Transit Advisory Committee

October 25, 2021



Alternate formats available upon request. To request, email accessibility@brampton.ca



Agenda

01 COVID-19 Update

02 Electrification Update

03 Third Facility

04 Service Recovery Plan

05 LRT Extension Study

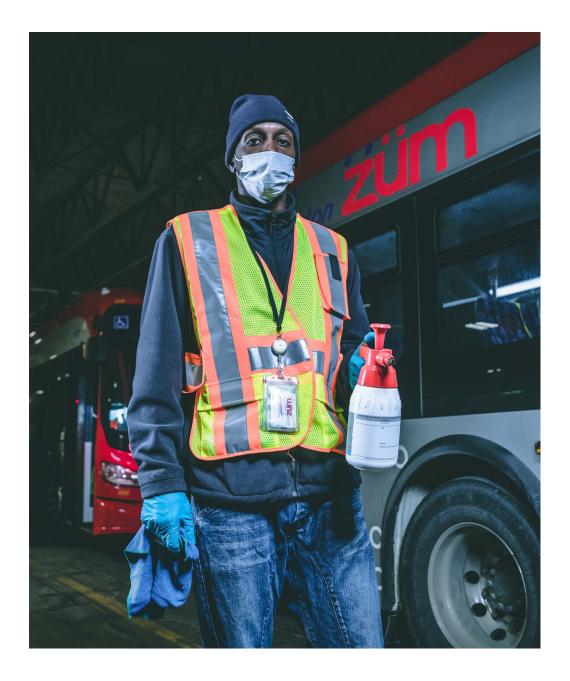
Queen Street- Highway 7

106 Bus Rapid Transit & Downtown Brampton Transit Hub









COVID-19 Update

Ridership

Month to date (September): 67% of the same month in 2019, 33% increase over same month in 2020.

Year to Date (Jan 1 – Sept 30): 56% of the same period in 2019, 94% of same period in 2020.

Note: Ceased Fare collection on March 21, - July 1, 2020

Safe Restart Agreement

 Brampton's allocation of funding under phase 3 of the Safe Restart Agreement is approx. \$23.5M. Electrification Update

July 2021

- City of Brampton and the Canada Infrastructure Bank (CIB) announced an agreement in principle, wherein the CIB would commit up to \$400 million to support Brampton Transit's purchase of up to 450 zero-emission buses (ZEBs) by 2027.

October 2021

Recognized with Environmental
 Sustainability award from Canadian Urban
 Transit Association for Brampton's electric bus trial.



Electrification Update cont'd...

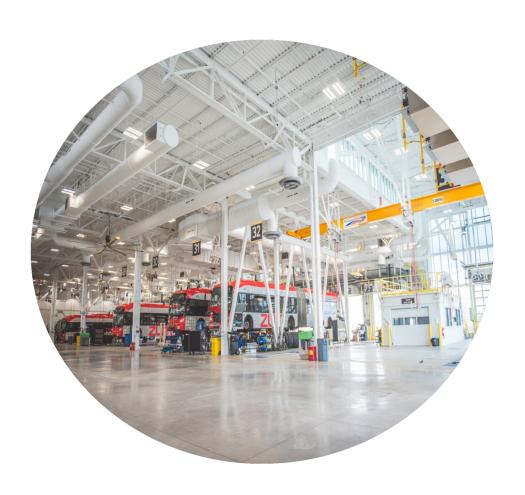
Transit Network Fleet Electrification Feasibility Analysis

- Where (which routes)
- What (zero emission bus "ZEB" technology):
 - Battery Electric Buses (BEB) and/or Hydrogen Fuel Cell Electric Buses (FCEB)
- Very detailed assessment: route by route / block by block
- Triple bottom line assessment by route (Economic, Environmental, Social)

ZEB Implementation Strategy

- When (fleet year-by-year)
- How (funding/procurement plan)
- Financial analysis (ZEB financing, deep costing, budget forecasting)
- Facilities engineering and energy services options





Third Transit Facility

Update

- Final Environmental Assessment Approval
- Execute Transfer payment Agreements
- Issued RFP for the design/build of Phase 1 to the pre-qualified proponents.

Service Recovery Plan

Deferral of 2021 Service Plan

Operating >85% of pre-COVID service

levels

Service Resumption Priority List

On-Demand Service Trial



LRT Extension Study



Short List of Options

- First virtual open house in Summer 2020
- Evaluated short list options (five surface and two underground) through the Metrolinx PDBC
- Results presented at the second virtual open house

Note: The loop options presented in the previous open house were not advanced to the short list for further assessment due to physical constraints (i.e. issues accommodating longer LRVs / impacts to property).



Stakeholder Engagement













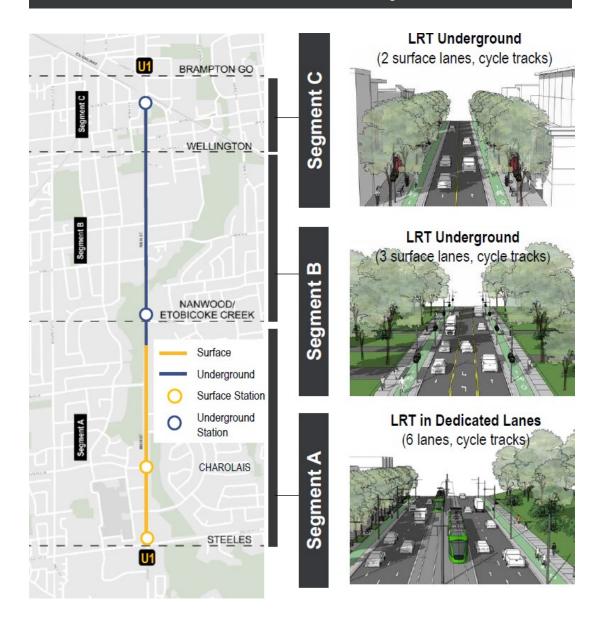
Key Messages from Virtual Open House #2:

- Ability to extend the LRT northward in the future.
- Revitalized Downtown with a vibrant pedestrian realm and streetscape.
- Maintaining the character and opportunities for reimaging Downtown Brampton.
- Maintenance of the mature tree canopy on Main Street and less disruption to surface conditions.
- Securing funding from Province.
- 54% of respondents showed a preference for Underground option U1, 46 % showed a preference for Surface option S3.

Preferred Surface Option

LRT in Mixed Traffic (2 lanes, cycle tracks) BRAMPTON GO Segment QUEEN WELLINGTON **LRT in Dedicated Lanes** (4 lanes, cycling in mixed traffic) Segment NANWOOD/ ETOBICOKE CREEK Surface Station **LRT in Dedicated Lanes** (6 lanes, cycle tracks) STEELES

Preferred Tunnel Option



All boulevard configurations shown are subject to change.

Comparison of how each option performs relative to the rest.

PDBC SUMMARY

PDBC SUMMARY		Worst	Comparable Best
		Option S3	Option U1 (via Main St)
Strategic Case	Transit Travel Time	9 minutes from Steeles Ave to Church St	7 minutes from Steeles Ave to Church St
	Auto Travel Time	7 minutes from Steeles Ave to Church St	6 minutes from Steeles Ave to Church St
	Cycling Conditions	Discontinuous Cycling Network along Main Street Cycle tracks in Segments A and C and cycling in mixed traffic in Segment B	Continuous Cycling Network along Main Street Cycle tracks in all Segments
	Pedestrian Conditions	Enhanced Streetscape Features in Segments A and C, including: widened sidewalks and furnishing zones.	Enhanced Streetscape Features in Segments A,B and C, including: widened sidewalks and furnishing zones.
	Civic Events	Limits Opportunity to Close Downtown Streets for Civic Events	Provides Opportunity to Close Downtown Streets for Civic Events
	Cultural & Natural Heritage impacts	Greater Impacts	Lower Impacts
Economic Case	Value for Money	Higher	Lower
Financial Case \$	Total Costs	Lower	Higher
Deliverability and Operations Case	Access Impacts	73 driveways converted to right-in, right-out access Potential for impact to EMS operations	9 driveways converted to right-in, right-out access Minimal impact to EMS operations
	Utility Conflicts	24 utility conflicts to be relocated	Minor utility conflicts to be relocated
	Property Requirements	Up to 5,100 m ² of property required	Up to 2,700 m ² of property required

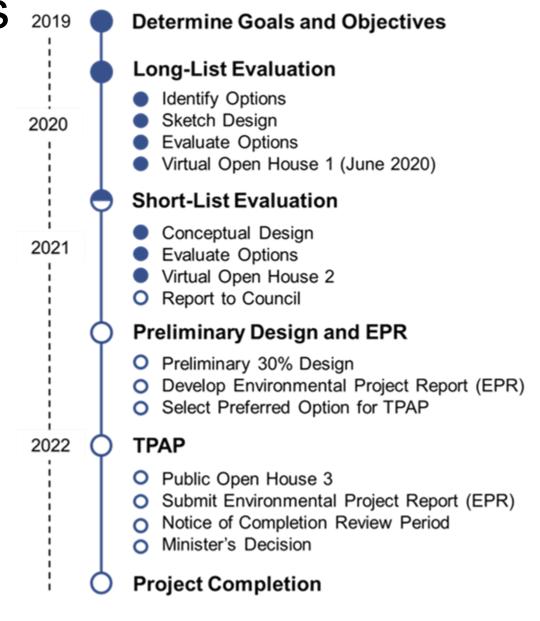
Benefits of Moving Both Preferred Options Forward

- Advanced design will help refine PDBC
- Potential Issues will be explored further
- Further Consultation
- Refine Cost Estimates

Preferred Surface Option Preferred Tunnel Option LRT Underground **LRT in Mixed Traffic** (2 surface lanes, cycle tracks) (2 lanes, cycle tracks) Segment LRT in Dedicated Lanes LRT Underground (4 lanes, cycling in mixed traffic) (3 surface lanes, cycle tracks) Segment LRT in Dedicated Lanes **LRT in Dedicated Lanes** (6 lanes, cycle tracks) (6 lanes, cycle tracks)

Revised Study Process

- Move both preferred options forward to the 30% Preliminary Design & Draft EPR Phase of the LRT Extension Study.
- The relocation of the LRT stop from the south side to the north side of the Steeles and Hurontario intersection, be incorporated into future design work for the LRT Extension Study.



Hurontario Light Rail Transit (LRT)



Background

The Hurontario LRT will bring 18 kilometres of fast, reliable, rapid transit between the Brampton Gateway Terminal and the Port Credit GO Station in Mississauga.









Key Brampton Features

- Three LRT stops, including Ray Lawson, County Court and Brampton Gateway Terminal.
- The Operations, Maintenance and Storage Facility will be located within Brampton, on Kennedy Rd. south of Highway 407 ETR.

Current Status

- The design is in progress at various stages and some early works construction activities, such as utility relocations are in progress within the City.
- A tentative completion and commissioning of the system by late fall of 2024.

Queen Street- Highway 7 Bus Rapid Transit

Metrolinx, is leading the project for advancing rapid transit along the Queen Street-Highway 7 corridor with support from the City of Brampton, Peel Region, and York Region.

The following two scenarios are identified in the Initial Business Case as having the greatest transit benefits to be considered in the Preliminary Design Business Case:

- Centre-Median BRT with Lane Conversion
- BRT with Lane Addition

Next steps include developing the scope of work for the Preliminary Design Business Case.





Downtown Brampton Transit Hub

- A new transit hub will add capacity and quality to the transit system, enhance inter modal connectivity, and support active transportation.
- In conjunction with the potential future LRT terminal, the Transit Hub will support downtown revitalization, economic growth and development, and high quality public realm, and enable transit oriented communities.
- The project is in the planning phase with the feasibility study ongoing to identify preferred site from potential sites around the GO Transit station.

