## Dundas BRT

# Welcome to the Dundas Bus Rapid Transit Project

Virtual Public Engagement Round 4 - Mississauga West July 10, 2024







## Land Acknowledgment

Let us take a moment to acknowledge we are on lands that have been, and continue to be, home to many Indigenous Peoples including, the Anishnabeg, the Haudenosaunee, and the Huron-Wendat peoples.

We are all Treaty people. Many of us have come here as settlers, as immigrants or involuntarily as part of the trans-Atlantic slave trade, in this generation, or generations past.

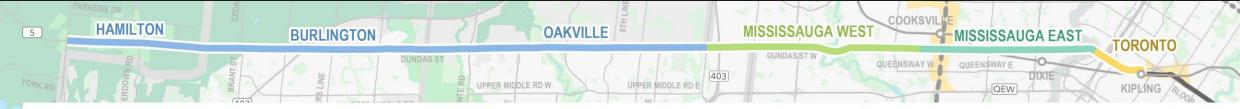
We acknowledge the historic and continued impacts of colonization and the need to work towards meaningful reconciliation with the original caretakers of this land.



We acknowledge that Metrolinx operates on territories and lands covered by many treaties that affirm and value the rights of Indigenous communities, Nations and Peoples.

We understand the importance of working towards reconciliation with the original caretakers of this land. At Metrolinx, we will conduct business in a manner that is built on a foundation of trust, respect and collaboration.

## **Project Overview**



#### **DUNDAS BRT**



Dundas BRT - Halton and Hamilton



Dundas BRT - Mississauga West



Dundas BRT - Mississauga East



Dundas BRT - Toronto

Dundas BRT alignment is as proposed by the Initial Business Case. Project names & alignments are subject to change based on further study. Map produced by Metrolinx on 25/03/2021. Base data from Land Information Ontario and Statistics Canada.

#### 48 km study area along Dundas Street

- Toronto (2.5 km)
- ME Mississauga East (7.5 km)\* •
- Mississauga West (10 km) •
- Halton/Hamilton (28 km)

\*ICIP funded segment

## Enables faster, more reliable connections to:

- Kipling Terminal
- Hazel McCallion Line
- University of Toronto Mississauga
- Uptown Core
- Hwy 407-Dundas Carpool
- Waterdown Gateway

# This project is a key part of the Metrolinx Regional Transportation Plan and the Connecting the GGH: A Transportation Plan for the Greater Golden Horseshoe<sup>†</sup>. Project benefits include:



Faster, more reliable, more frequent service.



Reduce greenhouse gas emissions.



Improve connectivity to other transit services.



Unlock economic and regional development along the corridor

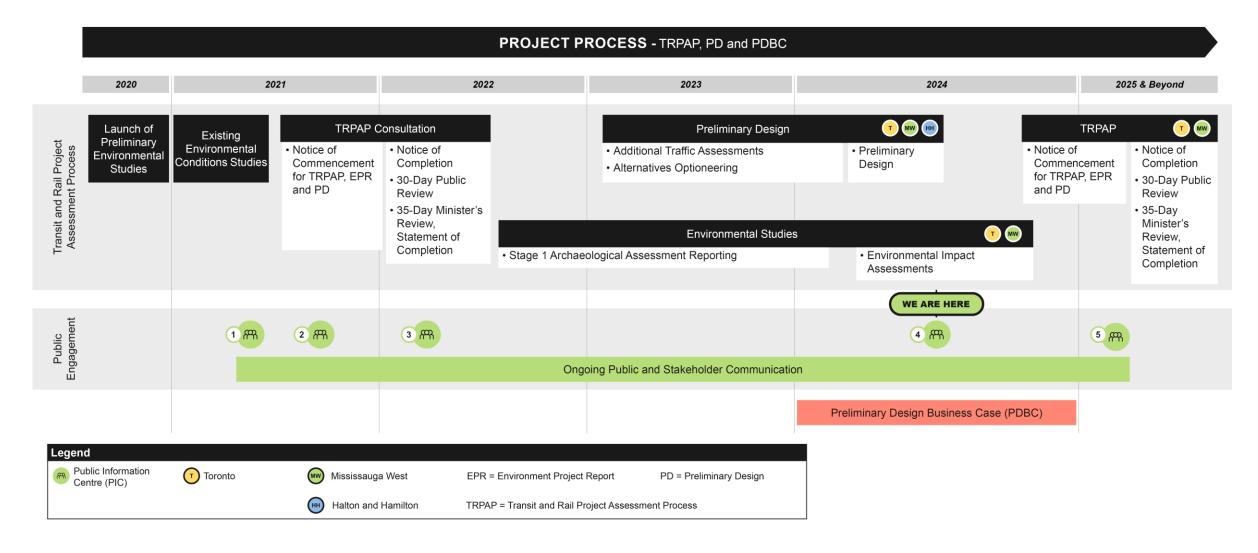


Attract new ridership (~30,000 new riders per day).



Help retain and attract residents, tourists and businesses along the corridor.

## **Project Timeline**



#### What we've heard so far

Interested individuals were provided with the opportunity to give feedback through past open houses, filling out feedback forms, submitting questions via the project webpage and emailing the project team directly. Feedback gathered related to:



Connectivity to surrounding transit.



Potential impacts as the project progresses.



Connectivity to surrounding infrastructure and services.



Community and property impacts.



Prioritization of active transportation.



Potential environmental impacts.



## Why are we here?

The purpose of round 4 engagement is to share and gather input on:

- The environmental studies to be performed for Mississauga West and the project team's obligations.
- The Mississauga West segment, including the Erindale Valley pinch point alternatives and best performing alternative.
- Proposed stop locations (including amenities) in Mississauga West.
- Next steps for Mississauga West and the project as a whole.

Engagement on Toronto, Mississauga and Halton and Hamilton will continue through 2024.



## Provide your feedback here:



## **Technical Advisory Committee and Stakeholder Advisory Groups**

In addition to virtual public engagements, the project team is engaging with the public, stakeholders and subject matter experts through a Technical Advisory Committee (TAC) and through Stakeholder Advisory Groups (SAGs). Metrolinx will continue to work with the TAC and SAGs throughout the course of the project to help ensure community members along the <u>Dundas BRT corridor remain engaged</u> and informed.

#### **TAC** meetings:

- Provide stakeholders and technical experts the opportunity to learn about and provide input on the project to inform key decision-making.
- Allow members to address issues and provide advice on the development of the project.
- Offer the project team a fresh perspective.

#### **SAG** meetings:

- Provide community leaders, advocates and experts
  within each section of the corridor the opportunity to
  learn about and provide input into the study.
- Allow members to learn about the project, ask
  questions of subject matter experts within the project
  team and discuss the project and potential impacts
  with other community leaders.

# How is the study structured?

# Transit and Rail Project Assessment Process (TRPAP)

The TRPAP evaluates the impacts the project will have on the surrounding environment.

Two separate processes will be conducted:

- ▼ Toronto
- Mississauga West

#### **Preliminary Design (PD)**

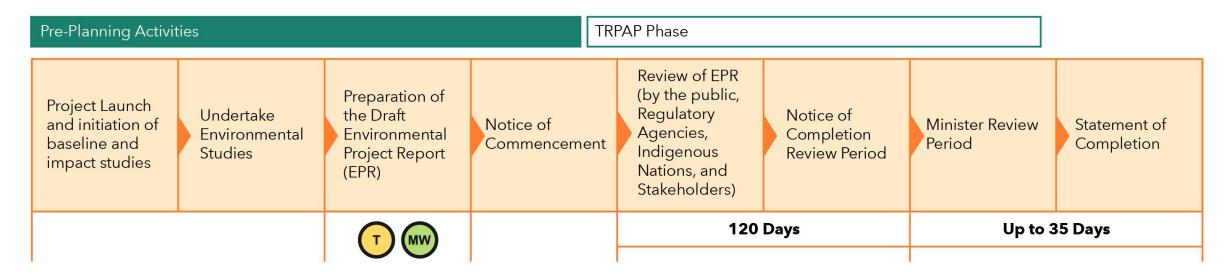
The preliminary design bridges the gap between the design concept and detailed design of a project. This includes:

- List of infrastructure alternatives.
- Evaluation and identification of the best performing preliminary design alternatives.
- Progression of concept designs for typical median and curbside stops, including amenities.
- Identification of stop locations.

# **Preliminary Design Business Case (PDBC)**

- The PDBC evaluates costs and benefits of the project based on preliminary design and environmental studies.
- The project is assessed using the four cases -Strategic, Economic, Financial and Deliverability and Operations Case.
- The stage of the business case lifecycle occurs in parallel with the Environmental Assessment process.

## **Transit and Rail Project Assessment Process**



#### **Next steps**

Prepare the preliminary design for Toronto and Mississauga West based on feedback received during this round of engagement and prepare the Environmental Project Report (EPR) based on the finalized preliminary design.

#### How is the community involved?

Metrolinx believes that when you have your say our transportation system gets stronger. We are committed to keeping you informed, building understanding and collecting your feedback. Engagement presents an opportunity for you to provide your input.

#### **Environmental Studies**

Studies to identify baseline conditions, determine any potential for impacts, and propose mitigation measures against potential negative impacts, are underway in Toronto and Mississauga West. Details and documented existing conditions from these studies are on the Dundas BRT website: <a href="Metrolinx - Dundas BRT Studies">Metrolinx - Dundas BRT Studies</a>



Natural Environment



Climate Change and Sustainability



Socio-economic and Land Use

Characteristics



Traffic and Transportation



Archaeology



Noise and Vibration



Cultural Heritage



Air Quality



#### **Evaluation Criteria for Infrastructure Alternatives**



#### **Strategic case**

How does the investment achieve strategic goals and objectives?

- Transit travel time savings
- Transit service reliability
- Official Plan Public Realm
- Cyclists' accessibility
- Pedestrians' accessibility
- Safety consideration



#### **Economic case**

What is the investment's overall value to society?

Capital costs



#### **Deliverability / operations case**

What risks and requirements must be considered in delivering and operating the investment?

- Corridor right-of-way (ROW) and property
- Traffic considerations (Level of Service)
- Traffic considerations (Auto travel times)
- Stop configuration
- Transit network considerations
- Operating in mixed traffic
- Environmental considerations



#### **Financial case**

What are the financial implications of delivering the investment?

- Property costs
- Operating and Maintenance cost



## Mississauga West Sections

# The Mississauga West contains three distinct sections:

- Confederation Parkway to The Credit Woodlands
- The Credit Woodlands to Mississauga Road, i.e., the Erindale Valley pinch point
- Mississauga Road to Ninth Line

Two of the three alternatives were considered in each section.



#### Legend

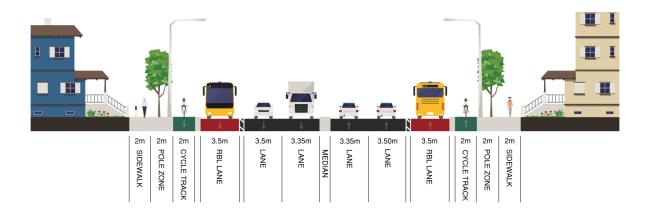
- Dundas BRT Halton and Hamilton
- Dundas BRT Mississauga East
- Dundas BRT Mississauga West Section 1 Confederation Parkway to The Credit Woodlands
- Dundas BRT Mississauga West Section 2 The Credit Woodlands to Mississauga Road
- Dundas BRT Mississauga West Section 3 Mississauga Road to Ninth Line

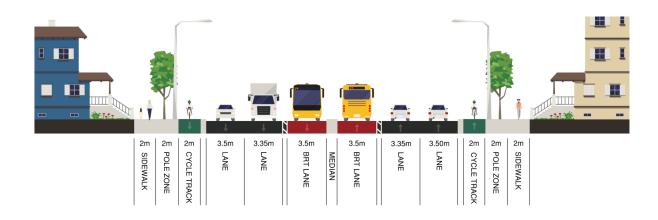
## **Alternatives Considered**

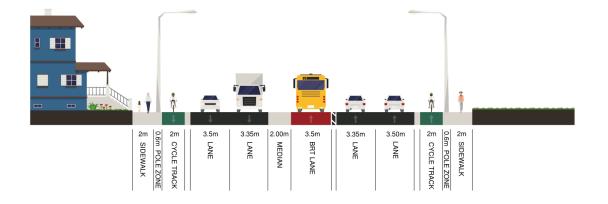
**Alternative 1:** Curbside Reserved Bus Lane (RBL)

Alternative 2: Full Median BRT

Alternative 3: Reversible BRT Lane







#### **Alternative 1: Curbside Reserved Bus Lanes**



#### **Benefits**

- Lower capital cost.
- Full amenity boulevard.
- Sidewalks and dedicated physically protected cycling facilities.
- Full multi-modal cross section, including buses, auto traffic, pedestrians and cyclists.



#### **Drawbacks**

- Dedicated physically separated BRT facilities not provided; conflicts with right turning vehicles.
- No continuity of median BRT lanes.
- Increased impacts to natural features.
- Conflicts between bus passengers and cyclists at curbside bus stops.
- Potential for commercial, residential and heritage resource property displacements.



#### **Alternative 2: Full Median BRT**



#### **Benefits**

- Continuity of median BRT.
- Full amenity boulevard.
- Sidewalk and dedicated physically protected cycling facilities.
- Full multi-modal cross section, including buses, auto traffic, pedestrians and cyclists.
- Transit service reliability with less potential for service interruptions or delays.



#### **Drawbacks**

- Higher capital cost.
- Potential for property impacts.

#### **Alternative 3: Reversible BRT Lane**



#### **Benefits**

- Lower capital cost.
- Full amenity boulevard.
- Sidewalks and dedicated physically protected cycling facilities.
- Fewer property impacts and building displacements.
- Minor impacts to natural features.



#### **Drawbacks**

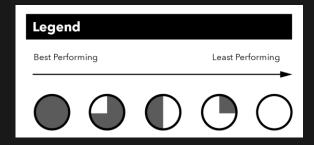
- No continuity of full BRT lanes.
- Reduced multi-modal cross section, with only one BRT lane.
- Reduced transit service reliability due to operating in mixed traffic.
- Potential for residential and built heritage resource displacements.



## **Evaluation of Alternatives: Mississauga Road to Ninth Line**

## A curbside BRT is the best performing alternative due to:

- Transit travel time savings.
- Transit reliability and routing flexibility.
- Reduced construction cost and impact, operating and maintenance costs.
- Managed traffic operations, intersection level of service and auto travel times.



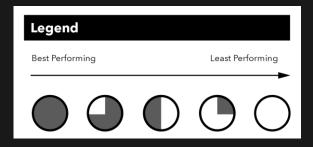
Evaluation Results			
Evaluation Principle	<b>Alternative 1</b> (Curbside reserved bus lane)	<b>Alternative 2</b> (Full median BRT)	
Strategic Case			
Economic Case			
Financial Case			
Deliverability and Operations Case			
Summary			



## **Evaluation of Alternatives: Confederation Parkway to The Credit Woodlands**

## A full median BRT is the best performing alternative due to:

- Increased transit travel time benefits.
- Transit reliability.
- Managing the associated capital, property and operating and maintenance costs.
- Traffic operations, intersection level of service and auto travel times.



Evaluation Results			
Evaluation Principle	<b>Alternative 1</b> (Curbside reserved bus lanes)	<b>Alternative 2</b> (Full median BRT)	
Strategic Case			
Economic Case			
Financial Case			
Deliverability and Operations Case			
Summary			



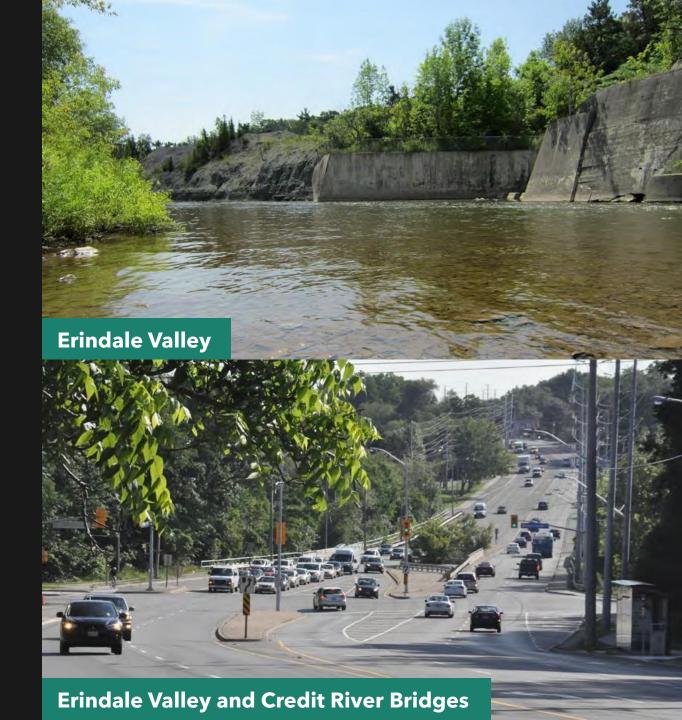
## Mississauga West Pinch Point

## What is a pinch point?

- Areas of special interest where necessary road widening is constrained by the existing environment.
- Where other design challenges are present (e.g., integrating BRT service into and gaining access to an existing transit station).

## **Erindale Valley area pinch point**

The Erindale Valley area is constrained due to the need to protect the natural environment of the Credit River Valley and Erindale Park. There are several heritage sites that need to be considered between Mississauga Road and The Credit Woodlands.



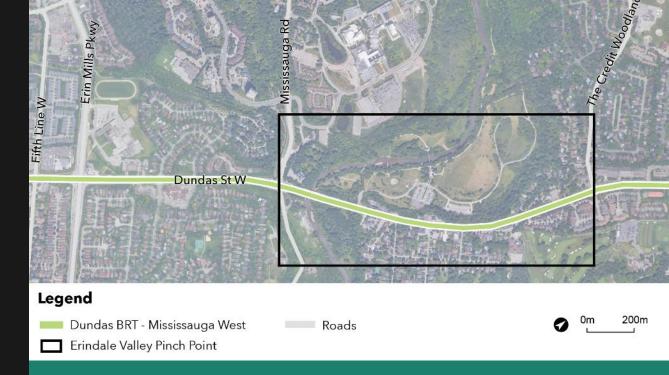
# **Alternatives: Erindale Valley Pinch Point**

#### **Key considerations:**

- Property acquisition required beyond the Official Plan right-of-way (ROW) to accommodate all contemplated infrastructure needs (dedicated BRT guideway, four general purpose lanes, cycle tracks, sidewalks and amenity/utility space).
- Numerous buildings located close to the property/ROW line.
- Significant natural heritage features.
- Numerous cultural heritage resources and landscapes.

#### Best performing alternatives identified for review:

- Alternative 1: reversible BRT lane.
- Alternative 2: full median BRT (alignment shifted to the north).



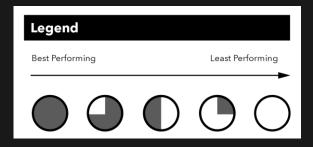
# During previous rounds of engagement, members of the public identified:

- Opportunities to implement the Dundas BRT project as part of the City of Mississauga's Dundas Connects Master Plan.
- Concerns about cycling infrastructure and safety, pedestrian infrastructure and safety, environmentally sensitive areas, dedicated transit lanes and landscaping (aesthetics).

## **Evaluation of Alternatives: The Credit Woodlands to Mississauga Road**

## A full median BRT is the best performing alternative due to:

- Increased transit travel time benefits.
- Transit reliability.
- Managing the associated capital, property and operating and maintenance costs.
- Traffic operations, intersection level of service and auto travel times.



Evaluation Results			
Evaluation Principle	<b>Alternative 2</b> (Full median BRT to the north)	<b>Alternative 3</b> (Reversible BRT lane)	
Strategic Case			
Economic Case			
Financial Case			
Deliverability and Operations Case			
Summary			



## **Dundas BRT Stops**

#### What is the distance between each stop?

Stop locations are based on:

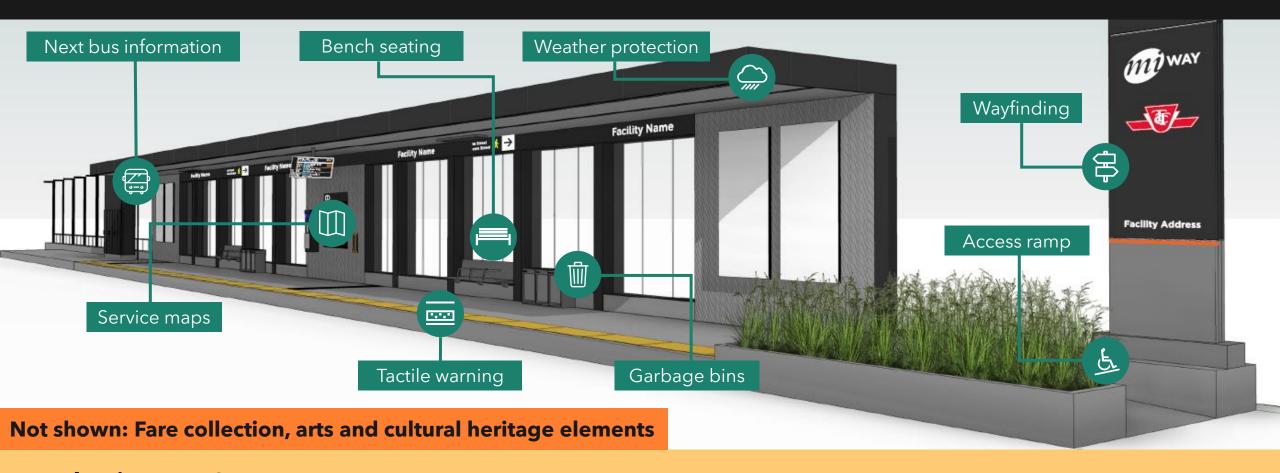
- Access versus travel time
- Current transit facilities and intersecting bus routes that form the basis of a feeder network.
- Distance between stops.
- Land use and major trip generators.

Work has advanced on establishing the proposed stop locations. Seven stop locations within Mississauga West have been identified.





## **Dundas Bus Stop**



#### What is a stop?

A stop is a designated area where the Dundas BRT will stop to pick up and drop off passengers. The scale and amenities of each stop will reflect the ridership or existing infrastructure in the area.



#### **Toronto**

#### **TRPAP**

Prepare and distribute
 Notice of Commencement.

#### **Preliminary Design**

 Prepare preliminary design for best performing alternative.

#### **PDBC**

 Ongoing work completed for the TRPAP and preliminary design will inform the development of the PDBC.



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#### **Preliminary Design**

- An evaluation of design alternatives.
- Prepare best performing alternative design and develop proposed stop locations.

#### **PDBC**

 Ongoing work completed for preliminary design will inform the development of the PDBC.

## We want to hear from you!

Public feedback is important to this process. We appreciate the time you are taking to learn more about the Dundas BRT project, and we greatly value your input on:

- The Mississauga West preliminary design alternatives.
- Preliminary design alternatives evaluation and best performing alternative.
- Proposed stop locations (including amenities) in Mississauga West.



Please complete the <u>online feedback form</u> at **metrolinx.com/DundasBRT** by **July 24, 2024**.

Stay involved with the Dundas BRT project. We have a dedicated Community Relations team for each region available to answer your questions and receive your feedback at any time.

Email us at: Peel@metrolinx.com



# **△** METROLINX