. Outlined below are the various work practices that should be employed in order to reduce VOC emissions from these sources.

7.4.1 Architectural Surface Coatings

Architectural surface coating operations consist of applying a thin layer of coating such as paint, paint primer, varnish or lacquer to architectural surfaces. Architectural surface coatings are applied to a variety of surfaces (e.g., metal, wood, plastic, concrete, bricks and plaster). VOCs that are used as solvents in coatings are emitted during the application of the coating as well as when the coating dries. The amount of coating used and the VOC content of the coating are the primary factors that determine emissions from this source. Solvents are also used as thinners in the coatings and for cleanup activities.

7.4.1.1 Durable and High Performance Coatings with a Low VOC Content Should be Used

Coatings having a low VOC content and meeting established performance standards should be used. Information on VOC contents of coatings purchased for use in construction operations should be requested from suppliers and if unavailable, from manufacturers. Currently, Canada has no requirement for labelling of VOC content of coatings. All manufacturers provide material safety data sheets (MSDSs) for their coatings products and some of these MSDSs provide VOC content information. Some manufacturers also provide technical data sheets for their products and some of these also provide VOC content information. The best source of this information is the website of a coatings manufacturer.

Environment Canada is currently examining potential VOC limits on Architectural and Industrial Maintenance (AIM) coatings, following recent initiatives on AIM coatings by the U.S. EPA, the California Air Resources Board (CARB) and the Ozone Transport Commission (OTC, which represents 12 northeast States). The proposed Environment Canada regulations will be developed through the regulatory process throughout 2005.

Outlined in the Table below are the VOC content limits, established in various jurisdictions in the U.S., for coatings that are commonly used in the

construction sector. The environmental certification criteria included in these programs are the requirement to meet specific VOC content limits for flat paint, non-flat paint, stains and varnish. These content limits can be used as a guide to select low VOC coatings until the Environment Canada regulation limiting VOC content has been established and is in force in Canada.

Table 7: Comparison of VOC Content Limits for Coatings Used in the Construction Sector

(grams of solvent/litre of paint, excluding water)

Coatings Category	EPA	SCAQMD	CARB	OTC
Flat Coatings	250	100 (50 by Jul/08)	100	100
Non-flat Coatings	380	150 (50 by Jul/06)	150	150
Floor Coatings	400	100 (50 by Jul/06)	250	250
Industrial Maintenance Coatings	450	250 (100 by Jul/06)	250	340
Lacquers & Sealers	680	550 (275 by Jul/06)	550-680	550-680

Note: EPA – U.S. Environmental Protection Agency; SCAQMD – South Coast Air Quality Management District (California); CARB – California Air Resources Board; OTC – Ozone Transport Commission.

A national guideline for surface coatings is published by the Environmental Choice^{M} Program (ECP). The ECP uses the EcoLogo^{M} to label coatings products that qualify under its environmental certification criteria. Further information on the Environmental Choice Program can be found at: [http://www.environmentalchoice.com].

The Canadian Council of Ministers of the Environment has also published the following document, "Recommendations for CCME Standards and Guidelines for the Reduction of VOC Emissions from Canadian Industrial Maintenance Coatings".

In addition, the Masters Painters Institute publishes an approved products list for architectural coatings. The list is published twice a year in booklet form and can be accessed at [http://www.paintinfo.com/mpi/]. Information is currently being developed on low odour/low VOC coatings.

It should be noted that durability and performance are critical factors in selecting coatings and have an impact on the lifecycle VOC emissions. A more durable product with a higher performance will reduce the frequency of recoating, thereby reducing VOC emissions. As an example, a coating system with 20% higher VOC content than an alternative product can reduce the number of times an object has to be repainted, thereby actually lowering lifecycle VOC emissions. Also when comparing product VOC content, the total amount of product to be applied has to be taken into consideration. For example, if a coating has a low VOC content, but requires numerous applications, it can result in higher lifecycle VOC emissions than an alternative higher VOC content coating.

7.4.1.2 VOC Emissions from the Storage, Handling and Preparation of Coatings Should be Minimized

Work practices that will reduce VOC emissions from the storage, handling and preparation of coatings are primarily focused on minimizing the duration of exposure of the liquid coating surface to surrounding air, and include the following:

- all coatings containers should be tightly sealed during transportation and storage;
- a new container of paint should not be opened if one is open already;
- containers should be kept covered when not in use (to avoid excessive evaporation from convection air movement);
- a small amount of solvent should be added to empty containers (establish agreement with the supplier) prior to their return to suppliers in order to prevent the drying of paint on the inside walls. This will ensure that only a minimum quantity of cleaning solvent is used in the drum cleaning operation;
- coatings should be mixed in bulk prior to transfer rather than in smaller containers. If small containers are used, then they should be full in order to reduce the number of mixing operations that must be undertaken;
- thinners should be added to coatings just prior to application in order to avoid long dwell times;
- coatings should be thinned with water or VOC-exempt compounds, where possible;

- always mix thinner with the coating according to the manufacturer's instructions; and
- mixing operations should be undertaken to minimize the exposure of the coating to air (e.g., in sealed containers).

Some coatings manufacturers provide technical data sheets that include important information about the proper preparation and application conditions for their products. This information should be reviewed when preparing a coatings management plan and communicated to coatings applicators.

7.4.1.3 Coatings Wastage Through Spillage and Splashing Should be Minimized

Handling procedures should be designed to minimize coatings wastage through reduced spillage and splashing, for instance by adhering to the following:

- During transfers, container lids, bungs, plugs, or valves may be opened or removed, but should be replaced or closed immediately after the transfer is complete;
- If it is necessary to open coating containers for prolonged periods, the use of flexible coverings (e.g., plastic film or sheet, fabric cloth) to cover the surface of the coating should be considered to minimize VOC losses;
- During transfers of coatings from one container to another, a pump and hose system should be used where possible to minimize fugitive VOC emissions. Vent holes in the source container should be opened to prevent the creation of a vacuum that might prevent adequate drainage and potentially lead to an unexpected large spillage;
- If manual decanting from one container to another must be done, it should be performed slowly and carefully to minimize spillage and splashing; and
- Where possible, separate pumping systems should be used for different paint colours to minimize flushing requirements. If this is not possible, colour applications should be sequenced to minimize flushing.

7.4.1.4 Surface to be Coated Should be Properly Prepared

Well-prepared surfaces will not need an excessive volume of coatings. Proper surface preparation can include: (i) removal of undesirable material from the substrate; (ii) sealing of cracks and fissures; and (iii) sanding to achieve desirable roughness for proper coating adhesion. Surfaces to be coated should be prepared as per the coating manufacturers specifications. All dirt, rust, scale, splinters, loose particles, disintegrated paint, grease, oil, and other substances should be removed from all surfaces that are to be painted or otherwise finished. Surface cracks or fissures should be filled with appropriate solid materials (putty, joint compounds), sealers or primers to minimize spaces where coatings can accumulate.

7.4.1.5 Paint Heaters Should be Used Instead of Paint Thinners

Paint heaters should be used to heat coatings to reduce viscosity immediately before spraying. Paint heaters use an in-line heating element located just upstream of the spray gun. The use of paint heaters provides the necessary viscosity to the coating operation, without the use of solvent-based thinners. It should be noted that the use of paint heaters is not always applicable. For instance, the application of heated paint to cold surfaces in winter months results in poor paint surface characteristics (i.e., cracking) because of the rapid cooling of the hot paint after it is applied to the cold surface.

7.4.1.6 Technologically Advanced Spray-Guns Should be Utilized to Apply Coatings

The most technologically advanced spray-guns should be utilized in order to apply coatings. VOC emissions can be significantly reduced by utilizing the most efficient spray guns with the highest transfer efficiency. Transfer efficiency is defined as the ratio of paint that adheres to the surface of the product to the total amount of paint that leaves the gun's nozzle.

Conventional high-pressure spray guns operate between 30 and 90 psi. The transfer efficiency of these high-pressure spray guns is poor. The high pressures associated with these spray guns force paint

out of the nozzle at high velocities. When paint particles leave the nozzle at high velocities, they tend to bounce off the targeted surface. If these guns have to be used, the air pressure on these systems should be lowered.

High volume/low pressure spray, low pressure/low volume and airless spray techniques are more recent developments with much higher transfer efficiency than conventional high-pressure spray guns. High-Volume/Low-Pressure (HVLP) and Low-Pressure/Low-Volume (LPLV) spray guns operate at or below 10 psi. The lower pressure ensures that paint particles leave the nozzle at slower velocities than typical spray guns, resulting in a reduction in overspray of up to 50%. Airless spray guns provide high transfer efficiency when applying thick materials. Some companies can reduce thinning of coating as well by using airless spray guns.

7.4.1.7 Spray-Gun Operators Should Apply Correct Application Techniques

Significant reductions in wasted coatings and consequently VOC emissions can result from implementing proper application techniques by operators. The following application techniques should be adhered to:

- The distance of the spray gun from the surface should be consistent. If the gun is too close to the surface, the coating will be applied to heavily and run and sag. If the gun is too far from the surface, excessive overspray, dry spray, a sandy finish and low transfer efficiency will result. HVLP spray guns should be held 15 to 20 cm (6 to 8 inches) away from the surface being coated. Air assisted spray guns should be held 20 to 25 cm (8 to 10 inches) away (20 to 30 cm or 8 to 12 inches if it is electrostatic, air-assisted airless). Airless spray guns should be held 30 to 26 cm (12 to 14 inches) away;
- The speed of the gun as it is moved across the surface should be consistent. A steady gun speed will help obtain a uniform thickness of coating. A gun speed higher than manufacturer specifications can distort the spray pattern and not permit the maximum amount of material to reach the surface;
- The proper overlap of the spray pattern should be applied. This overlap is determined by the coating being applied. Proper overlap may range from 50-80%. Greater overlap may result in wasted strokes, and less overlap may result in streaks;
- The spray gun should be held perpendicular to the surface being coated. Arcing the gun for hard to reach areas results in wasted material, since an uneven coat is applied. These areas should be coated by changing the position of the gun or the operator. Some coatings are applied to irregular surfaces (e.g., staircase banisters, decorative molding) for which the coating transfer efficiency using spray equipment is quite low. For irregular surfaces, manual application methods should be used to increase transfer efficiency;
- The manufacturers recommended system settings should be used for air and fluid pressure and coating consistency. These parameters can then be adjusted through a trial and error process; and
- VOC emissions can also be reduced by avoiding excessive application of topcoats. Primers should be applied as per manufacturers recommendations in order to minimize the quantity of topcoat that has to be applied. Application of topcoats should respect manufacturers recommended coverage rates and application thickness (wet-film thickness & dry-film thickness in mils).

7.4.1.8 Proper Technique Should be Used When Cleaning Spray Guns

For equipment that requires solvent cleaning, methods that reduce evaporation should be implemented wherever practical, for instance through the use of a gun washer to clean spray guns. A gun washer is similar to a dishwasher in that it is designed to hold a number of spray guns and related equipment and cleans by circulating solvent inside a closed chamber. Gun washers result in extended solvent cleaning life, reduced solvent waste and reduced VOC emissions from evaporation. The spent solvent from the gun washer can be reused for additional cleanings. Once the solvent has been reused to the point that it is no longer effective for cleaning the gun, it can be sent to a solvent reclaimer.

Keeping the spray gun clean maintains the gun's efficiency and reduces the risk of poor results due to clogged tips or passages or foreign matter contamination. Proper and regular maintenance of spray guns will also serve to mitigate VOC emissions. The following practices should be adhered to:

- Clean the spray gun regularly to ensure optimum atomization and spray pattern;
- Clean equipment as specified by the manufacturer; and
- Disassemble and inspect spray guns regularly.

Another cleaning practice where VOC emissions can be reduced through special equipment is line cleaning. One method that can improve line cleaning efficiency is to introduce turbulence into the solvent going through the line during cleaning. Equipment that forces alternating pulses of solvent and compressed air is one way to accomplish this.

In addition, lines should never be cleaned by spraying VOCs into the air or into filters. Clean-up solvents should always be directed using minimal pressure into containers. Solvents should be drawn from a closed supply solvent container and discharged into a closed container with an opening only large enough to accommodate the tip of a spray gun. In addition, the spray gun pressure should be lowered (decreasing air and paint pressure) to minimize atomization of the solvent during cleaning.

7.4.1.9 Alternative Coating Application Techniques Should be Used

Where feasible, rollers or brushes should be used instead of spray guns in order to reduce the quantity of solvent-based paint thinners that are required. In addition, transfer efficiency for direct application methods (i.e., rollers, brushes) can approach 100%.

7.4.1.10 Alternative Cleaners or Low-VOC Cleaners Should be Used Instead of Solvents

Where possible, non-VOC or low-VOC cleaning agents should be used instead of solvents. For surface preparation as well as clean-up operations, alternative cleaning agents to solvents (e.g., aqueous surfactant solutions) should be used.

7.4.1.11 Solvents Used for Cleaning Should be Minimized

When cleaning products containing VOCs are used, the following work practices should be applied in order to reduce the amount that has to be used:

- Solvents with a low vapour pressure (flash point greater than 60°C) should be used. The use of common mineral spirits that typically have a 40°C flash point should be avoided;
- A standard should be established to assure that used solvent is disposed of or recycled only when it loses its cleaning effectiveness, not just because it looks dirty;
- The amount of cleaning agent to be used should be minimized by blowing as much old paint as possible back through the lines with compressed air (or by scraping the paint off the surface);
- Pre-determined and measured amounts of solvent should be used (i.e., know how much is to be used beforehand);
- When soaking is required, containers with air tight lids should be used;
- Used solvents should be returned to sealed containers of a waste collection system for recycling and re-use;
- Cleaners should be contained (i.e., covered) and tightly sealed) whenever feasible in order to reduce evaporative losses.
- Solvent-soaked rags should be disposed of in a covered container;
- Segregate cleanup solvents and recover/reuse them;
- Self-closing funnels on barrels and hoses for solvent transfer should be used;
- The spray gun should be emptied of paint prior to cleaning so that the gun system is completely dry; and
- Equipment should be cleaned promptly after use in order to prevent the drying of coatings and consequently the need to use additional solvents in the cleaning operation.

7.4.1.12 Paint Colour Changes Should be Optimized to Reduce the Use of Cleaning Solvents

The amount of cleaning with solvents can be reduced through various strategic operating practices, for instance:

- specific equipment should be assigned to handle specific paint types and colours;
- paint colour changes should be scheduled from light to dark;
- no more coating than necessary should be mixed to complete the work; and
- mixing and application equipment should be dedicated to commonly used coatings.

7.4.1.13 Alternative Finishing Practices Should be Used

Non-VOC surface coverings (walls, floors, ceilings) should be used whenever economical and feasible.

7.4.2 Traffic Marking Operations

Traffic marking operations include the marking of highway centre lines, edge stripes, directional markings and parking lots. The Canadian Council of Ministers of the Environment, in its publication, *Recommendations for CCME Standards and Guidelines for the Reduction of VOC Emissions from Canadian Industrial Maintenance Coatings*, discusses traffic markings.

The following painting materials, typically used for traffic marking, emit VOCs:

- Non-aerosol traffic paint;
- Aerosol marking paint – paints used to apply stripes or markings to outdoor surfaces, such as streets, golf courses, athletic fields, etc.; and
- Preformed tapes applied with adhesive primer.

Alternatives to solvent-based traffic paints are water-based paints, thermoplastics, preformed tapes, field-reacted systems and permanent markers. Some of these alternatives (e.g., water-based traffic paints) can be used in the summer months to avoid the use of VOCs during the time of the year when ground level ozone forms. In addition, consideration should be given to refraining from traffic line painting completely when smog alerts have been issued in the area.

Many of the work practices outlined above for architectural surface coatings can also be applied to traffic marking operations.

7.4.3 Asphalt Concrete Paving

There are three categories of asphalt concrete, specifically: (i) hot-mix; (ii) cutback; and (iii) emulsified. Hot mix asphalt is a mixture of aggregate (rock) and asphalt cement (glue) that can be customized to specific paving applications. Cutback asphalt is made by adding petroleum distillates (e.g., naphtha, kerosene, etc) to asphalt cement. As a result, cutback asphalt contains the highest diluent content of the three asphalt categories and consequently emits the highest levels of VOCs per tonne used. The primary use of cutback asphalt is in tack and seal operations (related to the repair of roads) and for preparing roads for the application of hot-mix asphalt. Emulsified asphalt is made by adding water and an emulsifying agent (such as soap) to asphalt concrete. Emulsified asphalt is used in most of the same applications as cutback asphalt, but emits less VOCs.

7.4.3.1 Use of Cutback Asphalts Should be Minimized

Several jurisdictions in North America have completely or partially banned the use of cutback asphalts, since they result in high levels of VOC emissions. There are three classes of cutback asphalts: (i) rapid cure; (ii) medium cure; and (iii) slow cure. Where possible, rapid cure and medium cure cutback asphalts should not be used. Slow cure cutback asphalts containing more than 0.5% by volume organic compounds that evaporate at 260°C or lower should also not be used, where feasible.

7.4.3.2 Use of Emulsified Asphalt Should be Restricted

Emulsified asphalts that contain organic compounds in excess of 3% by volume which evaporate at 260°C or lower should not be used for paving, road construction or road maintenance.

7.4.3.3 Temperature of Asphalt Operations Should be Monitored and Controlled

VOC emissions from the storage, mixing and application of asphalt cement double for every increase of approximately 11°C (above 125°C) in operating temperature of the asphalt cement. Operating temperatures should be closely monitored

and minimized to the extent possible in order to reduce the potential for VOC emissions.

7.4.4 Asphalt Roofing Kettles

VOCs are emitted from the installation and repair of asphalt roofs on commercial and industrial buildings, specifically from roofing kettles. Roofing kettles are used for melting, heating, or holding asphalt or coal tar pitch.

7.4.4.1 Temperature of Material Inside Roofing Kettle Should be Restricted

The temperature of material inside a roofing kettle should be limited to the following in order to reduce the generation of VOC emissions:

- Asphalt 260°C
- Coal tar pitch 200°C

Devices capable of correctly indicating and controlling the operating temperatures of roofing kettles should be properly installed and maintained in good working order.

7.4.4.2 Close Fitting Lids on Roofing Kettles Should be Used

During roofing kettle draining operations, the VOC vapours from the kettle should be contained by a close fitting lid. A close fitting lid is a VOC impermeable cover that fits securely over a roofing kettle or other container so that no gap greater than 1 cm (3/8 inch) exists between the kettle body and lid. The lid(s) should not be opened except for loading the kettle with solid roofing material or unless the material in the roofing kettle is less than 65°C.

Within 2 minutes after the draining operation has been completed, the vessel that received the hot roofing material should be covered with a close fitting lid or capped to prevent the release of visible smoke from the vessel.

7.4.4.3 Kettle Vent Should be Kept Closed

Any kettle vent should remain closed during a pressure release caused by flashing of the roofing material.

7.4.4.4 All Roofing Kettles Should be Equipped with Afterburners

If feasible, roofing kettles should be equipped with afterburner lids, which virtually eliminate VOC emissions from this source. Existing roofing kettles can be retrofitted with these afterburners.

These afterburner lids are different than the close fitting lids identified earlier, as these lids actually destroy VOC emissions from the roofing kettle. These lids will achieve higher levels of VOC emission reduction than the close fitting lids (however they are more expensive).

8. Measuring/Monitoring and Record-Keeping

8.1 Introduction

A critical aspect of managing fugitive dust generation at construction and demolition sites is to undertake the necessary measuring and monitoring of specified activities and parameters. The measurement and monitoring program can assist in determining the need for and extent of fugitive dust actions as well as the effectiveness of these actions in mitigating fugitive dust. Equally important is that a systematic record-keeping process be established and maintained throughout the duration of the construction/demolition project. This typically takes the form of maintaining a daily record-keeping log. Guidance and examples of measuring/monitoring and record-keeping activities are provided within this section of the Best Practices document.

It is recognized that measuring, monitoring and record-keeping is a time-consuming and costly endeavour. Regulatory authorities as well as construction companies are encouraged to consider these practices and implement where feasible and practical.

8.2 Measuring and Monitoring

The recommended procedures to measure and monitor opacity, stabilized surfaces and wind speed are provided below. Key parameters are considered to be among the most critical to measure/monitor at construction and demolition sites. There are other parameters that can also be monitored that relate to the generation of fugitive dust emissions. Construction and demolition firms are encouraged to work with their local permitting authority in order to identify which parameters should be measured and monitored in conjunction with their fugitive dust generating activities.

8.2.1 Opacity Monitoring

The opacity of dust leaving the property line where construction and demolition activities are being conducted, should not exceed 20%. The steps to follow in order to monitor opacity from fugitive dust sources are provided below.

Step 1: Stand at least 5 meters from the fugitive dust source in order to provide a clear view of the emissions with the sun oriented in the 140-degree sector to the back. Following the above requirements, make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction. If multiple plumes are involved, do not include more than one plume in the line of sight at one time.

Step 2: Record the fugitive dust source location, source type, method of control used if any, observer's name, certification data and affiliation, and a sketch of the observer's position relative to the fugitive dust source. Also, record the time, estimated distance to the fugitive dust source location, approximate wind direction, estimated wind speed, description of the sky condition (presence and colour of clouds), observer's position to the fugitive dust source, and colour of the plume and type of background on the visible emission observation from both when opacity readings are initiated and completed.

Step 3: Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make opacity observations approximately 1 meter above the surface from which the plume is generated. Note that the observation is to be made at only one visual point upon generation of a plume, as opposed to visually tracking the entire length of a dust plume as it is created along a surface. Make two observations per source, beginning with the first reading at zero seconds and the second reading at five seconds. The zero-second observation should begin immediately

after a plume has been created above the surface involved. Do not look continuously at the plume, but instead, observe the plume briefly at zero seconds and then again at five seconds.

Step 4: Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a 5-second period.

Step 5: Repeat Step 3 and 4 until you have recorded a total of 12 consecutive opacity readings. There is no limit as to when the 12 consecutive readings must be taken. Observations immediately preceding and following interrupted observations can be considered consecutive.

Step 6: Average the 12 opacity readings. If the average opacity reading equals 20% or lower, the source is below the recommended opacity standard for construction and demolition sites.

8.2.2 Stabilized Surfaces

The purpose of this test is to check whether a property is sufficiently crusted to prevent windblown dust. The equipment that is needed for this test is as follows:

- One steel ball. Diameter - 1.6 cm (5/8 or 0.625 inches). Mass - 16-17 grams;
- A ruler or measuring tape; and
- A cardboard frame with a 30 by 30 cm (1 foot by 1 foot) opening (optional).

Step 1: Select a 30 by 30 cm (1 by 1 foot) survey area that is representative, or a typical example, of the crusted surface.

Step 2: Hold the small steel ball one (1) foot off the ground directly above your survey area. Use a ruler or measuring tape to make sure that your hand is at the correct distance above the ground. Drop the ball within the survey area.

Step 3: Pass/Fail Determination. Observe the ground around the ball closely before picking it up. Did the ball sink into the surface so that it is partially or fully surrounded by loose grains of dirt? Has it dropped out of view entirely? Then pick up the ball. Look closely where the ball fell. Are loose grains of dirt visible? If you have answered "yes" to any of the previous questions, the surface has failed the first drop test. Note that if the ball causes a slight indentation on the surface but you do not see loose grains, the surface has passed the test.

Step 4: Select two additional areas within the 1 by 1 foot survey area to drop the ball. Repeat steps 2 and 3. If the surface passes two or all three of the drop tests, the survey area is considered as passing the test.

Step 5: Select at least two other survey areas that are representative of the crusted surface. Pick the areas randomly and make sure they are spaced some distance apart. Drop the ball 3 times within each of these additional survey areas. Once again, if the surface passes the test twice or three times, count the survey area as passing the test.

Step 6: Examine Results. If all of the survey areas have passed the test, the surface is stable, or sufficiently crusted. If one or more survey areas have failed the test, the surface is insufficiently crusted.

8.2.3 Wind Speed

Site-specific wind monitoring at construction and demolition sites is encouraged due to improved accuracy when compared to regional wind monitors. Additionally, site-specific wind monitoring may document high winds that are not captured by regional wind monitors. The following guidance has been prepared to assist activities that conduct wind monitoring. Much of the guidance provided for measuring wind speed will only be practical for the largest of construction sites.

Aspects of a successful monitoring program include the selection of proper equipment, instrument siting, instrument and site maintenance, periodic audits and frequent data review. The instruments should be sited so as to characterize airflow between the source and receptor areas. In flat terrain, or where receptors are close to the source, one meteorological site may be adequate. Additional wind monitoring sites may be needed in complex terrain.

The standard sensor height for measuring surface winds in 10 meters above ground level over open, level terrain. This usually requires the installation of

a tower or mast. For the instrument to be sited over open terrain, there should be minimal obstructions to the wind flow, such as from buildings, hills or trees. In general, wind sensors should be located where the distance from the sensors to any obstruction is at least 10 times the height of that obstruction. When mounted on a building, wind sensors should be mounted 1.5 times the height of the building above the rooftop. Since these siting guidelines are sometimes not possible, especially in urban areas, it is recommended that siting that deviates from these guidelines be reviewed by local permitting authorities or an experienced consultant prior to installation.

Data recorders are the preferred method of recording and archiving the data. They are more precise and require less maintenance that strip chart recorders. Data loggers also allow data to be transmitted by telephone or radio to a central computer. Data records must be kept for a period of at least three years after the need for data collection has ended. Data recovery from a self-maintained meteorological system should be at least 90% complete on an annual basis, with no large data gaps (i.e., gaps greater than two weeks). The use of data recorders will likely only be practical for the largest of construction sites.

The U.S. Environmental Protection Agency recommends a sampling frequency of once per second, which is typical for quality data loggers. Wind-averaging periods may depend on the purpose of the data collected and the need to meet specific regulatory requirements. Either 1 hour or 15-minute averaging periods are common.

For wind sensors, the starting threshold must be rated at no higher than 0.5 meters per second (m/s). If there is some suspicion that the site would have a significant number of hours of wind speeds under 0.5 m/s, sensors with a lower threshold, such as 0.2 m/s, should be used. Wind speed systems should be accurate to within 0.2 m/s ± 5% of the observed speed. Total wind direction system errors should not exceed 5 degrees. This includes an instrument accuracy of ± 3 degrees for linearity and ± 2 degrees for alignment to a known direction.

Frequent data review, preferably on a daily basis, is critical for collecting good meteorological data. In addition, visual inspections of each site should be made at least once every month. This will help to identify sensor alignment problems that may not be obvious in the data.

In order to ensure that the sensors operate within the manufacturer's specifications, a calibration of the sensors should be performed once every six months by a trained technician or the sensor manufacturer. In corrosive, marine or dusty conditions, more frequently calibrations may be needed. Spare sensors are helpful to avoid data loss while sensors are brought down for calibration and repair. A logbook of calibrations and repairs should be kept.

Data that is critical for regulatory purposes should be independently audited by a qualified individual who is not affiliated with the organization that maintains and calibrates the instrument. The audits should be on a schedule that is appropriate for the measurements. Typically, once per year is adequate if a routine maintenance and calibration schedule is kept. An audit report should be written and problems should be corrected as soon as possible. The audit should compare the individual sensors to the sensor performance criteria and also look at the data collection system as a whole, including the data logger and siting, to ensure that the data are representative and accurate.

8.3 Record-keeping

Construction/demolition projects should maintain daily self-inspection records and this information should be retained for at least 3 years after project completion. Fuel use records should be kept. Additionally, any activity that utilizes chemical dust suppressants for dust control should maintain records indicating type of product applied, vendor name, and the method, frequency, concentration and quantity of application. All record-keeping information should be made available to the local permitting authority immediately upon request. A copy of the record-keeping should also be retained on-site.

Provided below are examples of daily record-keeping forms that can be used by construction and demolition firms, specifically related to practices to reduce PM emissions. Consideration should also be given to maintaining records of fuel usage/equipment maintenance in order to ensure proper management of fuel consumption.

CHEMINFO

Sample Daily Record-keeping Form for Fugitive Dust Abatement

Project Name:_____ Project Location:_____ Date:_____

Each time you visually check an area for dust control measure implementation, write the time in the shaded box at the top of the table and write a "Y", "N" or "NA", in the boxes below your recorded time. Use the "Comments" column to record other pertinent information (e.g., describe the corrective action taken).

								Comments
1. Before Dust Generation Operations Occur								
Pre-watering to depth of cuts?								
Pre-watering storage piles?								
Work phased/disturbance minimized?								
Water trucks being operated?								
Water trucks being filled?								
Other (specify in Comments column)								
2. During Dust Generating Operations								
Is visible dust present?								
Applying water?								
Applying dust suppressant(s) other than water?								
Fences 3'-5' with 50% porosity intact?								
Shut down operations?								
Checked control measures before leaving the work site for the day?								
Other (specify in Comments column)								
3. Unpaved Haul/Access Roads								
Is visible dust present?								
Vehicles travelling less than 15 miles per hour (24 kilometers per hour)?								
Is road visibly moist?								
Is road covered with gravel, recycled asphalt or other suitable material?								
Applying dust suppressant(s) other than water?								
Other (specify in Comments column)								
4. Loading, Unloading and Storage Piles								
Is visible dust present?								
Pre-watering material?								
Water being applied during loading/unloading?								
Other (specify in Comments column)								
5. Trackout/Access Points								
Is trackout control device intact?								
Cleaned-up trackout?								
Other (specify in Comments column)								
6. Temporary Site Stabilization								
Applying water?								
Applying dust suppressant(s) other than water?								
Other (specify in Comments column)								

Total Number of Litres Applied:_____ Responsible Person's Signature and Title:_____

CHEMINFO

Sample Daily Record-keeping Form for Fugitive Dust Abatement

A daily log should be maintained that records the actual implementation of measures to mitigate fugitive dust generation. Write "yes" or "no" for each question in the Table below.

Elements Monitored	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	Comments
Forecasted high winds											
Wind speed											
Wind direction											
# of water trucks operating											
# of water trucks available											
Roads moist/watered											
Unstabilized areas moist/watered											
Dry areas observed											
Irrigation working											
Water tanks filled											
Water pumps working											
Chemical stabilization used											
Track-out observed											
Blow sand observed on-site											
Blowing dust observed on-site											
Blowing dust observed off-site											
Wind/snow fence maintained											
# of complaints received											
Corrective action taken											

N = No or None Y=Yes N/A = Not Applicable

Name_____ Date_____

Additional Comments:

9. Members of the Construction and Demolition Multi-stakeholder Working Group

Name	Organization
Patrick Georges	Environment Canada
Monique Gilbert	Ville de Montréal
Dave Gylywoychuk	Manitoba Heavy Construction Association
John Jonasson	Manitoba Conservation Pollution Prevention
Dan Jutzi	Environment Canada
Jim Mahon	Ontario Environment Network
Tim Smith	Cement Association of Canada
Gerry Ternan	Environment Canada, Atlantic Region
Bruce Walker	STOP
Shelley Wearmouth	Wearmouth Demolition
Observers:	
Roch Berubé	Association de la construction du Québec
Jacques Blanchard	Ville de Montréal

Demolition/Deconstruction Sub-committee

Name	Organization
Estelle Coté	Consultant
Corinne Fulton	3R Demolition Corp.
Monique Gilbert	Ville de Montréal
Tracey Inkpen	Environment Canada
Jim Mahon	Ontario Environment Network
Olga Schwartzkopf	Soil and Water Conservation Society, BC Chapter
Jo-Anne St. Godard	Recycling Council of Ontario
Fred Topley	Greenspoon Specialty Contracting
George Venta	Cement Association of Canada
Shelley Wearmouth	Wearmouth Demolition
Observers:	
Roch Berubé	Association de la construction du Québec

Residential and Commercial Building Design Sub-committee

Name	Organization
Vince Catalli	Royal Architectural Institute of Canada
Estelle Coté	Consultant
Bruce Gillies	Environment Canada, Ontario Region
Dan Jutzi	Environment Canada
Jo-Anne St. Godard	Recycling Council of Ontario
Anna Tilman	Save the Oak Ridges Morraine
George Venta	Cement Association of Canada
Alex Zimmerman	Canada Green Building Council

Residential and Commercial Building Construction Sub-committee

Name	Organization
Estelle Coté	Consultant
Monique Gilbert	Ville de Montréal
Tracey Inkpen	Environment Canada
Christopher Morgan	City of Toronto
Olga Schwartzkopf	Soil and Water Conservation Society, BC Chapter
Anna Tilman	Save the Oak Ridges Moraine
John Volcko	PCL Construction
Observers:	
Roch Berubé	Association de la construction du Québec
Jacques Blanchard	Ville de Montréal

Architectural Surface Coatings Sub-committee

Name	Organization
Heather Atkinson	Environment Canada
Vince Catalli	Royal Architectural Institute of Canada
Estelle Coté	Consultant
Sue Fraser	Environment Canada
Barry Law	Master Painters Institute
Ian Meredith	Terra Choice Environmental Marketing
Olga Schwartzkopf	Soil and Water Conservation Society, BC Chapter
Bruce Walker	STOP

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11. Selected Sources to Obtain Additional Information

Topic/Area	Organization	Link
Associations	Canadian Construction Association	http://www.cca-acc.com/
	Canadian Home Builders' Association	http://www.chba.ca/
	Construction Sector Council	http://www.csc-ca.org/
Selection of Green Materials	Canadian Green Building Council	http://www.cagbc.org/
	Leadership in Energy and Environmental Design (LEED Canada)	http://www.cagbc.ca/building_rating_systems/leed_rating_system.php
	Canadian Construction Association's Green Building Resource Centre	http://www.cca-acc.com
	Green Globes Canada	http://www.greenglobes.com/design/homeca.asp
	Athena Sustainable Materials Institute	http://www.athenasmi.ca/
	U.S. Green Building Council	http://www.usgbc.org/
	LEED U.S.	http://www.usgbc.org/LEED/LEED_main.asp
	Environmental Choice Program	http://www.environmentalchoice.com
Dust Control Websites/Reports	New Mexico Environment Department	http://www.nmenv.state.nm.us/aqb/dust_control.html
	Maricopa County (Arizona) Dust Devil Academy	http://www.maricopa.gov/sbeap/dust_main.aspx
	Clark County (Nevada) Construction Activities Dust Control Handbook	http://www.co.clark.nv.us/air_quality/Permitting-Applications/Dust%20Control%20Handbook.pdf
	Coachella Valley (California) Fugitive Dust Control Handbook	http://www.cvag.org/depts/CV_DCH.pdf
	Alberta Roadbuilders and Heavy Construction Association Pollution Prevention Manual	http://www.arhca.ab.ca/order_pollutionmanual.php
Pollution Prevention	Canadian Centre for Pollution Prevention	http://www.c2p2online.com
	Pollution Prevention Information Centre – Residential Construction	http://peakstoprairies.org/topichub/toc.cfm?hub=31&subsec=7&nav=7
	Low Sulphur Fuels Procurement Guide	http://www.ec.gc.ca/energ/ecology/LSF/ecological_measures_e.cfm
Journals	Grading & Excavation Contractor	http://www.forester.net/gec.html
	Erosion Control	http://www.distributednrg.com/ec.html

Ontario is now in Step Three of the Roadmap to Reopen. Follow the restrictions and public health measures.

Ontario

Operations manual for air quality monitoring in Ontario

Technical guidance and direction to emitters and station operators in Ontario who are responsible for the operation and maintenance of air quality monitoring stations near an emitter's facilities. It provides a framework for consistent air contaminant monitoring across the province.

Disclaimer: This manual is not, and should not be construed as, legal advice. Please review applicable laws, including *Ontario Regulation 419/05*, and, if you have any questions about the application or interpretation of the legal requirements or have other legal questions, you should consult a lawyer.

Overview

This Operations Manual for Air Quality Monitoring in Ontario is an update of the 2008 version of the manual which was originally published by the Ontario Ministry of the Environment and Climate Change (ministry) in 2003 as the Operations Manual for Point Source Air Quality Monitoring. The guidance within this manual is to be used when air quality monitoring is conducted in Ontario and the data is to be submitted to the ministry or used to support applications or assessments submitted to the ministry. The ministry provides oversight of air quality monitoring in Ontario near point sources through the role of inspector.

This 2018 revised version, hereafter referred to as the Manual, includes revisions needed to recognise new sampling and monitoring technologies, to better reflect monitoring activities under *Ontario Regulation 419/05: Air Pollution – Local Air Quality* and in recognition of expanding monitoring activities in the province through various programs and initiatives.

The purpose of the Manual is to provide technical guidance and direction to emitters and station operators in Ontario who are responsible for the operation and maintenance of air quality monitoring stations. The manual provides a framework to harmonise air contaminant monitoring across the province. The intent of the Manual is to ensure the collection of accurate air monitoring data, and to ensure that the data is collected and reported to the ministry in a timely fashion, as appropriate.

The requirements set out in the Manual are considered to be minimum requirements to satisfy the ministry that the quality of data being collected from monitoring programs is acceptable. Emitters and station operators may choose to follow more stringent specifications or more elaborate procedures. Additionally, the ministry may in certain instances require more stringent criteria to be utilized to meet the goals of the monitoring. In certain situations, taking practical circumstances and limitations into consideration, the ministry may consider variations to monitoring crtieria. Any such deviations from the Operations Manual must be approved by, and completed in consultation with, the ministry.

The Manual is based on standards and procedures used by national agencies such as Environment and Climate Change Canada (ECCC) and the United States Environmental Protection Agency (US EPA).

The 2008 manual will remain in effect until June 30, 2018. This revised manual will take effect on July 1, 2018. However, emitters are encouraged to follow the revised manual prior to this date, where possible. New monitoring activities will be required to follow the revised manual immediately. The Manual is considered to be

a living document which will be reviewed and revised periodically to reflect the introduction of new monitoring and data collection technologies and practices, as well as changing ministry requirements for air monitoring in Ontario.

Scope of the Revised Manual

The Manual is a compilation of guidance material and requirements pertaining to the collection and reporting of air quality data for both continuously monitored and non-continuously sampled parameters. The Manual applies to all air quality monitoring activities conducted in Ontario by emitters and other agencies that:

- are requirements of legal instruments (e.g., Control Orders, Environmental Compliance Approvals [ECAs], Memoranda of Understanding)
- will be used in support of Environmental Assessments (EA)
- are part of Combined Assessments of Modelling and Monitoring (CAMMs) conducted under Paragraph 3 of Section 11(1) of *Ontario Regulation 419/05*
- result in monitoring data being submitted to the ministry
- generate air quality data which will be presented to health units and/or to the public of Ontario

The Manual includes the following topics:

- Quality Assurance/Quality Control (QA/QC) Guidance
- Data validation and editing
- Requirements for reporting monitoring and sampling results to the ministry
- Station and Probe Siting Criteria
- Standard Operating Procedures (SOPs) for continuous monitoring and non- continuous sampling methods

Section 1, QA/QC Guidelines, discusses monitoring and QA/QC objectives, the QA/QC program, monitoring plan, site selection, measurement methods and operating specifications, sampling system requirements, site and analyzer operation, calibration and reference standards, the ministry's audit program, station and instrumentation, and laboratory selection and analytical testing.

Section 2, Data Validation, discusses date and time stamping, Method Detection Limit (MDL), meteorological data, and data editing and validation protocols for continuously monitored and discretely sampled parameters.

Section 3, Data Reporting, discusses various reporting requirements for monitored data including exceedance reporting, data reporting requirements for emitters and other agencies, and public reporting requirements.

Section 4, Air Quality Monitoring Data Collected by Emitters, outlines requirements for emitters that collect air monitoring data as part of the Source Emissions Monitoring (SEM) program, or as a condition of an Environmental Compliance Approval (ECA), an order, or other legal instrument.

Section 5, Station and Probe Siting Criteria, provides guidance on the selection of sites to meet the objectives of the monitoring program. It also provides guidance and requirements for the proper location, and design and construction, of inlet probes for the parameters listed in the Manual.

Section 6, the SOPs, provide minimum performance specifications. The SOPs briefly describe, on a parameter by parameter basis,the US EPA designated reference methods, equivalent methods and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. The SOPs are not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions.

Key Revisions

There are a number of revisions in this edition of the Manual. The key revisions include:

Station and Instrument Documentation:
This is an essential component of a QA/QC program that is now explicitly discussed within the Manual. Previous versions of the manual referenced ECCC and US EPA guidance documents. Station and instrumentation documentation and logs are now a routine part of audits and are a requirement.

Performance Specifications:
New within manual to ensure that reliable instruments are used in monitoring programs.

Certification/Verification of Calibration Equipment by the Ministry:
The ministry's Laboratory Services Branch (LaSB) no longer provides annual certification services. Site operators should obtain the necessary certification equipment or the certification services from a third party capable of providing the equipment or service.

Ministry Audit Program:
Audit criteria are now included which define an audit failure and introduce the concept of a conditional pass.

Exceedance Reporting:
The manual clarifies that when measurements take place over shorter intervals than the standard's averaging time, assessment against standards must be done using running averages. That is, limits apply to any defined period, not just clock defined periods.

Standard Operating Procedures (SOPs):
The list of continuous monitors has been expanded. Additions include SOPs for nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (O_3), the Recordum Airpointer and the Sharp 5030.

Additions to the list of non-continuous samplers include asbestos sampling, hydrogen fluoride sampling, and passive trace gas sampling. SOPs for filter handling and high-volume sampler calibration have been developed.

Other:
This version of the Manual includes additional information, based upon a joint ministry-industry review related to the use of ambient monitors for a CAMM, in accordance with Paragraph 3 of Section 11(1) of *O. Reg. 419/05*. There are other updates related to the ministry's introduction, in 2011 for implementation starting in July 2016, of annual average air standards.

1.0 QA/QC Guidelines for Source Emissions Monitoring

1.1 Introduction

To ensure that data reported to the ministry and the public is of high quality, operators of air quality monitoring stations and equipment are required to implement the quality assurance / quality control (QA/QC) practices described in this Manual: these practices are minimum requirements. Participants may choose more stringent specifications or more elaborate QA/QC procedures as they deem as the minimum requirement set out in this manual.

1.2 Monitoring Objectives

There are a variety of objectives for which an ambient air quality monitoring program may be required:

- Measuring air contaminant concentrations for use in assessing emissions in relation to ministry standards and limits (*O. Reg. 419/05* standards, point of impingement [POI] guidelines, ambient air quality criteria [AAQCs], interim guidelines, or any other limits set out in a regulatory instrument such as an Order or

Environmental Compliance Approval [ECA]). A summary of *O. Reg. 419/05* schedule 1, 2 and 3 standards, schedule 6 upper risk thresholds, POI guidelines and AAQCs is available from the Rules on air quality and pollution webpage;

- Measuring air contaminant concentrations of any contaminant that may cause an adverse effect;
- Ensuring good quality data is collected to assist in the prevention of possible adverse effects due to air emissions from an industrial facility;
- Providing and reporting accurate measured air monitoring data from industrial sources to the ministry and the Ontario public;
- Providing accurate and reliable measured air pollutant concentration and meteorological data in support of air quality modelling calculations (see ministry document "Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report" for information on incorporating monitoring data into modelling);
- Determining the impact of industrial air emissions on local air quality in an adjacent community(ies) and in the regional air shed;
- Providing accurate and reliable data as part of an integrated air quality management and/or control system;
- Determining air quality improvements and trends in conjunction with industrial air emissions abatement programs;
- Providing data to assess local population and ecosystem exposure to air contaminants;
- Determining background concentrations of contaminants as part of an Environmental Assessment (EA); and,
- Monitoring to ensure proponents meet modelled emissions as specified in the EA process.

1.2.1 *Ontario Regulation 419/05*

The results of ambient air monitoring can be used to identify non-compliance/non-conformance with the standards in *O. Reg. 419/05* and other limits. However, it should be noted that the ministry will not accept monitoring information alone as a conclusive demonstration of compliance/conformance with the standards in *O. Reg. 419/05* or other limits. One rationale for this position is that a monitor can only measure concentrations at a very specific location and cannot provide information about concentrations at other locations.

To address such limitations of solely using ambient air monitoring or atmospheric dispersion modelling, the most accurate assessments of compliance with *O. Reg. 419/05* must include the combination of ambient air monitoring with atmospheric dispersion modelling. Appendix E (Review of Approaches for the Combined Analysis of Modelled and Monitored Results) of the ministry's Procedure for Preparing an Emission Summary and Dispersion Modelling Report, provides guidance on the coordinated use of modelling and monitoring to assess compliance with *O. Reg. 419/05*. Any ambient air monitoring plan for a Combined Assessment Modelling and Monitoring (CAMM), submitted by emitters as part of *O. Reg. 419/05* must be a reviewed and approved plan under Section 11(1) paragraph 3 of *O. Reg. 419/05*. Plans are subject to certain requirements, for example, meeting siting criteria, potentially subject to ministry audits, etc.

1.3 QA/QC Objectives

The QA/QC guidelines within this manual provide uniform data quality objectives to be achieved by emitters along with minimum requirements with respect to operational protocols. The implementation of these guidelines will ensure that air quality monitoring data across the province is:

- accurate and reliable
- representative (spatially and temporally)
- comparable
- complete

1.4 QA/QC Program

The Environment Canada report entitled National Air Pollution Surveillance Network Quality Assurance and Quality Control Guidelines[1] documents the elements of an air quality monitoring QA/QC program, which includes the following:

- plan, establish, develop and manage monitoring network programs (measurement methodology, equipment selection, and operating conditions);
- site selection (spatial scale of representativeness, location, separation distances);
- sampling system requirements (shelter requirements, probe/analyzer siting criteria, manifold design, probe material);
- site and analyzer operation (site visits, operating procedures, data acquisition and preventative maintenance);
- calibration (frequency, procedures, guidelines);
- station and instrumentation performance audits, laboratory accreditation/selection and testing;
- data validation and reporting;
- documentation (site documentation, site activities logbook, analyzer operation and maintenance manuals, QA/QC manual);
- personnel training and technical support.

All of these elements are discussed within the Manual, and minimum requirements are provided.

1.5 Monitoring Plan

Prior to initiating ambient air quality monitoring activities, a monitoring plan must be submitted to the ministry for approval. This would include development plans for monitoring activities undertaken either voluntarily or as required in legal instruments such as notices, orders or ECAs, and CAMMs, submitted to the ministry as part of *O. Reg. 419/05*, as per Paragraph 3 of Section 11 (1). It is recommended that the ministry be consulted early in the planning stages. The purpose of the ministry review of the monitoring plan is to ensure the data collected and submitted to the ministry is accurate and reliable in terms of assessing compliance and/or the potential for adverse effects. Monitoring plans will be reviewed and approved in writing by the ministry following a consultative process with the proponent.

The monitoring plan, as a minimum, must include the following:

- purpose or objectives of the monitoring program;
- expected duration of the monitoring program;
- identified and suspected air emission source(s);
- identified and suspected receptors;
- number and location of monitoring sites (including meteorological sites);
- air quality parameters to be monitored and the monitoring frequency;
- monitoring methods/instruments to be used;
- analytical methods/procedures;
- laboratory services support to be used;
- dispersion model to be used (if applicable);
- QA/QC plan;
- data reporting procedures

If the monitoring is conducted by or on behalf of an emitter or another entity to evaluate in community concentrations of contaminants, once the monitoring station or network has been established, any proposed changes to the monitoring plan, such as the addition of new instruments, the removal of instruments, or relocated monitors, etc., must be submitted in writing, for prior approval, to the ministry.

1.6 Site Selection

Site selection will depend upon the purpose of the monitoring program. For example, in the case where assessing community exposure is the objective, site selection must consider the location of identified or suspected sensitive receptors, and the locations where the highest concentrations of air contaminants are anticipated based on meteorological and modelling information. In the case where ambient monitors are being used to assess emissions from fugitive sources, monitors should be sited in the vicinity of those sources. The proponent should consult with the ministry early in the site selection process. All monitoring sites must be located in accordance with ministry siting criteria (see Section 5) and the locations must be approved in writing by the ministry as part of the monitoring plan. Taking practical circumstances and limitations into consideration, the criteria need to be met as closely as possible. The location of sites may be reviewed or audited from time to time by ministry staff to ensure that the monitoring objectives and siting criteria are, and will continue to be met in the foreseeable future. Monitoring sites may only be relocated with approval from the ministry.

1.7 Measurement Methods, Analyser Selection and Operating Specifications

There are a variety of recognised methods to measure pollutant concentrations in air. Analysers that satisfy the requirements of the United States Environmental Protection Agency (US EPA) as equivalent, or as reference methods for ambient air monitoring, should be selected where possible. Section 6 provides Standard Operating Procedures (SOPs) for analysers which are predominantly used in Ontario. These SOPs are short documents which provide emitters and site operators with information on reference documents, the acceptable monitoring method(s), any additional equipment required, and instrumentation QA/QC requirements, such as the type of internal/external performance checks and calibrations, and the performance audits by the ministry.

Minimum performance specifications for gas analysers are summarised in Table 5.

Real-time measurement of particles in air must also satisfy the requirements of US EPA equivalent reference methods for ambient air monitoring. Alternate methods, such as nephelometers, may be used in an ambient monitoring program, provided the unit has been validated against a reference or equivalent method.

1.8 Sampling System Requirements

The integrity and true representation of the air sample and the resulting data quality is strongly affected by the design of the sampling system in a monitoring station. The following all play an important role in ensuring the collection of representative samples of air: temperature stability of the shelter, the location of the sampling probe(s), the manifold or sample inlet line system, the length of the probe, probe construction material and the filters/fittings.

1.8.1 Shelter Requirements

Continuous analyzers must be housed inside secured buildings or shelters with restricted and/or controlled public access. It is recommended that the analyzers be housed in their own dedicated shelter for better control over concerns such as security, temperature stability, dust levels, health and safety, and after hours or weekend access. The shelter must be ventilated, heated and cooled to maintain an inside temperature in the range required for operation of instruments throughout the year to meet the specifications of the housed instrumentation. It should have good lighting, and must have an adequate electrical power supply. The shelter must also provide adequate space and electrical power supply to allow ministry personnel to operate audit equipment. Communications service should be available for data transmission telemetry. Consideration should be given to the use of an intrusion alarm and/or a chain link fence around the shelter, and adequate exterior lighting to secure the facility and protect it against unauthorised access. The shelter location requirements, with respect to surrounding obstructions, are summarized in the Station and Probe Siting Criteria section (Section 5).

Stand-alone samplers must be provided with, and be attached to, a solid, level and stable foundation that will prevent the sampler from toppling. A concrete pad or an elevated platform is acceptable. Tall grass and bushes must be kept trimmed for at least 10 metres in all directions around the sampler. Sampler line power must be

provided with service wires that comply with local and provincial electrical codes. Collocated samplers must be located at least 2 metres, but not more than 4 metres apart. **The operator must take practical steps to ensure that the motor exhaust does not influence or interfere with samples collected. As best practice, the MOECC recommends a minimum exhaust conduit length of 3 metres from the monitor inlet downwind according to the prevailing wind direction. The placement of the exhaust conduit must also consider the potential impact on other nearby samplers**.

1.8.2 Probe Siting Criteria and Manifold Design

Air sample inlet probe construction materials along with the design of the inlet manifold are important in obtaining representative air samples and conserving the integrity of the contaminant concentrations. The design of the inlet manifold should minimize the effects of moisture condensation, pressure drop, dust settlement and air sample residence time in the inlet. To achieve this goal, the inlet manifold design must adhere to the requirements outlined in Appendix II of the ECCC QA/QC guidance document[1]. Regular inspections of the inlet line and manifold are required to ensure that they are kept clean and have no air leaks.

1.9 Site and Analyzer Operation

The operation of the monitoring stations, analyzers and samplers must include site visits by the operating party, regularly scheduled zero and span verification, manual calibrations, sample filter changes (e.g., discrete particulate samplers), preventative maintenance and documentation.

It is the responsibility of the company/emitter/proponent that the necessary consumables and spare parts are available to minimize instrument down time, so as to ensure that the necessary percentage of valid data is met (see Section 2.4). As a minimum, the recommendations within manufacturer's instrument operations manuals should be followed.

1.9.1 Site Visits and Analyzer Operations

The frequency of site visits will depend on system and instrument reliability, recommended manufacturer service and maintenance requirements, and past experience with site operations. A schedule of routine bi-weekly visits is recommended. More frequent visits are suggested, for example, to check instrument calibration as soon as possible after a pollution episode, or if there is any doubt about station and analyzer operations. This will require judgment on the part of the operator. Each operation and maintenance site visit by the operator must be documented in the site log or an electronic log. A sample pollutant log for SO_2 is shown in Appendix 1. The operator should also follow a checklist of activities to ensure proper operating conditions before leaving the site. The Environment Canada QA/QC guidance document[1] provides a checklist for consideration by site operators (see Appendix 2).

The ministry SOPs for continuous analyzers require, as a minimum, a monthly external performance check and calibration using a certified calibration unit. Quarterly external performance checks are required for the continuous and non-continuous particulate samplers.

The operator must be trained and have experience in the operation of each continuous analyzer and non-continuous sampler used, and closely follow the procedures in the manufacturer's operating manual and the ministry SOPs listed in Section 6.

1.9.2 Data Acquisition

For continuous monitoring of air contaminants and meteorological parameters, a real-time data acquisition system (DAS) to collect, display and report the data is required. Data Acquisition Systems have a wide range of capabilities (e.g., telephone, wireless, radio link, satellite communications, editing and reporting software, etc.)

and emitters/site operators should select systems that suit their needs and also meet the requirements specified by the ministry.

1.9.3 Preventative Maintenance

Preventative maintenance routines specified in the analyser's or sampler's manufacturer's operation and maintenance manuals of the analyzer or sampler should be followed as closely as possible. Operators may wish to follow more stringent procedures.

1.10 Calibration and Reference Standards

In combination with automatic zero and span checks, calibrations are used to establish the validity of the data.

There are many models and makes of dilution calibrators designed for dynamic calibration of ambient air analyzers. Gas cylinders, permeation devices or a combination of both can be used as calibration source materials. The operator must be properly trained and have experience in the operation and maintenance of the calibrator. Federal and Provincial Health and Safety legislation must be followed with respect to operator training and the proper handling and shipping of calibration materials.

Ministry SOPs state that operators must perform an external performance check and calibration on continuous and non-continuous air monitoring and sampling equipment with a certified calibration unit. This requires that the calibration materials/gases and measurement devices, such as flow meters and pressure gauges, must be certified for accuracy against a reference or transfer standard traceable to a primary reference standard of the United States National Institute of Standards and Technology (NIST) or another equivalent international standards institute. This is to ensure consistency across the province and reproducibility between instruments and over time. The responsibility for ensuring that calibration materials and measurement devices have the required certification rests with the emitter/proponent.

At least once per year, formal certification of gas calibration devices by a certification authority is required. The ministry will verify at least once per year that the gas calibration devices used by site operators have had their annual certification performed.

Flow, temperature and barometric pressure calibration equipment must have the certification traceable back to NIST standards (or another equivalent international standards institute) according to the frequency recommended by the manufacturer. This can be accomplished by obtaining the necessary equipment or certification services from a third party capable of providing the equipment or service.

1.11 Audit Program

Ministry staff will regularly audit industrial monitoring procedures and activities. Authority for these audits can be found under Section 156 of the *Environmental Protection Act* (EPA). The audit program will determine the effectiveness of quality control activities used by station operators and data management staff. Ministry staff aim to ensure province-wide consistency by conducting audits.

1.11.1 What to Expect when Audited

Prior to the first audit, ministry staff will arrange a meeting with emitter management and the station operator to provide the scope of the audit, the obligations of the inspector and emitter, and a list of the documents the inspector will need to review while on-site. Once an emitter/proponent has received notification by the ministry of the date an audit of the monitoring equipment is to be undertaken. No Calibration or adjustment of the instrument should occur unless there has been a malfunction or failure. Should such an event (malfunction or failure) occur it is to be documented in the log and the ministry promptly informed.

A station operator or an emitter's management representative must accompany ministry inspection staff to access the sites and witness the audit. During the on-site audit, the inspector(s) will introduce themselves on arrival; and if required provide information on the reason(s) for the audit, the statutory authority (the law) governing the audit (EPA Section 156) and the scope of the audit. Ministry staff are also able to address concerns brought forward and should provide clear, detailed explanations of ministry requirements when necessary. They will also provide a contact number should further information or feedback be required. Site operators and emitters' management representatives are encouraged to ask any questions they may have about the audit process or ministry guidelines and requirements.

After the audit is completed, the preliminary results will be reviewed with the site operator or emitter's company representative while the inspector is still on site, and the site operator or emitter's company representative will be asked to sign the audit results worksheet(s) as having witnessed the audit. If the ministry audit criteria are met, based on instrumentation performance checks such as air sampling flow rates and responses to test gas concentrations, etc., the audit results will be provided in writing by the inspector to the emitter's management representative or the site operator via a formal audit report. If the audit criteria are not met, the inspector will provide the site operator with the option of immediately resetting the instrument within acceptable tolerances. At that time, the inspector will advise the site operator or the emitter's company representative of corrective actions that may be required. A report of the results and of any corrective actions required will be sent to the emitter as part of the audit report. Depending on the circumstances and follow-up actions, the ministry may re-audit an instrument that did not meet the audit criteria.

After the audit, the inspector may contact the site operator or emitter's management representative prior to finalizing audit reports to clarify information or to discuss details of the results. Periodically, short-notice audits or unannounced audits may be conducted. In this case, the site operator or emitter's management representative will be given minimal but reasonable notice.

1.11.2 Audit Focus and Scope

The main focus of the audit program is to ensure that air quality measurements recorded by emitters are collected, managed and reported to the ministry in a manner that ensures the integrity of the collected and reported data. Air quality monitoring comprises a number of activities, processes, procedures and data management practices. These include the locating of air monitoring stations following established siting criteria; the proper installation, operation and maintenance of analyzers and samplers; sample analysis in a laboratory; data management and reporting; and information management.

In situations where an emitter has hired a third party to operate and maintain air quality monitoring stations, and to report monitoring data to the ministry, the ministry considers the emitter to be responsible for the station. Audit reports will be sent to the emitter.

The scope of the ministry audit program is to determine the overall performance of monitoring activities performed by the emitters and conformance to generally accepted QA/QC requirements for air quality monitoring and data reporting. This is best accomplished through a 'Systems Audit', that is, a comprehensive audit that incorporates all activities, processes, procedures and practices related to the collection and reporting of air quality data by emitters. The 'Systems Audit' has essentially three components: a 'Site Audit', 'Instrument Performance Audit' and an 'Information Management Audit'.

Site/Instrument Performance Audit

Site audits include, but are not restricted to:

- how well sites conform to siting criteria
- how well sites are maintained

Instrument performance audits may include, but are not restricted to:

- determining that instruments and sampling devices are properly installed
- checking overall condition of instruments and sampling devices and performance of required maintenance
- assessing the complete sampling system
- performing instrument checks
- reviewing sample handling, storage and shipping
- conducting collocated monitoring by the ministry, and
- examining and verifying the station and instrument log, and calibration records

A site audit will periodically be performed in conjunction with an instrument performance audit. The instrument performance audits are conducted with certified audit devices (e.g., portable gas calibrators, flow meters, temperature and barometric pressure sensors, gas cylinders) traceable to a NIST (or another equivalent international standards institute) standard.

As described in the SOPs (section 6.0), instrument performance audits will be performed by ministry staff at least quarterly for continuous analyzers, at least semi-annually for non-continuous samplers and every one to two years for meteorological sensors. The frequency of audits will also depend on performance. Additional audits by the ministry or a calibration check of the analyzer(s) by the site operator after a measured pollution incident may also be required.

For the purposes of the audit, and hence data quality acceptability, the ministry will use a conformance/non-conformance limit of ±10% of the test gas value or of the sampler air flow rate. Non-conformance with this criterion will require that the emitter, in consultation with the ministry, take corrective actions and advise the ministry in writing of any actions taken. Corrective actions may include data editing to correct historical instrument drift.

In cases where criteria are not met, a follow-up audit by ministry staff may be required to ensure that appropriate corrective actions have been taken in a timely manner. For continuously monitored parameters (such as SO_2 or total reduced sulfur [TRS] acquired with a telemetry system, an audit starting from the analyzer through to the emitter's central computer will be undertaken periodically to ensure that the data recorded by the analyzer is correctly transmitted to and stored in the operator's data acquisition system. Finally, the ministry's Laboratory Services Branch (LaSB) may also participate in these audit activities with respect to the selection, use and performance of private laboratories.

Information Management Audit

Information management audits apply to all aspects of information collection, handling, storage and retrieval, this includes but is not limited to: record keeping (instrument operation and maintenance logs, sample submission chain of custody forms, data validation/editing, site activity logs, etc.); continuous data computer storage and back-up procedures; DAS time verification procedures; data editing/reporting protocols (reporting of method detection limits, required statistical analyses) and required formats; laboratory reports, etc.

1.11.3 Audit Criteria

An instrument will be deemed to have failed an audit if any of the following criteria are met:

- One or more audited instrument parameters do not meet the quantified audit criteria;
- The operator adjusts or calibrates the instrument after notification of an impending audit has been given. This condition does not apply to daily spans, and does not apply if calibrations are part of a routine maintenance schedule which has been previously documented and made available for verification by ministry audit staff;
- The analyser fails to stabilise within 10 minutes after the introduction of the test gas at any given calibration point; or
- The instrument is not properly connected to the sample inlet.

A failed audit may result in instrument audit frequency being increased until the instrument passes two consecutive audits. If the operator does not have, or fails to keep current, a log of calibration and maintenance activities, or if the log is unavailable for review by the audit staff at the time of an audit, a conditional pass may be issued if the monitor otherwise passes the audit.

Note: This type of conditional pass is administrative in nature and not related to the performance of the equipment.

1.12 Station/Instrumentation Documentation and Logs

Logs must be kept, and they must include a record of all work performed on an instrument. The log should be kept on site and remain with the instrument. The log must be kept current and must be available for on-site review by ministry staff. Logs should be maintained by the person or persons responsible for the calibration, maintenance and repair of the instruments and must contain the following:

- Date and time of service activity;
- All data relevant to calibration; calibration values and settings (span pot, zero pot, etc.);
- Documentation of the nature, as well as the date and time, of any adjustments that are made (span changes, zero changes, etc.) and the reasons for the adjustments;
- Description of any repairs that are made (lamp replacement, quartz tube replacement, etc.) and the reason for the repairs;
- Description and date of equipment malfunction, modifications or replacement; and,
- Documentation of routine maintenance actions (perm tube replacement, filter exchange, etc.).

All original records (calibration log and site logs) must be complete, legible, dated and signed by the site operator and retained as a part of the permanent analyser calibration record. The operator's signature on the calibration log form certifies that the calibration has been performed in accordance with QA/QC protocols, as per SOPs, and that the information contained on the form is accurate.

1.13 Laboratory Accreditation/Selection

For environmental samples which require laboratory analyses, such as suspended particulate matter (SP) (previously referred to as total suspended particulate matter [TSP], or particulate matter [PM]) and its constituents (e.g., trace metals, polycyclic aromatic hydrocarbons [PAH], dioxins/furans [PCDD/PCDF], etc.) and volatile organic compounds (VOC), the ministry requires that all environmental laboratory services work be performed by laboratories whose analytical methods, as required by the monitoring program, are accredited in accordance with the international standard , except under the following circumstances.

The ministry will allow the use of a laboratory which does not have the required accreditation provided the ministry can review and approve the selection of the laboratory, the proposed analytical methodologies and the QA/QC procedures. The ministry will provide advice and guidance in assisting in selecting an environmental analytical laboratory for required analytical services. For assistance contact: Laboratory Services Branch, 125 Resources Road, Etobicoke, Ontario M9P 3V6, 416-235-5743.

Emitters should consult the Standards Council of Canada (SCC) or the Canadian Association for Laboratory Accreditation (CALA) for a list of accredited Ontario analytical laboratories to perform specific air analyses. The lists are derived from accreditation scopes posted on both the SCC and CALA websites and are scheduled to be updated quarterly. However, this may not ensure its accuracy or completeness. Errors or omissions should be reported in writing to the ministry's Laboratory Services Branch (LaSB), 125 Resources Road, Etobicoke, Ontario M9P 3V6 care of the Assistant Director. Accredited laboratories operating outside of Ontario may request to be included on the list by writing to the same address.

The analytical methods accepted by the ministry's LaSB are referenced in the relevant SOPs presented in Section 6. Copies of these method descriptions are available from the ministry's LaSB by e-mailing to

LaboratoryServicesBranch@Ontario.ca and a PDF copy of the method will be provided. Please provide your full contact details including address and telephone number.

Questions regarding these methods or the list of accredited or certified laboratories can also be directed in writing to the mailing address above or electronically via the email address above.

It is important to note that, where achievable, the ministry requires analytical method detection limits (MDL) for laboratory analyzed samples to be at least a factor of ten lower than the applicable *O. Reg. 419/05* schedule 1, 2 and 3 standards, POI guidelines and AAQCs. Information on MDLs and how they are to be used in reporting data is provided in section 2.2.

Data Validation and Reporting

2. Data Validation

2.1 Data Time Stamps

All continuous and non-continuous data in the province are to be collected and reported in standard time throughout the year. In most of the province Eastern Standard Time (EST) is to be used, however, in north-western Ontario (parts west of longitude 90° west), Central Standard Time (CST) is to be used. For continuous data, this applies not only to the 'raw' real-time data but also to the means calculated from this data. The ministry recommends that computer clocks used with real-time data acquisition systems be checked at least monthly against a reliable time standard such as the computer system's server clock. The 24:00 hour system is to be used: the first hour of the day is to be shown as 0:00 hr, such that a 24-hour monitoring period is from 0:00 to 23:00 hrs. An hour is defined as the 'hour beginning', for example, the hourly mean for 14:00 hours is computed from readings collected from 14:00 EST to 14:59 EST hours. This reporting convention is applicable to shorter-time averaging periods, for example, half hour, five minute and other time resolutions.

2.2 Method Detection Limits

The Method Detection Limit (MDL) will be the limit used to qualify data in order to ensure that a simplified and standardised approach is used across the province in dealing with measurements that are reported as being below the limit of the sampling and analytical methods employed. The ministry may also accept low-level data using data qualifiers, such as W to determine the limit of measurement and T as the limit of reliability. The ministry's recommended approach for calculating the MDL is found in Appendix 6.

As previously stated, the ministry requires an MDL which is at least a factor of ten (one order of magnitude) lower than the applicable *O. Reg. 419/05* schedule 1, 2 and 3 standards, POI guidelines and Ambient Air Quality Criteria (AAQC). Site operators or emitter's environmental representatives should contact their ministry regional office at the program planning stage if it is suspected that the analytical method(s) contemplated for the proposed air monitoring program may not be able to meet this requirement.

The analytical lab must provide the MDL for each substance analyzed in the final engineering units reported to the ministry (e.g., $\mu g/m^3$). In addition, the lab will report a result with a value lower than the MDL as '$\leq$ 0.00x' for an MDL of 0.00x.

For the purpose of performing statistical analyses (e.g., means, etc.) and in keeping with a commonly accepted practice, a value of half the MDL must be substituted for concentrations less than the MDL. These values will be counted as non-detects. The percentage of the data with values above the MDL should also be reported.

The goal of this approach is to provide a level of consistency for emitters reporting non-continuous data to the ministry. For data generated by continuous monitors, the analyzers have MDLs typically much lower than the

applicable limits. In this instance, DASs report values less than MDLs as zeros. It is common practice to report these as zeroes in the database and to treat these as zeroes in calculating short and longer term means.

In the event that stated MDLs are comparable to or greater than applicable standards, especially for substances whose standards are based on human health impacts or substances with Upper Risk Thresholds (URT) (see schedule 6 of *O. Reg. 419/05*), a more refined statistical approach may be required to deal with MDLs if the data are to be used to estimate risks. This would occur when there is a need for risk assessors to impute a series of values that represent concentrations below the stated MDL, and when the non-detects comprise a significant portion of the data set. This is to be handled on a case-by-case basis in consultation with ministry experts.

2.3 Meteorological Data

The submission of meteorological data to the ministry as part of air quality monitoring activities does not constitute approval of the data for regulatory purposes. If there is any intention to use meteorological data for modelling under *O. Reg. 419/05*, the meteorological instrumentation must meet the requirements of *O. Reg. 419/05* and be included in the audit program. Approval for the use of site specific meteorological data for modelling must be obtained from the ministry as per the requirements of *O. Reg. 419/05*. The approval form is entitled Request for use of site specific meteorological data and is available through the Air dispersion modelling resources and guides. Notwithstanding the regulatory use of meteorological data, all meteorological instrumentation generating data as part of air quality monitoring will be subject to audit.

The standard equations for calculating wind speed and direction values are shown in Appendix 5.

2.4 Data Validation/Editing

A data validation process to filter out erroneous data is critical to maximize data integrity. Validation can be done using automated or manual procedures. Regardless of the process followed, judgment to accept or reject suspicious or unusual data is required. Many factors need to be considered in this process, which requires regular inspection of all data by experienced staff that have an understanding of local pollutant and climatic conditions as well as knowledge of air pollution principles and analyzer behavior.

Emitters will be responsible for ensuring that the data editor follows the recommended data editing and validation protocols outlined in Section 4.1 for continuous data and in Section 4.2 for non-continuous data. These are minimum requirements. Staff responsible for data editing and validation can also refer to, and use, protocols established by other agencies (e.g., ECCC, US EPA), as long as the requirements outlined in in this manual are met.

2.4.1 Continuous Data

As per the guidance in Section 4.1, raw and edited continuous data must be submitted electronically to the ministry on a quarterly basis. The data is to be submitted in a resolution of half-hour means. The ministry's regional office may request alternate data resolutions. The resolution required to be submitted is subject to change if the averaging period for the limits change. The emitter is advised to contact their regional ministry office to confirm the data resolution required as well as associated reporting requirements.

Automated (DASs) used by emitters or site operators must meet the requirements for acceptable data editing and validation.

Section 6.2 outlines data editing requirements for continuous data; the following general rules apply:

- Editing of continuous data, as stated above, will be done on half-hour resolution data. The ministry may periodically request the editing and submission of data collected at a resolution of 5 minutes, for example in the case of an exceedence or a spill. Data collected with resolution times shorter than 5 minutes (e.g., 1

minute means) are to be left as is, as a permanent record. This may be especially important in cases, such as where the data is used to assess compliance with 10 minute odour standards.

- For ministry submissions, a minimum of 75% of the readings within an averaging period must be valid for the means to be considered valid. For example, a valid 1- minute mean requires at least 45 1-second readings, a valid 5 minute mean requires at least 4 1-minute means and a valid 1 hour mean requires at least 45 1-minute means. This qualification must be applied for the determination of % valid data collected.
- For the purpose of calculating a valid annual mean, at least 75% of the half-hour or hourly means must be valid, that is, 6,570 valid hours out of a total of 8,760 hours, are required, or a valid monthly mean requires 23 valid daily means, with the exception of February. A valid 24-hour mean requires at least 18 valid hours out of 24 hours. Additionally, for a good representation of quarterly or seasonal means at least 75% of the data in each quarter or season must be valid.
- The tolerance limits for editing of hourly data are ±10% of the calibration standard.
- Data should be edited within 30 days of the end of the month in which it was collected.
- Zero drifts, beyond 2 ppb for sulphur dioxide, ozone, oxides of nitrogen and total reduced sulphur (SO_2, O_3, NOx and TRS), and 3 $\mu g/m^3$ for suspended particulate matter (SP), require an off-set adjustment.
- Zero drifts, beyond 0.2 ppm for carbon monoxide (CO), require an off-set adjustment.

All edits of continuous data must be reported to the ministry in an edit log table such as the example shown in Appendix 4 (Table 12). Reasons for edit actions must be included in the edit log table.

Data Storage/Backup

The ministry requires that all continuous data for the current and previous calendar year be stored in the data acquisition central computer. Older data should be archived in an acceptable format, in a reliable electronic medium, and must be stored by the emitter for a period of at least 7 years after its collection. It is recommended that the continuous data be backed up at least weekly.

2.4.2 Non-continuous Data

The data editing SOPs outlined in section 6.3 are based on those currently used by the ministry and are considered to be minimum requirements. Additional guidance is also provided in field method documents referenced in the SOPs and in the ministry's Laboratory Methods/Procedures documents. The use of other sample and data validation procedures is acceptable as long as the requirements for acceptable data editing and validation are met.

For air quality monitoring purposes, non-continuous data is usually obtained from the collection of monthly (30 days) samples (e.g., dustfall, fluoridation candles) and daily (24-hour) samples (e.g., TSP, PM_{10}, VOCs, PAHs, etc.). The daily samples are 24-hour samples, and sampling starts at midnight; the start time may be altered with the approval of the ministry. Particulate samples are collected every sixth day on the North American schedule. A different schedule (i.e. every third day) is sometimes used or required to collect more samples in a given year. The sampling frequency for polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and dioxins/furans (PCDD/PCDF) typically occurs every twelfth day on the North American schedule. These sampling schedules, or other schedules possibly required for special studies or assessments, need to be reviewed by the ministry for concurrence. The sampling schedule for this year's 1-in-3, 1-in-6 and 1-in-12 day schedules can be downloaded from the US EPA.

The following general rules apply to editing non-continuous data:

- A monthly sample is considered to be valid if the exposure period is within ±3 days of the 30 day period (calendar month); it is also desirable to have the 'on' and 'off' dates as close as possible to the start and end of a calendar month in order to minimize uncertainty in the determination of the exposure month.
- The tolerance limit for editing daily parameters is ±10% of the air flow calibration standard.

- A daily sample is considered to be valid if the sampling period is within ±10% of the required 24 hours, that is, from 21.6 to 26.4 hours. Additionally, for SP and PM_{10} high volume (Hi-Vol) samples, the air volume sampled over this time period must be within ±10% of the required theoretical total air volume of 1631 m^3, that is, from 1468 m^3 to 1794 m^3.
- For PM_{10} or $PM_{2.5}$ samples collected with a discrete sampler (e.g, PQ100 and PQ200) designed to operate with a flow rate of 16.7 liters per minute (L/min), the air volume sampled over a 24 hour period must also be within ±10% of the required theoretical total air volume of 24 m^3, that is, from 21.6 to 26.4 m^3.
- A valid annual arithmetic or geometric mean requires at least 75% of the total number of possible samples under the relevant sampling frequency to be valid. Hence, for monthly sampling, at least nine months of valid data are required to calculate an annual mean, whereas for daily sampling the following number of valid 24-hour sample results are required:

Sampling schedule	Number of valid samples required
Every 3rd day	90
Every 6th day	45
Every 12th day	23

- For calculating quarterly or seasonal means, at least 75% of valid data for each quarter or season of the year must be available.

All edits of non-continuous data must be reported to the ministry in an edit log table such as the example shown in Appendix 4 (Table 12). Reasons for edit actions must be included in the edit log table.

3. Data Reporting

This section discusses the various reporting requirements. Depending on the purpose of the monitoring, reporting requirements may be different. Requirements are usually identified during the development of the monitoring plan and through communications with the ministry. This guidance outlines the ministry's minimum reporting requirements.

3.1 Exceedance Notification

For all monitoring data, the emitter shall notify the ministry, as soon as practicable or as otherwise required, of measured exceedances of the limits specified in *O. Reg. 419/05*, in Environmental Compliance Approvals (ECAs), in orders, or of measured exceedances of other statutory or regulatory limits. Section 28 of *O. Reg. 419/05* requires the emitter to notify a provincial officer as soon as practicable in writing of modelled or measured exceedances of the standards in the Regulation, or of discharges that may cause an adverse effect.

Some contaminants are not listed in Schedules 2 and 3 of the Regulation, but are found in the document entitled Summary of Standards and Guidelines to Support *Ontario Regulation 419/05 –Air Pollution – Local Air Quality*. As well, if the monitoring is being done to support an Environmental Assessment (EA) or a general air quality study in a community, proponents should refer to the contaminants that are listed in the document entitled Ontario's Ambient Air Quality Criteria.

An exceedance of a guideline value may cause adverse effects, and as such, would trigger the requirement to notify a provincial officer if it is the result of an emission from a particular source. As such, information related to both exceedances of standards and guideline values are captured in the Notification of Exceedance Form under Notifications of exceedances.

Some air monitoring may be conducted to assess community air quality rather than evaluate the performance of a particular source or industry. The resulting measured concentrations should be compared to Ambient Air Quality Criteria (AAQC). In such cases, concentrations above do not necessarily trigger mandatory notification

to a provincial officer and the subsequent follow-up required under Section 29 of the Regulation. Nonetheless, the ministry should be made aware of such incidents so that staff may respond appropriately. Thus, operators are requested to communicate these episodes as soon as practicable.

With respect to Upper Risk Thresholds (URT), Subsection 30 (3) of *O. Reg. 419/05* requires that a person immediately notify the ministry in writing if there is any reason to believe, based on any relevant information (e.g., unrefined modelling, refined modelling, monitoring, etc.), that discharges of a contaminant may result in the concentration of the contaminant exceeding a URT listed in Schedule 6.

Ministry Point of Impingement (POI) standards, guideline values and URTs can be found in Summary of Standards and Guidelines to Support *Ontario Regulation 419/05 – Air Pollution – Local Air Quality*, as amended from time to time. Ambient Air Quality Criteria can be found in the document Ontario's Ambient Air Quality Criteria, as amended from time to time. These documents can be found at the ministry's Rules on air quality and pollution website.

3.2 Exceedance Reporting

Monitoring to determine non-compliance with air standards (or non-conformance with a guideline value) may take the form of samples with durations which match the averaging period specified in the regulation for that contaminant. As well, it may consist of a series of shorter consecutive samples which can be combined to give an average over the required period. If these samples are taken continuously, any consecutive set of them that spans the specified averaging period for that contaminant may be used to assess off-site concentration. Consecutive averages of these measurements are sometimes called **running averages** or **rolling averages**. They are also sometimes called a **moving mean** or **rolling mean**. A running average is used to analyse measurements by creating a series of different subsets of a larger data set. This document will refer to these as running averages for ambient air monitoring.

For the purpose of reporting to the ministry, when determining the number of exceedances for an averaging period using shorter period measurements, there may be multiple consecutive running averages that lie above a standard or other limit. Since each individual measurement reflects one period of emission and may be used to calculate a series of running averages (both before and after the individual measurement), it is not necessary to report multiple exceedances within a single averaging period. The exceedance reported should be the first value calculated for the averaging period that exceeds the standard. As well, the range of exceedances should be reported for that specific time period. This is clarified in the following two examples; however, for greater detail please refer to Appendix 7.

Example A
A substance may have a 24-hour standard specified in the regulation. At a particular station, a monitor may report concentrations based upon shorter averaging periods (e.g., hourly). Thus, any consecutive 24 one-hour concentrations may be averaged to compare to the standard. An average that is greater than the 24-hour standard constitutes an exceedance, except when an exceedance has occurred within the last 23 hours. For example, if the samples taken between 03:00 EST and 02:59 EST on the following day are used to compute a daily average which is higher than the standard, then an exceedance has occurred.

Example B
In the previous example, should the samples between 05:00 EST on the first day and 04:59 EST on the following day also average to a value which is higher than the standard, this would not be considered a separate reporting requirement as it relies, in part, on the same data as the previously reported exceedance.

For the purposes of comparing monitoring data to *O. Reg. 419/05* standards, and URTs, ECAs, order limits or guideline values for any contaminant, the ministry requires the following information to be reported:

- When the exceedance occurred;
- The value of the first running average that caused an exceedance; and,

- The range of running averages for that specific averaging period.

Please note in some cases the ministry may request all data points used in the calculation. This protocol is further explained in Appendix 7 with examples showing how to report the number of exceedances to the ministry.

4. Air Quality Monitoring Data Collected by Emitters

Emitters that operate ambient air quality monitoring stations off property as part of the Source Emissions Monitoring (SEM) program, or as a requirement within an Environmental Compliance Approval (ECA), an order or other legal instrument, have specific reporting requirements which are described within this section. Alternative data reporting arrangements can be made upon approval of the ministry.

4.1 Continuous Monitoring

The ministry may request continuous data to be available in real time in an acceptable format. Additionally, data (continuous and non-continuous) along with associated reports, are to be submitted to the ministry on a quarterly and/or annual basis as described below. Submitted monitoring data will be uploaded into a ministry database.

With the reliability of current technology and the implementation of a strong preventative maintenance program, automated continuous air quality monitoring systems can achieve a high level of valid data collection. Based on many years of ministry experience with the operation of such systems, a minimum target of 90% valid data collection per quarter per parameter (i.e., at least 1966 hours of valid data out of a total maximum of 2184 hours) can be routinely attained. Emitters and site operators should try to better this objective and meet a desirable target of 95% valid data (at least 2075 hours of valid data out of a total maximum of 2184 hours).

Notwithstanding the minimum 90% valid data performance measure, emitters shall notify, as soon as practical, the ministry of any system or equipment failures resulting in missing data of 24-hours or more in length and of the plans and schedule for repairing the failed system or equipment. This is to be followed by a notification to the ministry when the problems have been resolved and the annual report should detail the events and remedial actions taken.

Quarterly Data Reporting

Raw and validated (edited) data are to be submitted (electronically) quarterly to the ministry in time series format, either in Excel or Comma Separated Values (CSV) files, as per the guidance in Appendix 3. Prior to the initial submission of data, the ministry must be contacted to initialize the emitter station in the database and to confirm the acceptability of the data format (Appendix 3). For stations that have 10-minute to hourly limits that apply to them, and determine their exceedances based on rolling averages as described in Section 3.2, the data must be submitted in a 5-minute resolution, unless another resolution has been approved by the ministry. For stations that have 24-hour limits, data must be submitted as hourly averages. In cases where more than one averaging period may apply to a monitored substance, submitted data must be able to address the shortest-term standard applicable to that substance.

The data validation and editing rules discussed in Section 2.4 must be followed for data reports and data submission.

The data must be submitted within 45 days of the end of each quarter, based on the calendar year, that is, first quarter by May 15, second quarter by August 14, third quarter by November 14 and fourth quarter by February 14. Data editing protocols must be followed as per Section 6.2. Data may not be deleted from a data set – it may however be flagged as unsuitable with proper justification and not used in summarising the data; however, the ministry reserves the right to override these decisions. **Edits made to the original data must be summarised in an edit log table, as per the example in Appendix 4, and submitted with the edited data.**

The units of measurement for various continuously monitored contaminants are listed in Table 1.

Quarterly Report

A quarterly summary report must be submitted along with the data, unless alternate arrangements have been made and approved by the ministry. **Do not include a hard copy of the data with the report**. The report shall include the following statistics for each measured pollutant parameter:

- Arithmetic Mean
- Monthly Arithmetic Mean
- Maximum for any averaging period for which the data is used for comparison to any limit applied to the emitter; and,
- Maximum 24-hour, % valid hours, or other averaging period as appropriate.

Please submit only one hard copy to your facility's ministry District Manager/Director or as directed by the District Manager/Director. Submit an electronic copy of the data to the appropriate address below depending on the region:

- Northern Region: NR.AirData@ontario.ca
- Central Region: CR.Air.Data@ontario.ca
- West Central Region: WCR.Air.Data@ontario.ca
- Southwest Region: SWR.AirData@ontario.ca
- Eastern Region: ER.AirData@ontario.ca

Table 1: Units of Measurement Associated with Continuously Monitored Parameters

Continuously monitored parameter	Units of measurement
SO_2, TRS	parts per billion by volume (ppbv)
NOx/NO/NO_2	parts per billion by volume (ppbv)
Particulate matter (SP, PM_{10} and $PM_{2.5}$)	micrograms/cubic metre ($\mu g/m^3$)
Wind speed[2]	Kilometer per hour (km/hr)
Wind direction[1,2]	Degrees clockwise from north (deg)
Temperature	Degrees Celsius (°C)
Flow[3]	cubic metres per second or cubic feet per minute (m^3/s or CFM)
VOCs	parts per billion by volume (ppbv)

[1] to be taken as the direction it is blowing **from**, expressed as degrees clockwise from north (i.e., wind blowing from the north is 0°/360°, from the east is 90°, etc.

[2] to be computed using the equations listed in Appendix 5

[3] flows should not be corrected for humidity, pressure, temperature

Additionally, the report must include the number of times that the emitter exceeded a standard in *O. Reg. 419/05*, a guideline, an AAQC, a limit in an ECA or order, or any other legal limit which applies to the emitter's facility. The emitter must report all exceedences for each applicable averaging period. This is based on running averages, as discussed in Sections 3.1 and 3.2.

4.2 Non-Continuous Data

A target of 90% valid data collection per quarter for each parameter should be attainable with good routine maintenance and implementation of sound QA/QC practices. The data validation and editing rules discussed in Section 2.4 must be followed for data reports and data submission.

Raw and validated data from non-continuous sampling programs are to be submitted quarterly to the ministry in Excel or CSV format (Appendix 3, Table 11). The units of measurement for various sampled contaminants are listed in Table 2. Data are to be submitted electronically within 45 days of the end of each quarter of the calendar year:

- 1st quarter due May 15;
- 2nd quarter due August 14;
- 3rd quarter due November 14; and,
- 4th quarter by February 14 of the following year.

If full quarter results are not available from the laboratory, supply all data available, and provide missing results in the following quarterly report. The monitoring schedules are specified in the respective SOPs (see Section 6). If any data correction was performed, an edit log table shall be submitted as per the example in Appendix 4.

Minimum Routine Scans for Non-Continuous Parameters

The ministry may require minimum routine analytical scans for contaminants of interest or concern such as: metals and/or anions in particulate matter (SP, PM_{10} and $PM_{2.5}$), speciated VOCs, speciated PAHs, and speciated dioxins and furans (PCDD/PCDF). The emitter should contact their regional office of the ministry during the development of the monitoring plan (Section 1.5) to establish the list of parameters for which to analyse and confirm the required Method Detection Limit (MDL). Subsequent changes to the parameters list need to be done in consultation with and with approval by the ministry.

Quarterly Report

A quarterly summary report must be submitted along with the data. These reports should be combined with any continuous data quarterly reports. The report shall include the following statistics for each measured pollutant parameter:

- No. of valid samples;
- % valid data;
- Arithmetic mean;
- Period geometric mean (SP only);
- Maximum 24-hour value;
- Maximum monthly value; and,
- Sampling dates (start and end) (for example, dustfall, fluorides, etc.).

Additionally, the report shall include the number times that the emitter exceeded a standard in *O. Reg. 419/05*, a guideline, a AAQC, a limit in an ECA or order, or any other legal limit which applies to the emitter's facility. The emitter must report all exceedences for each applicable averaging period.

Please submit only one hard copy to your facility's ministry District Manager or as directed by the District Manager. Submit an electronic copy of the data to the appropriate address below depending on the region:

- Northern Region: NR.AirData@ontario.ca
- Central Region: CR.Air.Data@ontario.ca
- West Central Region: WCR.Air.Data@ontario.ca
- Southwest Region: SWR.AirData@ontario.ca
- Eastern Region: ER.AirData@ontario.ca

Table 2: Units of Measurement Associated with Non-Continuous Samples

Sampled Pollutant	Unit of Measurement
Dustfall	grams/square metre/30 days ($g/m^2/30d$)
Fluoridation rate	micrograms of fluoride/100 square cm/30 days (mg F/100 $cm^2/30d$)
Particulate matter (SP, PM_{10} and $PM_{2.5}$) and its constituents (it is called "suspended particulate" in the standard listing)	micrograms/cubic metre ($\mu g/m^3$)
VOC	micrograms/cubic metre ($\mu g/m^3$)
PAH	nanograms/cubic metre (ng/m^3)
Dioxins/furans (PCDD/PCDF)	picograms/cubic metre - expressed in toxicity equivalents (pg/m^3 – TEQ)
Flow[1]	actual cubic metres per second or cubic feet per minute (m^3/s or CFM)

[1] flow should not be corrected to temperature, humidity, or pressure with the exception when conducting audits

Annual Reports

The data validation and editing rules discussed in Section 2.4 must be followed for all data reports and data submission.

By May 15 of each year, emitters shall provide an annual summary report to the ministry, with interpretation, of the results obtained in the previous calendar year. This report is a summary of annual operations and data, along with interpretation. **Do not include a hard copy of the data within the report**. The report shall include:

- A map showing the location of emitting sources, property boundaries, major structures on site, and monitoring stations; the map must also include a distance scale, a north indicator (arrow), and the location of any significant nearby receptors
- A summary of overall operations (e.g., summary of parameters monitored and equipment/model numbers, frequency of site visits and calibrations, confirmation of data backups and/or archiving, list of problems) that resulted in significant losses of data, along with remedial actions. **Do not include copies of station log entries**.
- A summary of audits and audit outcomes. **Do not include copies of the audit reports**.
- Summary statistics, including:
  - Annual Arithmetic Mean
  - Annual Geometric Mean (SP only)
  - Maximum 1-hour (continuous data only)
  - Maximum 24-hour
  - Number of valid hours or sampling periods
  - % valid data
- A summary of exceedences including the number times that the emitter exceeded a standard in *O. Reg. 419/05*, a guideline, an AAQC, a limit in an ECA or order, or any other legal limit which applies to the emitter's facility. The emitter must report all exceedences for each applicable averaging period.
- All exceedences of criteria, standards or reporting thresholds are to be evaluated by wind speed/direction data for source contribution assessment: This may include "pollution rose" or "wind rose" analysis for continuous data.
- Comparison to historical data collected by emitters, (preferably using graphics),e.g., comparison of statistics to any previous years' statistics.

- Evaluation of effects (if any) on monitoring results by abatement actions.

Please submit only one hard copy to your facility's ministry District Manager or as directed by the District Manager. Submit an electronic copy of the data to the appropriate address below depending on the region:

- Northern Region: NR.AirData@ontario.ca
- Central Region: CR.Air.Data@ontario.ca
- West Central Region: WCR.Air.Data@ontario.ca
- Southwest Region: SWR.AirData@ontario.ca
- Eastern Region: ER.AirData@ontario.ca

Station and Probe Siting Criteria

5. Station and Probe Siting Criteria

This section describes siting criteria applicable to ambient air monitoring stations, probes, samplers and meteorological sensors. It is largely based on the US Code of Federal Regulations[3] (CFR). The section also uses siting criteria information from the ECCC document entitled National Air Pollution Surveillance Network Quality Assurance and Control Guidelines[1]. Criteria for the siting and exposure of meteorological sensors are based on US EPA[4] and World Meteorological Organization (WMO)[5] guidance documents.

Siting criteria are included for monitoring the following parameters: SO_2, TRS, NOx, CO, O_3, particulate matter (SP, PM_{10}, $PM_{2.5}$ and dustfall), PAH, VOC, fluoridation rate and meteorological parameters (wind speed/direction, temperature and solar radiation).

When planning a new air quality monitoring station, the emitter/proponent should consult with the ministry early in the process. Monitoring plans must be submitted to the ministry and approved prior to the commencement of air quality monitoring activities (Section 1.5).

5.1 Station Siting Criteria

Appendix D of the US EPA Title 40 CFR[3] focuses on the relationship between monitoring objectives and the geographical location of monitoring stations. To clarify the nature of this relationship, the concept of spatial scale of representativeness of a monitoring station is defined. The goal in siting stations is to match correctly the spatial scale represented by the sample of monitored air with the spatial scale most appropriate for the monitoring objective of the station. Thus the spatial scale of representativeness is described in terms of physical dimensions of the air parcel nearest to a monitoring station throughout which actual pollutant concentrations are reasonably similar.

The US EPA 40 CFR defines scales of representativeness ranging from microscale to national and global scales. For the purposes of ambient air monitoring of emissions from industrial sources, the scales of representativeness will typically range from the microscale to possibly the urban scale. These are defined in the US EPA 40 CFR as follows:

Microscale - defines concentrations in air volumes associated with area dimensions ranging from several metres up to about 100 metres;

Middle scale - defines concentrations typical of areas up to several city blocks in size with dimensions ranging from about 100 metres to 0.5 kilometres;

Neighbourhood scale - defines concentrations within some extended area of a city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometres range; and,

Urban scale - defines the overall, citywide conditions with dimensions on the order of 4.0 to 50 kilometres.

These scales of representativeness relate to the following basic monitoring objectives typically associated with monitoring industrial sources of emissions: compliance with regulatory requirements, population exposure and impact of emissions. Air emission inventories, population density, climatological data, geographical/land use information (GIS), dispersion modelling, public complaints about air quality and the results of short-term screening studies conducted with portable samplers, etc. are all useful in the station site selection process.

5.2 Probe Siting Criteria

Appendix E of the US EPA 40 CFR[3] contains specific criteria applicable to locating ambient air monitoring probes after the general station siting has been selected based on the monitoring objectives and spatial scale of representation.

The probe siting criteria discussed below must be followed as closely as possible. It is recognized that practical considerations may require some deviations from the criteria. In such a case, the reasons must be thoroughly documented in a written request for approval by the emitter's district office of the ministry. Conditions under which the ministry may grant a deviation from the criteria will be similar to those listed in section 11 of Appendix E of the US EPA 40 CFR.

The following is a description of the probe siting criteria by pollutant of interest for ambient air quality monitoring of emissions from industrial point sources. A summary of the criteria, by pollutant, is also presented in Table 3.

5.2.1 Sulphur Dioxide/Total Reduced Sulphur (SO_2/TRS)

The probe must be located between 3 and 15 metres above ground and must also be at least 1 metre vertically or horizontally away from any supporting structures, walls, parapets, penthouses, etc. Inlet probes protruding from walls are undesirable and are to be avoided. If the probe is located near the side of a building, then it should be on the side of the building facing the point source being monitored. No furnace, incineration flues or other sources of SO_2 and or TRS should be nearby (separation distance should take into account the height of flues, type of waste or fuel burned).

5.2.2 Nitrogen Oxides (NO_2)

In siting NO_2 analyzers for industrial point source monitoring, it is important to minimize interferences from automotive sources. For neighbourhood and urban scale monitoring, the table below provides required minimum separation distances between a roadway and a probe for various ranges of daily roadway traffic (smaller separation distances than listed in the table, [i.e., less than 10 metres] would classify the monitoring as middle scale).

Minimum Separation Distance (metres)	Vehicles per Day
10	≤ 10,000
20	15,000
30	20,000
50	40,000
100	70,000
250	110,000

5.2.3 Particulate Matter

Suspended Particulate (SP)

For all spatial scales, the SP sampler inlet must be between approximately 2 and 15 metres above ground. When determining the sampling location, roadways need to be taken into consideration as SP has large horizontal and vertical concentration gradients immediately adjacent to roadways. The sampler inlet must be at least 1 metre (vertical) and at least 2 metres (horizontal) from a supporting structure (for a rooftop location, the 2 metre separation distance is from walls, parapets or penthouses located on the roof). No furnace or incineration flues should be nearby.

The distance from the sampler to obstacles such as buildings must be at least twice the height of the obstacle protruding above the sampler. The airflow around the sampler must be unrestricted in three of the four cardinal wind directions. There must be no significant obstruction between the sampler and the point source even though other spacing from obstruction criteria are met. Trees provide surfaces for particulate deposition and also restrict airflow, thus the sampler should be placed at least 20 metres from trees.

To minimise the impact of windblown dusts, the SP sampler should not be located in an unpaved area unless there is good vegetative ground cover. For ground level installations, it is highly recommended to install the sampler on a stand (0.5 to 1.0 metre above ground) and to direct the exhaust of the sampler away from the sampler using appropriate ducting. Locations near unpaved parking lots, stockpiles or other fugitive sources are to be avoided unless these sources are part of the monitoring objectives. Activities generating particulate emissions, such as grass cutting near the samplers, are to be avoided on sampling dates.

PM_{10} and $PM_{2.5}$ (discrete sampler)

Many of the sample inlet siting criteria are similar to those for SP sampling, and notwithstanding the differences noted below, the criteria for SP sampling must be followed.

While PM_{10} and $PM_{2.5}$ exhibit dispersion properties of both gases and settleable particulates, they show vertical and horizontal gradients. PM_{10} and $PM_{2.5}$ inlets should be placed at breathing height. However, practical factors such as prevention of vandalism, security and safety precautions must also be considered when siting a particulate sampler.

Given these considerations, the sampler inlet height for microscale PM_{10} and $PM_{2.5}$ samplers must be 2 to 7 metres above ground level. For middle or larger spatial scales, increased diffusion results in smaller vertical concentration gradients than for the microscale, and hence the required air intake is 2 to 15 metres above ground.

The sampler inlet should be at least 5 metres from the nearest natural gas combustion exhaust. Sampler inlets should be placed at least 25 metres from major roadways to minimize their influence when monitoring industrial sources.

PM_{10} and $PM_{2.5}$ (continuous monitor)

Continuous PM samplers such as the Tapered Element Oscillating Microbalance (TEOM), Beta Gauge or Beta Attenuation Monitor (BAM), etc. require vertical installation of an inlet probe through the roof of the shelter, and according to the instrument operating manual, the sample line must form a straight line with the probe inlet of the sensor unit. Other than this, the probe siting criteria are very similar to those for sampling particulate with discrete samplers: the probe must be located 2 to 15 metres above ground, be at least 1 metre (vertical) 2 metres (horizontal) from support structures and at least 20 metres from trees. The distance from the probe to nearby obstacles such as buildings must be at least twice the height of the obstacle protruding above the probe. Unrestricted airflow is required in three of four cardinal wind directions and the separation distance requirements for discrete particulate samplers from roads and furnace and/or incineration flues apply as well.

Dustfall

The sampling method is described in American Standard for Testing and Materials (ASTM) Method D1739-98 and also in ministry Method DF-E3043A. Dustfall consists of the very coarse particulate matter fraction that settles quickly under the influence of gravity and can result in soiling and nuisance issues. It may contain components of concern for human health (e.g., lead) and can cause damage to nearby vegetation (e.g., salt cake). Although the sampling method is not considered to be rigorous, some regulatory agencies find it useful to determine off-property impacts of coarse particulate emissions from certain industrial source sectors (e.g., cement, aggregate and primary wood products emitters), and have applicable guidelines/criteria. A copy of Method DF-E3043A is available from the ministry's Laboratory Services Branch (LaSB), Customer Services at 416-235-6311. A copy of ASTM Method D1739-98 is available from the ASTM web site.

The dustfall sampling method is subject to much interference, such that natural materials (e.g., leaves, insect parts, bird droppings, etc.) not associated with the industrial emissions being monitored can easily bias the results. Hence, both the lab analytical method and the siting criteria must be followed to meet the objectives of the sampling program.

The dustfall collector (polymer jar) should be held in a suitable bracket affixed to a telephone/electrical utility pole (approval from the local utility should be obtained for everyone's safety) or other supporting device, approximately 3 metres above ground. This vertical separation distance is to minimize re-entrainment of particulate matter from the ground and also to minimize and prevent vandalism. Health and safety concerns regarding the use of ladders to change the jars are best addressed by the use of a long pole equipped with a suitable bracket.

The sampling sites should be selected to avoid unpaved roadways and parking lots, preference being given to sites with good vegetative cover. Also any fugitive source(s) should be documented or preferably avoided through suitable separation distances, depending on the objective of the sampling program. The sampler should be at least 20 metres from buildings, trees and other significant obstacles. There should be unrestricted air flow in three of the four cardinal points, especially between the sampler and the emission source(s) being monitored. For rooftop installations, the sampler should not be near chimneys or flues that could emit soot/coal or other coarse dust and should be positioned away from the edges of the roof to avoid building wake wind effects.

5.2.4 Polycyclic Aromatic Hydrocarbons (PAH)

Since PAH in ambient air are associated mostly with fine particulate matter, the sampler inlet siting criteria is the same as for sampling particulate matter. Hence the sampler inlet height must be 3 to 15 metres above ground and the separation distances from obstacles and furnace/incineration flues etc., is as required for sampling particulate Within the scope of the monitoring objectives, a critical consideration in siting a PAH sampler is to avoid possible nearby PAH sources which could interfere with the sample results. Hence PAH samplers must not be installed on asphalt rooftops and sampling should not be undertaken near sites when rooftop tarring and roadway/parking lot paving activities are occurring.

Cigarette smoke contains PAH. PAH samplers should not be placed near designated smoking areas, and if possible, a "no smoking" sign should be placed near the sampler. Care must be taken when handling PAH samples since a noticeable amount of PAH can be transferred to a filter – everyone should wear gloves when handling filters.

PAH filters typically are shipped in aluminum foil that may potentially be contaminated with paraffin wax. Please ensure with the accredited lab that this is not the case.

5.2.5 Volatile Organic Compounds (VOC)

The sampler inlet siting criteria are the same as for sampling PAH. Within the scope of the monitoring objectives, care must be taken to avoid nearby VOC sources (e.g., automobile exhaust, furnace/incineration

flues, etc.) which could interfere with the sample results. Hence minimum separation distances from roadways, specified for monitoring NOx, are required.

5.2.6 Dioxins and Furans (PCDD/PCDF)

The sampler inlet siting criteria are the same as for sampling PAH and particulate matter. Within the scope of the monitoring objectives, care must be taken to avoid possible known nearby sources of PCDD/PCDF which could bias the sample results. Hence minimum separation distances from such sources, using the range of criteria referenced in this document and knowledge of local conditions are required.

5.2.7 Fluoride Sampling

Passive and active sampling methods can be employed to determine the particulate and gaseous fluorides in ambient air.

Passive Sampling – Fluoridation Rate
Sampler siting criteria for the use of lime candles follow the guidelines for siting particulate samplers and trace gas monitors. The candle is usually protected from the elements using a louvered shelter positioned 2 to 3 metres above ground. The sampling site should be located more than 20 metres from trees and its distance from any air flow obstacle must be greater than twice the height of the obstacle above the sampler. Airflow must be unrestricted through an arc of at least 270 degrees.

Active Sampling
The active sampling method for fluorides follows the dual filter pack method (MOE, 1982). Active samples are collected over a 24 hour period with a start time of 12:00 a.m. (00:00). This method involves drawing a known air volume at a fixed rate through an acid-treated filter paper to collect particulate, which may contain fluoride, and then through an alkali-treated filter to collect fluoride gases. The remaining volume of air is exhausted out of the outlet end of the dry gas metres recording the volume. The two filters are held one above the other in a specially constructed filter holder referred to as a dual filter pack, or assembly, which provides a separate space for each filter. Please refer to the diagram below.

The dual filter assemblies should be positioned 2 to 3 meters above ground. The sampler should be located more than 20 metres from trees, and its distance from any air flow obstacle must be greater than twice the height of the obstacle above the sampler. Airflow must be unrestricted through an arc of at least 270 degrees.

There may be several dual filter assemblies connected to an appropriate manifold equipped with electrically controlled valves programmed to allow sequential operation. The filters are then removed from the sample, treated to dissolve soluble fluorides and analysed by the specific ion electrode method. After removal of the soluble fluorides, the filters may be processed to determine the insoluble content according to a separate procedure (ASTM D3266-79, ASTM D3269-79, EPA Method 300).

Within the scope of the monitoring objectives, care must be taken to try to avoid possible nearby sources of fluorides which could interfere with the sample results. Hence, minimum separation distances from such sources, using the range of criteria referenced in this document and knowledge of local conditions, are required.

5.2.8 Asbestos

The sampler inlet siting criteria are the same as for sampling PAH. Within the scope of the monitoring objectives, care must be taken to avoid nearby asbestos sources which could interfere with the sample results.

5.2.9 Passive Samplers

Passive diffusion sampling provides a cost-effective indicator of the ambient conditions in an area where there may be no power, qualitative results are adequate, or to assist in identifying representative monitoring locations. For credible results, it is recommended that at least duplicate passive samplers be used at each monitoring location. Care must be taken not to touch the diffusion barriers when handling the cartridges or to let the samplers fall to the ground.

Passive samplers sample gaseous pollutants, such as SO_2, NO_2, O_3, hydrogen sulphide (H_2S), ammonia (NH_3) and NOx, at a sampling rate controlled by diffusion through a static air layer or by permeation through a membrane. Passive samplers are generally simple in structure and do not require electricity. The passive sampling system needs to be installed in a specially designed rain shelter 1 to 3 metres above the ground. The rain shelters also help prevent interference from animals, human beings or the surroundings. After exposure, the samplers are analysed by a laboratory.

A passive sampler's sampling rate depends on many factors such as temperature, relative humidity, wind direction, wind speed, sampler's structure and collection media. If a passive sampler will be used year round, the sampling rate needs to be determined. During sampling, the exposure time, as well as the average temperature, relative humidity and wind speed need to be recorded.

Table 3: Sample Probe Siting Criteria

Pollutant	**Height Above Ground (metres)**	**Distance from Supporting Structure (metres) Vertical**	**Distance from Supporting Structure (metres) Horizontal[1]**	**Other Spacing Criteria**
SO_2 and TRS	3 to 15	≥1	≥1	a. Greater than 20 metres from trees b. Distance from the sampler to any air flow obstacle (i.e., buildings, terrain features, trees, etc.) must be ≥2× height of obstacle above the sampler c. Airflow must be unrestricted through an arc of at least 270 degrees d. No nearby[2] furnace or incineration flues
NOx (middle scale)	3 to 15	≥1	≥1	a. Greater than 20 metres from trees b. At least 10 metres from street intersection or at mid-block location c. 2 to 10 metres from roadway
NOx (neighbourhood scale)	3 to 15	≥1	≥1	a. Greater than 20 metres from trees b. Distance from the sampler to any air flow obstacle (i.e., buildings, terrain features, trees, etc.) must be ≥2× height of obstacle above the sampler c. Airflow must be unrestricted through an arc of at least 270 degrees d. Spacing from roadway varies with road traffic e. No nearby furnace or incineration flues

Pollutant	Height Above Ground (metres)	Distance from Supporting Structure (metres) Vertical	Distance from Supporting Structure (metres) Horizontal[1]	Other Spacing Criteria
CO	3 to 10	≥1	≥1	a. Greater than 10 metres from street intersection or at a mid block location b. 2-10 metres from roadway c. Airflow must be unrestricted through an arc of at least 270 degrees
SP / PM_{10} (both spatial scales)	2 to 15	≥1	≥2	a. Greater than 20 metres from trees b. Distance from the sampler to any air flow obstacle (i.e., buildings, terrain features, trees, etc.) must be ≥2× height of obstacle above the sampler c. Airflow must be unrestricted through an arc of at least 270 degrees d. No nearby furnace or incineration flues e. Distance of sampler from major roadways should be ≥ 20 to 25 metres for sampler inlet heights of 2 to 5 metres f. In the instance of collocated samples, there must be a separation distance of 2 metres, but no more than 4 metres, between the sampler units. As best practice, the MOECC recommends minimum exhaust conduit length of 3 metres from the monitor inlet downwind according to the prevailing wind direction. The placement of the exhaust conduit mus also consider the potential impact on other nearby samplers.
PM_{10} and $PM_{2.5}$ (discrete sampler)	2 to 7[3] 2 to 15[4]	≥1 ≥1	≥2 ≥2	a. Greater than 20 metres from trees b. Distance from the sampler to any air flow obstacle (i.e., buildings, terrain features, trees, etc.) must be ≥2× height of obstacle above the sampler c. Unrestricted air flow in 3 of the 4 wind quadrants d. ≥5 metres from chimneys with natural gas combustion emissions e. ≥20 to 25 metres from major roadways

Pollutant	Height Above Ground (metres)	Distance from Supporting Structure (metres) Vertical	Distance from Supporting Structure (metres) Horizontal[1]	Other Spacing Criteria
PM_{10} and $PM_{2.5}$ (continuous sampler)	2 to 15	≥1	≥2	a. Greater than 20 metres from trees b. Distance from the sampler to any air flow obstacle (i.e., buildings, terrain features, trees, etc.) must be ≥2× height of obstacle above the sampler c. Unrestricted air flow in 3 of the 4 wind quadrants d. ≥5 metres from chimneys with natural gas combustion emissions e. ≥20 to 25 metres from major roadways
PAH/Dioxins VOCs	3 to 15	≥1	≥2	a. No nearby sources of pollutants which could interfere with sample results
Dustfall Fluorides	3			a. No nearby unpaved roadways, parking lots[5] b. Greater than 20 metres from obstacles (buildings, terrain features, trees, etc.) c. Unrestricted air flow in 3 of the 4 wind quadrants d. No nearby chimneys or flues that could emit coarse particulate (soot/coal) e. Avoid building wake wind effects for rooftop installations

[1] When a probe is located on a rooftop, this separation distance is in reference to walls, parapets, or penthouses located on the roof

[2] Distance depends on the height of furnace or incinerator flues, type of waste or fuel burned, and quality of fuel (sulphur and ash content). This is to avoid undue influence from nearby sources

[3] For microscale measurements

[4] For middle or larger scale measurements

[5] Separation distances from these sources depend on monitoring objectives

5.2.10 Probe Material

In addition to the siting criteria for stations and sample inlet probes, an important requirement is the use of acceptable probe materials. For reactive gases such as SO_2 and NO_2, only Pyrex glass and Fluorinated ethylene propylene (FEP) Teflon have been found to be acceptable for use as intake sampling lines. For VOC sampling, FEP Teflon is unacceptable because of VOC adsorption and desorption reactions on the Teflon. Acceptable probe materials for VOC sampling are borosilicate glass, stainless steel or its equivalent.

5.2.11 Meteorological Measurements

The meteorological sensor siting and exposure criteria described below are largely based on US EPA and WMO guidance documents[4,5] as referenced. Meteorological measurements include measurements of wind speed, wind direction, temperature, barometric pressure, relative humidity and solar radiation. This document will not cover barometric pressure and relative humidity. As a general rule, meteorological sensors should be sited at a distance, which is beyond the influence of obstructions such as buildings and trees. The other general rule is that the measurements should be representative of meteorological conditions in the area of interest. A summary of the criteria for siting meteorological probes is provided in Table 4.

Wind Speed and Direction

To meet the best exposure criteria, sensors to measure wind are usually mounted on towers or masts. If sensors are mounted improperly, errors due to the influence of nearby obstacles and possibly of the tower itself will be introduced into the measurements. Note that wind direction is to be reported as direction **from** which the wind is blowing.

Except when measurements of extremely local phenomenon are required (from microscale to neighbourhood scale), measurements representative of a fairly large area (urban to regional scale) are desired. Care must be taken to ensure that the measurements are not adversely influenced by nearby obstacles. The WMO has recommended that the standard height at which surface wind measurements should be taken is 10 metres (however measurements at a height of 3 metres are acceptable for tripod-mounted sensors). Depending on the monitoring objectives/requirements, there may be circumstances for which wind measurements would best be taken at elevations much higher than 10 metres (minimize topographical effects, tracking of emissions from tall stacks, etc.). Such cases would need the approval of the ministry. Ideally, the measurements should be taken over level, open terrain but if obstructions, such as buildings, are present in the area where wind measurements are to be taken, the following criteria must be observed:

a. The sensor must be located a distance upwind of a building equal to at least the building height.
b. If the sensor is to be located on the roof of the building, it must be at least one and a half (1.5) building heights above the roof. Wind sensors should only be located on building rooftops as a last resort.
c. The sensor must be located a distance of at least 5 to 10 building heights downwind of the building.

For rough terrain or valley situations, local effects such as channelling, slope and valley winds need to be considered in the design of the monitoring program. If the program focuses on elevated sources of emissions, it may be desirable to avoid local wind influences. If the emissions of interest are from ground level sources, local influences require careful consideration and the siting of the wind sensors must take into account nearby topographical features, which could unduly influence the measurements.

In addition to the general rules concerning obstructions, other considerations are important with respect to sites near trees. Seasonal effects need to be considered for sites near deciduous trees. For dense continuous forests where an open exposure cannot be obtained, measurements should be taken 10 metres above the height of the general vegetative canopy. Any deviation from these guidance requirements should be completed in consultation with, and with approval by, the Regional Office Techhnical Support Section for approval.

If the anemometer and vane are to be installed on the side of a tower, then precautions must be taken to ensure that the wind measurements are not influenced by the tower. Studies have shown that turbulence in the wake of lattice towers is severe and in the wake of solid towers turbulence is extreme, often with flow reversal. Open lattice towers are preferred. To mitigate these effects, the following exposure criteria should be observed:

a. The boom should extend outward from a corner of the tower into the wind direction of primary concern.
b. The boom should support the sensor at a distance equal to twice the maximum diameter (or diagonal) of the tower away from the nearest point on the tower.

c. The wind sensors should be located at heights of minimum tower density, above or below the horizontal cross members.
d. If the width of the tower side is D, for a boom length of 1 tower width, i.e., 1D, measurements of wind speed are true to within 10% for a 330° sector of arc.
e. For a boom length of 2D, wind speed is accurate to within 10% for a 330° sector of arc. It is recommended that the wind sensor be mounted on booms at a distance of at least 2D from the tower

For these two arcs, wind direction has been found to be accurate to within 5%. On large TV towers, the sector of arc yielding accurate wind measurements may drop to 180° for boom lengths less than 1D. If more accurate wind measurements are required for an arc greater than that produced by the above exposure criteria, it is recommended that two sets of speed and direction sensors be placed 180° apart in the manner prescribed above. A wind sensor mounted on top of a tower should be mounted at least 1D above the top of the tower structure.

Air Temperature

The sensor must be housed in a ventilated radiation shield (aspiration velocity should exceed 3 m/s) to protect the sensor from thermal radiation. The US EPA recommends the sensor be no closer than four times the obstruction's height and at least 30 metres from large paved areas. Other situations to avoid include: large industrial heat sources, rooftops, steep slopes, tall vegetation, shaded areas, swamps, etc. The WMO standard for ambient air temperature measurements is 2 metres above ground. The US EPA recommends that the sensor be located at least 2 metres above ground, up to a maximum of 10 metres. Vandalism and security need to be considered in the placement of these sensors. Temperature sensors on towers should be mounted on booms at a distance of about 1D (D is the width of the tower side).

Probe placement for temperature difference measurements depend on the application. For use in estimating stable plume rise, temperature difference measurements should be made across the plume rise layer and a minimum separation of 50 metres is recommended.

Solar radiation

Pyranometers used for measuring incoming solar radiation should be located with an unrestricted view of the sky in all directions during all seasons, with the lowest solar elevation angle possible. They should be located to avoid obstructions casting a shadow on the sensor at any time. Sensor height is not critical for these units. A tall platform or rooftop is a desirable location.

Net radiometers should be mounted about 1 metre above ground and in such a fashion as to avoid obstructions to the field of view both upward and downward. The ground cover should be representative of the general site area. The monitoring objective will govern the collection of solar or net radiation data.

Table 4: Meteorological Probe Siting Criteria

Sensor Type	Height Above Ground (metres)	Exposure Considerations
Wind speed and direction	10[1]	a. ≥1 building height (H) upwind of a building obstruction b. ≥1.5 H above building roof for rooftop installation[2] c. ≥5 to 10 H downwind of building d. ≥10 metres above dense vegetative canopy e. ≥2 tower side widths (D) for boom installations f. ≥1D above tower for tower mast installation

Sensor Type	Height Above Ground (metres)	Exposure Considerations
Air temperature	2[1]	a. Temperature sensor ≥4 obstruction heights and ≥30 metres from large paved areas b. ≥1D for tower boom installations c. ≥50 metres between levels for temperature difference measurements
Solar radiation	1[3]	a. No vertical height restriction for pyranometers (incoming solar radiation) b. Ground cover representative of area

[1] World Meteorological Organization recommendation; height can be greater depending on monitoring requirements (e.g., tall stacks)

[2] Rooftop installations not recommended

[3] Height above ground for net radiometers

Standard Operating Procedures (SOPs)

6. Standard Operating Procedures (SOPs)

The SOPs provided in this section for performing ambient air quality monitoring are, generally, those currently used by the ministry. The current listing is the second revision to the initial list provided in June 2003. Most of the methods described herein have been designated as reference or equivalent methods by the US EPA. A current listing of these methods, for criteria air contaminants, can be found at the Ambient Monitoring Technology Information Center web site.

For the air contaminants described as air toxics by the US EPA, such as PAH, VOC and dioxins/furans, the methods recommended by the US EPA, and accepted by the ministry, are available at the Ambient Monitoring Technology Information Center web site.

Any ministry methods that are referenced or recommended in the SOPs can be obtained by emailing a request to LaboratoryServicesBranch@ontario.ca.

It is important to note that the SOPs are **not** intended to provide a detailed description of the monitoring/sampling methods. Emitters and site operators will need to review the method reference documents for the detailed method descriptions.

Emitters/site operators using or wanting to use an air monitoring or sampling method not listed in these SOPs, and not designated or listed by the US EPA, must contact their regional office of the ministry at the program planning stage for approval of the method intended to be used. Alternate instruments need to have demonstrated effectiveness, and the operating characteristics of non-equivalent instruments are to be documented and their performance continuously evaluated both in the field and the laboratory.

The SOPs are short documents which provide emitters and site operators with minimum performance specifications. The SOPs briefly describe, on a parameter by parameter basis, the US EPA designated reference

methods, equivalent methods and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. The SOPs are not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in these documents are minimum requirements, and site operators are encouraged to exceed them, if desired, for optimal performance. The operators of the instrumentation are required to service, operate and maintain it in accordance with the manufacturer's operating manual.

The SOPs will be revised from time to time to reflect changes and the introduction of new technology for air monitoring/sampling methods and updated QA/QC requirements.

6.1 Performance Specifications

To help ensure that field instruments are reliable, minimum performance specifications for ambient air gas analysers are presented Table 5[1].

Table 5: Performance Specifications for Continuous Analysers

Performance Parameter	**Pollutant - CO**	**Pollutant - O_3**	**Pollutant - NOx**	**Pollutant - SO_2**	**Pollutant - TRS**
Minimum Detection Limit	0.1 ppm	2 ppb	5 ppb	2 ppb	2 ppb
Precision	± 0.1 ppm	± 2 ppb	± 2 ppb	± 2 ppb	2 ppb
Linearity	1 % F.S.	1 % F.S.	1 % F.S.	1 % F.S.	1 % F.S.
Zero Drift/24 hours	± 0.2 ppm	± 2 ppb	± 2 ppb	± 2 ppb	2 ppb
Span Drift/24 hours	± 1 % F.S.	± 1 % F.S.	± 1 % F.S.	± 1 % F.S.	± 1 % F.S.
Noise	± 0.05 ppm	± 1 ppb	± 2 ppb	± 1 ppb	N/A
Rise Time (95%)	90 sec	90 sec	180 sec	180 sec	180 sec
Fall Time (95%)	90 sec	90 sec	180 sec	180 sec	180 sec
Operating Temperature Range	10 – 40 °C	10 – 40 °C	10 – 40 °C	10 – 40 °C	10 – 40 °C
Operating Humidity Range	100 %	100 %	100 %	100 %	100 %
Nominal Operating Ranges	50 ppm	500 ppb	1,000 ppb	500 ppb	500 ppb
Operating Voltage	105-125 vac/ 60 Hz	105-125 vac/ 60 Hz	105-125 vac/ 60 Hz	105-125 vac/ 60 Hz	105-125 vac/ 60 Hz

6.2 Standard Operating Procedure for Editing Continuous Data

This SOP establishes the procedure by which data editing will be conducted. It is intended to:

- Standardize the method by which data editing is done
- Ensure consistency of application
- Clearly define the expectations of the process

6.2.1 Daily Data Check

Every weekday a daily data review should be conducted to check for anomalous data.

Instruments that do not appear to be functioning normally are to be investigated and simple problems rectified. If major problems are noted by others, they are to be referred to the company's/emitter's representative assigned to that station.

Data is reviewed and corrections made where possible. Significant problems are flagged to the person assigned to that station (if problem noted by another person) if it appears related to a station related function that may need correcting.

6.2.2 Data Editing

All data should be edited within 30 days of the end of the month in which it was collected.

Data editing is any change made to raw data. It includes a check of the data and typically involves manual verification of values against electronic charts or other secondary data log(s) (e.g., minute data) and changing data to recover missing values, invalidating false data, etc. To maintain edited data as current as possible, the following procedure should be carried out after each calibration or as a minimum, monthly.

From a Data Acquisition System (DAS) workstation, print a monthly data report and review data to look for anomalous readings or missing data. Highlight data or data blocks that will require editing. See Table 6 below for the general principles to ensure valid data.

Table 6: General Principles for Data Editing - Continuous Data

Parameter	Look For	Action
General	Preponderance of missing values	Perform Manual Poll to recover missing data. Check other parameters for interruption, if yes may be power failure
General	Extreme high value(s)	Check data logger configuration. Check minute data.
General	Values look correct for pollutant	No action required
General	Checking calibration reports	Ensure zero and span response not shifting much.
NOx	Channels balance NO + NO_2 = NOx	Not every hour will balance but majority should
NOx	Channels not adding up at all	Zero reset may be needed
NOx	Long periods of zeros	Station visit; possible flow problem
TRS	Single hourly value too high (or low) compared to adjacent readings	View minute data and correct. Verify span check.
TRS	String of unchanging elevated numbers	Check wind direction and speed. Apply negative offset if required. Check for SO_2 breakthrough
TRS	Consistent low level values	Baseline noise; adjust block to zero
TRS	Oxidizer temperature not within specifications, typically between 850°C to 915°C	Invalidate data for time period of failure. Note: site visit maybe required to verify no connection problem (if connection ok, invalidation not required)

Parameter	Look For	Action
SO_2	Same as TRS	
Ambient Temperature	Check temperature readings for extreme high or low values.	View minute data and correct.
Ambient Temperature	Check for long periods of constant values	Check for power failures; Check for defective temperature probe.
SP	Filter loading greater than 90%	Site visit to change filter (Tapered Element Oscillating Microbalance - TEOM)
PM_{10}/ $PM_{2.5}$	String of zeros for PM_{10}/$PM_{2.5}$	Check whether statuses are within range
PM_{10}/ $PM_{2.5}$	Mass concentration and PM_{10}/$PM_{2.5}$	Values for the same hour should be very close; if values seem to be offset by one hour, check treatment settings
Wind	Check for some readings ≥20 kph	Aerovane turning ok?
Wind	Long periods of calm or same wind direction	Is aerovane stuck or frozen?
Wind	The number of zeros recorded as wind direction should be monitored	This could be a sign the meteorological tower requires maintenance.
Wind	Wind direction values should be between 0 and 360 deg.	Is the meteorological tower set correctly to true North?
Any other continuously monitored parameter		Establish data editing principles in consultation with local district office of the ministry.

6.3 Standard Operating Procedure for Editing Non-Continuous Data

This SOP establishes recommended procedures by which data validation and editing will be conducted for non-continuous data. It is intended to:

- Standardize the method by which data editing is done;
- Ensure consistency of application; and,
- Clearly define the expectations of the process.

A summary of the standard sampling schedules and general data editing and completeness requirements was provided earlier in section 2.4. Table 7 outlines in greater detail the general principles of data validation and editing to ensure the collection of good data.

Validation and editing of non-continuous data comprises procedures to be followed during sample collection and handling in the field, submission to a laboratory, laboratory analyses and analysis/screening of the data as part of the final editing process.

6.3.1 Field Procedures - sample collection and submission to a laboratory

The collection of valid field samples is the first step in ensuring the production of valid data. Air monitoring station operators should follow the SOPs provided in Section 6.4 and the principles outlined in Table 7. For additional information about filter sampling for the collection of SP, $PM_{2.5}$ and PM_{10} samples, please refer to the SOPs for filters in Section 6.4.

It is very important for field operators to document their observations at the time of sample collection to assist in the data validation process: a lightly discoloured filter would suggest a possible error in the determination of its tare weight in the laboratory if the particulate loading result was determined to be very high. These observations should be documented in writing and forwarded to the laboratory together with the sample. Observations should also be documented in the log.

Care is also required in shipping samples to the laboratory. Suitable containers are required to avoid sample contamination, destruction, damage, etc. Also, some samples such as VOCs, need to be kept and stored between 2°C and 10°C until the analysis is performed. Other samples, such as filters exposed for PAH analysis, should not be subjected to any environmental and human activities such as temperature changes, excessive automobile exhaust gas and cigarette smoke, and need to be sent to the laboratory within 14 days of sampling. Filters exposed for dioxin and furan analysis need to be kept in the dark to avoid sample degradation.

It is important for field operators to be familiar with, and follow, the recommended sample collection and handling procedures as closely as possible. Field operators must also document their observations for use by laboratory and data management staff in the data validation process.

6.3.2 Data screening and analysis

Another important component of the data validation process is data screening and analysis by staff responsible for data management aspects. Screening criteria are commonly used to flag or identify suspicious data. This comprises identifying outliers (extreme high or low values not commonly observed or possible, such as SP, $PM_{2.5}$ or PM_{10} values ≤ 0 or ≥ 500 mg/m^3, or benzene, toluene and xylenes values all ≤ 1 mg/m^3), or identifying results which are not theoretically possible such as $PM_{10} \geq SP$ for collocated samplers. Data analysts can design their own screening criteria to check suspicious data, based on their experience and knowledge of the database for the parameters of interest.

6.3.3 Analytical data screening and analysis

The third aspect of the data validation process involves laboratory screening procedures. For example, the determination of SP, PM_{10} and $PM_{2.5}$ particulate loadings involves weighing the filters in a temperature and humidity controlled room before and after the filters have been exposed. An obvious check here is to ensure that the exposed filter weight is greater than the tare filter weight. If this is not the case, this could result from a weighing error in the lab, a transcription error or a damaged exposed filter for which a small piece of filter is missing. Samples which require analysis within a time period after collection or receipt in the laboratory, known as sample hold time, may be analyzed but the result qualified with a remark if this time period has been exceeded. The decision as to whether or not the result is valid will have to be made based on all the information available for that sample.

Typically, laboratories use QA/QC control limits which are quite rigorous and if properly followed should uncover suspicious results. Analytical methods specify strict procedures for sample preparation/storage, sample hold times and expected method performance such as accuracy, precision and detection limits. Analytical data validation is closely linked to how well these methods are adhered to.

In summary, these examples are only a few of many that could be provided to screen out suspicious or invalid data. There should be good communication and documentation of observations by all staff involved in the process. Table 7 provides additional information on recommended checks and actions required to assist in the data validation process for non- continuous data. If in doubt about how to handle suspect data, consult with regional ministry personnel.

Table 7: General Principles for Data Validating and Editing - Non-Continuous Data

Parameter	Look For	Action

Parameter	Look For	Action
Dustfall	Siting criteria; Exposure period	Regularly inspect site and surrounding area to ensure criteria continues to be met. Check 'on' and 'off' dates to confirm period is within 3 days of start and end of calendar month and exposure period is between 25 and 34 days; ensure sample identified with proper exposure month
Dustfall	Condition of jar/liner	Check for signs of vandalism/tampering; ensure integrity of both and ensure that sample has not leaked due to liner tear/breakage
Dustfall	Sample condition	Inspect to determine possible contamination by interfering materials (e.g., excessive algae growth, bird droppings, other significant objects/materials)
Dustfall	Sample storage/submission	Minimize storage period and refrigerate if sample submission to lab is to be delayed for some time; ensure plastic liner is well sealed for shipment to lab
Dustfall	Data outliers	Check for extreme values (high and low) and investigate to confirm
Dustfall	Identical results for consecutive months	Check 'on' and 'off' dates
Fluoride candles	Siting criteria	Inspect site and surrounding area to ensure criteria continue to be met
Fluoride candles	Candle container	Check to ensure container has not been opened prior to candle being exposed in the field
Fluoride candles	Exposure period	Check 'on' and 'off' dates to confirm period is within 3 days of start and end of calendar month and exposure period is between 25 and 34 days; ensure sample identified with proper exposure month
Fluoride candles	Shelter and candle condition	Check for signs of vandalism/tampering; ensure top of louvered shelter is down and candle not exposed to precipitation; check for good air flow through the louvers (no obstructions)
Fluoride candles	Sample storage/submission	Minimize storage period after exposure; ensure candle container is well sealed for shipment to lab
Fluoride candles	Data outliers	Check for extreme values (high and low) and investigate if required
Fluoride candles	Identical results for consecutive months	Check 'on' and 'off' dates
SP, PM_{10}, $PM_{2.5}$, PAHs	Siting criteria	Inspect site and surrounding area to ensure criteria continue to be met
SP, PM_{10}, $PM_{2.5}$, PAHs	Filter and filter condition	Check filter integrity (perforations, missing pieces, large cracks, etc.); avoid contamination of exposed filter surface area while handling; exposed filter should always be darker than new filter
SP, PM_{10}, $PM_{2.5}$, PAHs	Filter cassette	Check for integrity and cleanliness of screen, gasket (tight seal on filter)
SP, PM_{10}, $PM_{2.5}$, PAHs	Shelter condition	Check for signs of vandalism/tampering; check for accumulated particulate and clean according to manufacturer's instructions (especially significant for the PM_{10} and $PM_{2.5}$ size selective inlet head cyclones)

Parameter	Look For	Action
SP, PM_{10}, $PM_{2.5}$, PAHs	Flow controller and timer	Check for proper sampling run times and flow rate
SP, PM_{10}, $PM_{2.5}$, PAHs	Handling of exposed filter	Remove from the sampler as soon as practical. Fold and store filter in acceptable envelope (SP), cardboard folder (PM_{10}), or aluminum foil (PAHs); refrigerate the filters for PAH analysis and minimize their exposure to fluorescent light - these filters should be analyzed within 7 days of exposure. PAH filter samples should not be handled with bare hands
SP, PM_{10}, $PM_{2.5}$, PAHs	Polyurethane Foam (PUF) plug cartridge container	Ensure container is intact (wrapped in aluminum foil) and sealed prior to sampling run; ensure plug is re-inserted in the glass container with original aluminum foil, the container is sealed and shipped to the lab for analysis
SP, PM_{10}, $PM_{2.5}$, PAHs	47 mm filter ($PM_{2.5}$)	Transport and expose the filters in the specially designed filter cassettes and store these in plastic Petri dishes or cassette holders. The filters should only be loaded/unloaded in the cassette rings in the lab by lab staff where they weighed
SP, PM_{10}, $PM_{2.5}$, PAHs	Data outliers	Check for extreme values (high and low) and investigate to confirm; filter tare weight should always be less than weight of exposed filter
SP, PM_{10}, $PM_{2.5}$, PAHs	SP vs PM_{10} and $PM_{2.5}$	For collocated sites, check that SP always greater than PM_{10} and $PM_{2.5}$
VOC	Cartridge container	Ensure glass container still sealed, intact and refrigerated prior to exposure of cartridge
VOC	Flow controller and timer	Check both to ensure proper flow rate and sampling time
VOC	Exposed cartridge	Remove cartridge from sampler as soon as practical, follow proper storage/ refrigeration requirements and ship to lab for analysis within required time frame after exposure
VOC	Evacuated canister	Ensure the initial vacuum in the canister is −29 ± 3 in of Hg and that when not in use the flow controller inlet and outlet are always capped. After the 24 hour sampling period, the final canister pressure should be between −5 to −10 in of Hg with a flow controller set at 3.5 mL/min for a 6 litre canister.
VOC	Positive pressure canister	Ensure the initial vacuum in the canister is ±30 ± 3 inches of Hg (+15 psi) and that when not in use, the flow controller inlet and outlet are always capped; after the 24-hour sampling period, the final canister pressure should be between +30 to +14 inches of Hg, with a flow/pump controller set at 3.5 mL/min for a 6 litre canister
VOC	Data outliers	Check for unusual and extreme values (especially high) and investigate to confirm
Dioxins and furans	Same as SP, PM_{10} and PAHs	

Parameter	Look For	Action
Dioxins and furans	PUF plug cartridge container	Ensure container is intact (wrapped in aluminum foil) and sealed prior to sampling run; ensure plug is re-inserted in the glass container with original aluminum foil, the container is sealed and shipped to the lab for analysis
Dioxins and furans	Data outliers	Check for unusual and extreme values and investigate to confirm
Any other sampled parameter		Establish data editing principles in consultation with local District Office of ministry.

6.4 Standard Operating Procedures for Air Quality Monitoring

The SOPs provided here represent the most common instruments used in Air Monitoring Surveys in Ontario and is not meant to be an exhaustive list. Those selecting instruments for air monitoring are encouraged to refer to the US EPA website for an up to date listing of certified methods.

Sulphur Dioxide (SO_2)

Pollutant	Sulphur Dioxide (SO_2)
US EPA designated reference and equivalent method	List of designated reference and equivalent methods – most recent version Automated equivalent method
Reference Documents	US EPA TTNWEB (current listing) List of Designated Reference and Equivalent Methods
Method	Ultraviolet (UV) Fluorescent

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzers should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Inlet line particulate filter (5 and 10 µm [TFE] filter element)
- Remote activation of zero/span and sample valves
- Zero/span and sample solenoid valves

- Internal permeation span source, SO_2 permeation tube, uncertified
- Certified SO_2 calibration unit

Instrumentation QA/QC Requirement

Internal Performance Check - Daily (over a 24-hour period)

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzers. Internal zero and span checks are to be performed automatically once per day. These checks are required to assess ongoing instrument performance such as zero / span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Automatic internal zero/span checks are to be performed daily. The total calibration cycle should run over two 1-hour periods (i.e., be initiated at the end of an hour and to carry over in the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing at 00:50 hours each day (or at 50 minutes into another hour if more suitable or desirable) and consisting of a 5 minute zero, 10 minute span and 5 minute recovery. Zero and span values should be reviewed daily.

Note: Auto span adjustment is not recommended

External Performance Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a **certified** calibration unit (e.g., calibrator, gas cylinder, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer, and possibly after a pollution episode. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. Audits will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non-conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Total Reduced Sulphur (TRS)

Pollutant	Total Reduced Sulphur (TRS)

Pollutant	Total Reduced Sulphur (TRS)
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods - most recent version Equivalent reference method (SO_2)
Reference Documents	US EPA TTNWEB (current listing) List of Designated Reference and Equivalent Methods
Method	US EPA approved U.V. Pulse Fluorescent (SO_2) with high temperature oxidizer

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the Instrument Manufacturer Operating Manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- High temperature oxidizer (850°C to 915°C) with SO_x scrubber
- Inlet line particulate filter (5 µm TFE filter element)
- Remote activation of zero/span and sample valves
- Zero/span and sample solenoid valves
- Internal permeation span source, H_2S permeation tube, uncertified
- Certified SO_2 calibration source and certified H_2S calibration source

Instrumentation QA/QC Requirement

Internal Performance Check - Daily

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzer. Internal zero and span checks are to be performed automatically once per day. These checks are required to assess ongoing instrument performance, such as zero/span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Automatic internal zero/span checks are to be performed daily. The total calibration cycle should run over two 1-hour periods (i.e., be initiated at the end of an hour and carry over into the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing at 00:50 hours each day (or at 50 minutes into another

hour if more suitable or desirable) and consisting of a 5 minute zero, 10 minute span and 5 minute recovery. Zero and span values should be reviewed daily.

Note: Auto span adjustment is not recommended

External Performance Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a **certified** calibration unit (e.g., calibrator, gas cylinder, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer and possibly after a pollution episode. The instrumentation must be challenged periodically with a certified SO_2 gas source (at least 100 ppb) to ensure proper operation of the SO_x scrubber and to provide guidance as to when to change the scrubber. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. It will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non-conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Nitrogen Dioxide (NO_2)

Pollutant	**Nitrogen Dioxide (NO_2)**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version Manual equivalent method
Reference Documents	US EPA TTNWEB List of Designated Reference and Equivalent Methods
Method	Chemiluminescence

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzers should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Inlet line particulate filter (5 µm TFE filter element)
- Remote activation of zero/span and sample valves
- Zero/span and sample solenoid valves
- Internal permeation span source: NO_2 permeation tube or an NO cylinder (both uncertified)
- Certified NO and NO_2 calibration unit

Instrumentation QA/QC Requirement

Internal Performance Check - Daily

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzers. Internal Zero and Span checks are to be performed weekly. These checks are required to assess on-going instrument performance such as zero/span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Manual zero/span checks are to be performed monthly. The total calibration cycle should run over two 1-hour periods (i.e., initiated at the end of an hour and carried over into the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing 50 minutes into the hour and consisting of a 5 minute zero, 10 minute span and 5 minute recovery.

Note: Auto span adjustment not recommended

External Performanace Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a **certified** calibration unit (e.g., calibrator, gas cylinder, gas dilution system, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer and possibly after a pollution episode. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and

reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. It will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Carbon Monoxide (CO_2)

Pollutant	**Carbon monoxide (CO_2)**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version Automated equivalent method
Reference Documents	US EPA TTNWEB (current listing): List of Designated Reference and Equivalent Methods
Method	Gas Filter Correlation, Infrared Absorption Spectroscopy

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzers should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Inlet line particulate filter (5 µm TFE filter element)
- Remote activation of zero, span and sample solenoid valves
- External U.S. National Institute of Standards and Technology (NIST)-traceable CO span cylinder of low concentration (0-50 ppm) for nightly calibrations
- Multipoint Calibrations: NIST CO span tank of high concentration (1,000 ppm)/Gas Dilution System

Instrumentation QA/QC Requirement

Internal Performance Check - Every eight or 24 hours (depending on model)

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzers. Internal Zero and Span checks are to be performed automatically every eight or 24 hours. These checks are required to assess on-going instrument performance such as zero/span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Automatic zero/span checks are to be performed. The total calibration cycle should run over two 1-hour periods (i.e., initiated at the end of an hour and carried over into the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing 50 minutes into the hour and consisting of a 5 minute zero, 10 minute span and 5 minute recovery. Zero and span values should be reviewed daily.

Note: Auto span adjustment is not recommended

External Performanace Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit (e.g., calibrator, gas cylinder, gas dilution system, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer and possibly after a pollution episode. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. It will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Ozone (O_3)

Pollutant	**Ozone (O_3)**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version Automated equivalent method

Pollutant	**Ozone (O_3)**
Reference Documents	US EPA TTNWEB (current listing): [List of Designated Reference and Equivalent Methods]
Method	UV Photometric

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzers should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Inlet line particulate filter (5 µm TFE filter element)
- Remote activation of zero, span and sample solenoid valves
- Internal lamp span source, uncertified
- Certified O_3 generator calibration unit

Instrumentation QA/QC Requirement

Internal Performance Check - Daily (over 24-hour period)

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzers. Internal Zero and Span checks are to be performed automatically once per day. These checks are required to assess on-going instrument performance such as zero/span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Automatic zero/span checks are to be performed daily. The total calibration cycle should run over two 1-hour periods (i.e., initiated at the end of an hour and carried over into the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing 50 minutes into the hour and consisting of a 5 minute zero, 10 minute span and 5 minute recovery. Zero and span values should be reviewed daily.

Note: Auto span adjustment is not recommended

External Performanace Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit (e.g., calibrator, gas cylinder, gas dilution system, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer and possibly after a pollution episode. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. It will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Combined Parameters Analyser: Recordum Airpointer (SO_2, O_3, CO, NOx, SP)

Pollutant	**Combined Parameters Analyser: Recordum Airpointer (SO_2, O_3, CO, NOx, SP)**
US EPA Designated Reference and Equivalent Method	Not designated by US EPA Note: Airpointer uses Thermo Scientific Inc. SO_2, O_3, CO and NOx sample cells
Reference Documents	operations mannual
Method	SO_2 - Ultraviolet (UV) Fluorescent O_3 - Ultraviolet (UV) Photometric CO - Gas-Filter Correlation Coefficient, Infrared Absorption Spectroscopy NOx - Chemiluminescence SP - Nephelometry

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzers should be in accordance with the Instrument Manufacturer's operating manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage). As the Airpointer uses a combined monitor setup, see SOPs for SO_2, O_3, CO and NOx for more detailed procedures. The Airpointer can be configured with up to seven ambient air analysers, including H_2S, VOC, meteorological (wind speed and direction, precipitation), and Traffic Data Sensors (TDS).

Additional Equipment Required

- Laptop with adaptor, AC cable to AUX power outlet (1A max), cross patch RJ45 cable
- Inlet line particulate filter (5 µm TFE filter element)
- Remote activation of zero, span and sample solenoid valves
- Internal permeation span sources, permeation tubes (SO_2, NOx), uncertified
- Certified dynamic gas dilution calibration system capable of delivering 4 L/min of flow, NIST-traceable cylinders, NIST-referenced dynamic ozone generating system
- Flow meter (e.g., basic input/output system [BIOS] DC Lite High flow meter, Tri-Cal, Delta-Cal, etc.)
- Zero filter and adaptor for nephelometer (e.g., Balston filter tube, HEPA filter, etc.)

Instrumentation QA/QC Requirement

Internal Performance Check - Daily (over 24-hour period)

Description: Internal performance check is defined as a QA/QC procedure carried out within the analyzers. Internal Zero and Span checks are to be performed automatically once per day (or every eight hours for CO). These checks are required to assess on-going instrument performance such as zero/span drift, sample repeatability and response time and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Automatic zero/span checks are to be performed daily. The total calibration cycle should run over two 1-hour periods (i.e., initiated at the end of an hour and carried over into the beginning of the next hour) to avoid lost data as a result of the required duration of the calibration cycle. The total calibration period is to be approximately 20 minutes, preferably commencing 50 minutes into the hour and consisting of a 5 minute zero, 10 minute span and 5 minute recovery. Zero and span values should be reviewed daily. CO should have the automatic re-zeroing feature turned on to correct for inherent drift. Zero verification should be performed on the nephelometer once a month to check for zero drift.

Note: Auto span adjustment for SO_2, O_3 and NOx is not recommended

External Performanace Check and Calibration - Monthly

Description: An external performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit (e.g., calibrator, gas cylinder, gas dilution system, etc., referenced to a primary standard). At least once per year, formal certification of gas calibration devices by a certification authority is required.

Requirement: An external performance check and calibration is to be carried out by the operator at least once per month and before (e.g., span drift of 5% or more) the internal performance check shows that the span values are greater than ±10% of the known standard. External performance checks are also recommended to be done after repairs are made to an analyzer, when an analyzer is installed at a station or relocated, when there is an interruption of more than a few days in analyzer operation, when there is any other indication (including excessive zero drift or span drift) of possible significant inaccuracy of the analyzer and possibly after a pollution episode. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and

reporting practices. The ministry will verify at least once per year in the field that the gas calibration devices used by site operators have had their annual certification performed.

Audit - Two to four times per year

Description: An audit will be performed by the ministry at least twice per year. Depending upon performance, audits may occur more frequently. It will also periodically include a check of the data flow through the telemetry system.

Requirement: Corrective action (e.g., zero and/or span adjustments, analyzer response time, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Suspended Particulate Matter (SP) - Discrete High-Volume Samplers

Pollutant	Suspended Particulate Matter (SP)
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version Designated reference method
Reference Documents	40 CFR (U.S. Code of Federal Regulations) Part 50 Appendix B LaSB Method E3288 - The Determination of Suspended Particulates on High Volume Glass and Quartz Fibre by Gravimetry, as amended from time to time LaSB Method E3471 – The Determination of Suspended Particulates on Low-Volume Teflon Filters (46.2 mm Diameter) by Gravimetry, as amended from time to time ASTM Method D4096-91 (2009) Vol. 11.07, Standard Test Method for Determination of Total Suspended Particulate Matter in the Atmosphere (High-Volume Sampler Method), as amended from time to time
Method	High Volume Sampler (Hi-vol)

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual unless otherwise stated. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24-hour period from midnight to midnight (EST or CST as determined by local usage).

Additional Equipment Required

- Appropriate filter for parametres to be analyzed: 8 inches by 10 inches in size; the filters used are specified to have a minimum collection efficiency of 99% for 0.3 µm
- Flow controller capable of maintaining a flow of 40 cubic feet per minute (cfm) (± 4 cfm) over 24 hours
- Certified flow calibration device

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling date on the flow controller/timer, and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: These checks include visual inspection of the sampler, a check of the flow controller to ensure that the flow is being maintained (controller alters the motor speed to maintain a constant flow rate) and confirmation of the correct time of day (EST or CST as determined by local usage), correct sampling day and duration (24 hours). Periodically, a check should be performed of the ΔP from the pressure tap on the motor casing with a digital manometer to confirm that the ΔP is in the expected range.

Motor brushes or the entire motor should be replaced after approximately 500 hours of operation, or when the motor sounds rough. Motor gaskets must be cleaned and replaced as needed, thus they must be regularly inspected. The flow control device and timer are to be inspected at each sample collection to insure that they are in proper working condition. The face plate gasket must be cleaned and replaced when worn or cracked. If exposed filters show signs of particulate seepage, the gaskets must be replaced immediately.

Samplers should be inspected for bird nests, wasp nests and spider webs when samples are collected, and cleaned where necessary. Samplers should be inspected for slugs and snails. Snails and slugs must be removed as they leave slime trails across the filter. Copper wire may be put around the legs to prevent them from crawling up. The inside of the sampler should be cleaned with soap and water periodically, especially under the roof and the filter cassette supporting surface. The filter holder, especially the gasket and horn, should be cleaned at every filter change and inspected for evidence of leakage.

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and flow calibration is to be carried out by the operator quarterly and before (e.g., flow deviation of ± 5% or more of 40 cfm) the internal performance check shows that the flow is greater than ± 10% of the required flow (40 cfm). Calibrations are to be performed using a critical orifice plate and a digital manometer capable of compensating for temperature and pressure, and capable of measuring pressure to at least 4 kPa H_2O. Results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non-conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Inhalable Particulate (PM_{10}) – Discrete High-Volume Samplers

Pollutant	**Inhalable Particulate Matter (PM_{10})**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version
Reference Documents	40 CFR Part 50 Vol 62 Appendix J or M LaSB Method E3288 - The Determination of Suspended Particulates on High Volume Glass and Quartz Fibre by Gravimetry, as amended from time to time LaSB Method E3471 – The Determination of Suspended Particulates on Low-Volume Teflon Filters (46.2 mm Diameter) by Gravimetry, as amended from time to time ASTM Method D4096-91 (2009) Vol. 11.07, Standard Test Method for Determination of Total Suspended Particulate Matter in the Atmosphere (High-Volume Sampler Method), as amended from time to time.
Method	Hi-Vol Sampler equipped with size selective head for PM_{10}

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24-hour period from midnight to midnight in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Appropriate filter for parametres to be analyzed: 8 inches by 10 inches in size; the filters used are specified to have a minimum collection efficiency of 99% for 0.3 µm
- Flow controller capable of maintaining a flow of 40 cfm (± 4 cfm) over 24-hours
- Certified flow calibration device

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling day on the flow controller/timer, and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: These checks include visual inspection of the sampler, a check of the flow controller to ensure that the flow is being maintained (controller slows down the motor rpm to maintain a slower rpm) and confirmation of the correct time of day (EST or CST as determined by local usage), correct sampling day and duration (24 hours). Periodically, a check should be performed of the ΔP from pressure tap on the motor casing with a digital manometer to confirm that the ΔP is in the expected range.

Motor brushes or the entire motor should be replaced after approximately 500 hours of operation, or when the motor sounds rough. Motor gaskets must be cleaned and replaced as needed, thus they must be regularly inspected. The flow control device and timer are to be inspected at each sample collection to insure that they are in proper working condition. The face plate gasket must be cleaned and replaced when worn or cracked. If exposed filters show signs of particulate seepage, the gaskets must be replaced immediately.

Samplers should be inspected for bird nests, wasp nests and spider webs when samples are collected, and cleaned where necessary. Samplers should be inspected for slugs and snails. Snails and slugs must be removed as they leave slime trails across the filter. Copper wire may be put around the legs to prevent them from crawling up. The inside of the sampler should be cleaned with soap and water periodically, especially under the roof and the filter cassette supporting surface. The filter holder, especially the gasket and horn, should be cleaned at every filter change and inspected for evidence of leakage.

The PM_{10} sampler head must be opened and the inside cleaned every three months. The sample impaction plate must be cleaned and sprayed with silicone to prevent particle fractioning, bounce and re-entrainment.

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator quarterly and before (e.g., flow deviation of ± 5% or more of 40 cfm) the internal performance check shows that the flow is greater than ± 10% of the required flow (40 cfm). Calibrations are to be performed using a critical orifice plate and a digital manometer capable of compensating for temperature and pressure, and capable of measuring pressure to at least 4 kPa H_2O. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Filter SOP

Reference Documents

- US EPA 40 CFR Part 50 Appendix B
- US EPA 40 CFR Part 50 Appendix J or M

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance. Use and handling of filters should be in accordance with the manufacturer's recommended protocols and US EPA requirements, unless otherwise stated.

Filter Media

- Appropriate filter for parametres to be analyzed: The filters used are specified to have a minimum collection efficiency of 99% for 0.3 µm
- Filter media used in monitoring activities must have physical and chemical properties appropriate for the sample methodology and the laboratory analysis method used. Ensure filter media are compatible with the type of analytical testing to be performed; for example, some inorganic tests are incompatible with glass-fibre or quartz-fibre matrices.
- Filters must not be chemically reactive with the deposited particulate, even when submitted to strong extraction solvents. Additionally, they must not absorb contaminating gases. When gas absorption is desired, as it may be when the precursors of secondary particles are measured, the filter material should absorb those gases at near 100% efficiency. Some filter materials are known to absorb artifacts such as sulfate, nitrate, organic vapour and also water vapour, which can greatly bias mass measurements.
- Filters should retain their porosity and structure over the temperature range typical of the sampled air stream and the applied analytical methods.

Filter Handling

- Particulate filters are to be conditioned and analysed only by a laboratory approved by the ministry.
- Particulate filters are to be inspected, preconditioned, and weighed in a manner consistent with US EPA 40 CFR Part 50 Appendix B (SP) or Appendix J or M (PM_{10}).
- Filters are to be ordered in sufficient quantity to ensure no disruption of the sampling schedule.
- Filters must be handled with clean hands or smooth cotton gloves (if not analyzing for carbon) to avoid sample contamination.
- Polytetrafluoroethylene (PTFE) filters should be handled with nitrile gloves.
- If a filter cassette is used, new filters should be loaded into filter cassettes in a clean room environment prior to deployment into the field.
- Filters are to lie flat in the sampler, remain in one piece, and have a good seal, with well-tightened wing nuts and a good-condition gasket, to eliminate leaks.
- Ensure that the filter is placed in the cassette with the correct side facing up – contact the manufacturer.
- Filter replacement in the field must be performed so as to reduce opportunities for sample contamination. The operator should stand downwind of the filter during handling.

- The exposed filter is to be returned as soon as possible to a clean room environment, and there removed from the cassette (ideally) for shipment to the analytical lab.
- The exposed area of the filter must not be touched to avoid dislodging particulate from the filter and to avoid sample contamination.
- The filter cassette must be cleaned thoroughly and allowed to dry prior to loading with a new filter. The filter cassette gasket must be inspected for signs of damage.

Filter Blank Concentration

- Filters should not contain significant and highly variable concentrations of the chemicals which are being determined by analysis. A sample of each batch lot of unexposed filters should be analysed, and blank concentration levels should be determined, prior to field sampling.
- Filters should allow sufficient amounts of air to be drawn through them to satisfy the sampling flow rate requirements of the inlet and to obtain an adequate deposit. A capacity of 500 $\mu g/m^3$ of particulate should be attainable over a 24-hour period.

Filter Acceptance Testing

- All filters require an "acceptance testing" program when they are to be used for chemical characterization of the deposited particulate. At least one filter from each lot, typically one per hundred, should be blank tested and analysed for filter interferences. Each filter must be individually light tested over a light table for discolouration, pin-holes, creases or other defects.

Sample Collection

- Exposed filters are collected in the field using a filter cassette and cover and removed in a clean area.
- Filters must be handled carefully to avoid tearing, contamination and loss of particulate.
- Before a filter is removed it should be inspected for tears, scrapes, perforations and extraneous material. The latter should be removed if this can be done without disturbing the integrity of the filter and the particulate.
- The filter is folded in half lengthwise, so the particulate covered surface is folded against itself.
- PM_{10} quartz filters are more delicate than Hi-Vol glass-fibre filters, and are folded carefully and placed in a folded cardboard holder for protection.
- The filter is placed in a sample envelope and sent to the lab for analysis.
- Tears or scrapes occurring as the filter is being removed from the sampler, as well as those having occurred during sampling, should be noted in the comments area on the sample envelope. All comments should be written on the envelope before the filter is inserted. Torn-off pieces should be placed inside the unexposed edge of the folded filter.

Sample Invalidation

Samples should be invalidated for the following reasons:

- If site access or other circumstances prevent the sample from being taken;
- If vandalism or tampering is suspected;
- If field equipment such as the sampler motor or flow controller failed to function properly;
- If a perforation or tear of any size occurs within the particulate collection area during sampling;
- If a leak in the gasket seal occurs during sampling and evidence of the leak extends to the edge of the filter;
- If bird droppings contaminate more than 5% (4 in^2 on 8 × 10 inch filters) of the exposed filter;
- If there has been a significant loss of particulate material due to a tear or a scrape which occurred after sampling (or losses for any other reason);

- If a piece of filter has been torn off and was lost after the blank filter was shipped from the laboratory, and the missing piece is about equal to the following:
    - 8in × 10in filter - 1 in^2 for SP
    - 8in × 10in filter - 0.5 in^2 for a PM10
    - 47 mm filter - any piece missing; and,
- If non-target material such as insects or plant matter adheres to the filter, the material should be removed with forceps. If the matter cannot be removed or was large enough to have significantly interfered with the collection of particulate, the sample should be invalidated.

High Volume (Hi-Vol) Sampler Calibration

Pollutant	High Volume (Hi-Vol) Sampler Calibration
Reference Documents	US EPA 40 CFR Part 50 Appendix B US EPA 40 CFR Part 50 Appendix J or M Filter SOP - in this manual
Method	Hi-Vol Sampler

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual, unless otherwise stated. As per the guidance in the SP and PM_{10} SOPs, Hi-Vol samplers are to be calibrated by the operator on a quarterly basis.

Equipment Required

- Critical orifice plate
- Differential manometer capable of measuring pressure to at least 4 kPa of water and compensating for temperature and pressure
- Flow controller capable of maintaining a flow of 40 cfm (±4 cfm) over 24 hours
- Appropriate filter for parameters to be analysed: 8in × 10in in size; the filters used are specified to have a minimum collection efficiency of 99% for 0.3 µm

Critical Orifice Plate

- The orifice calibration unit consists of a metal tube. The top end is covered with a metal plate that has a central orifice. A static pressure tap is located at this end. The other end of this tube is flanged to hold a loose female threaded coupling, which screws onto the inlet of the sampler. A filter is positioned between the unit and the sampler to supply resistance.
- The orifice calibration unit - must have its own unique slope and intercept linear equation.

- Slope and intercept by manufacturer specs must be checked on an annual basis or if gets damaged.
- Used in conjunction with a differential manometer capable of measuring pressure to at least 4 kPa of water and compensating for temperature and pressure.

Flow Calibration

- A flow calibration of Hi-Vol SP or PM_{10} samplers should be performed by operators every three months. Calibration is performed using a critical orifice plate and a digital manometer capable of compensating for temperature and pressure. Sampler flow is calculated using the known slope and intercept of the critical orifice plate; flow is set for 40 cfm.
- Collect any exposed filters by the proper collection method.
- Install the filter to be used for the calibration.
- Attach the orifice calibration unit (in place of the faceplate) to the inlet of the Hi-Vol horn assembly and fasten securely with the four wing nuts.
- Connect one end of the differential manometer to the differential pressure tap of the orifice calibration unit, and leave the other end open to the atmosphere.
- Turn on the Hi-Vol motor to simulate normal operation.
- Record the reading of the manometer.
- To obtain the true airflow rate:

MR - Manometer reading in inches of water
S - Slope of the calibration graph line
I- intercept of the calibration graph line

Beta Attenuation Monitor (BAM) (PM_{10} and $PM_{2.5}$) - Various Models
Met One Instruments, Inc.
Sibata Scientific Technology
Horiba
Ecotech Spirant

Pollutant	**Inhalable Particulate Matter (PM_{10})**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods most recent version EQPM-0798-122
Reference Documents	List of Designated Reference and Equivalent Methods 40 CFR Part 53 40 CFR Part 50 Appendix J Operating Manual

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the applicable requirements specified in 40 CFR Parts 50 and 53. The samplers are to use a glass fiber filter tape with a minimum filter advance frequency of one hour (on the hour) and operated for 24-hour mean measurements.

Note: The designated method requires that the system must be operated on a PM_{10} concentration range of 1.0 mg/m^3 and a sample pump time of 50 minutes. The unit may also be operated with $PM_{2.5}$ or SP sampling heads, but has not been certified as a manual equivalent method by the US EPA for monitoring those components.

Additional Equipment Required

- Glass fiber filter tape, 2.0 µm pore size
- Zero calibration kit (BX-302); flow calibration inlet adapter (BX-305)
- Certified flow (e.g., BIOS, BX-307 or TriCal), temperature, barometric pressure and relative humidity calibration devices.

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter paper tape changeover (every 2 months) or preferably every month

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover or preferably every month. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed at every filter tape changeover (every 2 months) or preferably every month. These checks include visual inspection of the sampler, a check of the main screen to ensure that there are no error/status messages, that the current time/date, sampling mode, the default flow rate of 16.7L/min are displayed correctly. In addition, data logger verification is recommended to ensure its current concentration value is within 2 $\mu g/m^3$ of the concentration displayed by the BAM 1020 LCD.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the flow (single point) is to be carried out by the operator at least every quarter, i.e., on a seasonal basis (the BAM operation manual recommends a monthly inlet flow check). A complete calibration of the ambient temperature, pressure and flow (single-point) must be done at least once per year in accordance with the procedures described in the Instrument Opertaing Manual (the BAM operation manual recommends a semi-annual interval). The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the ambient temperature, barometric pressure and flow (all single point) will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

Fine Particulate Monitor SHARP – Model 5030
Thermo Scientific Inc.
(Synchronised Hybrid Ambient Real-time Particulate)

Pollutant	**Inhalable Particulate Matter (PM_{10})**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods most recent version
Reference Documents	List of Designated Reference and Equivalent Methods Electronic Code of Federal Regulations Note: PM_{10}

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the applicable requirements specified in 40 CFR Parts 50 and 53. Samplers use a glass fibre filter tape with a minimum filter advance frequency of every eight hours (on the hour) and operated for 24-hour mean measurements.

Note: The designated method requires that the system must be operated on a $PM_{2.5}$ concentration range of 1.0 mg/m^3 and a sample pump time of 50 minutes. The unit may also be operated with PM_{10} or SP sampling heads, but has not been certified as a manual equivalent method by the US EPA for monitoring those components.

Additional Equipment Required

- Glass fiber filter tape, 2.0 µm pore size
- Mass transfer standards; flow calibration inlet adapter
- Certified flow (e.g., BIOS, BX-307 or TriCal), temperature, pressure and relative humidity calibration devices.

- HEPA filter for zero calibration
- Beta Attenuation Calibration Foils

Instrumentation QA/QC Requirement

Internal Performance Check - Tape advancement must be set to every 8 hours as per EPA requirement

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover or preferably every month. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed every month. These checks include visual inspection of the sampler, a check of the main screen to ensure that there are no error/status messages, that the time/date are current, and that the sampling mode and the default flow rate of 16.7L/min are displayed correctly. In addition, data logger verification is recommended to ensure its current concentration value is within 3 $\mu g/m^3$ of the concentration displayed by the SHARP screen.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year, or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the sensors (flow, temperature, pressure) is to be carried out by the operator at least every quarter (i.e., on a seasonal basis) (the SHARP operation manual recommends a monthly inlet flow check). A complete calibration of the ambient temperature, pressure and flow (single-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual (the SHARP operation manual recommends a semi-annual interval). The nephelometer zero must be verified on a monthly basis to correct for zero drift. The results of the external performance check and calibration must be documented and made available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognised national primary standards.

Audit - Two to four per year

Description: An audit of the ambient temperature, barometric pressure, flow and nephelometer zero will be performed by the ministry two to four times per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g,, sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

Tapered Element Oscillating Micro-Balance (TEOM)
Series 1400, 1400a and 1400ab (PM_{10})
Thermo Electron Corporation (Formerly Rupprecht & Patashnick Co., Inc.)

Pollutant	Inhalable Particulate Matter (PM_{10})

Pollutant	Inhalable Particulate Matter (PM_{10})
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version EQPM-1090-079 (Oct. 1990)
Reference Documents	40 CFR Part 53 40 CFR Part 50, Appendix L Operating Manual, R.&P. part no. 42-003347 Recommended Operating Procedures for the TEOM, Environment Canada, Report No. AAQD98-4, March 1999.

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the applicable requirements specified in 40 CFR Parts 50 and 53. The TEOM is to be operated at a temperature of 30°C (case, air and cap temperature) to minimize the volatilization of semi-volatile particulates and in standard time (EST or CST as determined by local usage). The particulate concentration range is 0-200 $\mu g/m^3$ (in the analog range).

Note: The TEOM may also be operated with a $PM_{2.5}$ sample inlet but has yet to be designated as an automated equivalent method by the US EPA for monitoring $PM_{2.5}$. The series 1400ab has also not been designated.

Additional Equipment Required

- Teflon-coated glass fiber filter cartridges
- Calibrated multimeter (3½ digit)
- Mass transducer calibration verification kit
- Certified flow (e.g., BIOS, BX-307 or TriCal), temperature and ambient pressure calibration devices.

Instrumentation QA/QC Requirement

Internal Performance Check - Daily (telemetered status indicators), at each filter replacement

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually as described below. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Available status watch indicators will be monitored daily with a telemetered DAS. Corrective action is required when the instrument reports a status or alarm condition. This is required to assess on-going instrument performance such as proper flow rates and filter cartridge loading. A leak check should be performed at each filter change. The air sample inlet should also be cleaned at that time (this frequency can be relaxed to every 6 months depending on the particulate concentration profile at the site). Every 6 months, the large bypass in-line filters should be replaced and the air inlet system should be cleaned. The flow controller filters should be replaced annually.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit (flow, temperature, barometric pressure.)

Requirement: An audit of the flows (3.0 L/min for the main flow and 16.7 L/min for the main flow plus auxiliary flow), and a leak check, are to be carried out by the operator at least every quarter, i.e., on a seasonal basis. A complete calibration of the ambient temperature, pressure (depending on the sampler configuration) and flow (singlepoint) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Annual

Description: An audit of the ambient temperature, ambient pressure, flow (single point), microbalance "K" value and a leak check will be performed by the ministry at least annually. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

PQ100 Air Sampler (PM_{10})
BGI Incorporated

Pollutant	**Inhalable Particulate Matter (PM_{10})**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version RFPS-1298-124
Reference Documents	40 CFR Part 53 40 CFR Part 50, Appendix J & L Operating Manual, Oct. 2003, version 6.21 Filter SOP in this manual

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the requirements and sample collection filters specified in 40 CFR Part 50 Appendix J. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24 hour period from midnight to midnight (EST or CST as determined by local usage).

Additional Equipment Required

- Particulate Teflon filters, 47 mm diameter, 2.0 µm pore size
- Reusable filter cassettes
- Certified flow calibration device (e.g., Delta Cal or TriCal)

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks include visual inspection of the sampler, a check of the main idle display screen to ensure that: there are no error messages; the current time/date, sample start and stop times/dates, the selected target flow rate of 16.7 L/min and the correct 24-hour sample volume of 24 m^3 for the previous run are correct.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the flow (single point) is to be carried out by the operator quarterly. A calibration of the flow (three-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the flow (single point), will be performed by the ministry at least once per year and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

PQ200 Air Sampler (PM_{10})
BGI Incorporated

Pollutant	**Inhalable Particulate Matter (PM_{10})**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version RFPS-1298-125
Reference Documents	40 CFR Part 53 40 CFR Part 50, Appendix J or M Operating Manual, July 2002, Rev. 1.77 Filter SOP in this manual

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the requirements and sample collection filters specified in 40 CFR Part 50 Appendix J, L and M. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24 hour period from midnight to midnight (EST).

Note: When configured as a PM_{10} sampler, the Well Impactor Ninety Six (WINS) impactor of the PQ200 is replaced by a straight passage.

Additional Equipment Required

- Particulate Teflon filters, 47 mm diameter, 2.0 µm pore size
- Reusable filter cassettes and single-filter tray; impermeable membrane for internal leak check
- Certified flow calibration device (e.g., Delta Cal or TriCal), certified temperature and pressure calibrators

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed at every filter changeover. These checks include visual inspection of the sampler, a check of the main screen to ensure that: there are no error/status messages, the current time/date, sample start and stop times/dates, the default flow rate of 16.7 L/min and the correct 24-hour sample volume of 24 m^3 for the previous run are correct. In addition, an external leak check and an internal leak check are to be performed monthly.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the ambient and filter temperature, ambient pressure and flow (single point) is to be carried out by the operator every quarter. A calibration of the ambient and filter temperature, ambient pressure and flow (3-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the ambient and filter temperature, ambient pressure and flow (single point) will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

Partisol – FRM Model 2000 $PM_{2.5}$ Air Sampler ($PM_{2.5}$)
Thermo Electron Corporation (Formerly Rupprecht & Patashnick Co. Inc.

Pollutant	**Respirable Particulate Matter ($PM_{2.5}$)**
US EPA Designated Referenece and Equivalent Method	List of designated reference and equivalent methods – most recent version RFPS-0498-117 (April 1998), and EQPM-0202-143 (Dec 2006)
Reference Documents	40 CFR Part 53 40 CFR Part 50, Appendix L Operating Manual, April 2002, Rev. B

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the requirements and sample collection filters specified in 40 CFR Part 50 Appendix L.

The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24 hour period from midnight to midnight (EST or CST as determined by local usage).

Additional Equipment Required

- Particulate Teflon filters, 47 mm diameter, 2.0 µm pore size
- Reusable filter cassettes and single-filter tray; leak check disk
- Certified flow calibration device (e.g., Streamline Flow Transfer Standard or TriCal), certified temperature and pressure calibrators

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed at every filter changeover. These checks include visual inspection of the sampler, a check of the main display screen to ensure that: there are no status codes, the current time/date, sample start and stop times/dates, the default flow rate of 16.7 L/min and the correct 24-hour sample volume of 24 m^3 for the previous run are correct. In addition, an external leak check and an internal leak check are to be performed monthly.

External Performance Check (Audit) and Calibration-Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the ambient and filter temperature, ambient pressure and flow (single point) is to be carried out by the operator every quarter. A calibration of the ambient and filter temperature, ambient pressure and flow (5-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the ambient and filter temperature, ambient pressure and flow (single point) will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently. The audit could also include collocated sampling.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

PQ200 Air Sampler ($PM_{2.5}$)
BGI Incorporated

Pollutant	**Respirable Particulate Matter ($PM_{2.5}$)**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version RFPS-0498-116 (April 1998), and EQPM-0202-142 (Dec 2006)
Reference Documents	40 CFR 40 Part 53 40 CFR Part 50, Appendix L Operating Manual, July 2002, Rev. 1.77

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the requirements and sample collection filters specified in 40 CFR Part 50 Appendix L. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24 hour period from midnight to midnight (EST or CST as determined by local usage).

Additional Equipment Required

- Particulate Teflon filters, 47 mm diameter, 2.0 µm pore size
- Reusable filter cassettes and single-filter tray; impermeable membrane for internal leak check
- Certified flow calibration device (e.g., Delta Cal or TriCal), certified temperature and pressure calibrators

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed at every filter changeover. These checks include visual inspection of the sampler, a check of the main screen to ensure that: there are no error/status messages, the current time/date, sample start and stop times/dates, the default flow rate of 16.7L/min and the correct 24-hour sample volume of 24 m^3 for the previous run are correct. In addition, an external leak check and an internal leak check are to be performed monthly.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the ambient and filter temperature, ambient pressure and flow (single point) is to be carried out by the operator every quarter. A calibration of the ambient and filter temperature, ambient pressure and flow (three-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the ambient and filter temperature, ambient pressure and flow (single point) will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently. The audit could also include collocated sampling.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

PQ200-VSCC or PQ200A-VSCC Air Sampler ($PM_{2.5}$)
BGI Incorporated

Pollutant	**Respirable Particulate Matter ($PM_{2.5}$)**
US EPA Designated Reference and Equivalent Method	List of designated reference and equivalent methods – most recent version EQPM-0202-142 (Feb. 2002)

Pollutant	Respirable Particulate Matter ($PM_{2.5}$)
Referenece Documents	40 CFR Part 53 40 CFR Part 50, Appendix L Operating Manual, July 2002, Rev. 1.77 Very Sharp Cut Cyclone (VSCC) Supplemental Manual (Appendix M).

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's operation manual and with the requirements and sample collection filters specified in 40 CFR Part 50 Appendix J, L and M. The sampler is to operate every 6th day on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. See the current year's Sampling Schedule Calendar. Samples are to be collected over a 24 hour period from midnight to midnight in standard time (EST or CST as determined by local usage).

Note: The PQ200A-VSCC is a portable audit sampler.

Additional Equipment Required

- Particulate Teflon filters, 47 mm diameter, 2.0 µm pore size
- Reusable filter cassettes and single-filter tray; impermeable membrane for internal leak check
- Certified flow calibration device (e.g., Delta Cal or TriCal), certified temperature and pressure calibrators
- Transport cases for the PQ200A

Instrumentation QA/QC Requirement

Internal Performance Check - At each filter changeover (every 6th day if on a 6 day schedule)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler by the operator. Internal checks are to be performed manually at each filter changeover. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Internal performance checks are to be performed at every filter changeover. These checks include visual inspection of the sampler, a check of the main screen to ensure that: there are no error/status messages, the current time/date, sample start and stop times/dates, the default flow rate of 16.7 L/min and the correct 24-hour sample volume of 24 m^3 for the previous run are correct. In addition, an external leak check and an internal leak check are to be performed monthly.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (once per year or sooner as needed)

Description: External performance check (audit) and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An audit of the ambient and filter temperature, ambient pressure and flow (single point) is to be carried out by the operator every quarter. A calibration of the ambient and filter temperature, ambient pressure and flow (3-point) must be done at least once per year in accordance with the procedures described in the instrument manufacturer's operation manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit of the ambient and filter temperature, ambient pressure and flow (single point) will be performed by the ministry at least once per year and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

GRIMM Model 107 Ambient Dust Monitor ($PM_1$1, $PM_{2.5}$, SP_{10})
GRIMM Aerosol Technik GmbH & Co., KG

Pollutant	**Particulate Matter (PM_1, $PM_{2.5}$ and PM_{10})**
US EPA Designated Reference and Equivalent Method	Not designated by US EPA as a reference or equivalent method.
Reference Documents	Operating Manual, ENVIROcheck Environmental Dust Monitoring, May 2002

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

The GRIMM model 107 ambient dust monitor is a portable (or stationary) unit which simultaneously measures PM_1, $PM_{2.5}$ and PM_{10} concentrations in $\mu g/m_3$ and particle counts (particles/liter) for particle sizes ranging from 0.25 to 32 µm. The mass concentration measurement range is 0.1 to 1500 $\mu g/m^3$. Operation, service and maintenance of the monitor should be in accordance with the instrument manufacturer's operation manual. The monitor can be programmed for continuous operation and for timed operation (e.g., 1 to 60 minute intervals between measurement sets). The monitoring schedule will depend on the data collection requirements and must be approved by the ministry prior to start-up of the monitoring program. The monitor is to be operated on EST or CST (as determined by local usage).

Additional Equipment Required

- Particulate filters, 47 mm diameter, 2.0 µm pore size (typically PTFE Teflon) depending upon subsequent lab analysis)
- Silica gel cartridges, computer cleaning tissue, compressed air

Instrumentation QA/QC Requirement

Internal Performance Check - Monthly to every 3-6 months for normal particulate levels and considerably shorter for sampling in highly contaminated areas (e.g. forest fires, industrial sites)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed monthly to every 3-6 months, or more often if the monitor is used in areas with elevated particulate levels. These checks are required to assess routine instrument performance and to ensure adherence to ministry QA/QC and reporting practices.

Requirement: Monthly checks include visual inspection of the sampler for particle contamination, a visual check of the silica gel cartridge (for colour change) when the sampler is used in the weather housing, a check of the main display screens to ensure that: there are no error messages (alarm log); the current time/date, sampling schedule and the selected target flow rate are correct. Semi-annual maintenance includes cleaning the ventilation system of the weather housing (changing the inlet filter) and cleaning the ambient air inlet port. The 47 mm PTFE filter, used to check the C-factor of the monitor, should be changed when the theoretical particulate mass on the filter reaches 20 mg (about every 3 months for normal environmental monitoring activity) or more often in high dust locations.

External Performance Check (Audit) and Calibration - Audits (quarterly), calibration (every 18 to 24 months or sooner as needed)

Description: External performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit.

Requirement: The sampler is required to be factory calibrated by the manufacturer, or by an authorized firm capable of providing this service, every 18 to 24 months. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Audit - Annual

Description: An audit (collocated sampling) of the sampling system will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported in writing to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices. A follow-up audit may be performed by the ministry as a result of an audit failure.

Total Dustfall

Pollutant	Total Dustfall
US EPA Designated Reference and Equivalent Method	Not designated by US EPA

Pollutant	Total Dustfall
Reference Documents	ASTM Method D1739-98 (2004), Standard Method for the Collection and Analysis of Settleable Particulate, as amended from time to time MOECC Method E3043 - The Determination of Total Dustfall in Air Emissions by Gravimetry, as amended from time to time
Method	Standard Plastic Dustfall Jars with 4 mil Polyethylene Liners and Exposed Without the Addition of Water or Ethylene Glycol

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instructions in the documents referenced above, and the ministry's Operations Manual for Air Quality Monitoring in Ontario, unless otherwise stated. Sampler should be set out for 30 day periods, preferably within a few days of the beginning of a month, unless an alternate schedule is warranted and has been approved by the ministry. Rainwater/snow collected in the jar must be kept in the plastic liner and submitted to the lab as part of the sample

Additional Equipment Required

- Appropriate collar bracket and jar picker to minimize/eliminate use of ladders
- Suitable rugged containers for shipment of samples to the lab

QA/QC Requirement

Internal Performance Check - At sample changeovers (every 30 days)

Description: Internal performance check is defined as a QA/QC procedure carried out with the sampler. Internal checks are to be performed at each sample changeover and are required to assess routine sampler performance.

Requirement: Sample changeover should be as close as possible to the beginning of a month. The exposure period should be 30 days (± 3 days). These checks include: visual inspection of the sampler to ensure the integrity of the plastic jar and polyethylene liner, a visual inspection of the sample to determine the possible presence of interfering materials (e.g., significant algae growth) which could invalidate the sample, confirmation of the 'on' and 'off' sample collection dates and the correct exposure month.

External Performance Check - Twice per year

Description: For this type of sampling activity, an external performance check is defined as a QA/QC procedure carried out by the operator to ensure that the site is continuing to meet the overall monitoring objectives.

Requirement: An external performance check is to be carried out by the operator at least twice per year and/or when the internal performance check shows that the site may no longer be suitable for meeting overall monitoring program objectives. This includes non compliance with siting criteria, unacceptable sampling interferences from nearby air emission sources due to new point sources and/or nearby land use changes. The results of the external performance check must be recorded and the documentation must be available for inspection and/or submission to the ministry.

Audit - Once per year

Description: An audit will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs, sampler relocation, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Fluoridation Rate

Pollutant	**Hydrogen Fluoride**
US EPA Designated Reference and Equivalent Method	Not designated by US EPA
Reference Documents	ASTM Method D 3269-96 (2001) e1. Standard Test Method for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Manual Procedures); withdrawn by ASTM in February 2010 ASTM Method D3270-00 (2006), Vol. 11.07, Standard Test Method for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semi-automated Method), as amended from time to time
Ministry Recommended Method	Lime candle

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instructions in the document referenced above and in the ministry's Operations Manual for Air Quality Monitoring in Ontario, unless otherwise mentioned. Sampler should be set out for 30 day periods, preferably within a few days of the beginning of a month, unless an alternate schedule is warranted and has been approved by the ministry.

Additional Equipment Required

- Suitable containers (with proper seals) for shipment of samples to/from the lab
- Suitable louvered shelter to house the lime candle

QA/QC Requirement

Internal Performance Check - At each sample changeover (every 30 days)

Description: Internal performance check is defined as a QA/QC procedure carried out with the sampler. Internal checks are to be performed at each sample changeover and are required to assess routine sampler performance.

Requirement: Internal performance checks are to be performed at every sample changeover which is to be as close as possible to the beginning of a month. The exposure period should be 30 days (± 3 days). These checks include: visual inspection of the container used to ship the candle from the lab to ensure it has not been opened prior to candle being exposed in the field; visual inspection of the candle to ensure its integrity; inspection of the shelter for signs of vandalism/tampering to ensure candle was not directly exposed to the elements; check for good air flow through the louvers (no obstructions); confirmation of the 'on' and 'off' sample collection dates to meet the exposure period requirement and the correct exposure month.

External Performance Check - Twice per year

Description: For this type of sampling activity, an external performance check is defined as a QA/QC procedure carried out by the operator to ensure that the site is continuing to meet the overall monitoring objectives.

Requirement: An external performance check is to be carried out by the operator at least twice per year and/or when the internal performance check shows that the site may no longer be suitable for meeting overall monitoring program objectives. This includes non compliance with siting criteria, unacceptable sampling interferences from nearby air emission sources due to new point sources and/or nearby land use changes. The results of the external performance check must be recorded and the documentation must be available for inspection and/or submission to the ministry.

Audit - Once per year

Description: An audit will be performed by the ministry at least once per year and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs, sampler relocation, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Volatile Organic Compounds – Absorbent Cartridge (VOC)

Pollutant	Volatile Organic Compounds (VOCs)
US EPA Designated Reference and Equivalent Method	Not designated

Pollutant	Volatile Organic Compounds (VOCs)
Reference Documents	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010b US EPA Method TO-17 ASTM Method D6196-03, Vol. 11.07, Standard Practice for Selection of Sorbents, Sampling and Thermal Desorption Analysis Procedures for Volatile Organic Compounds in Air, as amended from time to time MOECC Method E3314 - The Determination of Ambient Volatile Organic Compounds (VOC) in Air Using Thermal Desorption/Gas Chromatography-Mass Spectrometry (TD/GC-MS), as amended from time to time
Ministry Recommended method	Determination of VOC in Ambient Air Using Three-Phase Adsorbent Cartridges Followed by Thermal Desorption and GC-MS analysis

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Solid Sorbent Tube (glass or stainless steel) 6 mm O.D. packed with greater than 200 mg of solid adsorbent material (Supelco Carbotrap 300)
- Flow controller capable of maintaining a flow of 2.5 cm^3/min. (± 0.25 cm^3/min) over 24 hours
- Ice cooler to hold exposed cartridges between 2°C and 10°C during shipment to lab
- Certified flow calibration device

Instrumentation QA/QC Requirement

Internal Performance Check - every 12 days (or alternate schedule) during sample changeover

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually during sample collection. These checks are required to assess instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling date on the flow controller/timer to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Internal performance checks are to be performed during every sample changeover. These checks include visual observation of the sampler, a check of the flow controller to ensure the correct time and date and a check of the voltage output (if applicable) to ensure that the proper flow rate of 2.5 cm^3/min (± 0.25 cm^3/min) is being maintained.

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator quarterly and before (e.g., flow deviation of ± 5% or more of 2.5 cm^3/min) the internal performance check shows that the flow is greater than ±10% of the required flow (2.5 cm^3/min). The calibration must be done in accordance with the procedures described in the US EPA reference documents. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. And could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Volatile Organic Compounds – Evacuated Canister (VOC)

Pollutant	Volatile Organic Compounds (VOCs)
US EPA Designated Reference and Equivalent Method	Not designated
Reference Documents	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010b, US EPA Method TO-15 ASTM Method D5466-01 (2007) Standard Test Method for the Determination of Volatile Organic Chemicals (Canister Sampling Method), as amended from time to time Environment Canada SOP for Passive Canister Sampling – Passive FCSOP05
Sampling Method	Determination of VOCs in Air Collected in Specially-Prepared Canisters and Analyzed by GC-MS

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Flow controller capable of maintaining a flow of 3.5 mL/min. over 24 hours
- Stainless steel vacuum gauge capable of measuring 0.05 mm Hg
- Crescent wrench
- Inlet line (stainless steel tubing ¼″ inside diameter [I.D.] or 1/8″ ID)
- Sintered stainless steel in-line filter (2 µm pore size)

Instrumentation QA/QC Requirement

Internal Performance Check - every 12 days during sample collection

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually during sample collection. These checks are required to assess sampler performance such as proper flow controller operation to ensure adherence to ministry QA/QC requirements and reporting practices

Requriement: The checks include visual observation of the sampler to ensure that it is not damaged (valve opens/closes properly), vacuum gauge is functional and flow controller is properly installed on top of the canister valve. Sampling system must be leak free. Initial vacuum should be about −29 inches of Hg and the final vacuum should be between −5 to −10 inches of Hg.

External Performance check and Calibration - Twice per year

Description: External performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit.

Requirement: An external performance check and calibration of the vacuum gauge and flow controller is to be carried out twice per year. The calibration must be done in accordance with the procedures described in the US EPA reference documents. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance

requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Volatile Organic Compounds – Evacuated Canister – Positive Pressure (VOC)

Pollutant	Volatile Organic Compounds (VOCs)
US EPA Designated Reference and Equivalent Method	Not designated
Reference Documents	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010b, US EPA Method TO-15 ASTM Method D5466-01 (2007) Standard Test Method for the Determination of Volatile Organic Chemicals (Canister Sampling Method), as amended from time to time Environment Canada Air Toxics SOP – VOC Sample Management Procedures
Sampling Method	Determination of VOCs in Air Collected in Specially-Prepared Canisters and Analyzed by GC-MS

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Sampling apparatus with: flow controller capable of maintaining a flow of 10.0 mL/min (± 10%) for 24 hours, sample pump capable of 2 atmospheres output pressure, canister pressure gauge (−30 to 30 in. Hg), pump pressure gauge (0 to 30 psig), solenoid valve, electronic timer and elapsed time indicator
- Inlet line (stainless steel tubing ¼″ inside diameter [I.D.] or 1/8″ ID)
- Sintered stainless steel in-line filter (2 µm pore size)
- Temperature controlled enclosure (operating according to sampler manufacturer's specifications)

Instrumentation QA/QC Requirement

Internal Performance Check - every 12 days during sample collection

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually during sample collection. These checks are required to assess

sampler performance such as proper flow controller operation to ensure adherence to ministry QA/QC requirements and reporting practices

Requriement: The checks include visual observation of the sampler to ensure that it is not damaged (valve opens/closes properly), vacuum gauge is functional and flow controller is properly installed on top of the canister valve. Sampling system must be leak free. Initial vacuum should be about −30 inches of Hg and the final vacuum should be between 5 to 25 inches of Hg.

External Performance check and Calibration - Twice per year

Description: External performance check and calibration is defined as a QA/QC procedure carried out with a certified calibration unit.

Requirement: An external performance check and calibration of the vacuum gauge and flow controller is to be carried out twice per year. The calibration must be done in accordance with the procedures described in the US EPA reference documents. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Polycyclic Aromatic Hydrocarbons – Filter (PAH)
Non-Volatile Fraction

Pollutant	Polycyclic Aromatic Hydrocarbons (PAH) – Three Member Rings & Up
US EPA Designated Reference and Equivalent Method	Not designated

Pollutant	Polycyclic Aromatic Hydrocarbons (PAH) – Three Member Rings & Up
Reference Documents	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010/b, US EPA Method TO-13A ASTM Method D6209-98 (2004), Vol. 11.07, Standard Test Method for Determination of Gaseous and Particulate Polycyclic Aromatic Hydrocarbons in Ambient Air (Collection on Sorbent-Backed Filters with Gas Chromatographic/Mass Spectrometric Analysis), as amended from time to time MOE Method E3124 - The Determination of Polycyclic Aromatic Hydrocarbons (PAH) in Ambient Air by Gas Chromatography-Mass Spectrometry (GC-MS), as amended from time to time Polycyclic Aromatic Hydrocarbons in Ambient Air - Standard Operating Procedure and Technical Manual, Ministry of the Environment, Air Resources Branch, 1992 Filter SOP - in this manual Hi-Vol Sampler Calibration SOP - in this manual
Method	Determination of PAH in Ambient Air Using the hi-vol Method With Teflon-coated Glass Fiber Filter (without sorbent cartridge) with Subsequent Quantitative GC/MS Detection

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should in accordance with the instrument manufacturer's operation manual unless otherwise mentioned. The sampler is to operate every 12th day based on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. Air samples (~610 m^3) to be collected over a 24-hour period from midnight to midnight in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Flow controller capable of maintaining a flow of about 15 cfm (± 1.5 cfm) over 24 hours
- Teflon-coated glass fibre filter (or quartz filter??) 8 inches by 10 inches in size
- Ice chest to hold samples at ≤ 4°C for shipment to the lab after collection
- Aluminum foil to ship exposed filters to the lab
- Certified flow calibration device.
- Refrigerator to keep exposed filters cool (≤4°C) before analysis

Internal Performance Check - every 12 days (or alternate schedule) during sample changeover

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each filter changeover. These checks are required to assess instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling date on the flow controller/timer and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: These checks include visual inspection of the sampler, a check of the flow controller to ensure that the flow is being maintained (controller slows down the motor rpm to maintain a slower rpm) and confirmation of the correct time of day (EST or CST as determined by local usage), correct sampling day and duration (24 hours).

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator at least quarterly and before (e.g., flow deviation of ± 5% or more of 15 cfm) the internal performance check shows that the flow is greater than ± 10% of the required flow (15 cfm). The calibration must be done in accordance with the procedures described in the reference documents, specifically the Hi-Vol Sampler Calibration SOP – in this manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. The ministry may also audit the PAH sampling program by performing collocated monitoring. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices

Polycyclic Aromatic Hydrocarbons – Filter and PUF Cartridge (PAH)
Volatile and Non-volatile Fractions

Pollutant	Polycyclic Aromatic Hydrocarbons (PAH) – Three Member Rings and Up
US EPA Designated Reference and Equialvant Method	Not designated as a reference or equivalent method

Pollutant	Polycyclic Aromatic Hydrocarbons (PAH) – Three Member Rings and Up
Reference Document	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010/b, US EPA Method TO-13A ASTM Method D6209-98 (2004), Vol. 11.07, Standard Test Method for Determination of Gaseous and Particulate Polycyclic Aromatic Hydrocarbons in Ambient Air (Collection on Sorbent-Backed Filters with Gas Chromatographic/Mass Spectrometric Analysis), as amended from time to time Filter SOP - in this manual Hi-Vol Sampler Calibration SOP - in this manual
Method	Determination of PAH in Ambient Air Using the hi-vol Method With Teflon-coated Glass Fiber Filter and Sorbent Cartridge; Quantitative GC/MS Detection

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the Instrument Maufacturer's Operating Manual unless otherwise mentioned. Sampler top operate every 12th day based on the standard North American schedule, unless an alternate schedule is warranted and has been approved by the ministry. Air samples (≥ 300 m^3) to be collected over a 24-hour period from midnight to midnight in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Modified hi-vol with flow controller capable of maintaining a flow of about 8 cfm (± 0.8 cfm) over 24 hours
- Teflon-coated glass fibre filter (or quartz filter) 8 inches by 10 inches in size
- PUF or XAD-2 resin cartridge (see note 1 below)
- PUF absorbent cartridge assembly and shipping container (Al canister)
- Ice chest to hold samples at ≤ 4°C for shipment to the lab after collection
- Aluminum foil to ship exposed filters to the lab
- Certified flow calibration device
- Refrigerator to keep exposed filters in the dark and cool (≤4°C)

** Note 1: In general, XAD-2 resin has a higher collection efficiency for volatile PAH than PUF as well as higher retention efficiency for both volatile and reactive PAHs. Naphthalene, acenaphthylene and acenaphthene have only ~ 35% recovery when using PUF as the sorbent medium. The PUF method includes the analysis of the PAHs listed in US EPA Method TO-13A on page 13A-2.

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each filter changeover. These checks are required to assess

instrument performance and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Internal performance checks are to be performed during every filter changeover. These checks include: visual observation of the sampler, a check of the flow controller to ensure that the flow is being maintained (controller slows down the motor rpm to maintain a slower rpm) and confirmation of the correct time of day (EST or CST as determined by local usage), correct sampling day and duration (24 hours).

External Performance Check and Calibration - Every quarter

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator quarterly, or sooner if the internal performance check shows that the flow controller does not appear to be functioning properly or the ΔP is not in the expected range. The calibration must be done in accordance with the procedures described in the reference documents, specifically the Hi-Vol Sampler Calibration SOP – in this manual. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified annually against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. The ministry may also audit the PAH sampling program by performing collocated monitoring. Depending upon performance, audits may occur more frequently.

Rquirement: Corrective action (e.g,, sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Dioxins and Furans (PCDD/PCDF)

Polluant	Dioxins and Furans
US EPA Designated Reference and Equivalant Method	Not designated

Polluant	Dioxins and Furans
Reference Documents	Air Toxics - Monitoring Methods US EPA Report EPA/625/R-96/010bM US EPA Method TO-9A, Jan 1999 Environment Canada Method 1/RM/19 and CEN-EN 1948 for PCDD/PCDFs MOECC Method E3418, The Determination of Polychlorinated Dibenzo-P-Dioxins, Polychlorinated Dibenzofurans and Dioxin-Like Polychlorinated Biphenyls (DLPCBs) in Environmental Matrices by Gas Chromatography-High Resolution Mass Spectrometry (GC-HRMS), v3.0, August 24, 2010 (note analysis of air samples at MOECC-LaSB was discontinued in later versions of this method)
Method	Determination of dioxins and furans in Air Using Teflon-coated Glass Fibre Filter and Polyurethane (PUF) Plug, Followed by Soxhlet Extraction with Toluene and GC/MS

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyzer should be in accordance with the instrument manufacturer's opertation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment Required

- Polyurethane Foam (PUF) Plug of solid adsorbent material.
- Flow controller capable of maintaining a flow of 8 cfm (± 0.8 cfm) over 24 hours.
- Dry gas metre to monitor total volume of ambient air sampled.
- Ice cooler to hold samples at 4°C or cooler during shipment to laboratory
- Teflon-coated glass fibre filter 8 inches by 10 inches in size
- Certified flow calibration device
- Aluminum foil to wrap exposed filter for shipment to lab

Instrumentation QA/QC Requirement

Internal Audit Check - every 12 days (or alternate schedule) during sample changeover

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each sample changeover. These checks are required to assess instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling date on the flow controller/timer and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: These checks include visual inspection of the sampler, a check of the flow controller to ensure that the flow is being maintained (controller slows down the motor rpm to maintain a slower rpm) and confirmation of the correct time of day (EST or CST as determined by local usage), correct sampling day and duration (24 hours).

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator at least quarterly and before (e.g., flow deviation of ± 5% or more of 8 cfm) the internal performance check shows that the flow is greater than ± 10% of the required flow (8 cfm). The calibration must be done in accordance with the 8 procedures described in the US EPA reference documents. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported as soon as practical to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Asbestos

Polluant	Asbestos
US EPA Designated Reference and Equivalant Method	Not designated
Reference Documents	*O. Reg. 278/05 Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations* Asbestos and Other Fibers by PCM NIOSH MAN 7400 Asbestos Sampling – US EPA SOP #2015
Method	Determination of asbestos using mixed cellulose ester (MCE) filters in phase contrast microscopy (PCM) cartridges. Analysis by PCM and, if needed, transmission electron microscopy (TEM).

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed

description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the sampler should be in accordance with the instructions in the documents referenced above and in the ministry's Operations Manual for Air Quality Monitoring in Ontario, unless otherwise mentioned.

Additional Equipment Required

- 25 mm MCE membrane filters, 0.45 to 1.2 µm pore size, conductive cowl on cassette
- Suitable containers (with proper seals) for shipment of samples to/from the lab
- Flow controller capable of sampling 2,400 L of air over 24 hours
- Certified flow calibration device

Instrumentation QA/QC Requirement

Internal Audit Check - every sampling date

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each sample changeover. These checks are required to assess instrument performance such as proper flow controller operation and confirmation of the correct time, date and sampling date on the flow controller/timer and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Internal performance checks are to be performed during every sample changeover. These checks include a visual observation of the sampler, a check of the flow controller to ensure the correct time and date, and a check of the voltage output (if applicable) to ensure that the proper flow rate is being maintained.

External Performance Check and Calibration - Quarterly

Description: External performance check and calibration is defined as a QA/QC procedure carried out by the operator with a certified calibration unit.

Requirement: An external performance check and calibration is to be carried out by the operator quarterly and before (e.g., flow deviation of ± 5%) the internal performance check shows that the flow is greater than ± 10% of the required flow. The calibration must be done in accordance with the procedures described in the reference documents. The results of the external performance check and calibration must be recorded and the documentation must be available for inspection and/or submission to ministry to ensure adherence to ministry QA/QC and reporting practices. The calibration equipment must be certified against a reference or transfer standard traceable to recognized national primary standards.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year, and could include collocated sampling. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported as soon as practical to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Fluoride Active Sampling Method

Polluant	Particulate and Gaseous Fluorides
US EPA Designated Reference and Equivalant Method	Not designated
Reference Documents	Technical and instructional information from suppliers of fluoride active sampling systems ASTM D3266-79 ASTM D3269-79 EPA Method 300
Method	Sampling and Determination of Particulate and Gaseous Fluorides in ambient air by the dual filter pack method

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyser should be in accordance with the sampling system manufacturer's operation manual, unless otherwise mentioned. Data is to be collected in standard time (EST or CST, as determined by local usage). Average temperature, average relative humidity, and average wind speed during the exposure period, are required and can be obtained from the local weather station or from nearby monitoring stations.

Additional Equipment Required

- Sample Filter Cassettes (SKC filter cassette, clear styrene, 37 mm) and polypropylene support pad
- Luer tubing adapter, PVC
- Sample tubing (¼ inch Teflon or plastic) and in-line valve (for opening/restricting flow)
- 24-hour samples with an average flow rate of approximately 14 litres per minute (LPM)
- Re-sealable plastic bag as supplied with sampler
- Outdoor mounting bracket for filter cassettes, rain hood and programmable timer power bar

Instrumentation QA/QC Requirement

Internal Audit Check - Monthly

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each sample changeover. These checks are required to assess instrument performance to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: An internal performance check is to be carried out by the operator at least monthly or before (e.g. flow deviation of ± 5% or more of 20 m^3, or 700 ft^3, over 24 hours). These checks include leaks in the system; inspect filter cassette for any cracks or holes, ensure the flow is being maintained at approximately 15 LPM, and confirm the correct time of day (EST or CST, as determined by local usage), correct sampling day and duration (24 hours).

External Performance Check - Twice per year

Description: For this type of sampling activity, an external performance check is defined as a QA/QC procedure carried out by the operator to ensure that the site is continuing to meet the overall monitoring objectives.

Requirement: An external performance check is to be carried out by the operator at least twice per year and/or when the internal performance check shows that the site may no longer be suitable for meeting overall monitoring program objectives. This includes non-compliance with siting criteria, unacceptable sampling interferences from nearby air emission sources due to new point sources and/or nearby land use changes. The results of the external performance check must be documented and made available for inspection and/or submission to the ministry.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g,, sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported as soon as practical to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Trace Gas Passive Sampling

Polluant	Various Contaminants
US EPA Designated Reference and Equivalant Method	Not designated
Reference Documents	Technical and instructional information from suppliers of passive sampling systems
Method	Determination of trace gas concentrations using passive air sampling systems

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the analyser should be in accordance with the sampling system manufacturer's operation manual, unless otherwise mentioned. Data is to be collected in standard time (EST or CST, as determined by local usage). Average temperature, average relative humidity, and average wind speed

during the exposure period, are required and can be obtained from the local weather station or from nearby monitoring stations.

Additional Equipment Required

- passive sampler
- Re-sealable plastic bag as supplied with sampler
- Protective container with Teflon liner
- Freezer to store unexposed NOx passive samplers at −20°C
- Fridge to store unexposed SO_2, NO_2, O_3, H_2S and exposed SO_2, NO_2, O_3, H_2S and NOx passive samplers at 4°C

Instrumentation QA/QC Requirement

Internal Audit Check - During sample changeover (every 30 days)

Description: Internal performance check is defined as a QA/QC procedure carried out within the sampler. Internal checks are to be performed manually at each sample changeover. These checks are required to assess instrument performance to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Sample changeover should be as close as possible to the beginning of a month. The exposure period should be 30 days (±3 days). These checks include: a visual inspection of the sampler to ensure the integrity of the sampling system, a visual inspection of the sample to determine the possible presence of interfering materials which could invalidate the sample and confirmation of the ‘on’ and ‘off’ sample collection dates and the correct exposure month.

External Performance Check - Twice per year

Description: For this type of sampling activity, an external performance check is defined as a QA/QC procedure carried out by the operator to ensure that the site is continuing to meet the overall monitoring objectives.

Requirement: An external performance check is to be carried out by the operator at least twice per year and/or when the internal performance check shows that the site may no longer be suitable for meeting overall monitoring program objectives. This includes non-compliance with siting criteria, unacceptable sampling interferences from nearby air emission sources due to new point sources and/or nearby land use changes. The results of the external performance check must be documented and made available for inspection and/or submission to the ministry.

Audit - Once or twice per year

Description: An audit will be performed by the ministry at least once per year. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., sampler repairs/cleaning, flow adjustment, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported as soon as practical to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Wind Speed and Direction

Pollutant	Wind Speed and Direction

Pollutant	Wind Speed and Direction
US EPA Designated Reference and Equivalent Method	Not designated
Reference Documents	Meteorological Monitoring Guidance for Regulatory Modeling Applications EPA-454/R-99-005
Method	Determination of wind speed by (cup or propeller) anemometer and wind direction by bi-directional wind vanes. Units with no moving parts (ultrasonic, solid state methods) have not been commonly used for routine monitoring but can be considered after a proper evaluation.

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the anemometer and wind vanes should in accordance with the instrument manufacturer's opertation manual unless otherwise mentioned

Additional Equipment

Recommend a spare anemometer as a preventative maintenance measure

Instrumentation QA/QC Requirement

Internal Performance Check - Daily

Description: In this application, an internal performance check is defined as a QA/QC procedure carried out by inspecting the wind speed and direction data once per day. These checks are required to remotely assess, in a qualitative sense, performance of the wind speed and direction data measurement and collection system and to ensure adherence to ministry QA/QC requirements and reporting practices

Requirement: Wind speed and direction data are to be inspected daily to check for extreme values (e.g., unusually high/low wind speeds, constant wind directions for sustained periods, etc.), or for values which do not appear to agree with forecasted or observed wind conditions. The results of these data checks could suggest anemometer/wind vane failure (damaged anemometer, worn out bearings, missing cups, frozen wind vane, etc.). Some specific data screening criteria are presented in Table 8-4 of the US EPA report EPA-454/R-99-005. The results of these checks which could suggest system/equipment problems should be acted on as required and documented for data validation purposes.

External Performance Check and Calibration - Monthly (first level inspection) and at least once a year (second level inspection)

Description: In this application, an external performance check and calibration is defined as a QA/QC procedure carried out by the operator, such as physical inspections of the equipment (monthly), or calibration

checks (once per year or as recommended by the manufacturer, whichever comes first). It is highly recommended to change the anemometer every year to prevent failure due to bearing ware.

Requirement: The first level of inspection is visual (anemometer and vane can be looked at directly or through binoculars/telescope to check for physical damage or signs of erratic behavior). The second level of inspection is a "hands on" check which requires removal of the anemometer/wind vane from the tower/mast for further testing/calibration (e.g., bearings replacement, calibration test). Conservatively, operators should not wait for failures and as part of a preventative maintenance program and it is recommended that they have a spare unit on hand and consider replacing/refurbishing the active unit annually. The calibration equipment must be certified against a reference or equivalent standard, and traceable to recognized national primary standards.

The results of the external performance check/calibration must be documented and made available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Audit - Annually or bi-annually

Description: An audit will be performed by the ministry every one to two years. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., anemometer and/or wind vane repairs/ replacement, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Ambient Temperature

Pollutant	Ambient Temperature
US EPA Designated Reference and Equivalent Method	Not designated
Reference Document	Meteorological Monitoring Guidance for Regulatory Modeling Applications EPA-454/R-99-005
Method	Resistance change thermometer sensor such as a platinum or copper resistance temperature detector (RTD), housed in a motor aspirated solar radiation shield.

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the anemometer and wind vanes should in accordance with the instrument manufacturer's opertation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment

- Airflow warning device in solar radiation shield
- Calibrated Digital voltmeter (DVM) with proper input impedance
- Reference temperature sensor accurate to about ≤1°C

Instrumentation QA/QC Requirement

Internal Performance Check - Daily

Description: In this application, an internal performance check is defined as a QA/QC procedure carried out by inspecting the temperature data once per day. These checks are required to remotely assess, in a qualitative sense, performance of the ambient temperature data measurement and collection system and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Ambient temperature data are to be inspected daily to check for extreme values (e.g., unusually high/low values, constant temperature readings for sustained periods, sudden and unexpected temperature changes over a short time period, etc.), or for values which do not appear to agree with forecasted or observed temperature conditions. The results of these data checks could suggest equipment failure (faulty temperature sensor, failure of airflow aspiration system, etc.). Some specific data screening criteria are presented in Table 8-4 of the US EPA report EPA-454/R-99-005. The results of these checks which could suggest system/equipment problems should be acted on as required and documented for data validation purposes.

External Performance Check and Calibration - Monthly (first level inspection) and at least once a year (second level inspection)

Description: In this application, an external performance check and calibration is defined as a QA/QC procedure carried out by the operator, such as physical inspections of the equipment (monthly), or calibration checks (once per year or as recommended by the manufacturer, whichever comes first).

Requirement: The first level of inspection is visual (solar radiation shield can be looked at directly or through binoculars/telescope to check for physical damage or cleanliness – no air flow restrictions, sound of aspiration motor, etc.) The second level of inspection is a "hands on" check which requires removal of the temperature sensor from the tower/mast for further testing/calibration (e.g., replacement/repair of the aspiration motor, calibration testing of the temperature sensor according to the manufacturer's recommended procedures). Conservatively, operators should not wait for failures and as part of a preventative maintenance program it is recommended that they have a spare aspiration motor/fan on hand and replace/refurbish the active unit as recommended by the manufacturer, or at least once every 2 years. The calibration equipment must be certified against a reference or equivalent standard, and traceable to recognized national primary standards.

The results of the external performance check/calibration must be documented and made available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Audit - Annually or bi-annually

Description: An audit will be performed by the ministry every one to two years. Depending upon performance, audits may occur more frequently.

Requirement: Corrective action (e.g., anemometer and/or wind vane repairs/replacement, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Solar Radiation

Pollutant	Ambient Temperature
US EPA Designated Reference and Equivalent Method	Not designated
Reference Documents	Meteorological Monitoring Guidance for Regulatory Modeling Applications Report EPA-454/R-99-005
Method	Depending on the application, either a net radiometer or a first/second class pyranometres with World Meteorological Organization (WMO) specifications

Operation, Service and Maintenance

This SOP briefly describes the US EPA designated reference methods, or equivalent methods, and available reference documents from various agencies, non-designated monitoring methods accepted by the ministry, the minimum service, operation and maintenance requirements, instrumentation QA/QC requirements (internal and external performance checks), and audits by the ministry. This SOP is not intended to provide a detailed description of monitoring/sampling methods: Emitters and site operators need to review the method reference documents for detailed method descriptions. The requirements specified in this document are minimum requirements and site operators are encouraged to exceed them for optimal performance.

Operation, service and maintenance of the anemometer and wind vanes should in accordance with the instrument manufacturer's opertation manual unless otherwise mentioned. Data is to be collected in standard time (EST or CST as determined by local usage).

Additional Equipment

- Electrical light bulb (100 watts or similar)
- Calibrated DVM with proper input impedance
- Complete opaque cover (for zero check)

Instrumentation QA/QC Requirement

Internal Performance Check - Daily

Description: In this application, an internal performance check is defined as a QA/QC procedure carried out by inspecting the solar radiation data once per day. These checks are required to remotely assess, in a qualitative sense, performance of the radiation data measurement and collection system and to ensure adherence to ministry QA/QC requirements and reporting practices.

Requirement: Solar radiation data are to be inspected daily to check for extreme values (e.g., unusually high/low values, constant temperature readings for sustained periods, sudden and unexpected changes over a short time period, radiation readings >0 at night, etc.), or for values which do not appear to agree with the maximum possible value for the date and latitude. The results of these data checks could suggest equipment failure (faulty sensor, electrical signal processing problems, etc.). Some specific data screening criteria are presented in Table 8-4 of the US EPA report EPA-454/R-99-005. The results of these checks which could suggest system/equipment problems should be acted on as required and documented for data validation purposes.

External Performance Check and Calibration - Monthly (first level inspection) and at least once a year (second level inspection)

Description: In this application, an external performance check and calibration is defined as a QA/QC procedure carried out by the operator, such as physical inspections of the equipment (monthly), or calibration

checks (once per year or as recommended by the manufacturer, whichever comes first).

Requirement: The first level of inspection is visual: solar radiation sensor should be checked for physical damage/integrity (scratches or cracks on surfaces of the hemisphere), for cleanliness (optical hemispheres should be cleaned frequently with a soft lint-free cloth) and for any discoloration/deformation of the detectors. This level of inspection should also include confirmation that the site is maintaining acceptable siting criteria so that the radiation data is not adversely affected by nearby objects or surfaces. The second level of inspection is a "hands on" check which requires removal of the solar radiation sensor from the field for further testing and possible zero adjustment/calibration (e.g., calibration/testing according to the manufacturer's recommended procedures). Conservatively, operators should not wait for failures and as part of a preventative maintenance program it is recommended that they have a spare sensor on hand and replace/refurbish the active unit as recommended by the manufacturer, or at least once every 2 years. The calibration equipment must be certified against a reference or equivalent standard, and traceable to recognized national primary standards.

The results of the external performance check/calibration must be documented and made available for inspection and/or submission to the ministry to ensure adherence to ministry QA/QC and reporting practices.

Audit - Annually or bi-annually

Description: An audit will be performed by the ministry every one to two years

Requirement: Corrective action (e.g., sensor replacement, data correction, etc.) will be required by the operator if the audit results show non conformance with acceptable operation, service and maintenance requirements. The corrective action must be recorded and reported to the ministry as soon as practical to ensure adherence to ministry QA/QC and reporting practices.

Appendices

Appendix 1: Sample Pollutant Log

Download Sample Pollutant Log

Appendix 2: List of Activities to be performed during Station Visits

One of the main purposes of monitoring station visits is to verify the proper operation of the monitoring equipment and of data acquisition systems (DAS) to ensure the collection of valid and complete data. A second important purpose is to verify the continued safe and secure environment at the station. Diagnostic tests, which can be performed remotely on various monitoring equipment and station parameters, complement the station visit verification.

Station visits should be documented in the site log. The following is a list of recommended activities to be performed at the station:

- Examine the external station conditions including the inlet probe for damage or blockage. Periodically review the station characteristics for any change or modification to the station to ensure that siting criteria continue to be met.
- Examine the manifold, if applicable, the transfer lines (or inlet line) and the inlet filters for dirt build-up and replace the filter or clean the lines as required. Examine the seals in the sampling system, the scrubbing and drying agents, and replace as required.

- Perform zero and span verifications on the analyzers at least monthly. Record the values and note abnormal deviations. All adjustments need to be documented.
- Perform preventative maintenance as prescribed in the instrumentation operations and maintenance manuals.
- Check the heating/cooling system to ensure that the station temperature is maintained in the required temperature range.
- Ensure that the analyzers are in the sample mode before exiting the shelter.
- Ensure that the shelter door and gate (if applicable) are locked upon leaving the station.

Appendix 3: Guidance for Electronically Submitting Validated Data

The ministry requires electronic submission of raw and edited emitter data on a quarterly basis. This data will then be uploaded into a database. Prior to the first submission of data, the ministry requires that Table 8 be submitted along with a sample of the data to confirm the format in which the data will be received so that the ministry can initialize and test the industry station in the database.

The first column will always contain the date and the second column time. Please be sure that the format of the first two columns is correct and that the date and time have been delimited. It is important that the format be identical each quarter. Data is to be submitted as a time series, not as a monthly matrix. Acceptable data formats include Excel, Comma Separated Values (CSV), or Enview. Each quarter the submission must include a combined file for the three months and the files must contain data ordered from oldest to newest, (e.g., Jan 01/13 0:00 to Mar 31/13 23:59). Examples of acceptable formats are provided in Tables 9 and 10.

If the emitter makes any changes (including service pack installation and upgrades) to their systems after the initial acceptance of their data format by the ministry, the emitter should verify that the formats have not changed. If the data is no longer importable into the ministry's database, the ministry will provide guidance about the problems and the emitter may be asked to resubmit the data.

Table 8: Station Registration Template

Download Station Registration Template

Table 9: Excel Data Submission

A	B	C	D	E	F	G
Date	**Time**	**TRS**	**$PM_{2.5}$**	**Temp**	**Wind Speed**	**Wind Direction**
04/01/2006	1:00	−0.031	3.5	0.02	14.4	8
04/01/2006	1:30	−0.026	3.967	−0.148	15.067	4.2
04/01/2006	2:00	0.004	3.8	−0.114	11.467	6.6
04/01/2006	2:30	0.006	3.267	−0.249	10.533	12.9
04/01/2006	3:00	−0.002	6.867	−0.484	9.133	11.3
04/01/2006	3:30	−0.019	1.833	−0.517	5.467	10.4
04/01/2006	4:00	−0.002	5.55	−0.585	3.4	342.8

Table 10: CSV Data Submission

Date,Time,TRS,STEM,TRST
05/29/2007,00:00,1,24,913

05/29/2007,00:30,1,24,913
05/29/2007,01:00,1,23,913
05/29/2007,01:30,No Data,No Data,No Data
05/29/2007,02:00,1,24,913
05/29/2007,02:30,1,23,913
05/29/2007,03:00,1,24,913

Table 11: Sample of Non-Continuous Data Format for Submission

Download Sample of Non-Continuous Data Format for Submission

Appendix 4: Sample Edit Log Table

Table 12: Sample edit log table

Download Sample Edit Log Table

Examples of Acceptable Edit Actions

- Add offset of
- Delete hours
- Zero Correction
- Slope Correction
- Manual data entry for missing, but collected data
- Invalidating span & zero check data
- Invalidating data due to equipment malfunctions and power failures.
- Invalidating data when instrumentation off-line
- Marking data as out-of-range

Appendix 5: Wind Speed and Direction Calculations

The following equations used to calculate wind speed and wind direction values were taken from the US EPA document entitled QA Handbook for Air Pollution Measurement Systems, Vol. IV: Meteorological Measurements, Version 1.0 (Draft) EPA-454/D-06-001, October 2006.

Wind Speed Average Calculation

A. Horizontal wind speed (WSA) is scalar horizontal wind speed
B. Horizontal wind speed (WSA) may be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour calculations of mean (scalar) horizontal wind speed.
C. The following is the standard form of the equation used for calculating scalar, or horizontal wind speed (WSA):

where

WS_i
: instantaneous horizontal wind speed (scalar)

N
: number of instantaneous samples (typically 1 second)

Horizontal Wind Direction

A. Horizontal wind direction is a circular function with values limited to between 001 and 360 degrees.
B. The hourly calculation of wind direction mean is a crossover-corrected average of the instantaneous wind direction samples.
C. A crossover algorithm for handling wind direction crossover through north is used that compares the current instantaneous wind direction value to the average of all the preceding wind direction values for the pertinent averaging period. If a difference of more than +180 degrees is found, 360 degrees is subtracted from the current value; or if a difference of less than −180 degrees is found, then 360 degrees is added.
D. The following is the equation used for calculating the mean horizontal wind direction (WDA):

where

WD_i
: instantaneous horizontal wind direction (scalar)

N
: number of instantaneous samples

Sigma Theta Calculation

A. Sigma theta calculation is the standard deviation of the horizontal wind direction.
B. The standard deviation of the horizontal wind direction, or sigma theta, is calculated from the instantaneous wind direction samples. An algorithm similar to the crossover algorithm used for horizontal wind direction is used for sigma theta.
C. Sigma theta can be calculated and averaged into 1-minute, short term (e.g., 5-minute), and 1-hour means.
D. It has been suggested that the upper limit of sigma theta should be limited to 103.9 degrees (Yamartino, 1984). The equations used do not impose a limit to the range of possible sigma theta values recorded to eliminate any bias that an upper limit may impose.
E. The following is the form of the equation used for computing sigma theta from horizontal wind direction (WD):

Where

WDA
: mean horizontal wind direction

N
: number of instantaneous samples

Vertical Wind Speed Calculation

A. Vertical wind speed is the vertical component of wind flow. Vertical wind flow can be positive (upward), or negative (downward).
B. Vertical wind speed (VWSI) can be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour means (VWSA).

C. The following is the form of the equation used for calculating mean vertical wind speed:

where

VWS_i
: instantaneous vertical wind speed (scalar)

N
: number of instantaneous samples

Sigma w Calculation

A. Sigma w is standard deviation of the mean vertical wind speed (VWSA).
B. Sigma w can be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour means.
C. The following is the form of the equation used for calculating sigma w:

where

VWSA
: instantaneous vertical wind speed (scalar)

N
: number of instantaneous samples

Sigma Phi Calculation

A. Sigma phi is calculated using the Sigma w and horizontal wind speed (WSA) data channels.
B. Sigma phi can be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour means.
C. The following is the form of the equation used for calculating sigma phi:

The above equation yields sigma phi in units of radians and it is converted to degrees using the following equation:

Sigma phi (degrees) = Sigma phi (radians) * 57.2958

Resultant, or Vector Wind Speed and Direction Calculation

A. The hourly calculation of resultant or vector wind speed and direction provide a vector mean of all of the instantaneous samples of wind direction and wind speed sampled each hour.
B. Sigma phi can be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour averages.
C. The following are the equations used for calculating vector wind speed and vector wind direction:

where

U
: east-west component of wind

V
: north-south component of wind

WDR
: resultant wind direction (vector average)

WSR
: resultant wind speed (vector average)

Sigma v Calculation

A. Sigma v is the standard deviation of the instantaneous wind speed normal to the hourly resultant wind direction.
B. Sigma phi can be averaged into 1-minute, short term (e.g., 5-minute), and 1-hour means.
C. The following are the equations used for the calculation of sigma v:

Appendix 6: Calculation Procedure for Method Detection Limit (MDL)

This appendix has been reproduced from the original MOECC guidance document Estimation of Analytical Method Detection Limits, originally published in 1988 and revised in 1991.

Introduction and Background

The Method Detection Limit (MDL) is a statistically defined decision point such that measured results falling at or above this point are interpreted to indicate the presence of analyte in the sample with a specified probability, and assumes that there are no known sources of error in identification or biases in measurement.

For the purposes of this protocol, the MDL is defined as having a confidence limit of 99%. This confidence limit defines the multiplication factor used from Student's t-tables relating MDL to the analytical precision. This Student's t-value depends on the amount of data used to calculate the analytical precision. In general, analytical precision will depend on the analytical conditions and the sample matrix. When possible, precision will be determined by replicate analysis of typical low-level samples, with sufficient replication to provide a reasonable estimate.

It should be noted that when MDL estimates are developed using clean samples (e.g., reagent [blank] water) they represent an optimum achievable value. Laboratory MDLs (>LMDLs) obtained in this fashion are very useful for establishing performance criteria and allowing comparison of inter-laboratory method capabilities, but may not be applicable in defining the quantitation capability for other samples which introduce matrix effects.

The following protocol represents a modification to that documented in the Federal Register / Vol. 49, No. 209 / Friday, October 26, 1984 / Appendix B to Part 136 – Revision 1.11. This modification restricts the options listed in the original document and gives more direct instructions at other option points.

Scope and Application

This protocol is designed for application to a wide variety of sample types ranging from reagent (blank) water fortified with a known concentration of analyte to wastewater containing analyte. The MDL for an analytical

procedure may vary as a function of sample type. The protocol requires a complete, specific, and well defined analytical method. It is essential that all sample processing steps of the analytical method be included in the determination of the MDL.

Since the MDL procedure was designed for application to a broad variety of physical and chemical methods, it was made device or instrument independent. There are four options available for estimating the analytical precision:

a. accumulation of a large number of in-run replicate analyses of typical samples at levels not exceeding 10 times the estimated MDL;
b. accumulation of in-run replicate analyses of laboratory reagent quality water spiked with a known amount of the target analyte(s) at levels not exceeding 10 times the estimated MDL;
c. analysis of eight replicate aliquots of a typical low level sample at levels not exceeding 10 times the estimated MDL; and,
d. analysis of a series of eight replicate aliquots of laboratory reagent quality water spiked with a known amount of the target analyte(s) at a level not exceeding 10 times the estimated MDL.

Note: When applied for parameters regulated under *O. Reg. 419/05*, Schedule 1, 2 and 3 standards, Point of Impingement (POI) guidelines and Ambient Air Quality Criteria (AAQC), one-tenth of the standard shall be used in place of the "estimated MDL" in the above options. This will be considered the Reporting MDL (RMDL) value referred to in the procedure below.

Organic Analytes

This protocol requires that option d) in the Scope and Application be used. The fortification of laboratory reagent (blank) water with a known level of analyte is required to standardise the protocol for all laboratories and minimise the problems associated with analyzing duplicate or replicate samples or finding a standard "matrix" for organics analysis. The analytical precision is established based on eight replicate analyses and the estimated MDL is derived from a combination of these measurements and the appropriate value from *t*-test tables. This option is not intended to assess the effect of the matrix on the values obtained but rather to define a standardised approach in the development and application of inter-laboratory performance criteria for the program.

Conventionals, Metals and Inorganics

This protocol allows any of the options a), b), c) or d) in the Scope and Application to be used. For options a) and b), the laboratory should review recent data on in-run replicates (data accumulated within the preceding 12-month period, or less) and apply the formula as outlined in Step 6.6.3 to at least 40 data pairs.

Procedure

1. Make an estimate of the MDL using one of the following:
    i. the concentration value that corresponds to an instrument signal/noise ratio of 3:1;
    ii. the concentration equivalent of three times the standard deviation of replicate instrumental measurements of the analyte in reagent water;
    iii. that region of the standard curve where there is a significant change in sensitivity (e.g., a break in the slope of the standard curve); and,
    iv. Instrumental limitations.

    It is recognised that the experience of the analyst is important to this process. However, the analyst must include the above considerations in the initial estimate of the detection limit.

2. Prepare reagent (blank) water that is as free of analyte as possible. Reagent or interference-free water is defined as a water sample in which analyte and interferent concentrations are not detected at the MDL of each analyte of interest. Interferences are defined as systematic errors in the measured analytical signal of an established procedure caused by the presence of interfering species (interferent). The interferent concentration is presupposed to be normally distributed in representative samples of a given matrix. The use of commercially obtained or laboratory prepared organic free water is acceptable, but clearly indicate what was used.
3. If the MDL is to be determined in reagent (blank) water, prepare a laboratory standard (analyte in reagent water) at a concentration which is at least five times, but not to exceed 10 times the estimated MDL. If this is the case, proceed to Step 6.
4. When a "real" sample is being used for the MDL determination, analyse the sample. If the measured level of the analyte is in the recommended range of one to five times the estimated MDL, proceed to Step 6.
5. If the measured level of analyte is less than the estimated MDL, add a known amount of analyte to bring the level of analyte between five and 10 times the estimated MDL.

   If the measured level of analyte is greater than five times the estimated MDL, there are two options:

   i. Obtain another sample with a lower level of analyte in the same matrix, if possible.
   ii. The sample may be used as is for determining the MDL, if the analyte level does not exceed 10 times the MDL of the analyte in reagent water. The variance of the analytical method changes as the analyte concentration increases from the MDL, hence the MDL determined under these circumstances may not truly reflect method variance at lower analyte concentrations.
6. Take eight aliquots of the sample to be used to calculate the MDL and process each through the entire analytical method. Make all computations according to the defined method with final results in the method reporting units.

   If a blank measurement is required to calculate the measured level of analyte, obtain a separate blank measurement for each sample aliquot analysed. Calculate a result (x) for each sample/blank pair.

7. For option c) and d) above, take eight replicates of a typical low level sample or spiked reagent water and calculate the standard deviation (S) of the replicate measurements as follows:

   where:
   xi = the analytical results in the final method reporting units for the eight replicate aliquots (i = 1 to 8)
   = the average of the eight replicate measurements

8. For option a) and b) above, for the assessment of historic within run replicate analysis data, calculate the standard deviation (S) of the replicate measurements as follows:

   where:
   x1, x2 = the two replicate results for each of the n replicate pairs (minimum n = 40)

9. Compute the MDL as follows:

   MDL = *t*(n-1, α = 0.01)*S*

   where: *t*(n-1,α 0.01) is the Student's t value appropriate for a 99% confidence level given the degrees of freedom n-1.
   S = the standard deviation as determined above

   Tables of Student's t Values at the 99% Confidence Level

Number of Replicates	Degree of Freedom (n-1)	t (n-1)
7	6	3.143
8	7	2.998
9	8	2.896
10	9	2.821
11	10	2.764
16	15	2.602
21	20	2.528
26	25	2.485
31	30	2.457
∞	∞	2.326

Recording

Record the calculated MDL to two significant figures (e.g, 0.032). The analytical method used must be specifically identified by number or title, and the MDL for each analyte expressed in the appropriate method reporting units. If the analytical method permits options which affect the MDL, these conditions must be specified with the MDL value. Report the mean analyte level with the MDL and indicate if the MDL procedure was iterated. If a laboratory standard, or a sample that contained a known amount of analyte, was used for this determination, also record the mean recovery.

Treatment of Outliers

Single Analyte Methods

If one of the results can be shown to be an 'outlier' by the Dixon test (described below), and the LMDL calculated for the remaining seven replicates (3.143 times S) is less than the RMDL, this latter estimate of the LMDL will be accepted.

Scans

Certain methods permit analysis of several analytes within a single 'scan'. The MDL for each analyte in the scan must be less than the corresponding RMDL. When the LMDLs tend to bracket the RMDLs, the overall method is not sensitive enough and, therefore, the LMDLs will not be considered acceptable.

However, if only a few of the LMDLs in a 'scan' exceed their respective RMDLs, there may be outliers within the set of eight replicates for these non-complying analytes. If this can be confirmed, as described above, for each of the noncomplying analytes, then the LMDL based on seven replicates (3.143 times S) will be accepted for those few analytes.

To forestall the possibility that one replicate sample may be an outlier for all or most analytes in the scan, and that the calculated LMDLs will therefore be greater than the RMDL for several analytes, the analyst may choose the following option:

- perform 11 replicates (rather than eight);
- for each analyte, note which replicate gives the highest and the lowest results;
- reject the sample replicate containing the greatest number of high results;
- reject the sample replicate containing the greatest number of low results;
- reject the sample with the greatest number of high and low results; and,

- calculate LMDLs for each analyte using the remaining eight replicate samples.

If this procedure fails to indicate an LMDL for each analyte which is below the respective RMDL, redefine the method (for example, larger sample aliquot, different range expansion, etc.), retrain staff, and repeat the entire procedure for estimating RMDL for all analytes in the scan. Discard all previous replicate data.

Outlier procedure: Dixon's Test for sample size n = 8 to 10.

i. sort the replicate values from lowest to highest $r_1, r_2, \ldots r_{(n-1)}, r_n$;
ii. determine the difference between the suspect value and its nearest neighbour $r_1 - r_2$ (or $r_n - r_{(n-1)}$,);
iii. determine the difference between the suspect value and the next to last value at the opposite end of the sorted list of values $r_1 - r_{(n-1)}$, (or $r - r_2$);
iv. calculate the ratio of ii) divided by iii); and,
v. if the ratio is greater than 0.55, the value r_1 (or r_n) is considered to be an outlier ($\leq$ 5% risk of error).

Natrella, M.G. "Experimental Statistics", NBS Handbook 91 (1966), USGPO, Washington, D.C.

Appendix 7: Ambient Monitoring Running Average Exceedances

This appendix has been prepared to clarify the requirements of reporting exceedances to the ministry using running averages, which is applicable for ambient monitoring data only. This guidance outlines the ministry's minimum expectations with respect to reporting. It does not reference the total number of potential offences that may have occurred during an averaging period.

Section 3.1 of the Operations Manual stipulates that the requirements for reporting exceedances to the ministry are based on running averages, which are explained through different examples, as shown below. The examples are organised by averaging time, which in turn depend on the contaminant's standard, guideline limit, or AAQC, and on whether *O. Reg. 419/05* Schedule 2 or Schedule 3 applies.

Hourly Running Average

Hourly running averages may be computed from 1-minute or 5-minute data. Examples 1-3 illustrate 5-minute SO_2 average concentrations and resultant hourly running averages.

Example 1: SO_2 1 Hr Running Avg,
1-hr Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
14-April	23:50	121	74
14-April	23:55	139[2]	75
15-April	00:00	169[2]	80
15-April	00:05	192[2]	87
15-April	00:10	229[2]	99
15-April	00:15	268[2]	115
15-April	00:20	293[2]	134
15-April	00:25	304[2]	155

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
15-April	00:30	312[2]	177
15-April	00:35	316[2]	199
15-April	00:40	319[2]	224
15-April	00:45	326[2]	249
15-April[1]	**00:50**[1]	381[2]	**271**[1]
15-April	00:55	304	284[5]
15-April	01:00	286	294[5]
15-April	01:05	257	300[3]
15-April	01:10	234	300[3]
15-April	01:15	229	297[5]
15-April	01:20	221	291[5]
15-April	01:25	213	283[5]
15-April	01:30	218	275[5]
15-April	01:35	197	265[5]
15-April	01:40	176	254[5]
15-April	01:45	163	240[4]
15-April	01:50	152	221
15-April	01:55	148	208
15-April	02:00	121	194
15-April	02:05	117	182
15-April	02:10	94	171
15-April	02:15	89	159
15-April	02:20	37	144
15-April	02:25	39	129
15-April	02:30	45	115
15-April	02:35	48	102
15-April	02:40	59	93
15-April	02:45	76	85
15-April	02:50	92	80

Notes:

[1] Date, time and exceedance value reported.

[2] Range of 5-minute measurements that contribute to the exceedence value reported.

[3] Maximum of the range.

[4] Minimum of the range.

[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

In Example 1, 11 consecutive hourly running averages exceed the 250 ppb standard within a single averaging period, but this only constitutes a single exceedance. The exceedance would be reported as follows: An exceedance of the SO_2 1-hour standard occurred at 00:50 EST on April 15 when the 1-hour running average was 271 ppb. During the exceedance period, successive running averages ranged between 240 ppb and 300 ppb.

Example 2: SO_2 1 Hr Running Avg,
1-hr Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
09-September	06:25	106	117
09-September	06:30	113	114
09-September	06:35	119	113
09-September	06:40	126	113
09-September	06:45	134[2]	114
09-September	06:50	162[2]	117
09-September	06:55	178[2]	121
09-September	07:00	203[2]	129
09-September	07:05	224[2]	138
09-September	07:10	239[2]	149
09-September	07:15	247[2]	162
09-September	07:20	334[2]	182
09-September	07:25	384[2]	205
09-September	07:30	367[2]	226
09-September	07:35	341[2]	245
09-September[1]	**07:40[1]**	307[2]	**260[1]**
09-September	07:45	283[2]	272[5]
09-September	07:50	266[2]	281[5]
09-September	07:55	286[2]	290[5]
09-September	08:00	209[2]	291[3]
09-September	08:05	193[2]	288[5]
09-September	08:10	187[2]	284[5]
09-September	08:15	161[2]	277[5]
09-September	08:20	202[2]	266[5]
09-September	08:25	257[2]	255[5]
09-September	08:30	298[2]	249[5]

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
09-September	08:35	316[2]	247[4]
09-September[1]	**08:40**[1]	362[2]	**252**[1]
09-September	08:45	237	248[5]
09-September	08:50	213	243[5]
09-September	08:55	124	230[5]
09-September	09:00	298	237[5]
09-September	09:05	278	244[5]
09-September	09:10	261	251[5]
09-September	09:15	235	257[5]
09-September	09:20	213	258[3]
09-September	09:25	198	253[5]
09-September	09:30	168	242[5]
09-September	09:35	124	226[4]

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.
[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

In Example 2, the first hourly SO_2 exceedance occurred at 07:40 on September 9. It reflects a running average from 06:45 to 07:40. Although this period includes parts of two "clock" hours, it is 60 minutes long and thus is only one exceedance. Also, once a particular 5-minute value contributes to calculating an exceedance, it cannot be used to calculate a second exceedance. Therefore, the next 1-hour SO_2 exceedance cannot begin until one hour after the previous exceedance was determined, which in this case is at 08:40. The exceedance would be reported as follows: An exceedance of the SO_2 1-hour standard occurred at 07:40 on September 9 when the 1-hour running average was 260 ppb. During the exceedance period, successive running averages ranged from a minimum of 247 ppb to a maximum of 291 ppb. This was immediately followed by a second exceedance which began at 08:40 on September 9, at which time the 1-hour SO_2 running average was 252 ppb. During this period, the concentration ranged between a minimum of 226 ppb and a maximum of 258 ppb.

Example 3: SO_2 1 Hr Running Avg,
1-hr Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
12-August	14:10	98	133
12-August	14:15	106	129
12-August	14:20	109	125

Date	Hour (EST)	5-min Avg. (ppb)	SO_2 1-hr Runnning Avg. (ppb)
12-August	14:25	114	123
12-August	14:30	119	121
12-August	14:35	125	121
12-August	14:40	127	122
12-August	14:45	139	123
12-August	14:50	147	124
12-August	14:55	159	125
12-August	15:00	162	127
12-August	15:05	174	132
12-August	15:10	181	139
12-August	15:15	189	145
12-August	15:20	191[2]	152
12-August	15:25	229[2]	162
12-August	15:30	246[2]	172
12-August	15:35	289[2]	186
12-August	15:40	302[2]	201
12-August	15:45	284[2]	213
12-August	15:50	256[2]	222
12-August	15:55	231[2]	228
12-August	16:00	284[2]	238
12-August	16:05	256[2]	245
12-August	16:10	231[2]	249
12-August[1]	**16:15**[1]	236[2]	**253**[1]
12-August	16:20	184	252[5]
12-August	16:25	178	248[5]
12-August	16:30	234	247[5]
12-August	16:35	273	246[5]
12-August	16:40	297	245[4]
12-August	16:45	324	249[5]
12-August	16:50	316	254[5]
12-August	16:55	303	260[3]
12-August	17:00	258	258[5]
12-August	17:05	216	254[5]
12-August	17:10	176	250[5]

Notes:

[1] Date, time and exceedance value reported.

[2] Range of 5-minute measurements that contribute to the exceedence value reported.

[3] Maximum of the range.

[4] Minimum of the range.

[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 3 illustrates that one exceedance period may incorporate periods where the average may exceed the standard or guideline, while others do not. However, all of these high values fall within a one hour span and use part of the data that resulted in the exceedance at 16:15. In this case, the exceedance would be reported as follows: An exceedance of the SO_2 1-hour running average occurred at 16:15 on August 12 with a concentration of 253 ppb. During the exceedance period, running averages ranged from a minimum of 245 ppb to a maximum of 260 ppb.

Half-Hour Running Average

When reporting exceedances using half-hour running averages, the same principle as described above applies. That is, none of the data used to calculate one exceedance should be used for computing additional exceedances. The following examples illustrate 30-minute running average concentrations for NO_2.

Example 4: NO_2 ½ Hr Running Average
Half-hour Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	NO_2 ½ Hr Running Avg. (ppb)
18-May	06:45	125	121
18-May	06:50	169	135
18-May	06:55	194	152
18-May	07:00	169	163
18-May	07:05	194[2]	174
18-May	07:10	214[2]	182
18-May	07:15	239[2]	197
18-May	07:20	269[2]	213
18-May	07:25	296[2]	230
18-May[1]	**07:30**[1]	308[2]	**253**[1]
18-May	07:35	286	269[5]
18-May	07:40	254	275[3]
18-May	07:45	235	275[5]
18-May	07:50	221	267[5]
18-May	07:55	199	251[4]
18-May	08:00	171	228

Date	Hour (EST)	5-min Avg. (ppb)	NO_2 ½ Hr Running Avg. (ppb)
18-May	08:05	149	205
18-May	08:10	126	184
18-May	08:15	105	162
18-May	08:20	84	139
18-May	08:25	77	119
18-May	08:30	61	100
18-May	08:35	57	85
18-May	08:40	55	73
18-May	08:45	49	64
18-May	08:50	56	59
18-May	08:55	72	58
18-May	09:00	86	63

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.
[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 4 illustrates six consecutive 30-minute running averages within a half-hour period which results in one half-hour NO_2 exceedance at 07:30 on May 18. This exceedance would be reported as follows: An exceedance of the NO_2 half-hour standard occurred at 07:30 EST on May 18 with 253 ppb. During the exceedance period, successive running averages ranged from a minimum of 251 ppb to a maximum of 275 ppb.

Example 5: NO_2 ½ Hr Running Average
Half-hour Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	NO_2 ½ Hr Running Avg. (ppb)
17-January	07:10	196	177
17-January	07:15	214[2]	190
17-January	07:20	263[2]	207
17-January	07:25	271[2]	224
17-January	07:30	278[2]	224
17-January	07:35	264[2]	248
17-January[1]	**07:40**[1]	237[2]	**255**[1]
17-January	07:45	226[2]	257[3]
17-January	07:50	235[2]	252[5]

Date	Hour (EST)	5-min Avg. (ppb)	NO_2 ½ Hr Running Avg. (ppb)
17-January	07:55	247[2]	248[5]
17-January	08:00	261[2]	245[5]
17-January	08:05	248[2]	242[4]
17-January[1]	**08:10**[1]	306[2]	**254**[1]
17-January	08:15	281[2]	263[3]
17-January	08:20	187[2]	255[5]
17-January	08:25	234[2]	253[4]
17-January	08:30	289[2]	258[5]
17-January	08:35	276[2]	262[5]
17-January[1]	**08:40**[1]	254[2]	**254**[1]
17-January	08:45	241[2]	247[5]
17-January	08:50	267	260[5]
17-January	08:55	253[2]	263[3]
17-January	09:00	219[2]	252[4]
17-January	09:05	301[2]	256[5]
17-January[1]	**09:10**[1]	286[2]	**261**[1]
17-January	09:15	267	266[3]
17-January	09:20	242	261[5]
17-January	09:25	227	257[5]
17-January	10:25	224	258[5]
17-January	11:25	260	251[4]

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.
[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 5, on the other hand, illustrates non-consecutive half-hour exceedances spread across half-hour clock-based periods. Example 5 illustrates a total of four exceedances, one at 07:40, the second at 08:10, the third at 08:40 and the fourth at 09:10, on January 17. The exceedances should be reported as follows: four NO_2 half-hour running average exceedances occurred on January 17 at 07:40, 08:10, 08:40, and at 09:10, at concentrations of 255, 254, 254 and 261 ppb, respectively. During the first exceedance event, NO_2 half-hour running averages ranged from a minimum of 242 ppb to a maximum of 257 ppb. During the second exceedance period, NO_2 half-

hour running averages ranged from a minimum of 253 to a maximum of 263 ppb. The third exceedance event ranged from a minimum of 252 to a maximum of 263 ppb. The forth exceedance event ranged from a minimum of 251 to a maximum of 266 ppb.

Example 6: NO_2 ½ Hr Running Average
Half-hour Standard = 250 ppb

Date	Hour (EST)	5-min Avg. (ppb)	NO_2 ½ Hr Running Avg. (ppb)
03-March	08:10	173	161
03-March	08:15	189	172
03-March	08:20	226	186
03-March	08:25	198	192
03-March	08:30	175	192
03-March	08:35	197[2]	193
03-March	08:40	263[2]	208
03-March	08:45	257[2]	219
03-March	08:50	248[2]	223
03-March	08:55	289[2]	238
03-March[1]	**09:00[1]**	296[2]	**258[1]**
03-March	09:05	264	270[3]
03-March	09:10	238	265[5]
03-March	09:15	213	258[5]
03-March	09:20	206	251[5]
03-March	09:25	197	236[4]
03-March	09:30	176	216
03-March	09:35	203	206
03-March	09:40	214[2]	202
03-March	09:45	193[2]	198
03-March	09:50	255[2]	206
03-March	09:55	296[2]	223
03-March	10:00	296[2]	243
03-March[1]	**10:05[1]**	272[2]	**254[1]**
03-March	10:10	241	259[5]
03-March	10:15	228	265[3]
03-March	10:20	202	256[5]
03-March	10:25	197	239[5]
03-March	10:30	176	219[4]

Notes:

[1] Date, time and exceedance value reported.

[2] Range of 5-minute measurements that contribute to the exceedence value reported.

[3] Maximum of the range.

[4] Minimum of the range.

[5] These values should not be used to calculate the number of reportable exceedances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 6 illustrates non-consecutive half-hour exceedances resulting in two exceedances: one at 09:00 and the second at 10:05 on March 3. The exceedances should be reported as follows: There were two NO_2 half-hour running average exceedances that occurred on March 3 at 09:00 and 10:05 with concentrations of 258 and 254 ppb, respectively. The first exceedance episode ranged from a concentration of 236 ppb to a maximum of 270 ppb. The second exceedance event included 5-minute values that ranged from a minimum of 219 ppb to a maximum of 265 ppb.

Ten-Minute Running Average

The same reporting principle applies to exceedances of 10-minute standards such as total reduced sulphur (TRS) compounds. Examples 7 through 9 illustrate 10-minute running averages for TRS concentrations.

Example 7: TRS 10 Min Running Average
10-min Standard = 9 ppb

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
06-June	07:20	0.0	0.0
06-June	07:25	0.0	0.0
06-June	07:30	0.0	0.0
06-June	07:35	0.0	0.0
06-June	07:40	0.0	0.0
06-June	07:45	3.2	1.6
06-June	07:50	13.0[2]	8.1
06-June[1]	**07:55**[1]	21.0[2]	**17.0**[1,3]
06-June	08:00	9.0[2]	15.0[4]
06-June[1]	**08:05**[1]	32.0[2]	**20.5**[1,3]
06-June	08:10	8.0[2]	20.0[4]
06-June[1]	**08:15**[1]	28.0[2]	**18.0**[1,3]
06-June	08:20	7.0[2]	17.5[4]
06-June[1]	**08:25**[1]	26.0[2]	**16.5**[1,3]
06-June	08:30	5.0[2]	15.5[4]
06-June[1]	**08:35**[1]	21.0[2]	**13.0**[1,3]
06-June	08:40	4.0[2]	12.5[4]

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
06-June[1]	**08:45**[1]	15.0[2]	**9.5**[1,3]
06-June	08:50	2.0	8.5[4]
06-June	08:55	7.0	4.5
06-June	09:00	3.0	5.0
06-June	09:05	14.0	8.5
06-June	09:10	2.0	8.0
06-June	09:15	4.0	3.0
06-June	09:20	0.0	2.0
06-June	09:25	0.0	0.0

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 7 illustrates six 10-minute TRS exceedances spread across multiple clock periods: 07:55, 08:05, 08:15, 08:25, 08:35 and 08:45 on June 6. During the exceedance period, successive running averages ranged from a minimum of 8.5 ppb to a maximum of 20.5 ppb.

Example 8: TRS 10 Min Running Average
10-min Standard = 9 ppb

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
04-October	08:05	0.0	0.0
04-October	08:10	0.0	0.0
04-October	08:15	0.0	0.0
04-October	08:20	0.0	0.0
04-October	08:25	0.0	0.0
04-October	08:30	0.0	0.0
04-October	08:35	0.0	0.0
04-October	08:40	0.0	0.0
04-October	08:45	5.1	2.6
04-October	08:50	9.4[2]	7.3
04-October[1]	**08:55**[1]	15.1[2]	**12.3**[1,3]
04-October	09:00	7.7	11.4[4]
04-October	09:05	10.0	8.9
04-October	09:10	0.6	5.3
04-October	09:15	0.0	0.3

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
04-October	09:20	0.0	0.0
04-October	09:25	0.0	0.0
04-October	09:30	0.0	0.0
04-October	09:35	0.0	0.0
04-October	09:40	0.0	0.0
04-October	09:45	0.0	0.0
04-October	09:50	0.0	0.0
04-October	09:55	0.0	0.0
04-October	10:00	0.0	0.0
04-October	10:05	0.0	0.0
04-October	10:10	0.0	0.0

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 8 shows a 10-minute TRS exceedance which crosses between two clock-based periods. In this example only one 10-minute TRS exceedance at 08:55 on October 4 should be reported. The 10-minute TRS running average at 09:00 is not a second exceedance, since the 5-minute data used for the computation was part of the previous 10-minute TRS exceedance. The exceedances should be reported as follows: There was one TRS 10-minute running average exceedance that occurred on October 4 at 08:55 with 12.3 ppb. The exceedance period included concentrations ranging from a minimum of 11.4 ppb to a maximum of 12.3 ppb.

Example 9: TRS 10 Min Running Average
10-min Standard = 9 ppb

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
05-December	09:30	0.0	0.0
05-December	09:35	0.0	0.0
05-December	09:40	3.9	1.9
05-December	09:45	7.9[2]	5.9
05-December[1]	**09:50**[1]	14.3[2]	**11.1**[1,3]
05-December	09:55	7.2	10.8[4]
05-December	10:00	9.6[2]	8.4
05-December[1]	**10:05**[1]	9.4[2]	**9.5**[1,3]
05-December	10:10	8.4	8.9[4]
05-December	10:15	2.4	5.4

Date	Hour (EST)	5-min Avg. (ppb)	TRS 10-min Running Avg. (ppb)
05-December	10:20	15.2[2]	8.8
05-December[1]	**10:25[1]**	7.8[2]	**11.25[1,3]**
05-December	10:30	13.2	10.5[4]
05-December	10:35	5.4	9.3
05-December	10:40	2.3	3.9
05-December	10:45	1.6	2.0
05-December	10:50	4.3	3.0
05-December	10:55	5.8	5.1
05-December	11:00	7.6	6.7
05-December	11:05	8.9	8.3
05-December	11:10	4.2	6.6
05-December	11:15	0.0	2.1
05-December	11:20	0.0	0.0
05-December	11:25	0.0	0.0
05-December	11:30	0.0	0.0
05-December	11:35	0.0	0.0

Notes:
[1] Date, time and exceedance value reported.
[2] Range of 5-minute measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 9 illustrates blocks of time that include non-consecutive exceedances, calculated from running averages, which occur across and within a 10-minute clock based period. Example 9 illustrates three 10-minute TRS exceedances, which are at 09:50, 10:05 and 10:25 on December 15. The exceedances should be reported as follows: There are three TRS 10-minute running average exceedances which occurred on December 15; at 09:50, 10:05 and 10:25, with concentrations of 11.1, 9.5 and 11.5 ppb, respectively. During the exceedance period, successive running averages ranged from a minimum of 8.9 ppb to a maximum of 11.5 ppb.

24-Hour Running Average

Daily running averages may be calculated from 1-hour averages. Examples 10 through 12 illustrate 24-hour PM_{10} running averages within and across 24-hour clock-based periods.

Example 10: PM_{10} 24 Hr Running Average

Daily AAQC = 50 µg/m^3

Date	Hour (EST)	1-Hour Avg. (µg/m^3)	PM_{10} 24-Hr Running Avg. (µg/m^3)
06-May[1]	**03:00[1]**	148[2]	**56[1]**

Date	Hour (EST)	1-Hour Avg. (µg/m^3)	PM_{10} 24-Hr Running Avg. (µg/m^3)
06-May	04:00	123	60[5]
06-May	05:00	107	63[5]
06-May	06:00	95	65[5]
06-May	07:00	84	67[5]
06-May	08:00	68	68[5]
06-May	09:00	52	69[3]
06-May	10:00	43	69[3]
06-May	11:00	39	69[3]
06-May	12:00	32	69[3]
06-May	13:00	26	68[5]
06-May	14:00	55	69[3]
06-May	15:00	66	69[3]
06-May	16:00	47	67[5]
06-May	17:00	36	65[5]
06-May	18:00	27	61[5]
06-May	19:00	21	59[5]
06-May	20:00	34	57[5]
06-May	21:00	28	55[5]
06-May	22:00	19	54[5]
06-May	23:00	17	53[5]
07-May	00:00	14	51[5]
07-May	01:00	15	51[5]
07-May	02:00	12	50[4]
07-May	03:00	18	45
07-May	04:00	23	41
07-May	05:00	27	37
07-May	06:00	24	34
07-May	07:00	21	32
07-May	08:00	24	30
07-May	09:00	19	29

Notes:

[1] Date, time and non-conformance value reported.

[2] Range of hourly measurements that contribute to the exceedence value reported.

[3] Maximum of the range.

[4] Minimum of the range.

[5] These values should not be used to calculate the number of reportable non-conformances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 10 illustrates one 24-hour PM_{10} non-conformance on May 6 at 03:00. In this case, the next non-conformance cannot occur until at least 24 hours after the first non-conformance, on May 7 at 03:00. The exceedances should be reported as follows: There was one 24-hour PM_{10} running average non-conformance that occurred on May 6 at 03:00 with a concentration of 56 $\mu g/m^3$. During the non-conformance period, daily running averages ranged from a minimum of 50 $\mu g/m^3$ to a maximum of 69 $\mu g/m^3$.

Example 11: PM_{10} 24 Hr Running Average

Daily AAQC = 50 $\mu g/m^3$

Date	Hour (EST)	1-Hour Avg. ($\mu g/m^3$)	PM_{10} 24-Hr Running Avg. ($\mu g/m^3$)
16-July	21:00	46[2]	47
16-July	22:00	57[2]	48
16-July	23:00	52[2]	49
17-July[1]	**00:00**[1]	59[2]	**51**[1]
17-July	01:00	56	52[5]
17-July	02:00	48	53[5]
17-July	03:00	36	53[5]
17-July	04:00	26	53[5]
17-July	05:00	22	52[5]
17-July	06:00	56	53[5]
17-July	07:00	63	54[5]
17-July	08:00	58	55[5]
17-July	09:00	58	56[5]
17-July	10:00	59	57[5]
17-July	11:00	60	57[5]
17-July	12:00	63	58[3]
17-July	13:00	63	58[3]
17-July	14:00	56	58[3]
17-July	15:00	52	58[3]
17-July	16:00	57	58[3]
17-July	17:00	44	55[5]
17-July	18:00	37	53[5]
17-July	19:00	32	52[5]

Date	Hour (EST)	1-Hour Avg. (µg/m^3)	PM_{10} 24-Hr Running Avg. (µg/m^3)
17-July	20:00	24	49[5]
17-July	21:00	21	48[5]
17-July	22:00	17	47[5]
17-July	23:00	14	45[4]
18-July	00:00	17	43
18-July	01:00	19	42
18-July	02:00	21	41
18-July	03:00	27	40

Notes:
[1] Date, time and non-conformance value reported.
[2] Range of hourly measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.
[5] These values should not be used to calculate the number of reportable non-conformances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 11 illustrates a 24-hour period where 20 of the hours had values above the PM_{10} benchmark. In this example, there is one daily PM_{10} non-conformance of the AAQC which occurred at midnight (00:00), with a concentration of 51 µg/m^3. During the non-conformance period, daily running averages ranged from a minimum of 45 µg/m^3 to a maximum of 58 µg/m^3.

Example 12: PM_{10} 24 Hr Running Average
Daily AAQC = 50 µg/m^3

Date	Hour (EST)	1-Hour Avg. (µg/m^3)	PM_{10} 24-Hr Running Avg. (µg/m^3)
10-August	23:00	129[2]	39
11-August	00:00	118[2]	43
11-August	01:00	96[2]	46
11-August	02:00	79[2]	49
11-August[1]	**03:00**[1]	126[2]	**54**[1]
11-August	04:00	83	56[5]
11-August	05:00	81	59[5]
11-August	06:00	45	60[5]
11-August	07:00	21	60[5]
11-August	08:00	25	60[5]
11-August	09:00	27	60[5]

Date	Hour (EST)	1-Hour Avg. (µg/m^3)	PM_{10} 24-Hr Running Avg. (µg/m^3)
11-August	10:00	36	61[5]
11-August	11:00	49	62[5]
11-August	12:00	31	63[3]
11-August	13:00	23	62[5]
11-August	14:00	27	62[5]
11-August	15:00	16	62[5]
11-August	16:00	11	61[5]
11-August	17:00	19	60[5]
11-August	18:00	17	58[5]
11-August	19:00	13	55[5]
11-August	20:00	9	51[5]
11-August	21:00	7	49[5]
11-August	22:00	16	46[5]
11-August	23:00	10	41[5]
12-August	00:00	8	36[5]
12-August	01:00	9	33[5]
12-August	02:00	14	30[4]
12-August	03:00	21	26
12-August	04:00	29	24
12-August	05:00	33	22
12-August	06:00	28	21

Notes:
[1] Date, time and non-conformance value reported.
[2] Range of hourly measurements that contribute to the exceedence value reported.
[3] Maximum of the range.
[4] Minimum of the range.
[5] These values should not be used to calculate the number of reportable non-conformances.

The reported exceedance is the first value (in **bold**), and the range of runnning average values for that period should also be reported (including maximum and minimum).

Example 12, on the other hand, illustrates a 24-hour period that contains non-consecutive running averages which are higher than the benchmark and span two calendar days. However, only one 24-hour PM_{10} non-conformance should be reported in Example 12, which occurred on August 11 at 03:00, with a concentration of 54 µg/m^3. During the non-conformance period, daily running averages ranged from a minimum of 30 µg/m^3 to a maximum of 63 µg/m^3.

Glossary of Terms

Audit
: A check by ministry staff of the performance of an air quality monitoring system operated by the emitter or their site operator. The field component of the audit consists of assessing compliance/conformance of the sites with established criteria, and in conducting instrument performance checks with certified calibration devices to ensure that the instruments are operating within acceptable tolerances. The other component consists of reviewing documents and procedures to ensure that proper information management practices/procedures have been implemented by the emitter or its site operator, and are followed.

Calibration Check
: A test of the accuracy of an instrument using a certified calibration device traceable to a primary standard. If the difference in accuracy between the instrument and the calibration device is greater than ±5%, a calibration of the instrument should be performed.

Calibration
: An instrument adjustment with a certified calibration device traceable to a primary standard following an audit or a calibration check when the accuracy of the instrument deviates by more than 5% from the required set point. Instrument calibrations are performed by site operators and not by the inspectors.

Certification of calibrators
: A test of the accuracy of a calibration device traceable to a primary standard. At least once per year, formal certification of calibration devices by a certification authority is required.

Continuous monitoring
: Monitoring performed with fully automated instrumentation that collects data on a very short time scale (e.g., every second or minute) such as an ozone or sulphur dioxide analyzer thereby providing realtime data.

Cycling time
: The time required to complete the active measurement cycle (sample collection, analysis and measurement) and to produce an output.

Emitter
: The person in occupation or having the charge, management or control of a facility that emits air contaminants into the natural environment.

External performance check
: QA/QC procedure carried out external to an instrument with a certified calibration unit (e.g., calibrator, gas cylinder, etc., referenced to a primary standard). It is synonymous to a calibration check.

Fall time to 95%
: The time interval between initial response (the first observable change in analyser output) and a level of signal output, which is 95% of the steady state output after a step decrease in input concentration.

Internal performance check
: QA/QC procedure carried out ‘within’ the analyzer and, as such, consists in all instruments checks not done with a calibrator.

Linearity
: The maximum deviation between the actual analyser output reading and the predicted analyser output from a least square fit to the actual readings.

Minimum Detection Limit
: The lowest concentration that can be detected by the analyser with confidence. It is defined as twice the noise level of the analyser.

Noise
: Spontaneous short duration deviations in the analyser output, about the mean output, which are not caused by input concentration changes.

Non-continuous sampling
: Sampling conducted with discrete samplers that collect a sample, typically over a 24-hour period such as a Hi-Vol sampler. Samples are collected on a set schedule, such as once every 6th day.

Operating humidity range

The maximum level of moisture content of the ambient air in the environment surrounding the analyser, in which the analyser will meet all performance specifications.

Operating Ranges
: The ranges corresponding to the full-scale output of the analyser.

Operating Voltages
: The minimum and maximum line voltages in which the analyser will meet all performance specifications.

Operating temperature range
: The minimum and maximum ambient temperature, of the environment surrounding the analyser, in which the analyser will meet all performance specifications.

Precision
: The degree of variation about the mean of repeated measurements of the same pollutant concentration by the analyser, expressed as standard deviation about the mean.

Primary standard
: The reference standards used by the United States National Institute of Standards and Technology (NIST) against which other standards (secondary) are compared with for accuracy. The certification of calibration devices used must be traceable to a primary standard through secondary standards.

Probe
: Sampling inlet; The point of entry of an air sample into an air quality monitoring system. A probe's siting must meet criteria to ensure that a representative and unbiased sample is collected.

Proponent
: A person or organization that has established or is undertaking air monitoring other than the MOECC or an emitter, or contractor employed by an emitter, as defined herein.

Rise time to 95%
: The time interval between initial response (the first observable change in analyser output) and a level of signal output, which is 95% of the steady state output after a step increase in input concentration.

Running Average
: A running average is a calculation to analyse data points by creating a series of different subsets of the full data set. It is also called a moving mean or a rolling mean.

Span Drift
: The percent change in analyser output response to a constant upscale pollutant concentration over a period of unadjusted continuous operation.

Station operator
: The person that performs the regular operation and maintenance of the station. This can be the emitter or a third party retained by the emitter.

Verification of Calibrators
: A check of the gas calibration devices used by site operators in the field by ministry audit staff with their calibrators. This is to be done between the annual formal certifications and does not constitute a certification.

Zero Drift
: The change in analyser output response to a constant zero air input concentration over a period of unadjusted continuous operation.

Acronyms

AAQC
: Ambient Air Quality Criteria as defined and listed in *O. Reg. 419/05*

AAQD
: Analysis and Air Quality Division of Environment Canada

ASTM
: American Society for Testing and Materials

BAM
: Beta Attenuation Monitor, more commonly known as a beta gauge monitor used to measure (in real-time) concentrations of particulate matter, mostly in the PM_{10} and $PM_{2.5}$ size fractions

BIOS
: Acronym for basic input/output system, the built-in software that determines what a computer can do without accessing programs from a disk.

CALA
: Canadian Association for Laboratory Accreditation

CAMM
: Combined Assessment of Modelling and Monitoring; a study conducted under *O. Reg. 419/05*, Section 11(1), Paragraph 3, with the purpose of refining emission rates for modelling

cm^3/min
: Cubic centimetres per minute

cfm
: Cubic feet per minute

CFR
: Code of Federal Regulations (U.S.)

CST
: Central Standard Time

CSV
: Comma Separated Values. A data format with values separated by a comma

DAS
: Data Acquisition System. The hardware/software of a system used to collect data electronically

Delta Cal
: Trade name for a device used to calibrate flow, temperature and ambient pressure

ΔP
: Pressure differential

DVM
: Digital voltmeter

EA
: Environmental Assessment

ECA
: Environmental Compliance Approval

ECCC
: Environment and Climate Change Canada (formerly Environment Canada)

EMRB
: The Environmental Monitoring and Reporting Branch of the ministry

ESDM
: Emission Summary and Dispersion Modelling Report. This is one of the key documents required in the application package for an Air Certificate of Approval from the ministry

EST
: Eastern Standard Time

FEP
: Fluorinated ethylene propylene

GC-MS
: Gas chromatography and mass spectrometry

GIS
: Geographic Information System

H_2S
: Hydrogen sulphide

I.D.
: Inside diameter

in. of Hg
: Inches of mercury (unit of barometric pressure)

km/hr
: Kilometres per hour

L/min

Liters per minute

LaSB
: Laboratory Services Branch of the ministry

LCD
: Liquid crystal display

m^3
: Cubic metre

MDL
: Method Detection Limit (analytical lab methods). In this document it is defined as the smallest measurable amount, where the risk of a false positive is 1%, or conversely the confidence level is 99%.

mL/min
: Milliliters per minute

MOECC
: Ministry of the Environment and Climate Change (Ontario)

NIST
: United States National Institute of Standards and Technology (NIST) which is the source of the primary reference standards for the monitoring/sampling methods listed in this document

NO
: Nitric oxide

NO_2
: Nitrogen dioxide

NO_x
: Oxides of nitrogen, principally nitric oxide (NO) and nitrogen dioxide (NO_2)

O.D.
: Outside diameter

ng/m^3
: nanograms per cubic metre

PAH
: Polycyclic aromatic hydrocarbons

PCDD
: Polychlorinated dibenzo-p-dioxins, commonly known as dioxins

PCDF
: Polychlorinated dibenzofurans, commonly known as furans

PDF
: Portable document format

PM_{10}
: Particulate matter with an aerodynamic diameter less than about 10 microns; also known as inhalable particulate matter

$PM_{2.5}$
: Particulate matter with an aerodynamic diameter less than about 2.5 microns; also known as fine particulate matter or respirable particulate matter

POI
: Point of Impingement as defined in *O. Reg. 419/05*

ppbv
: Concentration of a gaseous contaminant expressed in parts per billion by volume of air sampled

pg/m^3
: Concentration of an air contaminant expressed in picograms (10^{-12} gram) per cubic metre of air sampled

PUF
: Polyurethane Foam cartridge used for the determination of polycyclic aromatic hydrocarbons (PAHs), dioxins (PCDDs) and furans (PCDFs) in air

QA/QC

Quality Assurance and Quality Control programs to ensure the collection and reporting of data of acceptable quality

RFP
: Request for proposal

RTD
: Resistance temperature detector

SCC
: Standards Council of Canada which accredits analytical laboratories in Canada

SO_2
: Sulphur dioxide gas

SOP
: Standard Operating Procedure for monitoring/sampling of air contaminants

SHARP
: Synchronised Hybrid Ambient Real-time Particulate

SP
: Suspended Particulate matter is all airborne, finely divided solid or liquid material. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small that individual particles can only be detected using microscopy techniques. See Particulate Matter (PM) Basics

STEM
: Station Temperature (for Air Quality Monitoring stations)

TEOM
: Tapered Oscillating Microbalance. A particulate monitor for determining (in real-time) concentrations of particulate matter, mostly in the PM_{10} and $PM_{2.5}$ size fractions

TEQ
: Toxicity Equivalent values are obtained by determining the relative toxicity of a doxin or furan congener to that of 2,3,7,8-TCDD (tetrachlorodibenzo-p-dioxin) and using these factors for each of the members of a mixture to assign a toxicity to the whole.

TFE
: Tetrafluoroethylene

TriCal
: Trade name for a device used to calibrate flow, temperature and ambient pressure

TRS
: Total Reduced Sulphur compounds consisting mostly of hydrogen sulphide (H_2S) and mercaptans

TRST
: Total Reduced Sulphur Temperature (temperature of high temperature TRS converter)

US EPA
: United States Environmental Protection Agency

URT
: Upper Risk Thresholds for air contaminants as listed in schedule 6 of *O. Reg. 419/05*

UV
: Ultraviolet light

$\mu g/m^3$
: Microgram (10^{-6} gram) per cubic metre of air sampled

µm
: Micron (or micrometre) which is 10^{-6} of a metre

VOC
: Volatile Organic Compounds some of which play an important role in the formation of ozone and smog aerosols

VWSA
: Vertical Wind Speed Average

WINS
: Well Impactor Ninety Six, an impactor designed to provide a particle cut-point of 2.5 microns

WMO

World Meteorological Organization

References

[1]National Air Pollution Surveillance Network Quality Assurance and Quality Control Guidelines, Environment Canada, Environment Protection Service, Environmental Technology Advancement Directorate, Pollution Measurement Division, Environmental Technology Centre, Ottawa, Ontario. Report No. AAQD 2004-1 (Originally published as Report No. PMD 95-8, December 1995).

[2]ISO/IEC17025:2005 - General Requirements for the Competence of Testing and Calibration Laboratories. Available at ANSI webstore.

[3]U.S. Code of Federal Regulations, Title 40, Volume 5, Part 58, Appendix D (Network Design Criteria for Ambient Air Quality Monitoring) and Appendix E (Probe and Monitoring Path Siting Criteria),EPA 1999. Revised July 1, 1999.

[4]Meteorological Monitoring Guidance for regulatory Modeling Applications. EPA 2000. EPA-454/R-99-005, Section 3 (Siting and Exposure), February 2000.

[5]Guide to Meteorological Instruments and Methods of Observation. WMO 2008. World Meteorological Organization-No. 8, 7th edition, Geneva Switzerland.

Footnotes

- [1] ^Note that this guidance outlines the ministry's minimum expectation with respect to reporting and also informs what may be reported publicly in an Environmental Compliance Report. It does not speak to the number of potential offences which could occur in that averaging period based on the application of running averages.

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