

Date: 2024-01-12

Subject: **Light Rail Transit (LRT) Extension Study – Advance to TPAP Stage (RM 35/2023) Presentation**

Contact: **Doug Rieger, Director, Transit Development**

Report Number: Brampton Transit-2024-049

Recommendations:

1. That the presentation titled **Light Rail Transit (LRT) Extension Study – Advance to TPAP Stage (RM 35/2023)** to the Committee of Council meeting of January 17, 2024 be received.



City of Brampton

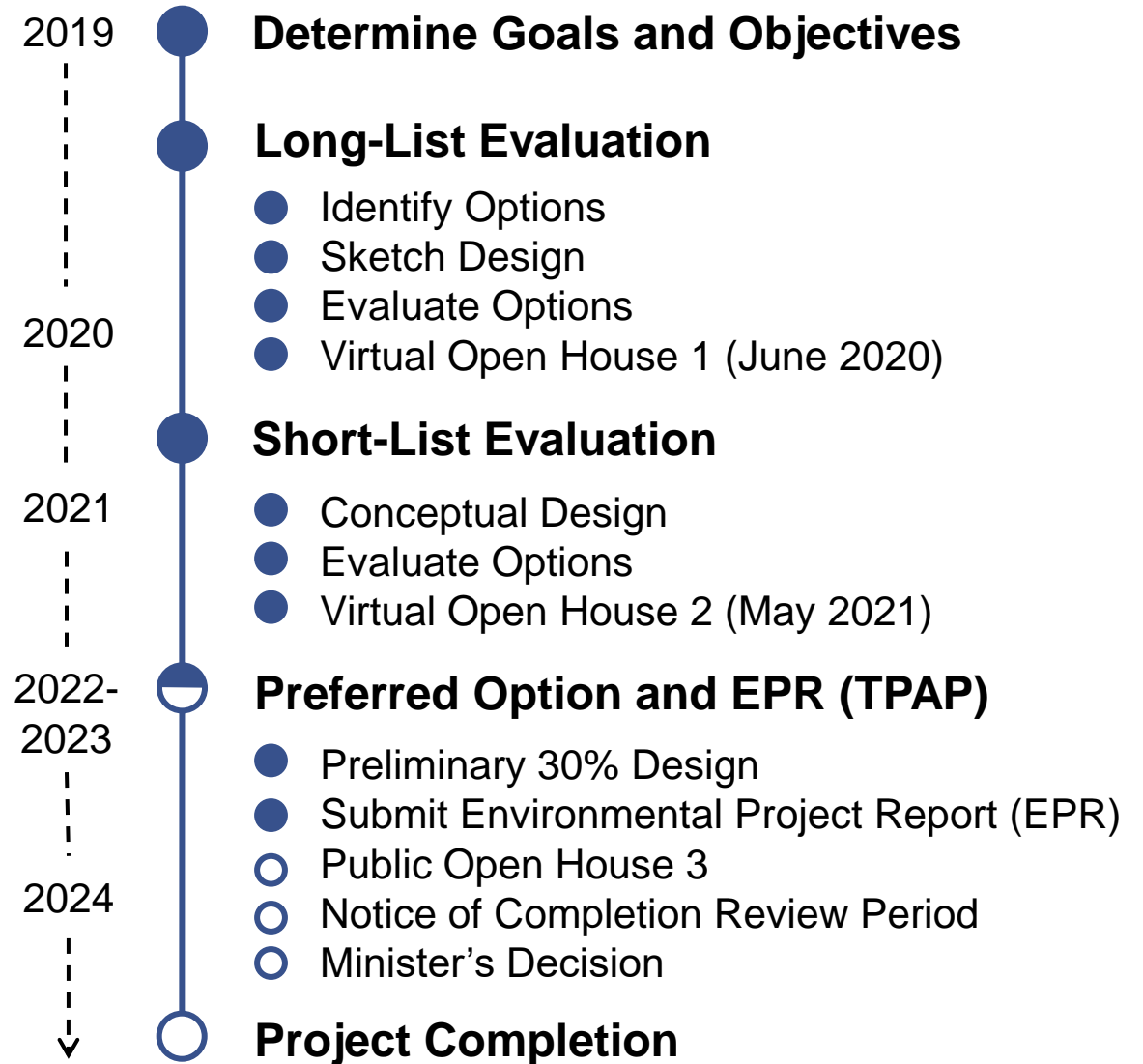
LRT Extension Study

TPAP Recommendation

January 17, 2024
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Study Process

- The study evaluated LRT options in a multi-level process.
- Over the course of the study, the options were evaluated, presented to the public and narrowed down to one surface and one underground for preliminary design.
- Only one option will be taken through the Transit Project Assessment Process (TPAP).



Council Direction from May 10, 2023

- Staff have further dialogue with Metrolinx and provincial officials to help inform the Tunnel option, which is the alignment unanimously supported by Brampton City Council to advance funding advocacy, which could then be taken through the Transit Project Assessment Process (TPAP), and report back in approximately six months on outcome of these discussions.
- Staff be directed to engage with federal and provincial officials to help explore and discuss potential funding options for the LRT Extension.

Engagement with Metrolinx

- LRT Extension evaluated as part of Metrolinx's annual review of the Frequent Rapid Transit Network (FRTN)
- The LRT Extension was grouped in to the “High” prioritization category



Engagement with the Government of Canada and Province of Ontario



Canada 

 Association of
Municipalities Ontario


FÉDÉRATION CANADIENNE DES MUNICIPALITÉS FEDERATION OF CANADIAN MUNICIPALITIES

Ontario 

Funding Programs

Canada

- Permanent Transit Fund

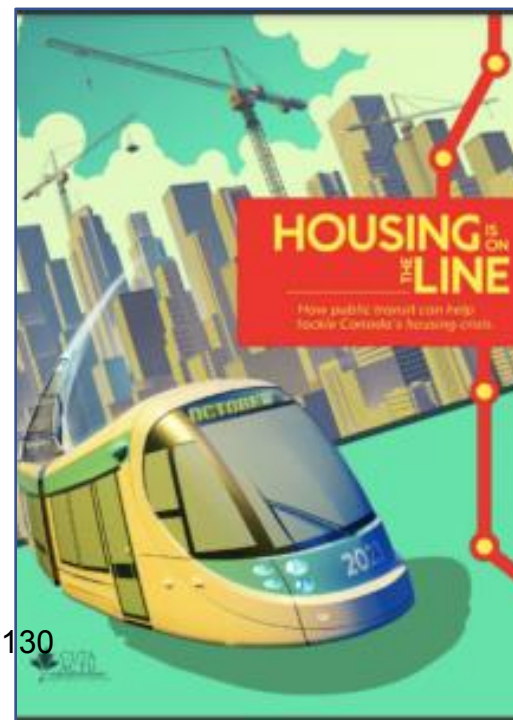
Ontario

- Ontario Infrastructure Bank

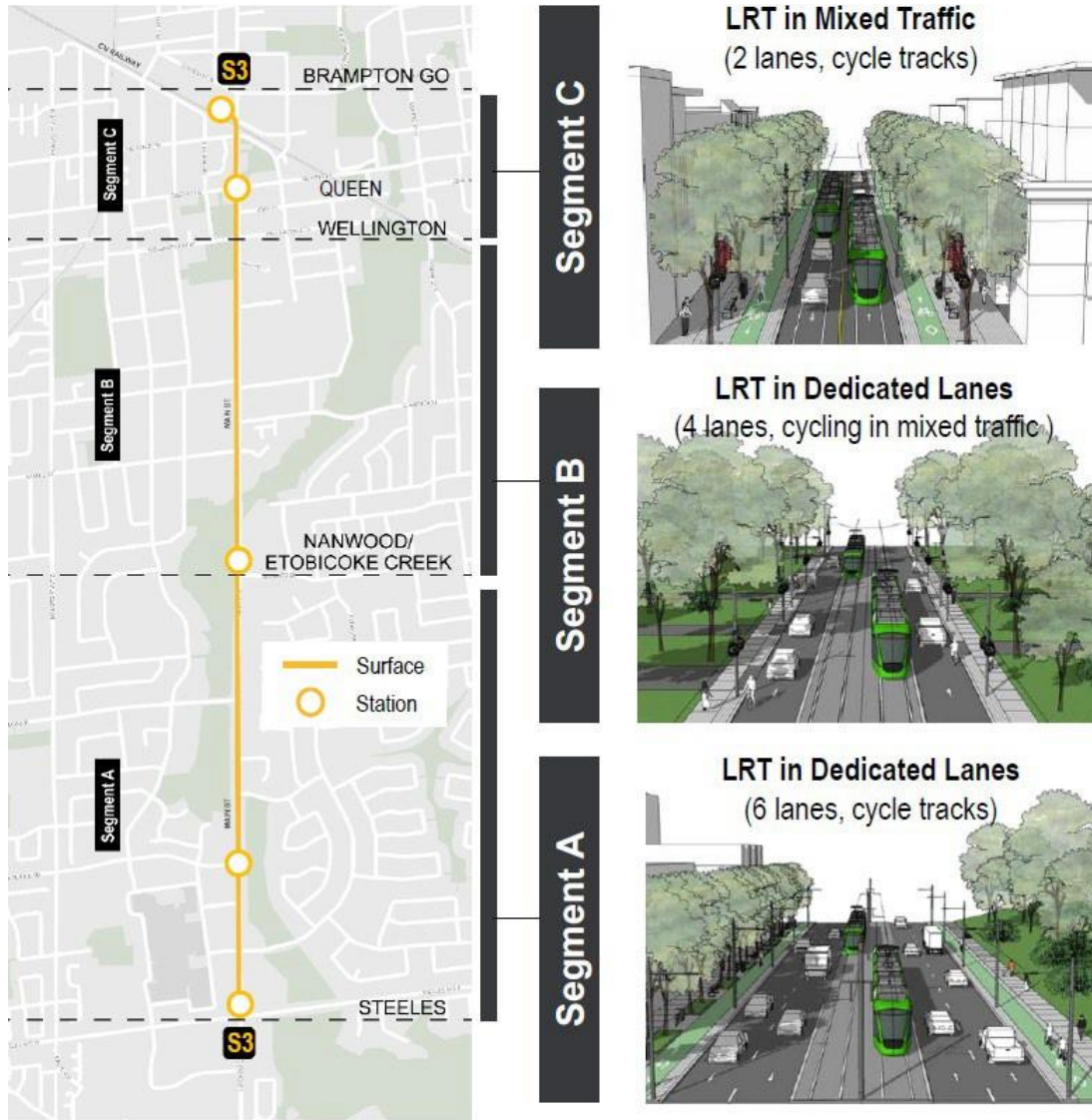


LRT & Housing in Downtown Brampton

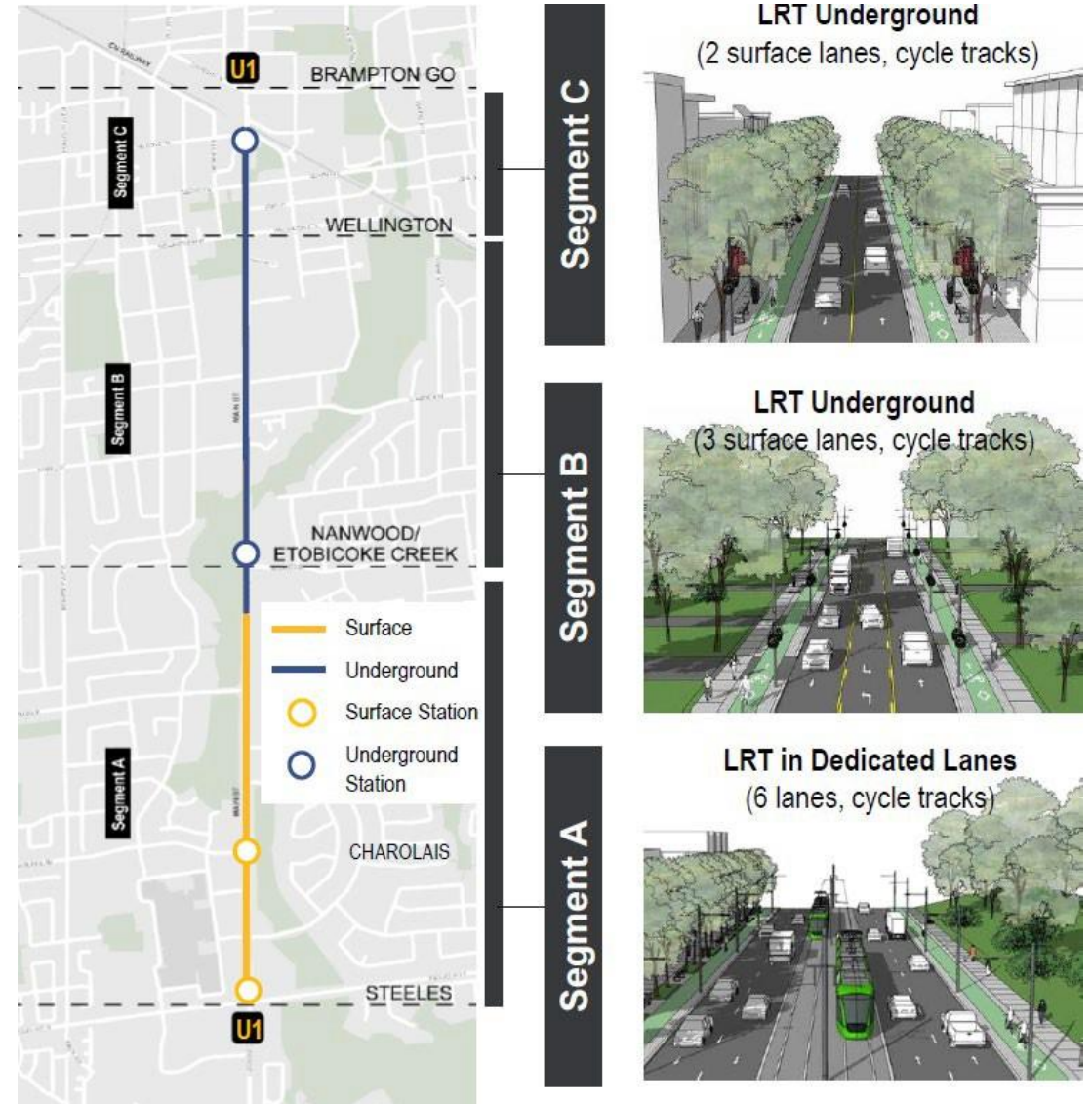
- After housing, transportation is the 2nd highest expense for most households.
- Increased levels of housing in Downtown Brampton.



Preferred Surface Option



Preferred Tunnel Option



All boulevard configurations shown are subject to change.

Surface Option: Key Design Considerations

1

TRANSPORTATION IMPACTS

Higher travel times, access modifications, and cycling network gap

2

IMPACTS TO DOWNTOWN

Lowering of Main St under CN Bridge and impact to Downtown Revitalization cross-section

3

FUTURE EXTENSION

Considerations for future northern extension

4

OPERATION & MAINTENANCE RISKS

Risks related to streetlighting, overhead catenary system, and road maintenance

5

PROPERTY IMPACTS

Impacts to heritage features from TPSS and Brampton GO Station property taking

6

BRAMPTON GO STATION

Updates to the design at the Brampton GO LRT terminus station

Underground Option: Key Design Considerations

1

TUNNELING APPROACH

Construction methodology

2

UNDERGROUND STATIONS




Property requirements and design updates at Nanwood Station and Downtown Brampton

3

PORTAL RELOCATION

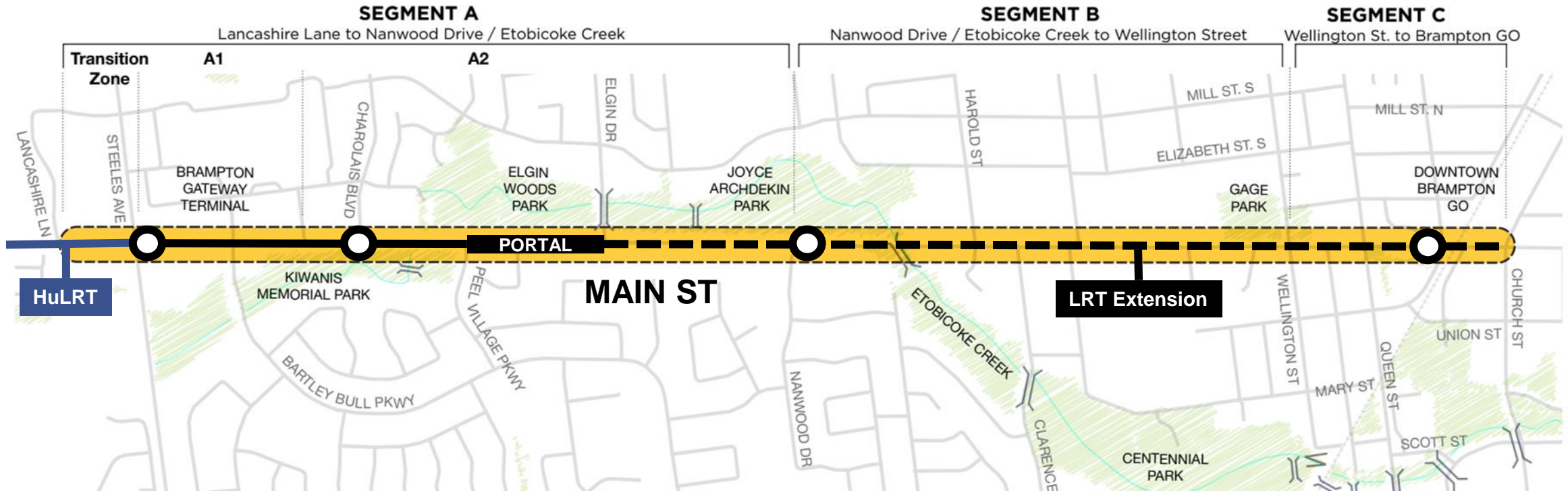
Increased tunnel length and portal size due to portal relocation out of floodplain

Higher Order Transit Funding in the GTHA

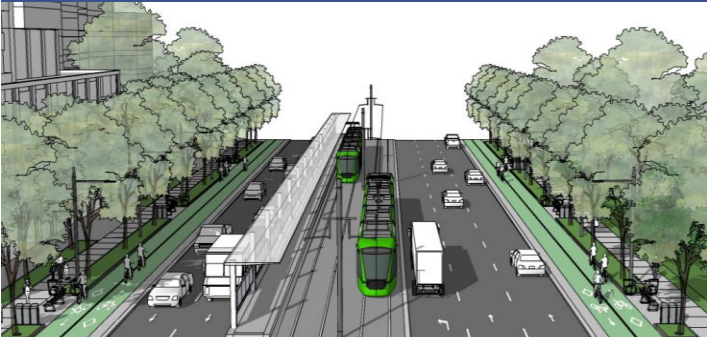
GTHA Rapid Transit Projects	Municipal Population (2021 Census)	Total Cost of Project(s)	Provincial Funding	Federal Funding	Provincial & Federal Funding per Capita	Change in Transit demand between 2009 and 2019	Covid Ridership Recovery (Aug. 2023)
City of Toronto* Scarborough Subway Extension Ontario Line Finch West LRT Eglinton Crosstown	2,794,356	\$39.8B	\$31.32B	\$8.48B	\$14,240	12%	 22%
City of Hamilton Hamilton LRT	569,353	\$3.4B	\$1.7B	\$1.7B	\$5,970	3%	 4%
City of Brampton Brampton LRT Extension (Tunnel) Queen St - Highway 7 BRT	656,480	\$3.3B	\$1.65B	\$1.65B	\$5,030	160%	 30%

Notes: *City of Toronto projects does not include Yonge Subway Extension as it is primarily a York Region Project

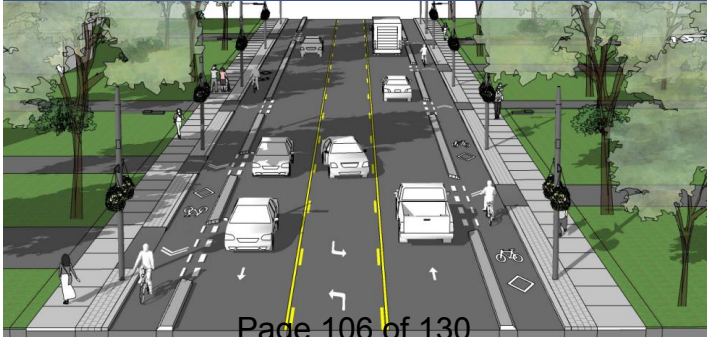
Preferred Underground Option



Segment A: LRT in Dedicated Lanes
(up to 10 lanes, cycle tracks)

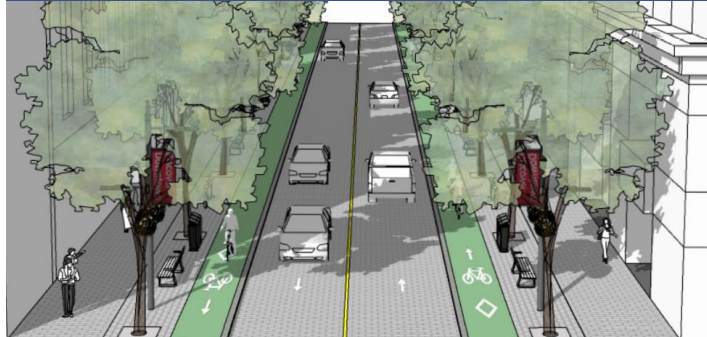


Segment B: LRT Underground
(4 lanes, existing bike lanes)



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Segment C: LRT Underground
(2 lanes, cycle tracks)



Note: All renderings are conceptual and subject to change.

Next Steps

- Commence Transit Project Assessment Process (TPAP) for the tunnel alignment.
- Receive approval from the Ministry of Environment, Conservation & Parks.
- Forward Project Documents to Metrolinx.
- Continue to advocate to fund the project.

