BRT

Welcome to the Queen Street-Highway 7 Bus Rapid Transit Project

Public Information Centre #1:

Long List Planning Concepts



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Screening Criteria for Long List Planning Concepts*

Planning concepts for BRT infrastructure scenarios are screened using the below criteria:

* Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Strategic



Natural Environment

Support and enhance natural areas and avoid or mitigate negative impacts.



Social Environment

Strengthen neighbourhood, promote development, and create an environment to live, work, and play.



Transportation

Integrate existing transportation network to provide more choice, reduce congestion/travel times, and make travel more reliable.

Financial and Economic



Financial

Costs—what will the option cost? Consider property impacts and operating costs.



Economic

Benefits-ridership benefits, potential for integrated corridor development and transit time improvements.

Delivery and Operations



Project Delivery

Consider potential risks to construction for complex elements.



Facility Operations

Consider potential for delays to multi-year construction schedule.

Segment 1



Segment (1



Mississauga Road to McLaughlin Road

Characteristics and Conditions:

- 4 km of Queen Street.
- Future High-Density Mixed-Use development at major intersections.
- 5-lane cross section.
 - 2 general purpose lanes in each direction.
 - 1 shared centre-turning lane for both directions of traffic.
- Multi-use path for pedestrians, cyclists on the north side.

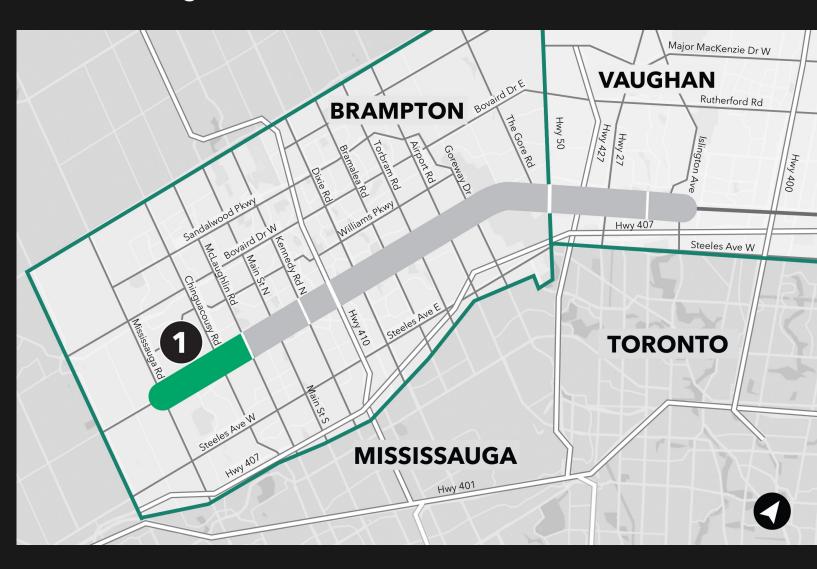
Right-of-Way:



Existing: 20-50 m Official Plan: 36-45 m

Right-of-Way

The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure between properties.





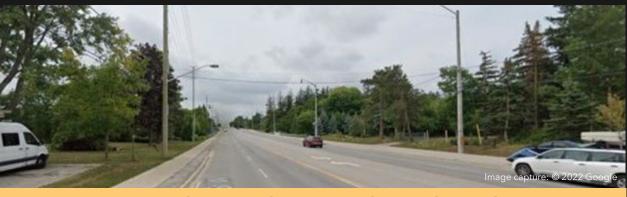
\blacksquare Segment (1



Mississauga Road to McLaughlin Road



Queen Street by Mississauga Road (eastbound)



Queen Street by Angelgate Road (westbound)



Queen Street by Chinguacousy Road (eastbound)

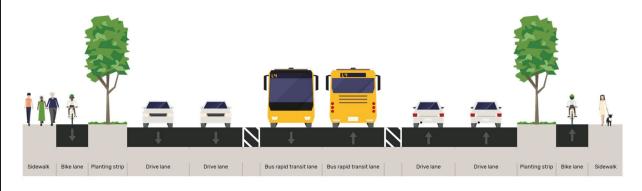
Typical Existing Cross-Section—Segment 1

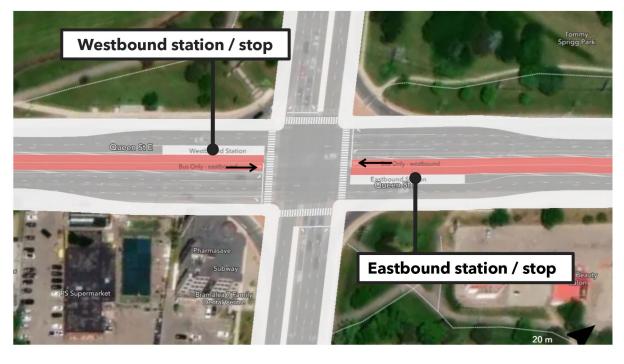


Typical Existing Cross Section—Segment 1

Concept A:

Convert general purpose lane for median BRT.





Legend



Bus Only



Drive Lane



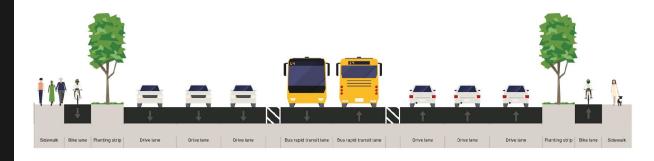
Sidewalk

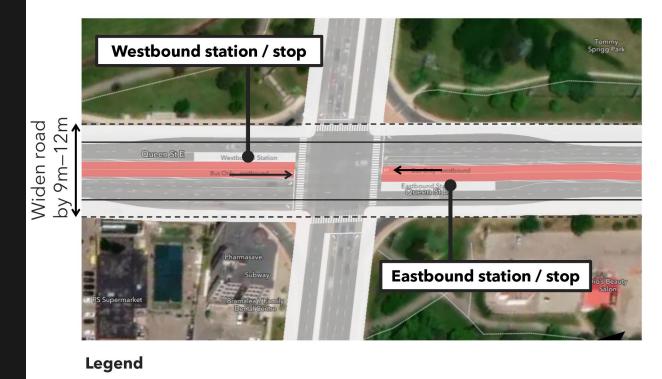


* Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Concept B:

Keep all existing lanes and widen to include median BRT.





Sidewalk

→ Direction of Travel

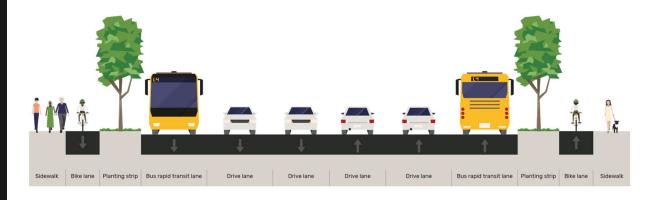
* Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Drive Lane

Bus Only

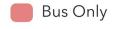
Concept C:

Convert general purpose lane for curbside business access and transit lane.





Legend





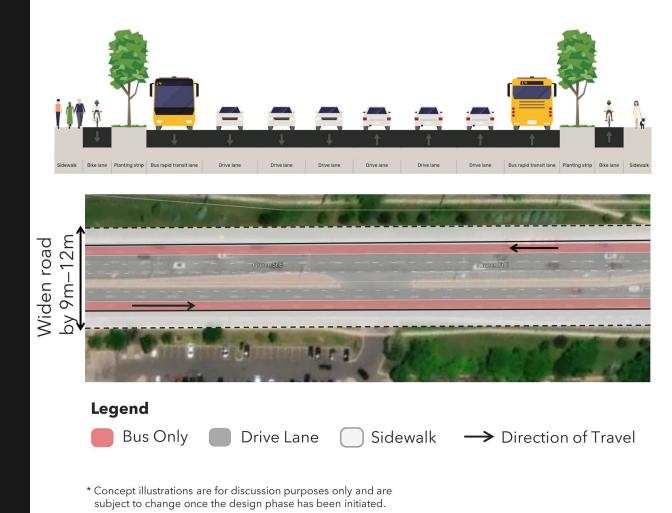


→ Direction of Travel

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Concept D:

Keep all general purpose lanes and widen for curbside business access and transit lane.



Segment 2



Segment (2) McLaughlin Road to Kennedy Road

Characteristics and Conditions:

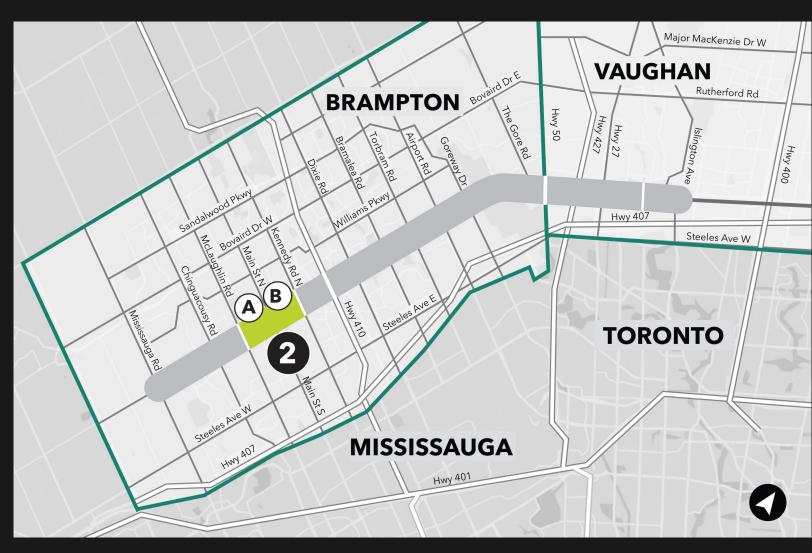
- 3 km of Queen Street.
- Mix of residential and downtown commercial land.
- 4- to 5-lane cross section through most of the segment.
- Will be reduced to a 2-lane cross section between Theatre Lane and Mill Street (future condition).
- On-street parking lanes in sections of the downtown area.
- No dedicated cycling facilities.

Right-of-Way:

Existing: 20-35 m Official Plan: 20-36 m

Right-of-Way

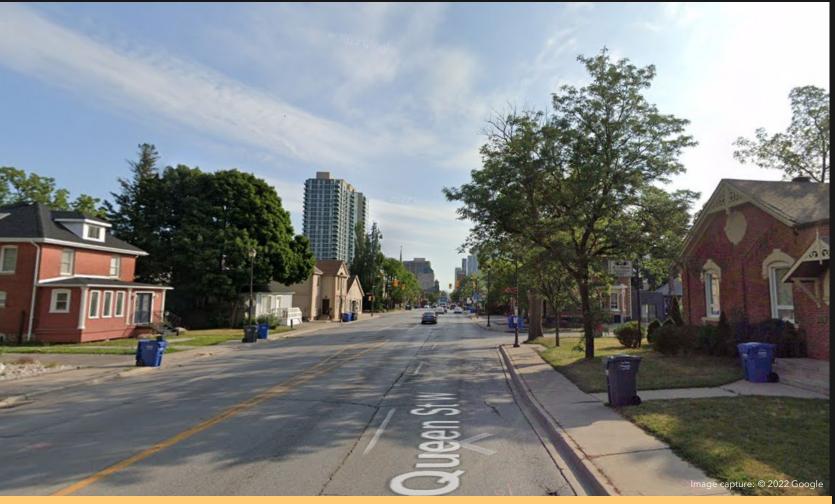
The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure between properties.







Segment (2) McLaughlin Road to Kennedy Road



Queen Street by Mill Street (westbound)



Downtown Brampton



Kitchener-Georgetown GO Rail **Corridor Underpass**



Focus Area



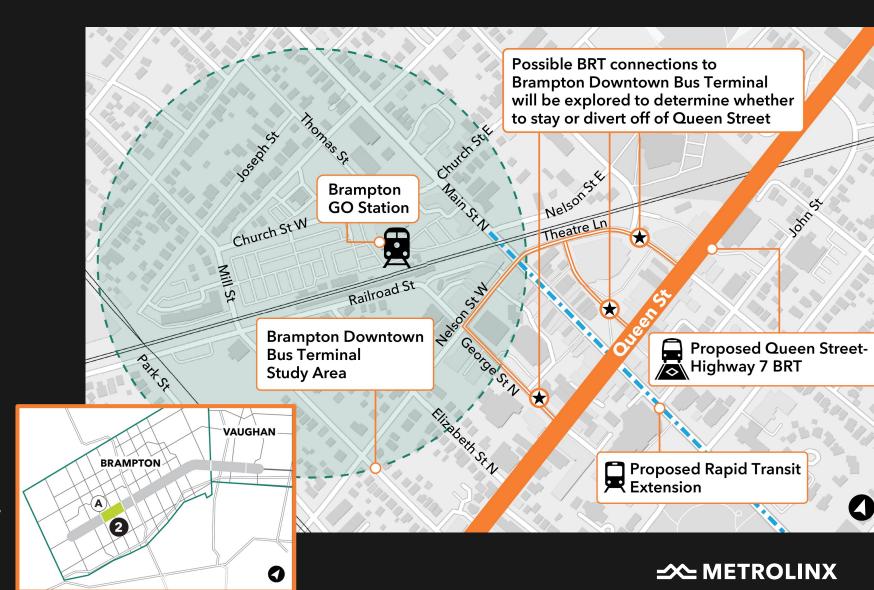
Downtown Bus Terminal / GO Station

Opportunities:

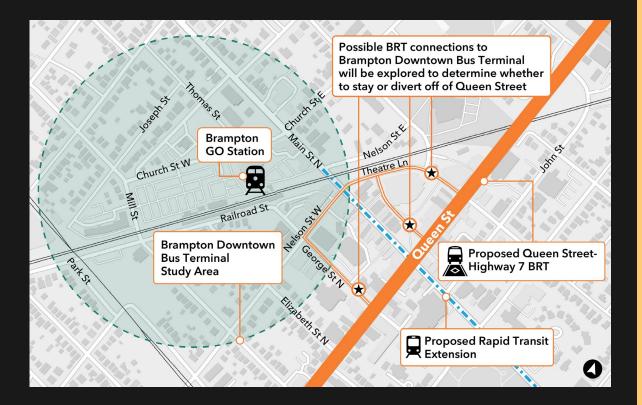
- Provincial Urban Growth Centre, part of the Central Area of a rapidly developing city.
- 2. Development potential for a walkable, mixed-use, transit-oriented centre.
- Connecting local and regional transit (bus and rail) at Brampton GO Station.

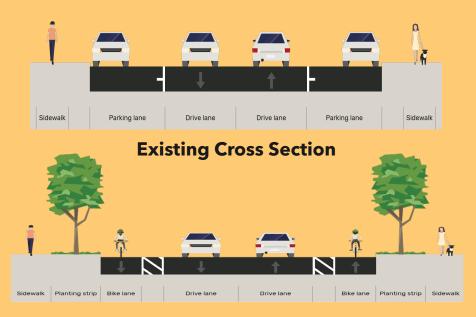
Challenges:

- Strong heritage value: the intersection of Queen Street and Main Street, the 'Four Corners,' marks the symbolic heart of the historic downtown.
- Integrate BRT exchange and transfers with possible future transit projects (Brampton LRT and Downtown Transit Hub location).
- 3. Narrow streets limiting the opportunity for dedicated transit.



Focus Area A Downtown Bus Terminal / GO Station





Future Cross Section

This focus area has many future conditions that must be considered when screening planning concepts for Queen Street-Highway 7 BRT:

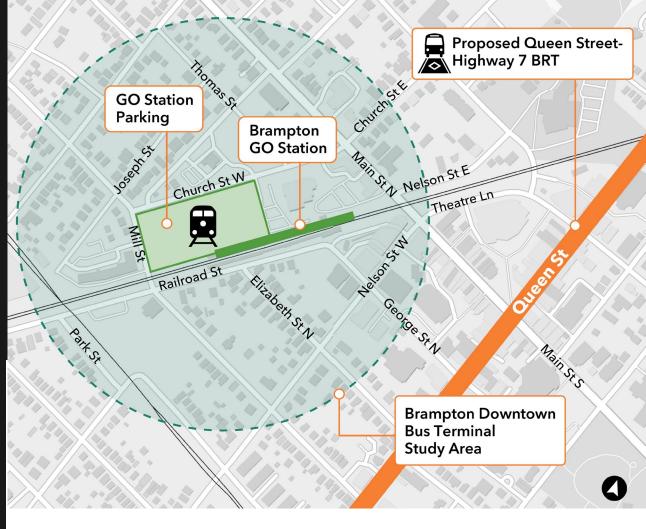
- 1. The potential rapid transit expansion east of Main Street.
 Undetermined if transit route will cross over Queen Street or go underground at this location.
- 2. Location for a new Brampton Downtown Bus Terminal is to be determined.
- 3. Queen Street Transformation will narrow this portion of Queen Street to one lane in each direction.
- 4. Widening of GO Train tracks.

^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept A:

BRT stays on
Queen Street
with station located
near Main Street.



Considerations:

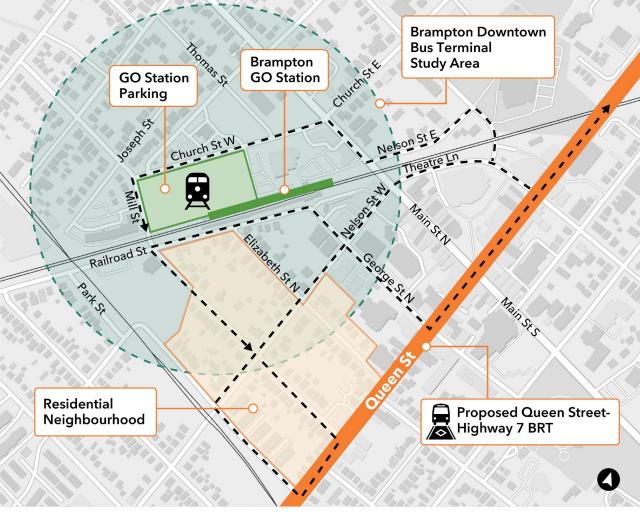
- Faster, more direct BRT.
- Better service reliability.
- Inconvenient transfers.
- Accessibility concerns.
- Safety perception.
- Operational Issues.

- Weather obstacles.
- Queen Street delays.
- Location of downtown bus terminal to be confirmed in a separate study, currently underway



Concept B:

Divert BRT off Queen Street to the Future Bus Terminal or GO Station.



Considerations:

- Better LRT, bus, GO transfer.
- Improved accessibility.
- Transfer safety.
- Diversion travel times.
- Service reliability.
- Path through downtown affects neighbourhoods.
- Bus terminal site unconfirmed.



Focus Area



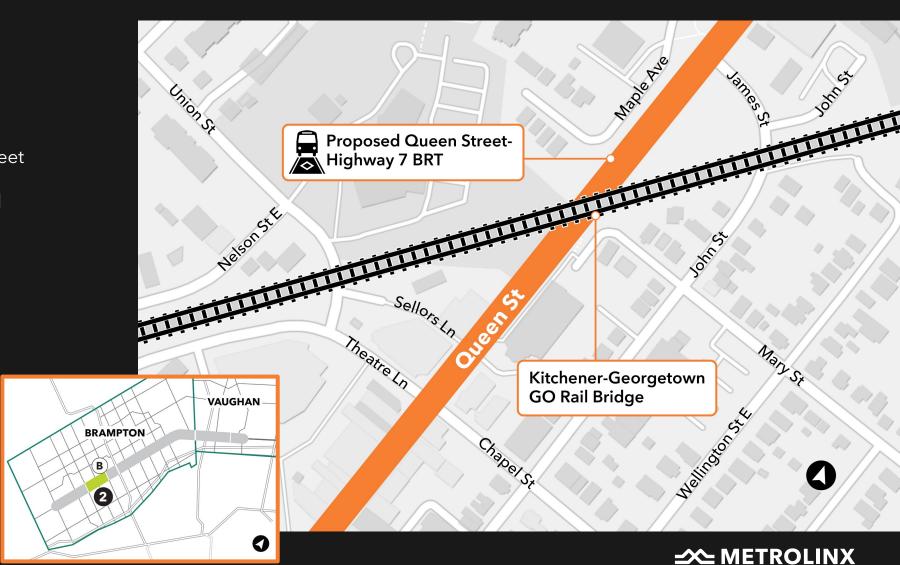
Kitchener-Georgetown GO Rail Corridor Underpass

Opportunities:

- Improve connections to Züm and GO Transit services.
- 2. Improve connection of Queen Street with Downtown Brampton.
- Prioritizing transit in a constrained area to improve greater mobility along Queen Street

Challenges:

- 1. Narrow Right-of-Way.
- High costs to acquire land for rail bridge widening.
- Service impacts to
 Kitchener-Georgetown
 GO service due to construction.



Focus Area B Kitchener-Georgetown GO Rail Corridor Underpass





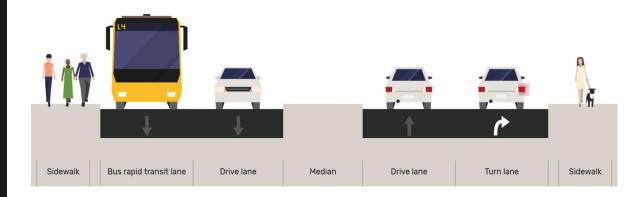
Existing Cross Section

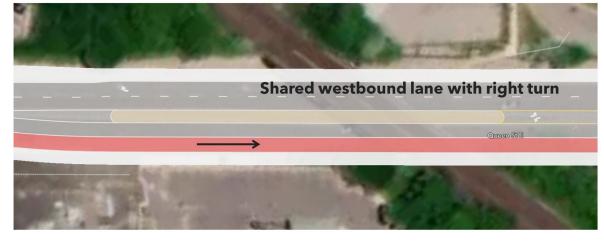
are subject to change once the design phase has been initiated.



Concept A:

Eastbound BRT lane with general purpose lane removed.





Legend



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Focus Area B Kitchener-Georgetown GO Rail Corridor Underpass

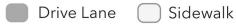
Concept B:

Mixed traffic operations.





Legend

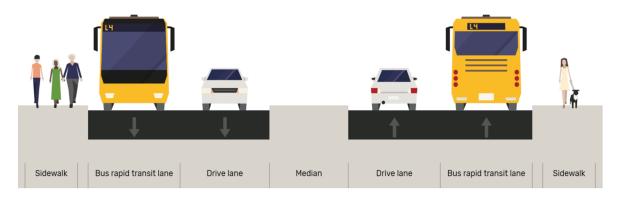


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept C:

Eastbound BRT lane with one general purpose lane removed.





→ Direction of Travel

Legend

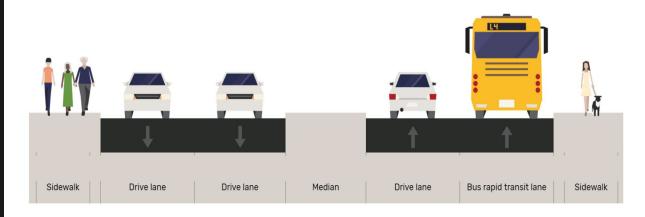


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Focus Area B Kitchener-Georgetown GO Rail Corridor Underpass

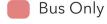
Concept D:

Westbound BRT lane.





Legend





Drive Lane



Sidewalk → Direction of Travel

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Segment 3



Segment (3 Kennedy Road to Highway 410

Characteristics and Conditions:

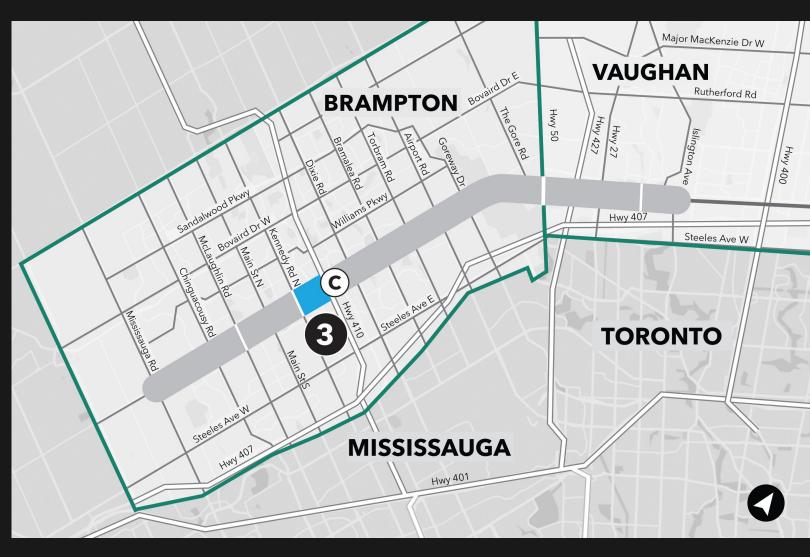
- 1.5 km of Queen Street.
- Mostly commercial land.
- 7-lane cross section.
- No cycling facilities.
- Many driveways/property access points on Queen Street.

Right-of-Way:

Existing: 33-47 m Official Plan: 26-45 m

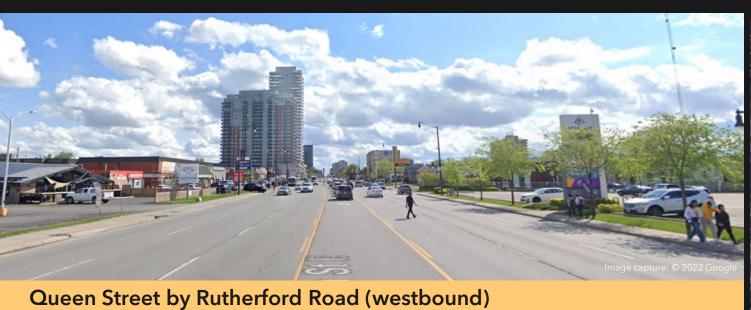
Right-of-Way

The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure between properties.





Segment (3) Kennedy Road to Highway 410



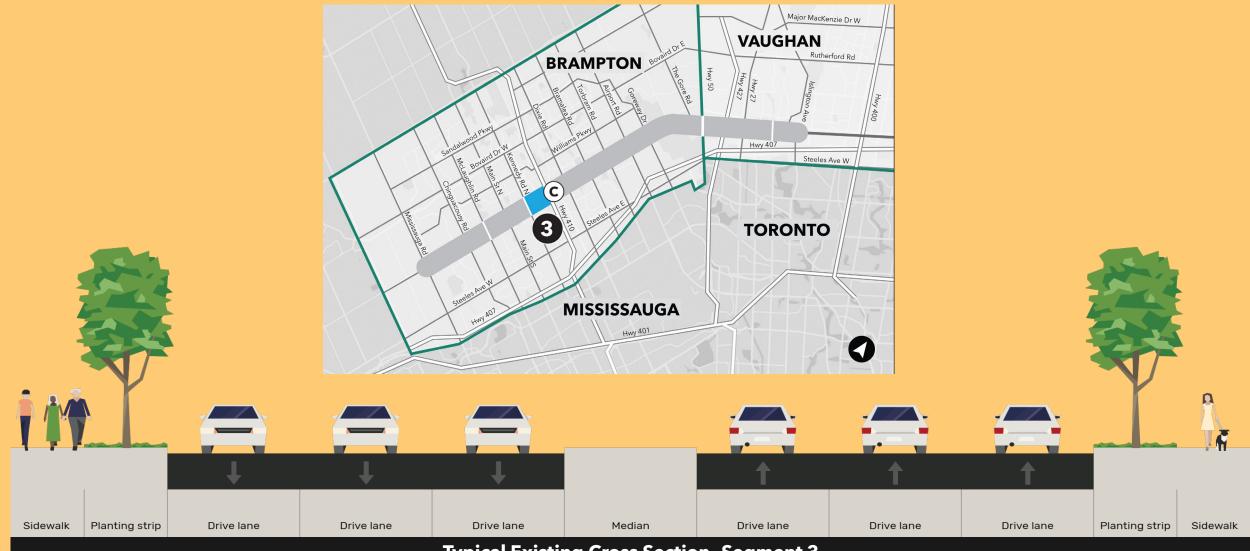






Aerial view of Highway 410

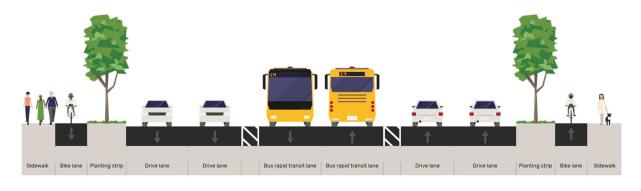
Typical Existing Cross-Section—Segment 3

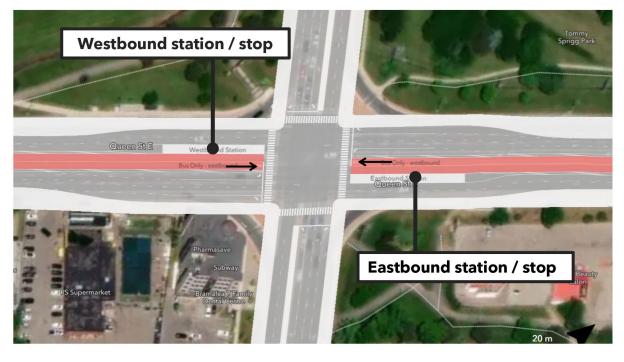


Typical Existing Cross Section–Segment 3

Concept A:

Convert general purpose lane for median BRT.





Legend





Drive Lane



Sidewalk

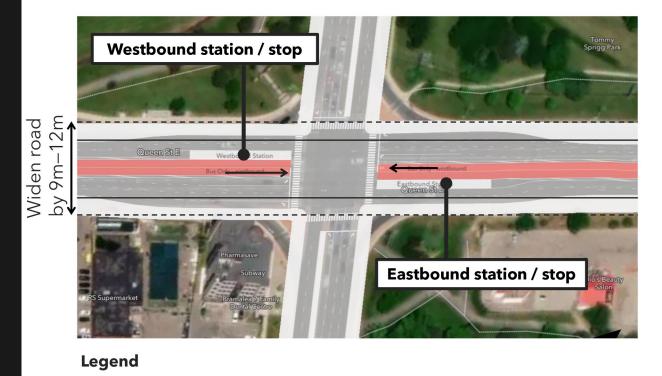


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Concept B:

Keep all existing lanes and widen to include median BRT.





Sidewalk

→ Direction of Travel

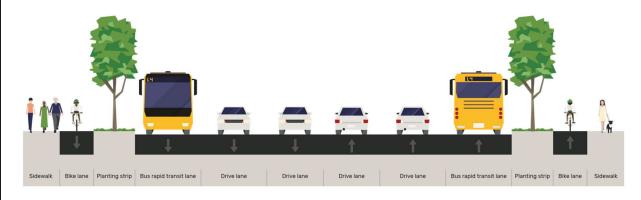
* Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Drive Lane

Bus Only

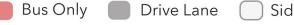
Concept C:

Convert general purpose lane for curbside business access and transit lane.





Legend

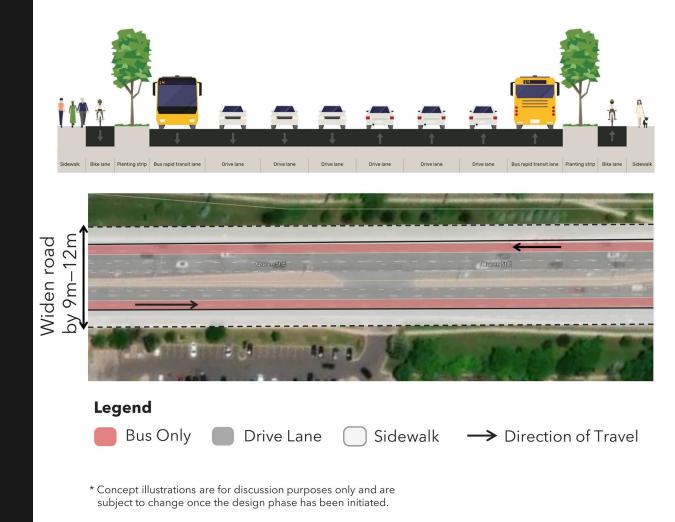


) Sidewalk \longrightarrow Direction of Travel

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Concept D:

Keep all general purpose lanes and widen for curbside business access and transit lane.





Focus Area



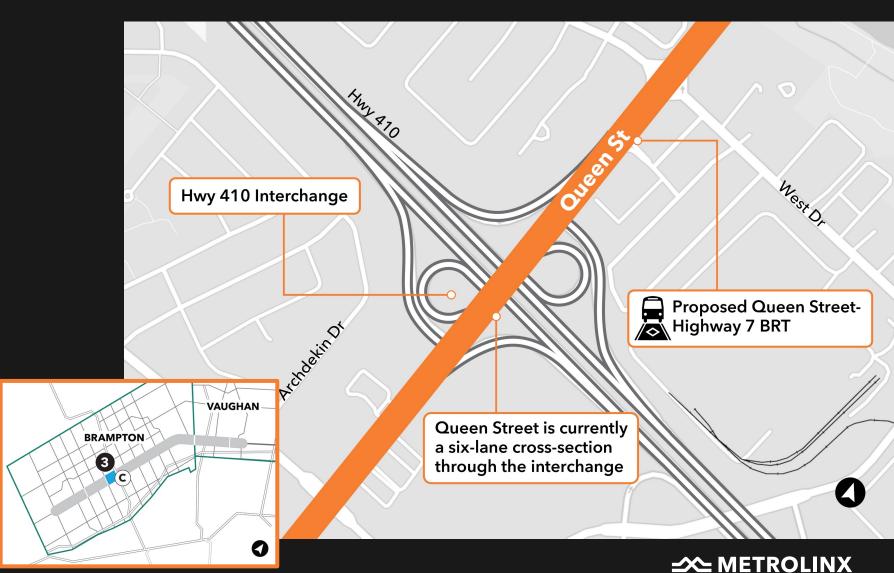
Highway 410 Interchange

Opportunities:

- Next to commercial lands with access to employment (opportunity for higher density).
- Active transportation facilities approaching the Highway 410 interchange.

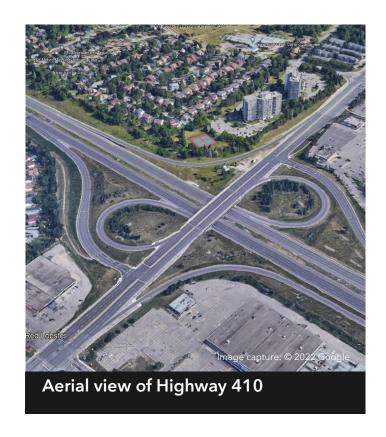
Challenges:

- High costs to reconstruct interchange ramps and to widen bridge.
- 2. Property acquisitions needed to widen the Right-of-Way.
- Highway on/off ramps create conflicts for cyclists and pedestrians.



Highway 410 and Highway 427

Planning concepts for these two areas are being developed in consultation with Ministry of Transportation.





Existing Cross Section

Segment 4



Segment 4 Highway 410 to Highway 50

Characteristics and Conditions:

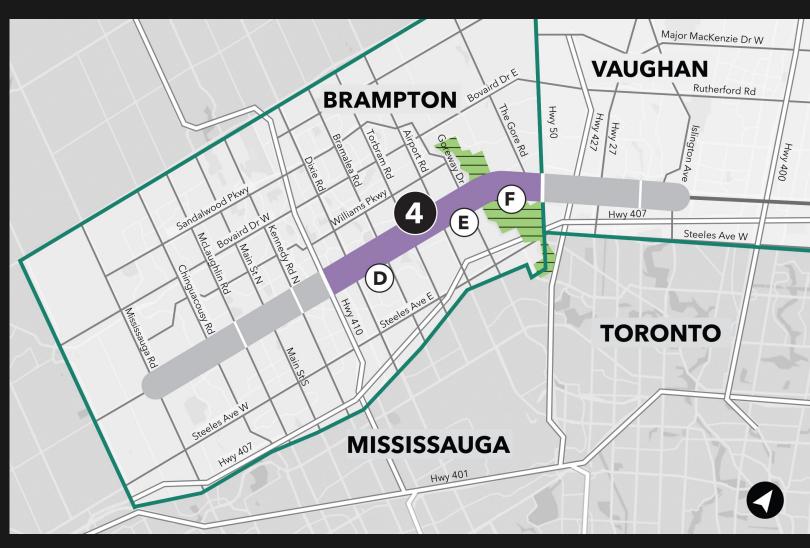
- 10 km of Queen Street.
- Mix of commercial, industrial, and residential land with conservation areas.
- 7-lane cross section.
- No cycling facilities.

Right-of-Way:

Existing: 42-55 m Official Plan: 45 m

Right-of-Way

The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure between properties.

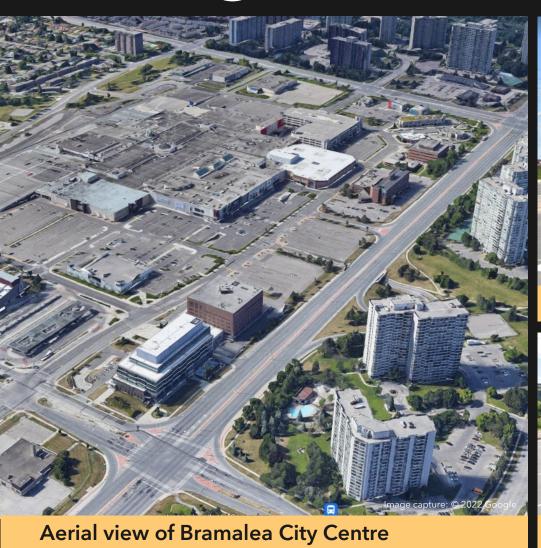




Segment



Highway 410 to Highway 50



Queen Street by Claireville Conservation Area



Queen Street by The Gore Road (westbound)

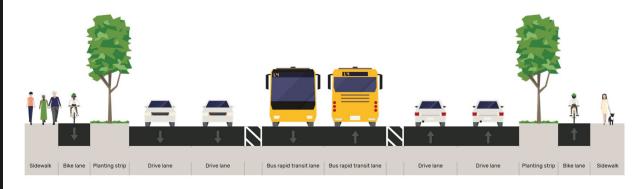
Typical Existing Cross-Section—Segment 4

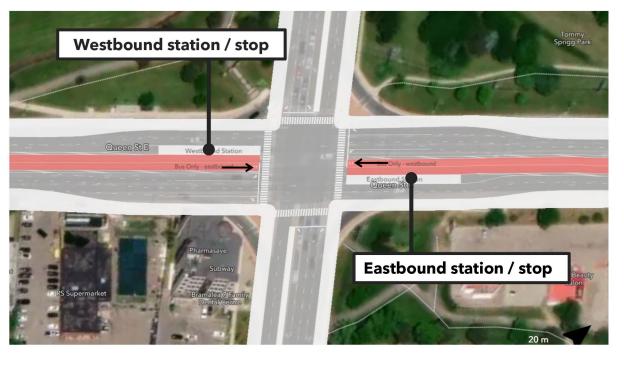


Typical Existing Cross Section–Segment 4

Concept A:

Convert general purpose lane for median BRT.





Legend



Drive Lane



Sidewalk

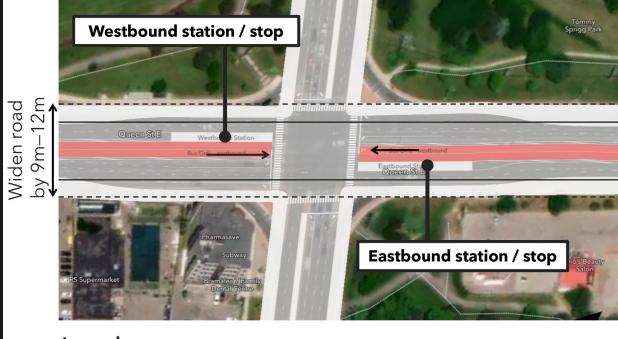


→ Direction of Travel

Concept B:

Keep all existing lanes and widen to include median BRT.





Legend



Bus Only



Drive Lane



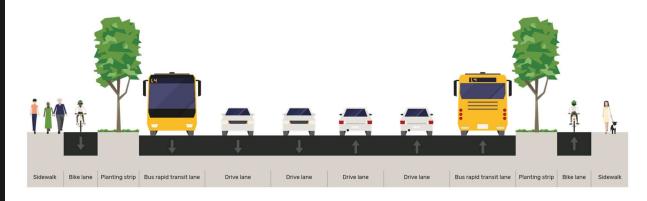
Sidewalk



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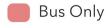
Concept C:

Convert general purpose lane for curbside business access and transit lane.





Legend







→ Direction of Travel

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Concept D:

Keep all general purpose lanes and widen for curbside business access and transit lane.



subject to change once the design phase has been initiated.



Focus Area



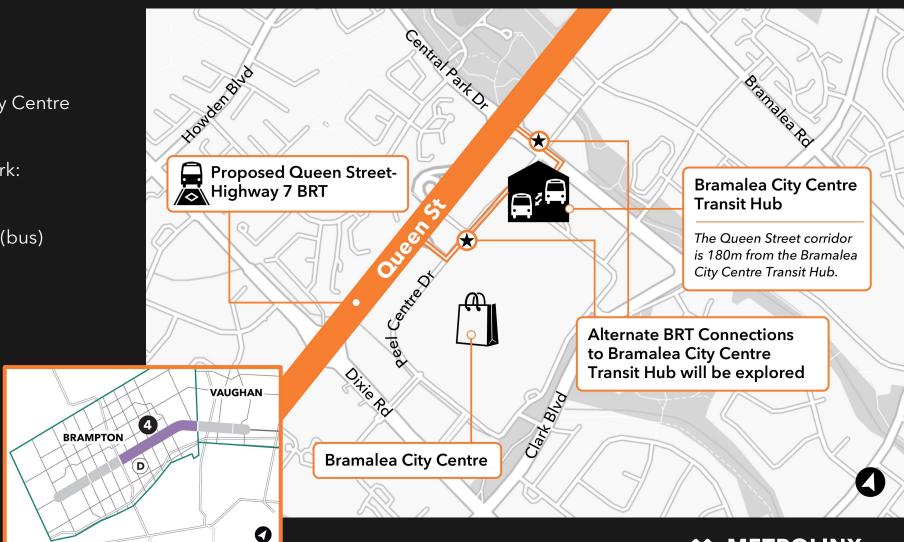
Bramalea City Centre Transit Hub

Opportunities:

- Serve the refreshed Bramalea City Centre with opportunities for residential, employment, and retail.
- Connections to Chinguacousy Park: a major landmark and recreation destination.
- Connection of local and regional (bus) transit at Bramalea Terminal.

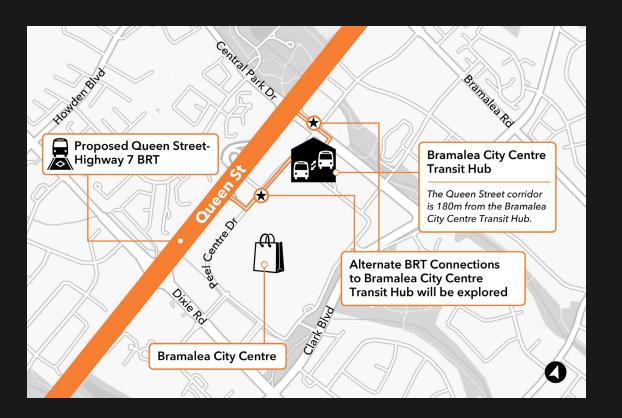
Challenges:

- Costs to widen structure and ramp into Bramalea City Centre.
- 2. Primary truck route.
- High auto volumes in some areas, partially due to access to Highway 410.



⇒ METROLINX

Focus Area D Bramalea City Centre



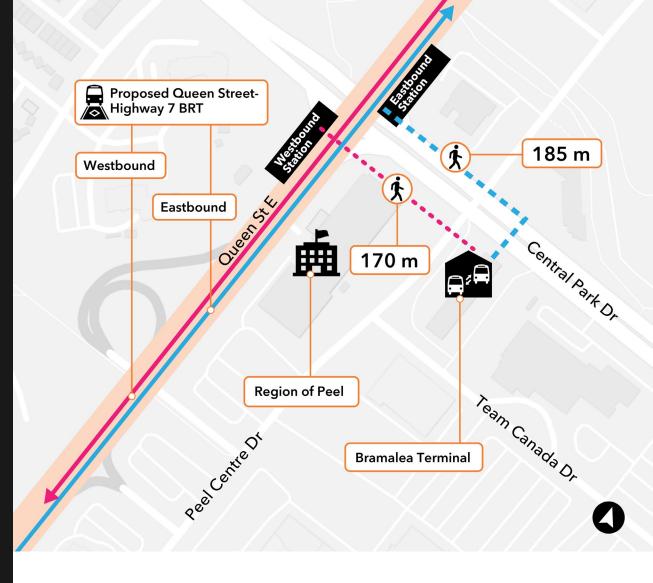
This focus area has future conditions that need to be considered when screening planning concepts for Queen Street-Highway 7 BRT:

- 1. The Brampton 2040 Vision includes the Bramalea New Town Concept, which includes three new, built-up districts that introduce various land uses to Bramalea City Centre such as commercial (retail and office), residential, recreational, and institutional.
- 2. The Bramalea New Town Concept is projected to increase population and density of the area.



Concept A:

Station located on **Queen Street.**



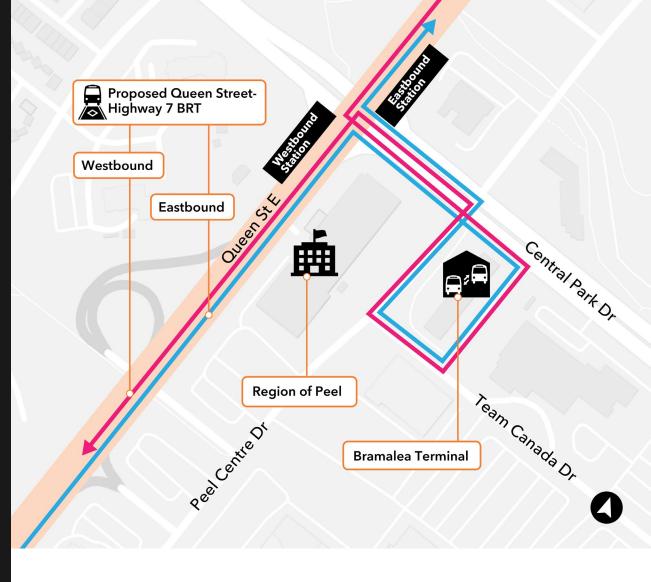
Considerations:

- No diversion.
- Time lost.
- 3-4 minute walk to Terminal transfers.



Concept B:

BRT diverts off Queen
Street to Bramalea
Terminal via
Central Park Drive.



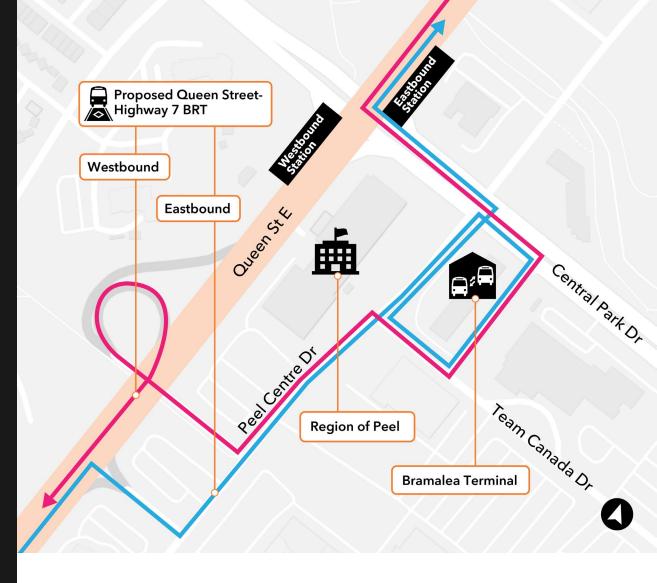
Considerations:

- 3-5 minute diversion from route.
- No added transfer or walk for passengers (same as Züm).
- Bus priority measures already in place.



Concept C:

BRT diverts off Queen Street to Bramalea Terminal via Peel Centre Drive.



Considerations:

- 4-6 minute diversion from route.
- No added transfer or walk for passengers (same as Züm).
- No priority through mall parking lot (slightly longer diversion times).



Focus Area



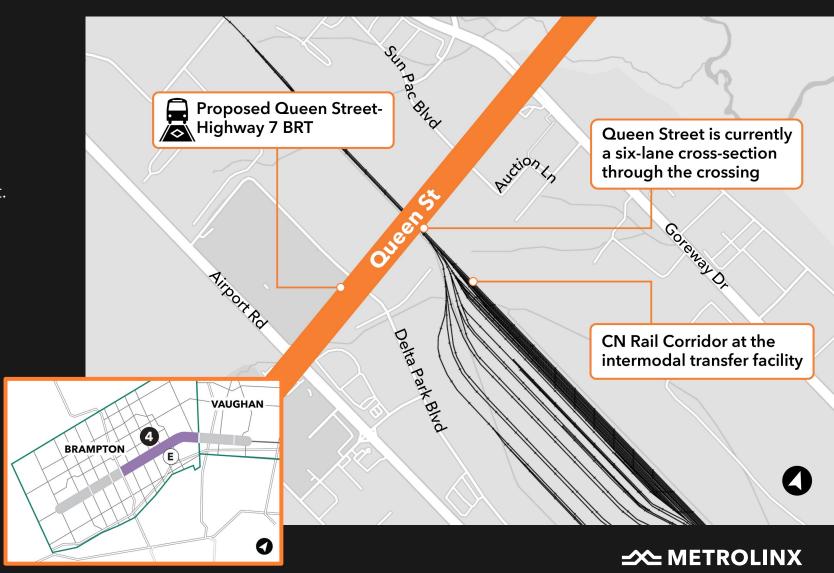
Delta Park Boulevard to Auction Lane & Rail Structure at CN Intermodal Yard

Opportunities:

- Improve access to manufacturing and industrial employment areas.
- Redevelopment potential of large, low-intensity sites fronting Queen Street.
- 3. Potential connection point to existing transit routes on Goreway Drive.

Challenges:

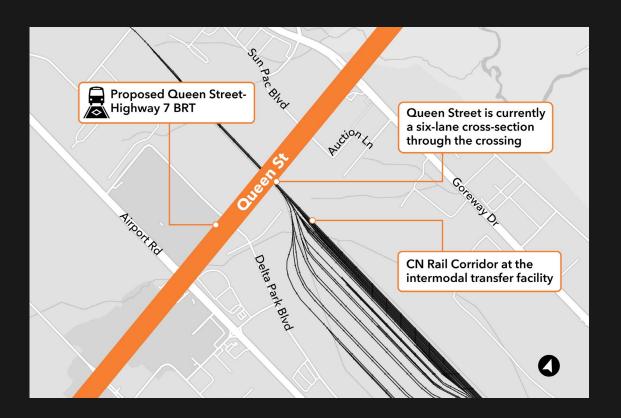
- Primary trucking route with high traffic volumes.
- 2. Property acquisition needed to widen the area.
- 3. Widening the structure may result in clearance-related impacts.



Focus Area



Delta Park Boulevard to Auction Lane & Rail Structure at CN Intermodal Yard



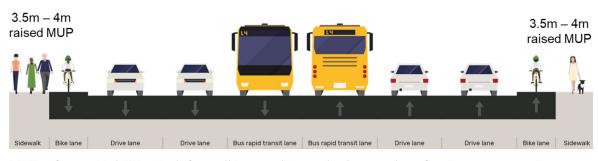
CN Rail Yard Overpass Bridge Sidewalk Drive Iane Drive Iane Median Drive Iane Drive Iane Sidewalk

Existing Cross Section



Concept A:

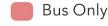
Centre BRT with one general purpose lane removed.



MUP refers to Multi-Use Path for walking, cycling and other modes of active transportation.



Legend





Drive Lane



Sidewalk



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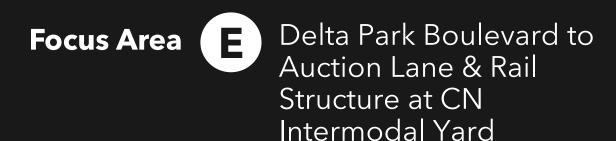
Concept B:

Centre BRT with all general purpose lanes retained. A new structure would be needed.



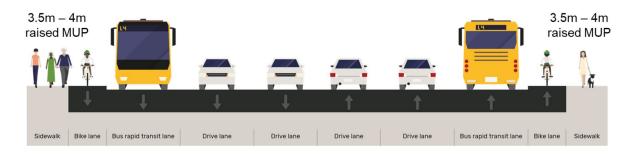


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept C:

Curbside BRT with one general purpose lane removed.





Legend



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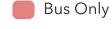
Concept D:

Curbside BRT with all general purpose lanes retained. A new structure would be needed.





Legend





Sidewalk

→ Direction of Travel

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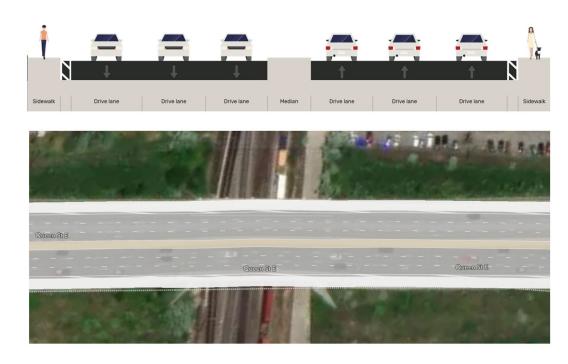




Delta Park Boulevard to Auction Lane & Rail Structure at CN Intermodal Yard

Concept E:

Mixed traffic operations.



Legend



Drive Lane



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Focus Area



Claireville Conservation Area (Goreway Drive to The Gore Road)

Opportunities:

- 1. Connections to Claireville Conservation Area, parks, and valley lands.
- 2. Opportunity to improve street network.
- 3. The Gore neighbourhood is designated for mix of residential and employment land.
- 4. Streetscaping and active transportation infrastructure.

Challenges:

- The Claireville Conversation Area and associated valley lands is of significant natural heritage.
- 2. Valley lands act as pedestrian barrier.
- 3. Primary trucking route.



Segment 5



Segment (5) Highway 50 to Kipling Avenue

Characteristics and Conditions:

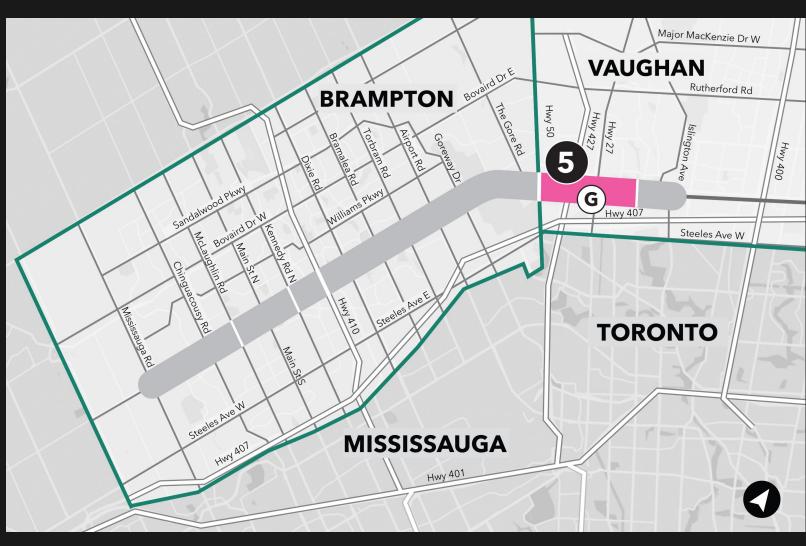
- 4.5 km of Highway 7.
- Commercial and industrial land.
- 6- to 7-lane cross section.
- No cycling facilities.
- Many driveways/property access points on Highway 7.
- Goods movement corridor.

Right-of-Way:

Existing: 42-55 m Official Plan: 45 m

Right-of-Way

The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure between properties.

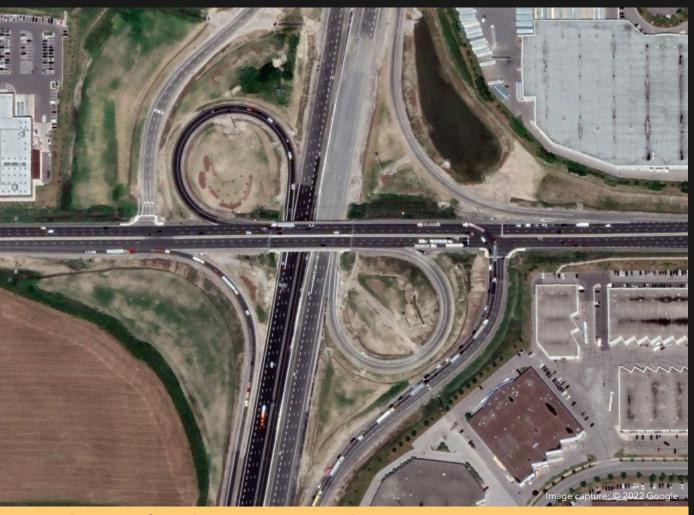




Segment (5



Highway 50 to Kipling Avenue



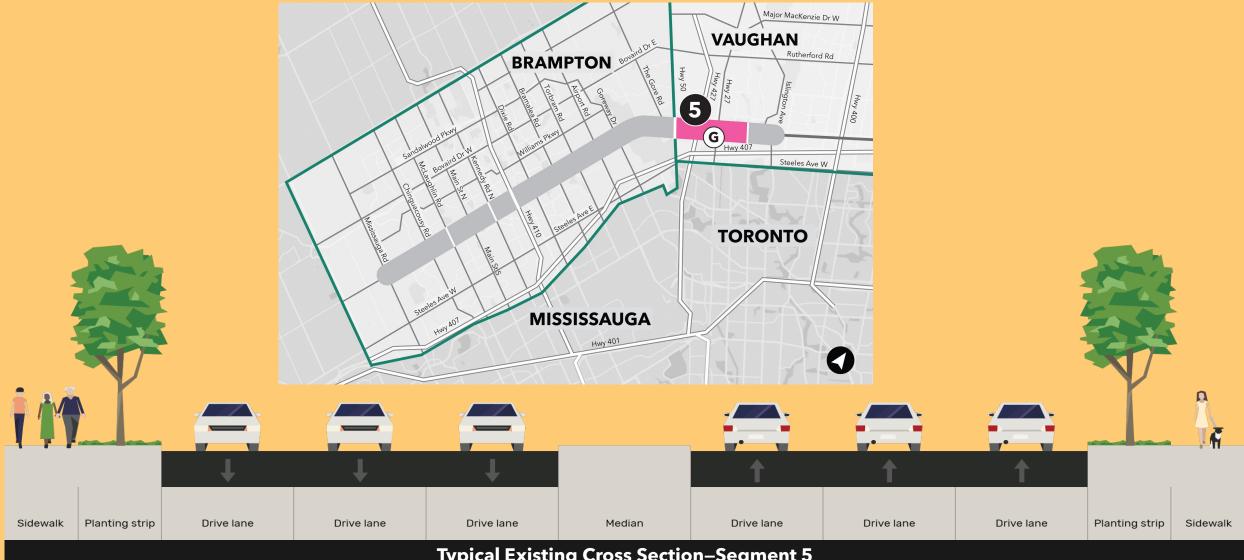
Aerial view of Highway 427 Interchange







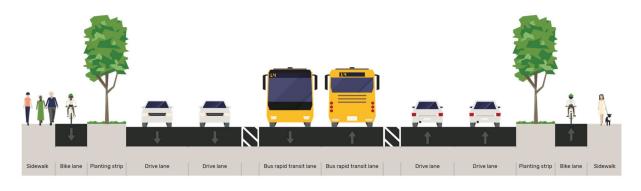
Typical Existing Cross-Section—Segment 5

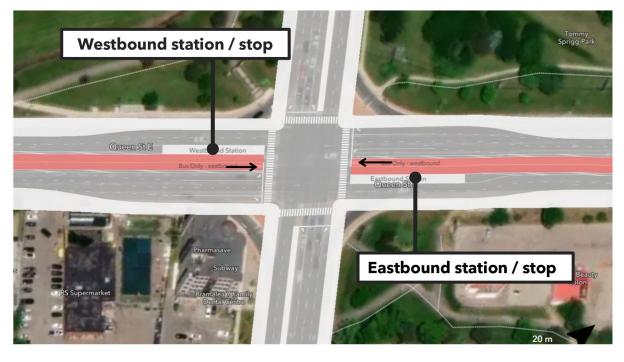


Typical Existing Cross Section–Segment 5

Concept A:

Convert general purpose lane for median BRT.





Legend



Bus Only



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Drive Lane



Sidewalk



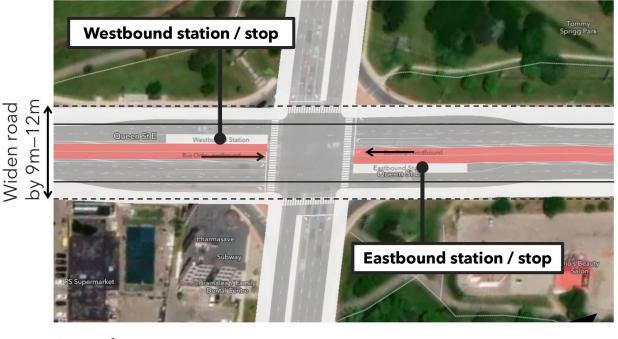
→ Direction of Travel

QUEEN STREET-HIGHWAY 7 BRT

Concept B:

Keep all existing lanes and widen to include median BRT.





Legend



Bus Only



Drive Lane



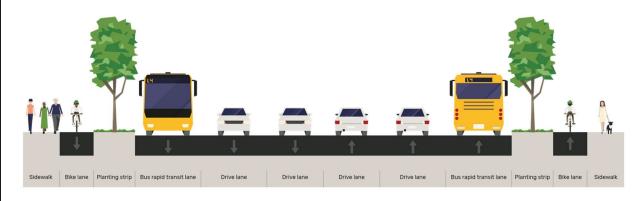
Sidewalk → Dir



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Concept C:

Convert general purpose lane for curbside business access and transit lane.





Legend





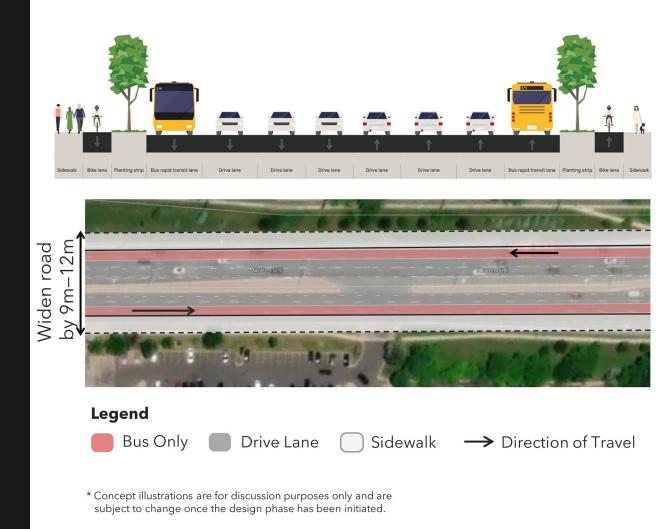


→ Direction of Travel

^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Concept D:

Keep all general purpose lanes and widen for curbside business access and transit lane.





Focus Area



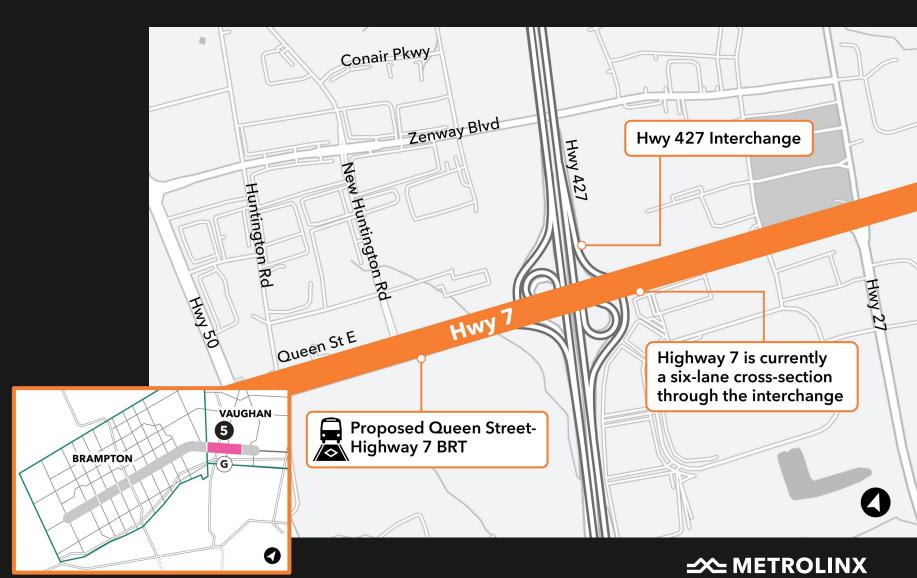
Highway 427 Interchange – 6-Lane Structure

Opportunities:

- Access to the industrial and manufacturing employment area.
- 2. Active transportation facilities approaching the interchange.

Challenges:

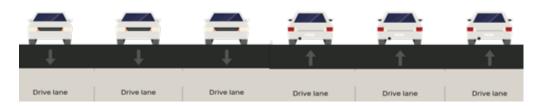
- Costs to widen bridge and reconstruction of interchange ramps.
- 2. Land acquisitions needed to widen area.
- 3. On/off ramps create conflicts for cyclists and pedestrians.
- 4. North-south hydro corridor.



Highway 410 and Highway 427

Planning concepts for these two areas are being developed in consultation with Ministry of Transportation.





Existing Cross Section

Segment 6



Segment (6) Kipling Avenue to Wigwoss Drive

Characteristics and Conditions:

- 1.5 km of Highway 7.
- 4- to 5-lane cross section.
- Residential land and natural features.
- No dedicated cycling facilities.
- Connects to existing Viva Rapidway.

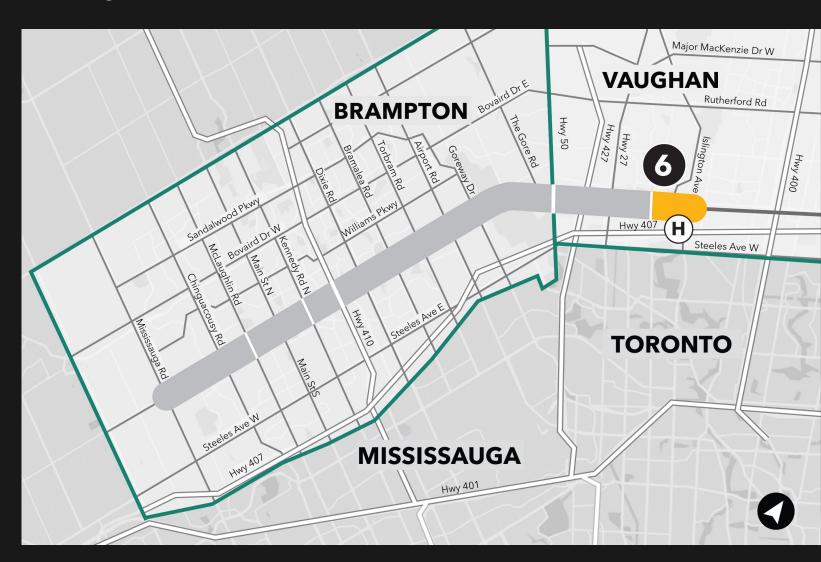
Right-of-Way:

The width of space available for BRT design. Includes width of the road, sidewalk, and infrastructure

between properties.

Right-of-Way

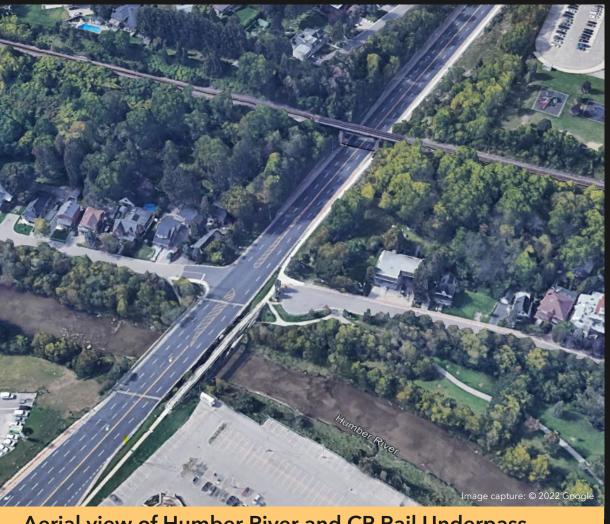
Existing: 28-48 m Official Plan: 45 m



Segment



Kipling Avenue to Wigwoss Drive



Aerial view of Humber River and CP Rail Underpass



Highway 7 by Lansdowne Avenue (eastbound)



Highway 7 between Islington Avenue and Bruce Steet



Highway 7 by Helen Street/Wigwoss Drive (westbound)

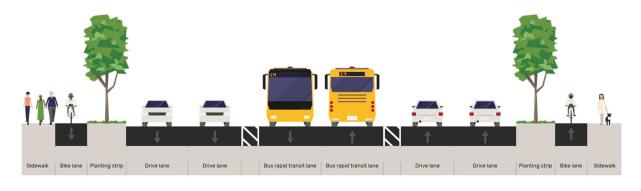
Typical Existing Cross-Section—Segment 6

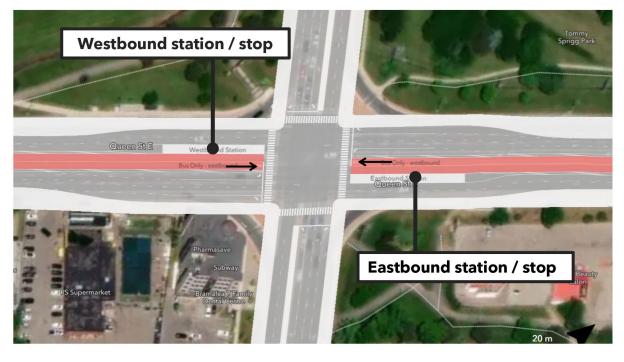


Typical Existing Cross Section-Segment 6

Concept A:

Convert general purpose lane for median BRT.





Legend



Bus Only



Drive Lane



Sidewalk

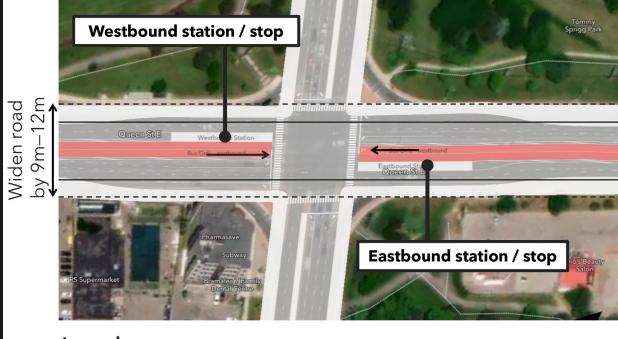


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Concept B:

Keep all existing lanes and widen to include median BRT.





Legend



Bus Only



Drive Lane



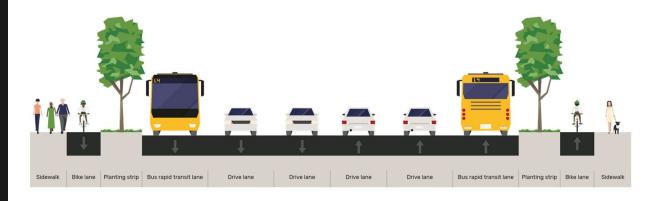
Sidewalk



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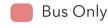
Concept C:

Convert general purpose lane for curbside business access and transit lane.





Legend







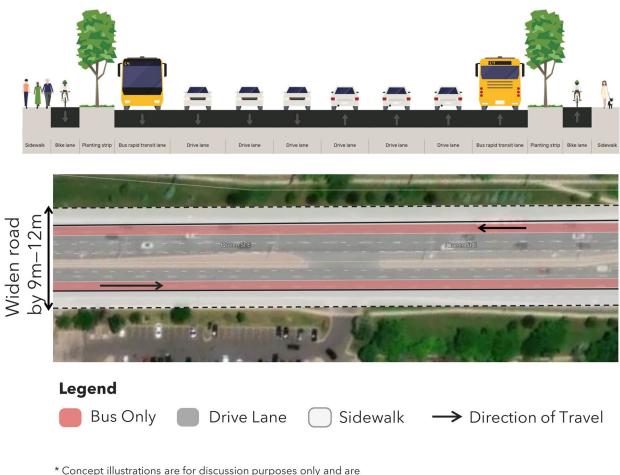
→ Direction of Travel

^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Planning Concepts for Segment 6

Concept D:

Keep all general purpose lanes and widen for curbside business access and transit lane.





Focus Area



Humber River / Rail Corridor

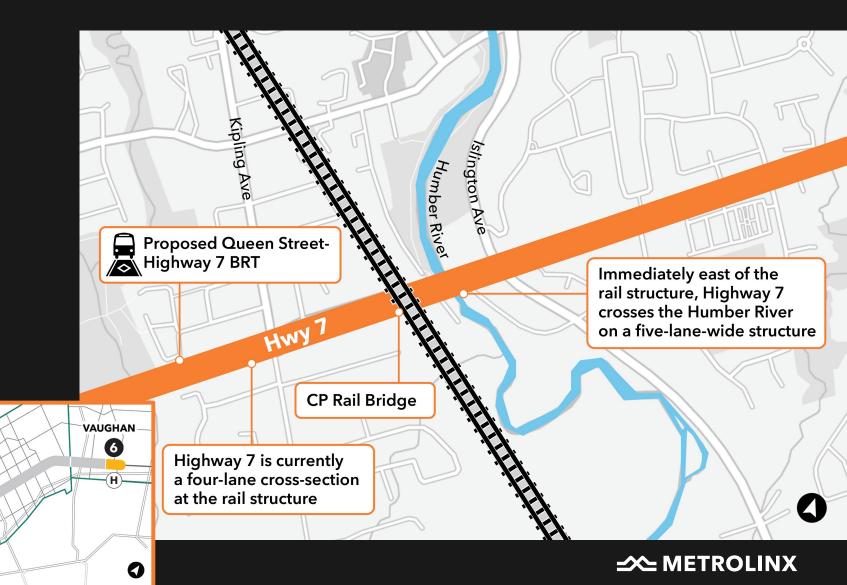
BRAMPTON

Opportunities:

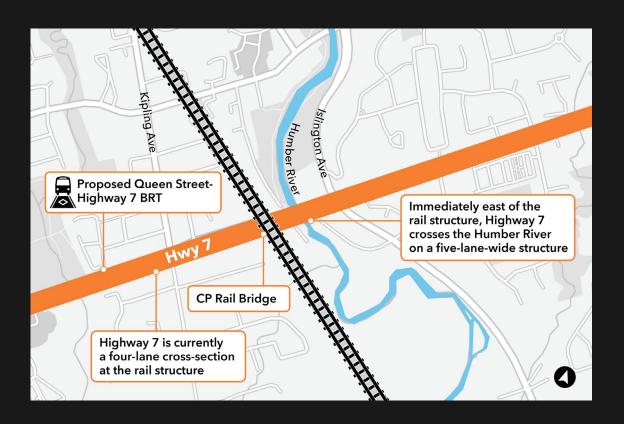
- Improve streetscaping and Active Transportation infrastructure.
- 2. Highway 7 transitions to the existing centre median BRT between Bruce Street and Helen Street.
- Connect to the Humber River.

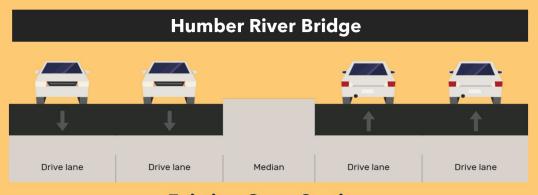
Challenges:

- Impacts to Humber River, a significant natural environment.
- 2. Costs to widen rail, bridge, and stormwater structures.
- 3. Above ground utilities within the Right-of-Way.



Focus Area H-1 Humber River Bridge





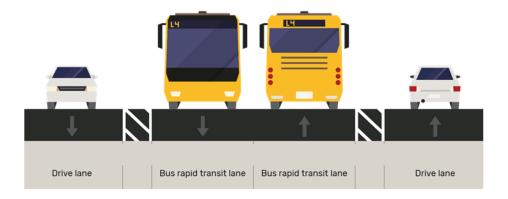
Existing Cross Section

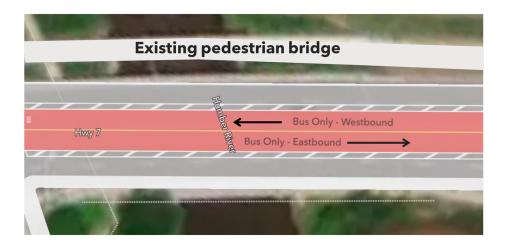
^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept A:

Convert general purpose lane for median BRT.





Legend

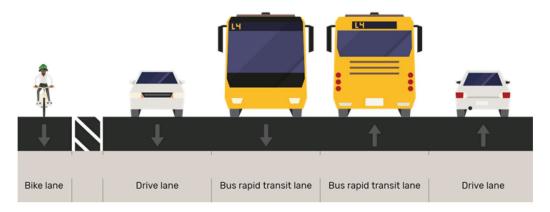


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



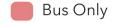
Concept B:

Convert general purpose lane for median BRT. Addition of eastbound cycling lane.





Legend





Drive Lane



Pedestrian Path



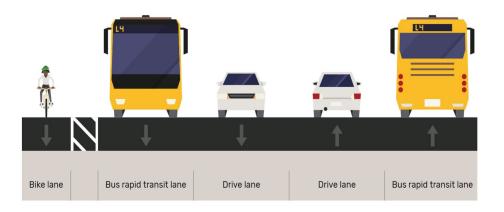
Bike Lane

^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept C:

Convert general purpose lane for curbside BRT. Addition of eastbound cycling lane.





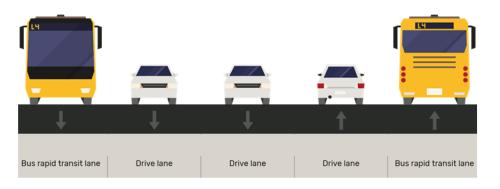
Legend



^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.

Concept D:

Convert general purpose lane for curbside BRT.





Legend

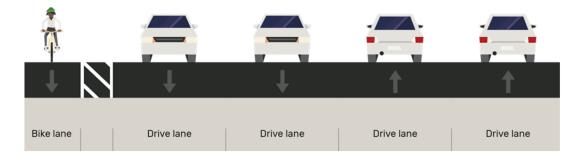


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept E:

No BRT.





Legend



^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept F:

Curbside BRT in one direction only.



Legend



^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept G:

New structure with median BRT. Keep general purpose lanes.





Canaant illustrations are for discussion nume

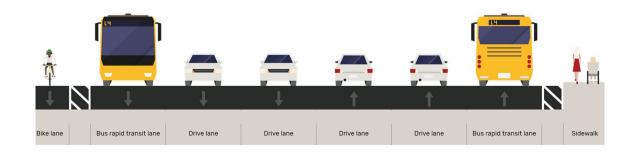
Bike Lane

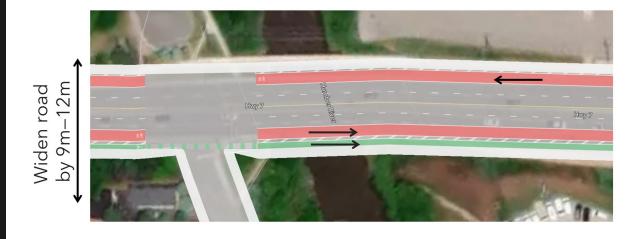
* Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept H:

New structure with curbside BRT. Keep general purpose lanes.



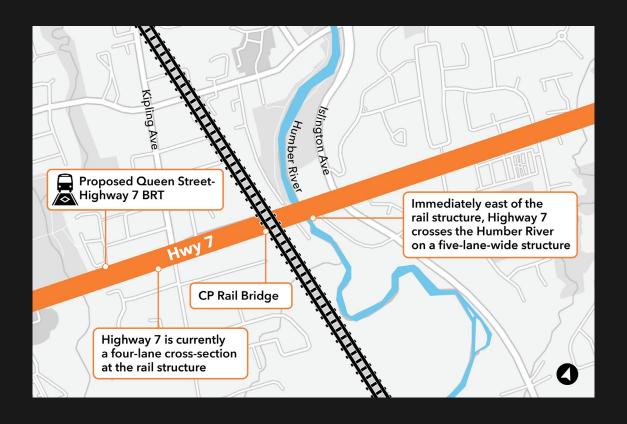




Bike Lane

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Focus Area H-2 CP Rail Overpass Bridge





Existing Cross Section

^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept A:

Centre BRT with one general purpose lane removed.

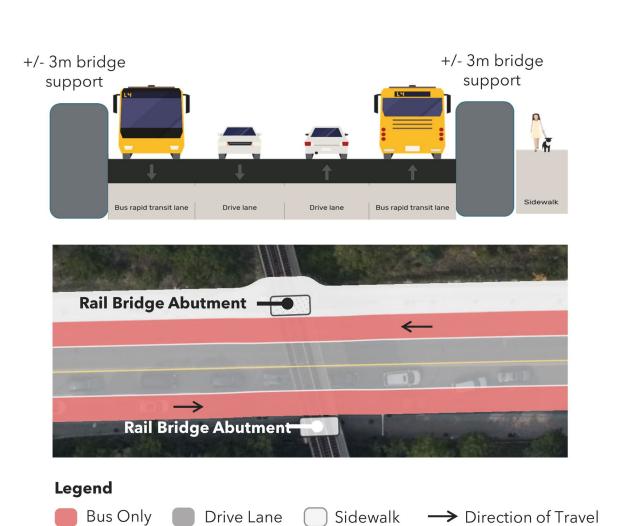


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept B:

Curbside BRT with one general purpose lane removed.

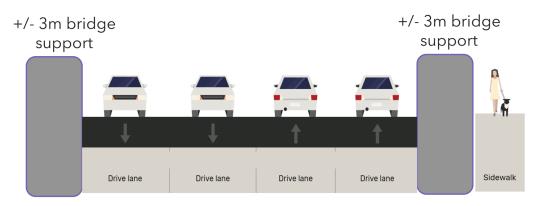


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept C:

No BRT – shared curbside lanes.





Legend

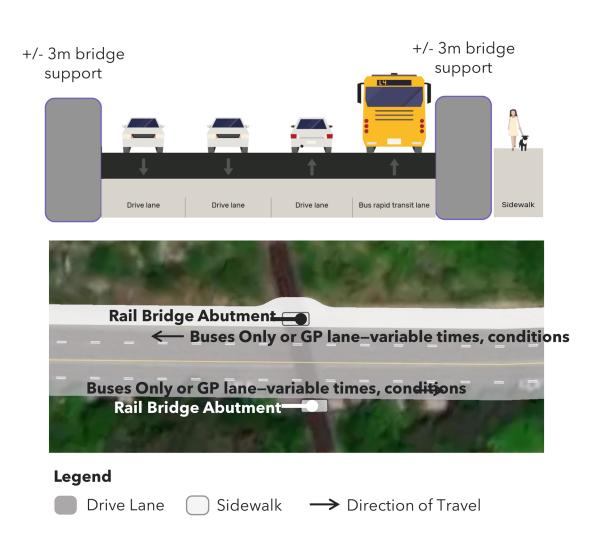


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept D:

Curbside BRT with one general purpose lane removed.

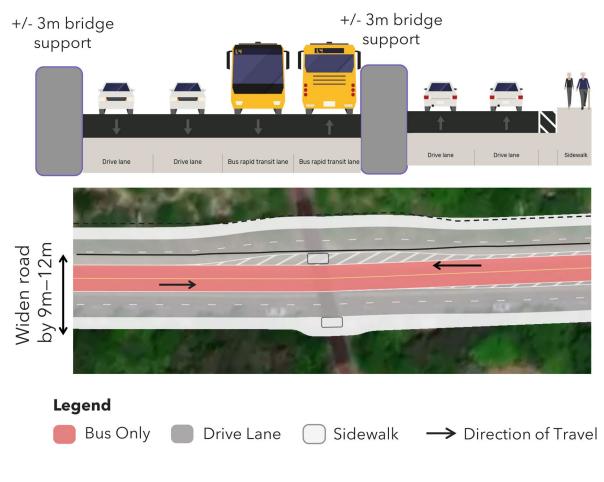


^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept E:

Centre BRT.
Bridge widening on north side.

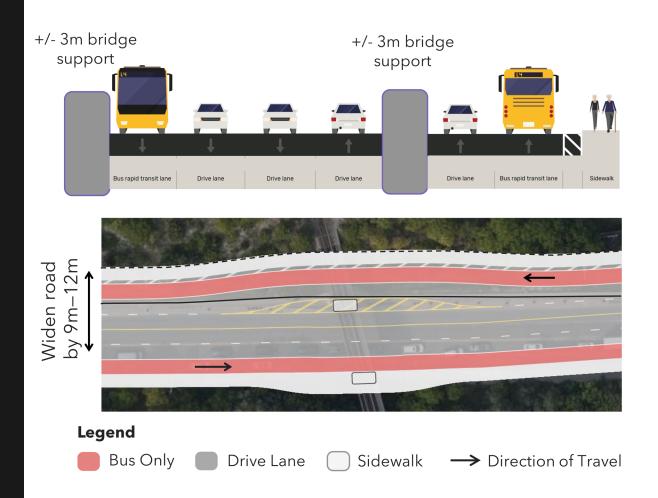


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Concept F:

Curbside BRT.
Bridge widening on north side.



^{*} Concept illustrations are for discussion purposes only and are subject to change once the design phase has been initiated.



Concept G:

Curbside BRT with eastbound cycling lane. Bridge widening on north side.





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△ METROLINX