

Yonge North Subway Extension

York Region Special Council Meeting - Project Update



February 3, 2022





Subways are Happening

Eglinton Crosstown West Extension

7 stops, 9.2 km

Recent milestones

- Excavation of tunnel launch site and arrival of TBMs

Upcoming milestones

- Identifying teams to build the tunnel and elevated section
- Tunnelling to start this spring

Ontario Line

15 stops, 15.6 km

Recent milestones

- Last of five early works EA reports finalized

Upcoming milestones

- Early works to begin in shared rail corridor
- Execution for two major contracts; RFQ for last major contract to be issued

Scarborough Subway Extension

3 stops, 7.8 km

Recent milestones

- Excavation of tunnel launch site and arrival of TBMs

Upcoming milestones

- Procurement for stations, rail and systems contract will wrap this year
- Tunnelling to start later this year

Scarborough Subway Extension Tunnel Launch Site

A Much-Needed Subway Extension

- 1994 : York Region identifies the extension in Official Plan
- 2009 : York Region and City of Toronto complete first Environmental Project Report for the extension from Finch Station to Richmond Hill Centre
- 2010/2011: Cities of Markham, Richmond Hill and Vaughan adopt secondary plans for intensification that requires the extension to support planned growth
- 2014: York Region and City of Toronto complete addendum to the 2009 Environmental Project Report to include a train storage facility
- 2018: York Region and City of Toronto, supported by Metrolinx, initiate preliminary design and engineering
- 2021: Metrolinx releases initial business case for the extension and adjustments to the route in response to community concerns
- 2022: Metrolinx releases Environmental Project Report Addendum Report assessing changes since the completion of the 2009 and 2014 studies



Identifying the Best Transit Project

Developing an Initial Business Case allowed consideration of:

- alignment options
- station locations
- bus terminal alternatives
- tunnel configurations
- train storage options

1 Define Strategic Outcomes

Identifies problem statement and defines benefits that the project needs to deliver.

2 Feasibility and Options Analysis

Evaluates options and determines a preferred option. Typical point at which funding for planning and preliminary design is secured.

Initial Business Case

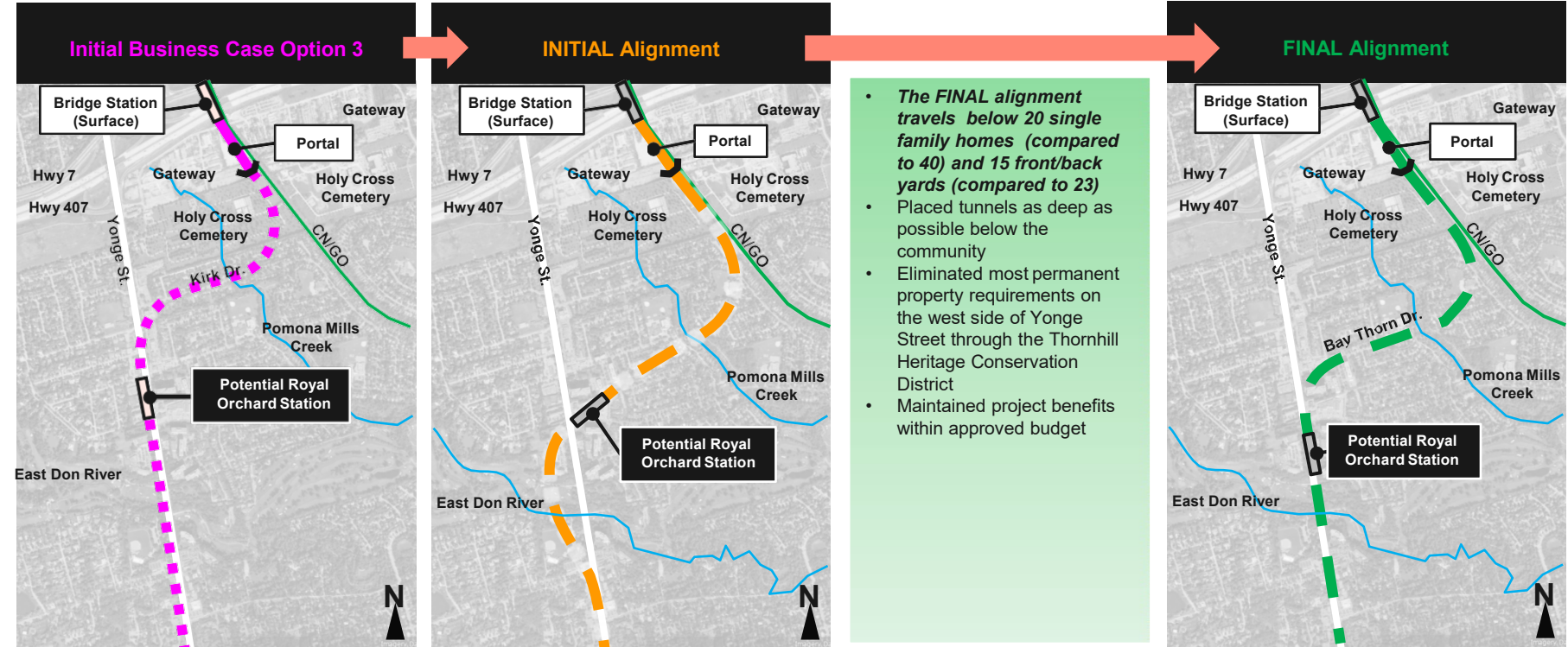
- The Initial Business Case compares investment options and selects a preferred option for further refinement and design.
- This Business Case is typically used to secure funding from the Province for planning and preliminary design.

All Options Considered

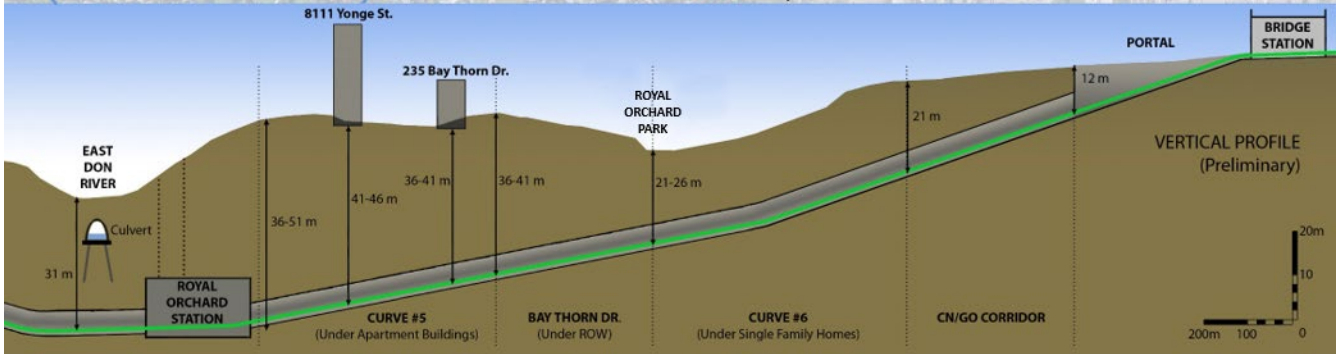
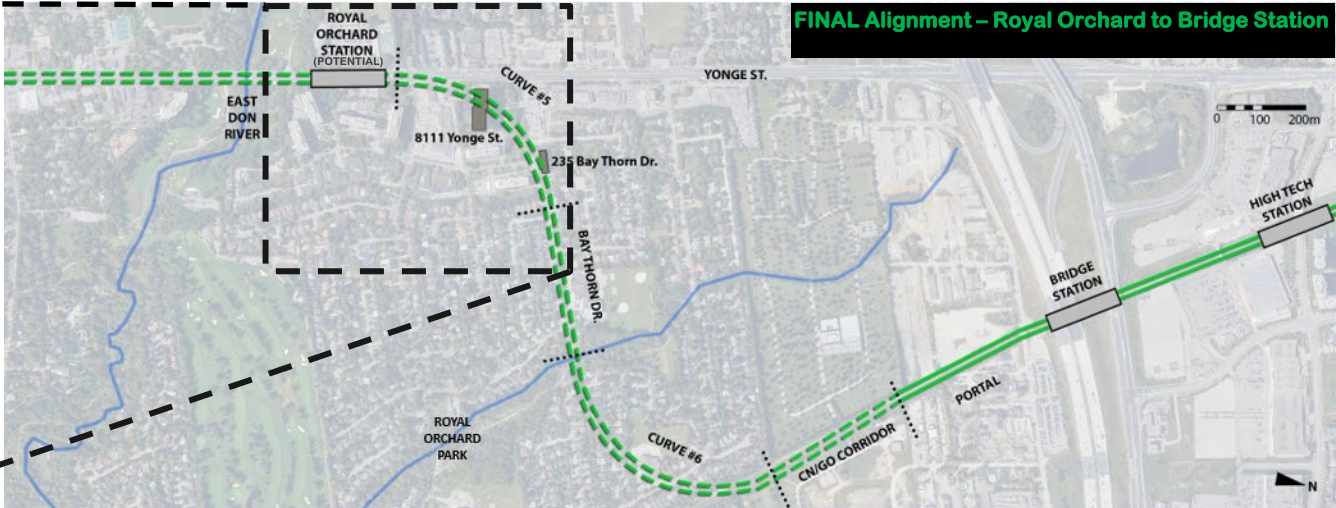
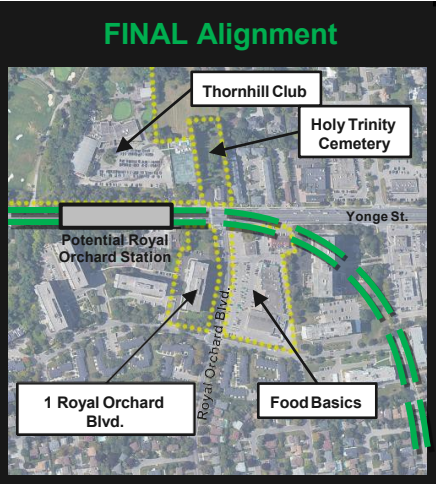
- Over ten routes investigated as part of project planning
 - Multiple Station locations studied to best connect transit and service the Richmond Hill Centre/Langstaff Gateway Urban Growth Centre
- 1 Option 1 (light blue) reflects the 2009 alignment - funding accommodates 3 total stations
 - 2 Option 2 (dark blue) improves station placement in Richmond Hill Centre/Langstaff Gateway - funding accommodates 3 total stations
 - 3 Option 3 (magenta) aligns subway with existing rail corridor and brings the subway to grade at Bridge Station - funding accommodates 4 total stations



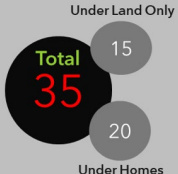
Reducing Impacts is Part of the Process



Yonge North Subway Extension










Single Family Residential Properties

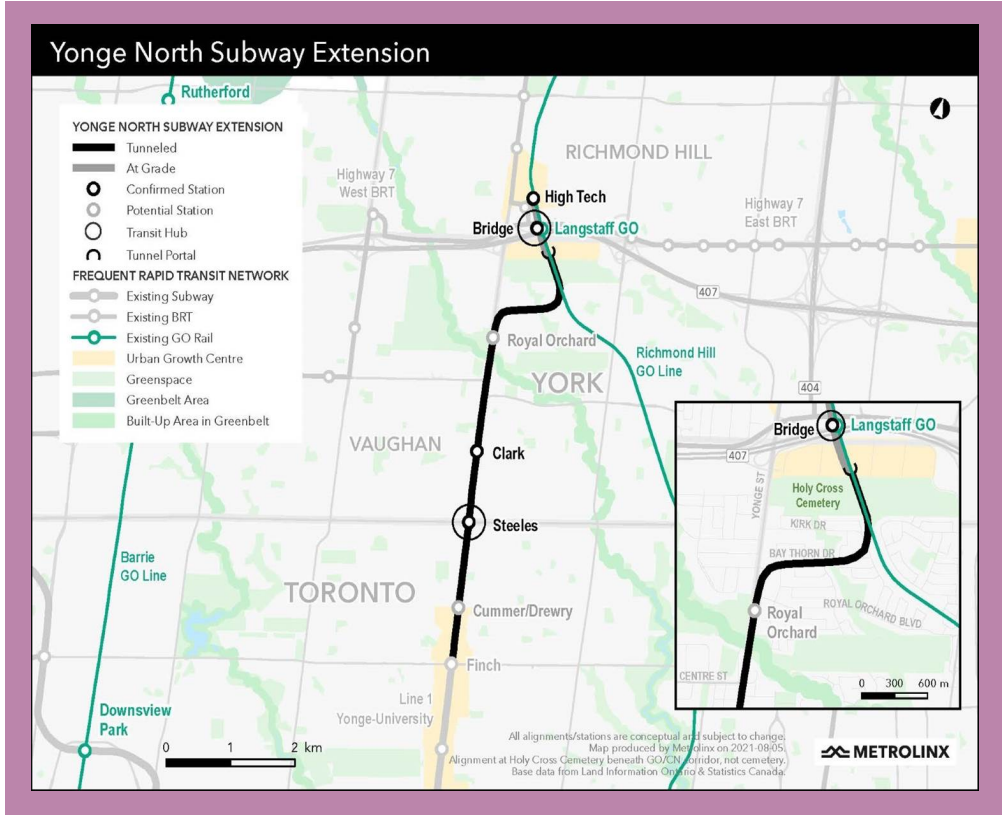


Yonge North Subway Extension

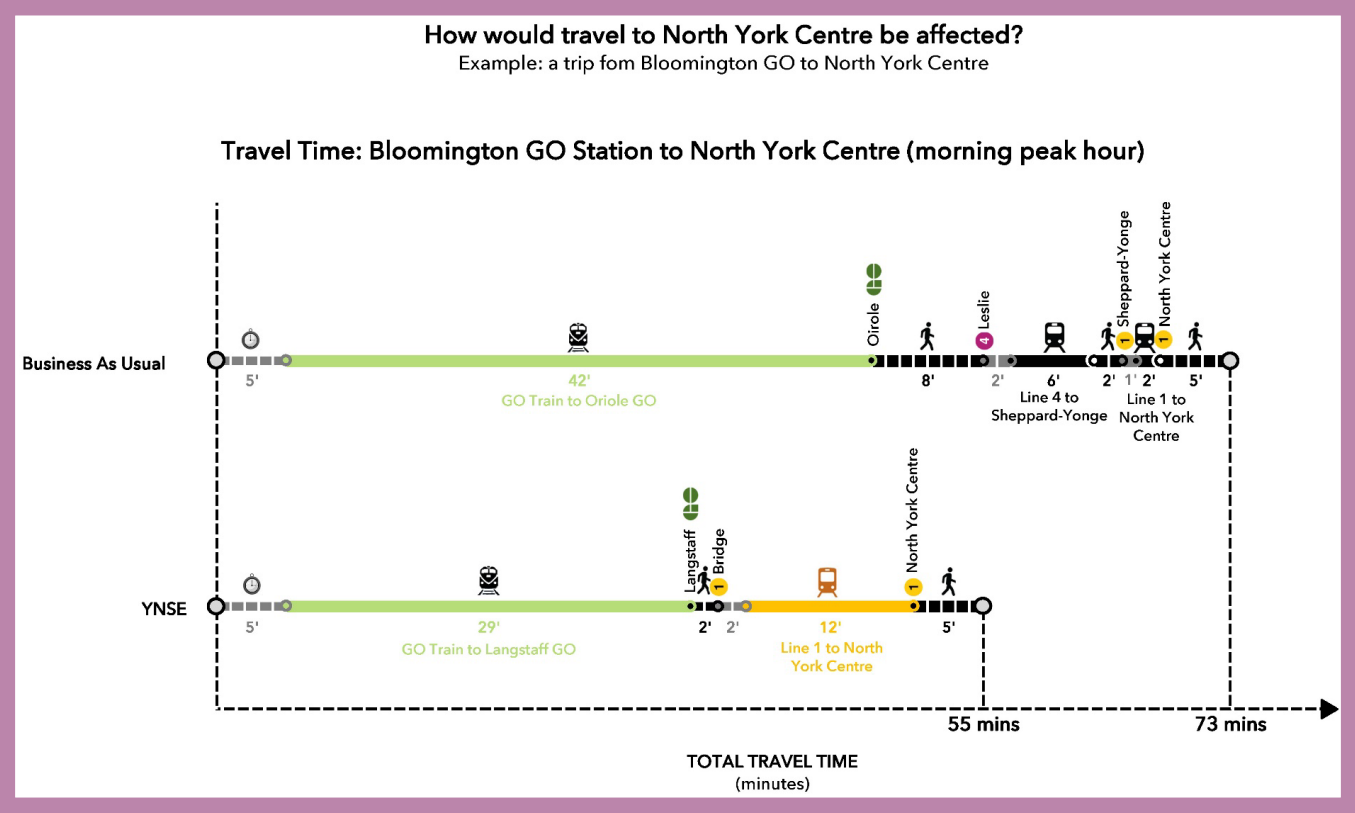
By the Numbers

-  ~8-km route
-  4* new stations
-  94,100 daily riders
-  Up to 22 minutes saved on a trip from York Region to downtown Toronto
-  4,800 tonnes in yearly greenhouse gas emission reductions
-  26,000 more people with in 10-minute walk to transit
-  7,700 fewer km traveled by cars during morning rush hour

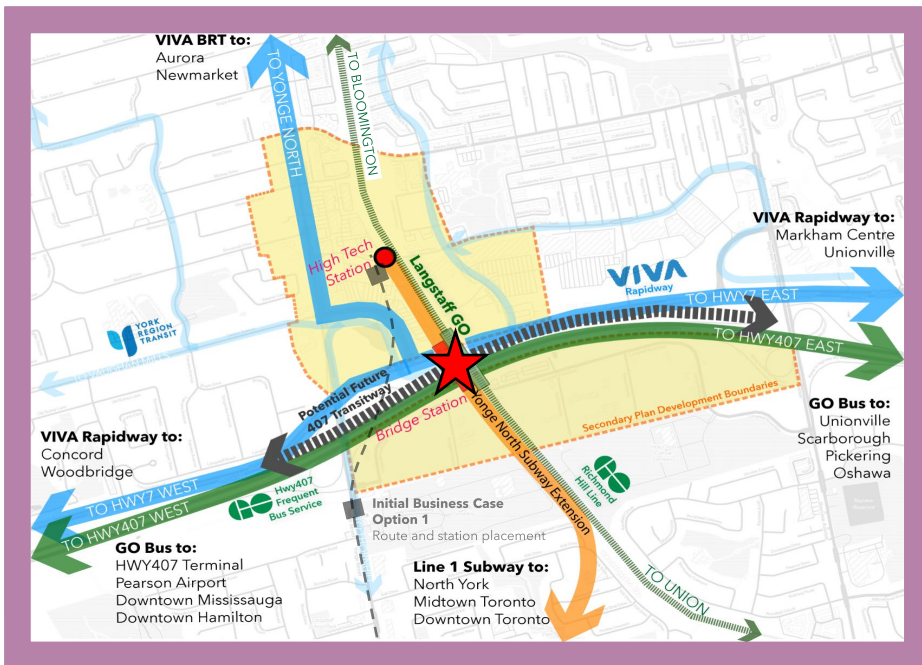
• We're continuing to explore opportunities with our project partners that could support additional stations.



Time Savings for all Travellers

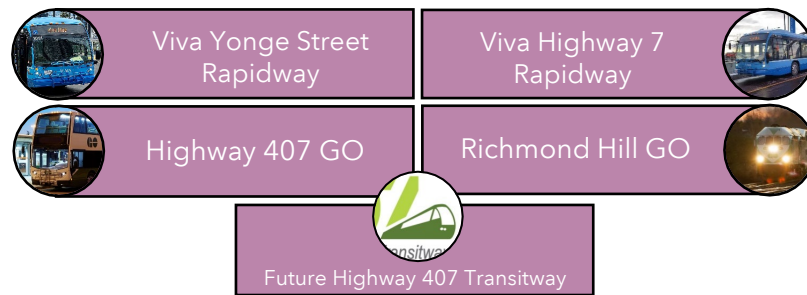


A Launchpad to Explore the Region



A new transit hub at Bridge Station will open up new travel possibilities in York Region and beyond.

- Brings **convenient transit access** to the heart of the Richmond Hill Centre and Langstaff Gateway development areas
- Places **stations closer to where people will live and work** making walking and cycling to the stations a viable option
- Offers **fast and convenient transfers** to as many as **five** existing and future regional transit lines:



Noise and Vibration Effects Will be Mitigated

We will work with communities to ensure a comprehensive array of solutions are in place to address noise or vibration concerns. These solutions can include, but are not limited, to:



Resiliently supported rail ties

An elastic pad under the rail ties that prevents vibration caused by coming into direct contact with the crushed rock that forms the track bed



Rubber rail dampers

Discs that tend to look a lot like oversized hockey pucks attach to the rails and help soak up the vibration energy to reduce the sound of passing trains



Ballast mats

A continuous layer of material that reduces the vibration transmitted into the ground as trains pass over



Noise walls

These walls can be designed with a combination of solid and transparent panels, and have been installed across many parts of the Metrolinx rail network



High-grade rail fasteners

These fasteners keep all the track parts tightly together and compress to absorb vibration



Floating concrete slabs

The rails would be attached to large concrete slabs that are cushioned below by thick rubber pads that soak up vibrations.

Noise and Vibration Studies Complete

Study results indicate that noise and vibration will be at or lower than applicable thresholds at all locations near the project.

For example, in the Royal Orchard community with solutions such as floating slab track in place:

- ground-borne noise levels are predicted to be no higher than the sound of background noise in a broadcast studio;
- ground-borne vibration levels are predicted to be below the threshold of what the average person can feel.



Examples
of Floating
Slab Track

Environmental Project Report Addendum Review

February 10
Notice of EPR
Addendum

March 14
Public Review Closes

April 15
Notice of Updated
EPR Addendum

Up to 35 days
MECP Minister
Issues Notice



Public Review of EPR Addendum (30 days) and updates to the Addendum
Total up to 65 Days

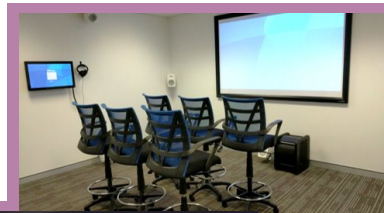
MECP Minister's Review of Updated EPR Addendum
Up to 35 Days

- Public review on YNSE Metrolinx Engage
- Virtual open houses will be hosted through February and March
- Public can also email questions to YongeSubwayExt@metrolinx.com

**All dates are subject to change*

Ongoing Public Engagement and Stakeholder Outreach

- 30,000 homes received project postcard
- Royal Orchard Community Liaison Committee established with on the ground community presence
- 7 virtual open house meetings with 2633 attendees and 1577 questions answered
- 1500 notification flyers distributed, 23 stakeholder briefings, 36 elected official briefings, 15 eNews, biweekly meetings with Communications Working Group (municipal staff), community walks and canvassing.
- 7 Council presentations
- Open letter from CEO Phil Verster to the Royal Orchard community
- Community Office for project staff to be in the community and available to share information and answer questions
- Noise and Vibration Mitigation Experiential Program with local subway tours, scale model demonstration of train and track vibration reduction, sound lab experience of existing and projected sound levels when the subway is in operation



Community Benefits/Supports in Every Subway Project

Community Benefits Program - Ontario Line examples

Employment Opportunities

Description: Promoting apprenticeship training and workforce development opportunities to local communities.

Local Business Supports

Description: Building and fostering relationships with local businesses to minimize and alleviate business disruptions as a result of construction impacts.

Public Realm Improvements

Description: Where construction as a result of the project creates a temporary disruption, we find ways to improve and leave the surroundings in an improved state.

Supporting Community Improvements

Description: Support municipalities and communities to maximize benefits possible from new transit investment/infrastructure, outside of public realm improvements.



Proposed Future Community Parkette

Community Support Program Eglinton Crosstown LRT

- As of December 2021, included:
- 455 placements, including professional, administrative, and technical hires and apprentices and journey persons.
 - Over \$8 million spent in support of local business and social procurement.



Project Timeline

