



GO Expansion Program

This document was prepared by Metrolinx for inclusion in this report.

GO Expansion is the largest transit infrastructure program in Canadian history. It will ensure that the current transportation network meets the needs of our growing region and unlocks the region's potential, realizing significant benefits to transit users, drivers, and the region as a whole.

The GTHA is one of the fastest growing city-regions in North America and is a national centre for business, culture, and education. By 2041:

- Regional population is expected to increase by 42% to more than 10 million people;
- Total regional employment is estimated to grow by 41% to 4.8 million;
- The GO Service Area is projected to reach 12.4 million from the current 8.8 million;
- Toronto will remain the largest employment centre in the region with over 40% of all jobs; and
- Regional travel demand is forecast to increase by 50%.

The existing infrastructure will not be able to accommodate this growth, as much of the network is already congested today:

- Today congestion can increase travel times for drivers by as much as 120%;
- Congestion could cost the region's economy up to \$15 billion annually in lost productivity by 2031; and
- By 2031, demand for travel will exceed the capacity of highway network and the rapid transit network will similarly be crowded

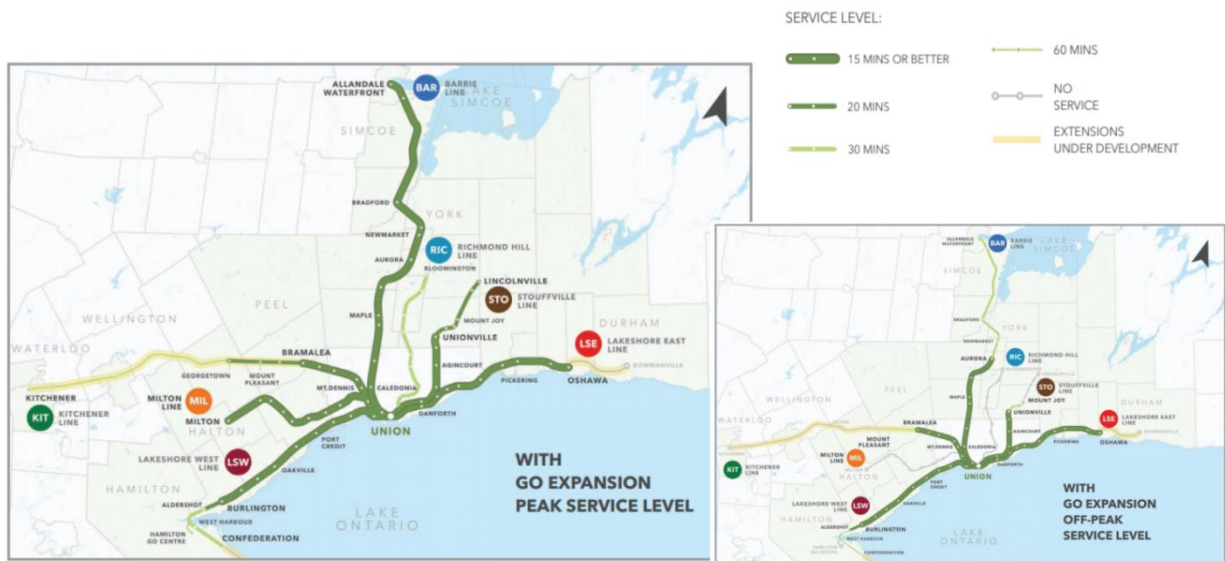
The GO Expansion program presents a significant opportunity to make progress on shared transportation objectives. GO Expansion will provide:

- Faster and more efficient trains - over 680 km of electrified track with new trains that are up to 29% faster and up to 50% cheaper to operate
- Two-way, all-day service
- A train every 15 minutes, or better on core lines
- More accessible stations - level boarding at 42 stations, which will allow

customers to board and alight faster and reduce trip times by 2-5 minutes

- An expanded and improved Union Station to accommodate demand beyond 2055

GO EXPANSION PROGRAM: MAP



Packages of Work:

The GO Expansion Program can be grouped in three main “packages”. These are Early Works, Off-Corridor and On-Corridor.

1. Early Works

This includes a series of civil works projects, both on-corridor and off-corridor, including station work, grade separations, etc.

These are works in each of the rail corridors that are required to be completed in advance of broader network infrastructure such as track work, signalling, and electrification. Projects that are currently underway include:

- 10 stations under construction (Bramalea, Bloomington, Weston, Rutherford, Agincourt, Milliken, Unionville, Cooksville, Kipling, Union Station)
- 29 stations slated for early station improvements (customer service and safety improvements, including PA systems, platform edge tiles, display boards)
- 3 corridors with track work underway (Stouffville double track, Barrie double track, Hamilton Junction track and signals in partnership with CN)
- 3 grade separations (Davenport Diamond, Steeles Avenue, Rutherford Road)

- 4 tunnel/bridge expansions (401/409 Tunnel expansion, Centennial bridge in partnership with CN, John Street in partnership with CN, and Desjardin Canal Bridge in partnership with CN)

2. Off-Corridor

Work off the railway corridor related to stations and the surrounding infrastructure and delivered in many cases with private partners.

3. On-Corridor

There is no precedent for the OnCorr program - it is a highly complex project unlike anything before in Canada. OnCorr is a single innovative, fully-integrated contract to run more and better service. The winning team will design, build, operate and maintain the new infrastructure and trains for 25 years, a massive, multibillion-dollar undertaking.

The successful proponent team will be responsible for operating trains to a world-class standard and selecting and delivering the right infrastructure to unlock the benefits of GO Expansion. The contract is in a multi-year procurement process, and currently teams are completing the bids that will close in Spring 2021. Construction will get underway in 2022.

To assess the impacts of this project, it has been broken up into the following five GO Expansion elements, undertaking a Transit Project Assessment Process (TPAP) or TPAP addendum regulated by the Province of Ontario. These five include: three (3) TPAPs - [New Track and Facilities TPAP](#), [Scarborough Junction Grade Separation TPAP](#), [Stouffville Rail Corridor Grade Separations TPAP](#), and two (2) addenda - [Network-Wide Structures Project](#) (an Addendum to the Barrie Rail Corridor Expansion TPAP 2017), and [an Addendum to the GO Rail Network Electrification TPAP 2017](#)

Proposed new infrastructure, as part of OnCorr, includes new track and facilities (such as layover facilities, storage yards, etc.) throughout the network and a number of grade separations (places where the rail network is separated from the road network or other rail lines). These new elements represent work that is required to enable two-way all-day GO service.

1. [New Tracks & Facilities Transit Project Assessment Process \(TPAP\)](#)

New Track & Facilities is one component of the GO Expansion Program that will follow a Transit Project Assessment Process (TPAP) (Ontario Regulation 231/08). New infrastructure being proposed as part of the New Track & Facilities TPAP includes:

- four (4) new layover/storage facilities;
- new platforms at existing GO Stations;
- new tracks/switches within existing Metrolinx Rights-of-Way (ROW);

- modifications or upgrades to existing tracks within existing Metrolinx rail ROW;
- bridge expansion/modifications; and
- electrification of a portion of the Richmond Hill GO Rail Corridor up to Pottery Road in the City of Toronto.

2. [Scarborough Junction Grade Separations TPAP](#)

The Scarborough Junction Grade Separation is one component of the GO Expansion Program that will follow a Transit Project Assessment Process (TPAP) (Ontario Regulation 231/08).

The Scarborough Junction Grade Separation Project will facilitate the GO Expansion Program and accommodate the expansion of the service on the Stouffville Rail Corridor through grade separations and related infrastructure.

Reducing the number of road and rail at-grade crossings is essential to support transit expansion and will provide community benefits.

Infrastructure being proposed as part of this Project includes:

- Rail / Rail Grade Separation of the Stouffville and Lakeshore East lines;
- Midland Layover;
- Corvette Park - Multi-use Crossing (Bridge or Tunnel);
- Danforth Road - Rail Tunnel;
- St. Clair Avenue East - Bridge Expansion; and
- modification or relocation of Scarborough GO Station Building.

3. [Stouffville Rail Corridor Grade Separations TPAP](#)

The purpose of the Stouffville Rail Corridor Grade Separations is to accommodate the expansion of the Stouffville Rail Corridor through grade separations or road closure at seven at-grade road-rail crossings. These improvements will reduce traffic conflicts. The Project will facilitate the GO Expansion Program, including the construction of the previously approved new track. To support GO Expansion along the Stouffville Rail Corridor, the following at-grade crossings will be altered in the City of Toronto:

- Passmore Avenue, Road Under Rail Grade Separation
- McNicoll Avenue, Road Under Rail Grade Separation
- Huntingwood Drive, Road Under Rail Grade Separation
- Havendale Road, Road Closure with Multi-use Crossing
- Progress Avenue, Road Over Rail Grade Separation

4. [Network-Wide Structures Project](#)

Through the Network-Wide Structures Project, a number of grade separations and crossing improvements have been proposed along various rail corridors. These projects will address the at-grade crossings, accommodate rail line expansion including construction of new track, and assess proposed options for road-rail grade separation at these locations.

5. [GO Rail Network Electrification](#)

The 2017 GO Rail Network Electrification Transit Project Assessment Process (TPAP) identified infrastructure required to convert Metrolinx-owned rail corridors from diesel to electric propulsion. Since then, additional electrification infrastructure requirements for new/upgraded tracks and layover facilities (which are being studied as part of a separate Metrolinx study called “New Track & Facilities TPAP”) have been identified at various locations across the network to achieve increased service levels.

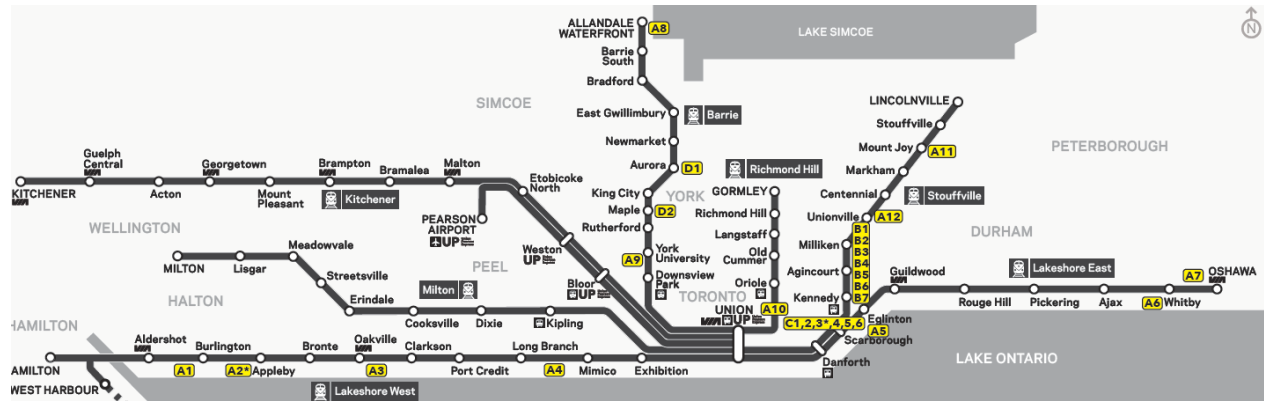
Metrolinx has determined that the impacts of the additional infrastructure represents a Significant Change to what was presented in 2017 and a TPAP Addendum is being undertaken (in accordance with Section 15(1) of O. Reg. 231/08).

An Environmental Project Report (EPR) Addendum is currently being prepared to address effects associated with additional Overhead Contact System (OCS) infrastructure that falls outside of the previously assessed 7 metre OCS Impact/Vegetation Removal Zone identified in the 2017 EPR.

Electrification of the lower Richmond Hill corridor is being undertaken as part of the New Track and Facilities TPAP project, while electrification of the Kitchener Guelph Subdivision is being undertaken as part of the Kitchener GO Expansion project.

More project updates are coming in Round 3 public consultation in Fall 2020.

Map of Proposed Infrastructure: GO Expansion



New Track and Facilities TPAP:

- A1** New Beach Layover by Burlington GO
- A2** New Walkers Line Layover by Appleby GO*
- A3** Track Upgrades by Oakville GO
- A4** Track Upgrade by Long Branch GO
- A5** New Turnback Track by Eglinton GO
- A6** Track Upgrades by Whitby GO
- A7** New Third Track, Thickson Rd Bridge Expansion, and New Track and Island Platform at Oshawa GO
- A8** New Track by Allandale GO
- A9** New Track by York University GO
- A10** Track Upgrades, Electrification of Rail Corridor from Union Station to Pottery Rd, and New Don Valley Layover
- A11** New Passing Track, New Side Platform at Mount Joy GO
- A12** New Track, New Island Platform, and New Unionville Equipment Storage Yard by Unionville GO

Stouffville Rail Corridor Grade Separations TPAP:

- B1** Denison St, Road Underpass
- B2** Kennedy Rd, Road Underpass
- B3** Passmore Ave, Road Underpass
- B4** McNicoll Ave, Road Underpass
- B5** Huntingwood Dr, Road Underpass
- B6** Havendale Rd, Road Closure with Multi-use Crossing
- B7** Progress Ave, Road Overpass



Scarborough Junction Grade Separation TPAP:

- C1** Scarborough GO Modification / Relocation
- C2** Rail Bridge Widening at St. Clair Ave E
- C3** Train Storage Layover (Midland Layover)*
- C4** Stouffville Line Rail-Rail Grade Separation
- C5** Depressed Rail Under Danforth Rd
- C6** Corvette Park Multi-Use Crossing

Network Wide Structures Project:

- D1** Wellington St, Road Underpass
- D2** McNaughton Rd, Road Overpass

System-Wide Projects:

-  Noise and Vibration Assessment Update
-  Air Quality Assessment Update

* New infrastructure introduced in Round 2

Transit Project Assessment Process (TPAP)

The population of the Greater Golden Horseshoe (GGH) is increasing, and with it, traffic congestion. Metrolinx is committed to improving the GO Rail Network to bring 15-minute, two-way electrified service to core parts of the rail network through the GO Expansion Program. As part of GO Expansion, Metrolinx is already starting to transform the existing GO Rail Network from a commuter service to a whole new rapid transit experience. To this end, Metrolinx is proposing new infrastructure that involves carrying out several Environmental Assessments under the Transit Project Assessment Process (TPAP) (Ontario Regulation 231/08).

All new transit infrastructure as part of GO Expansion is being assessed through the Provincial Transit Project Assessment Process, either through new Environmental Assessments or through Addenda to previously completed and approved Environmental Assessments.

Metrolinx continues to work with local communities to understand the effects of the infrastructure needed to support GO Expansion and how best to mitigate these impacts. Public consultations are ongoing and input will be captured in the Environmental Project Report and will be considered as part of the respective TPAPs and Addenda under Ontario Regulation 231/08 - Transit Projects and Metrolinx Undertakings.

Metrolinx is also completing system-wide studies to assess noise, vibration and air quality, as well as an update to the vegetation removal and compensation program.

Public Engagement & Consultation

In February 2020, Metrolinx hosted a variety of public meetings across the network to share information on the GO Expansion Program including: ancillary components, updates on noise & vibration and air quality assessments, updates on vegetation management, GO Expansion procurement process, TPAP Addendum work, and project timelines.

Of the ten sessions hosted by Metrolinx, four were hosted in Toronto, at locations including the Scarborough Civic Centre, Evergreen Brick Works, George Brown College (Corktown), and the Metropolitan Centre in Agincourt.

Round 2 of consultation was held online from August 18 to September 1, 2020. In the Fall of 2020, Metrolinx will release the plans for the third and final round of consultation.

Metrolinx continues to identify community engagement opportunities to provide targeted information about local projects and operate community offices, which are positioned in key areas along the corridor and work with residents, businesses and stakeholders to identify and respond to issues and find ways to mitigate against construction impacts.

Procurement Approach

Metrolinx is using a new project delivery model to implement components of GO Expansion, known as the Public- Private Partnership model. This new model transfers design and delivery responsibilities to private sector partners (referred to as "Project Co"). While a private partner will deliver GO Rail under the Expansion program, Metrolinx will remain the owner of the system and will continue to be publicly accountable for its performance, revenue risks, customer service experience, coordination with other public agencies, and decisions on service planning and fares.

Coordination with the City of Toronto

Metrolinx is committed to working in partnership with the City of Toronto to ensure GO Expansion is constructed in a manner that reflects the input of the City and meets shared objectives and that Toronto plays a critical role in the delivery of the GO Expansion program.

Engagement with the City of Toronto has followed the successful framework that has been established for previous Metrolinx LRT projects within the City of Toronto. Staff work closely together to align environmental assessments and other related engagement opportunities. The City continues to have dedicated staff for design coordination and review of Metrolinx submissions.

Councillor Engagement Process

Through its work on other major transit projects, Metrolinx has developed and implemented a comprehensive communications program utilizing a variety of meeting techniques to keep City Councillors and their staff apprised of plans and developments related to the Program. Metrolinx facilitates regular monthly Councillor and stakeholder meetings (including local Members of Provincial Parliament (MPPs), local Councillors, Metrolinx staff, project partners and City staff) across the project corridors. Key stakeholders are updated and consulted frequently, often several times each week.

The Metrolinx consultation strategy includes one-on-one briefings with Councillors to address specific milestone events and emerging issues, community outreach and Business Improvement Area (BIA) meetings, plus Construction Liaison Committee (CLC) meetings (which include BIAs and local businesses), which are scheduled throughout the long-term construction period to provide information and address current concerns and issues should they arise. Broad construction traffic management strategies are shared with the attendees at these meetings by way of presentations made by members of third-party project delivery teams, Metrolinx and City staff.

Specific details of the traffic management plans are discussed with the local Councillors as they are prepared and evolve. Metrolinx, project partners, and City staff will work with local Councillors to address these issues in a timely manner. Specifically, City staff will hold one-on-one briefings with the local Councillors to provide information and advice on concerns related to the project. Briefings will be provided prior to any significant road closure required for project construction work. Further, City staff will liaise with Metrolinx and Project Co. to minimize disruption during construction activities and the City and Metrolinx are coordinating with large capital projects.

Details of the complex staging and discussions of lane closures are the subject of the monthly stakeholder meetings, routinely attended by Councillors and their staff. Similarly, the construction phasing at various station sites is an agenda item during monthly stakeholder meetings, and the subject of direct and frequent email communication between City of Toronto transit teams Transit Infrastructure Projects Unit office and the Metrolinx project team.

In all cases, when a significant change is planned at any of the construction sites, Metrolinx issues public notices in advance of the work, both on their website and delivered door-to-door. Major changes are also widely reported on television and radio and through social media platforms.

Metrolinx staff is regularly available to answer questions from Council when reports include information that is specific to Metrolinx and items under its purview.

In addition, Metrolinx and City staff members are in regular contact with Councillor's offices and their staff to provide project information and local updates in coordination with information that is shared with Members of Provincial Parliament and Members of Parliament. All elected officials, including Councillors, receive project information and communications for residents in advance and are provided an opportunity to provide feedback before they are issued.

Appendix: GO Expansion Projects in the City of Toronto

Project Name	Additional Information
Early Works	
Highway 401 / 409 Tunnel Expansion	Work includes construction of two tunnels under Highway 401/409 to accommodate two additional tracks, future signaling and communications infrastructure and replacing footings of retaining walls that support the ramp from eastbound Highway 409 to eastbound Highway 401.
Stouffville Stations and Steeles Grade Separation	Stouffville Stations and Grade Separation contract for Agincourt Station, Milliken Station and the Steeles Grade Separation.
Lakeshore West (Station Upgrades)	The project scope includes a variety of bundled On Corridor and Off Corridor projects to enable future GO Expansion service and facilitate the OnCorr electrification and signalling work including two station reconstructions at Long Branch GO Station and Mimico GO Station.
Lakeshore East - Central Corridor Expansion	Morningside and Scarborough Road Grade Separations and additional grading and drainage.
Lakeshore East - West Corridor Expansion	Expansion of Danforth Ave, Warden Ave and Woodbine Ave bridges.
Davenport Diamond Grade Separation	To help increase capacity on the Barrie Corridor, work includes construction of a rail grade separation, erection of retaining walls, construction of a temporary diversion track to enable construction of a new two-track elevated guideway, modification of an existing at-grade crossing and replacement of Bloor Street West Bridge.
Finch/Kennedy Grade Separation	Grade Separation at Finch and Kennedy.
Oriole Station Relocation	The existing Oriole GO station is proposed to be permanently relocated.
Stouffville Rail Corridor Expansion	The project involves construction of a second track and grading from north of Kennedy Road to Scarborough Junction.
Birchmount Bridge	The project includes reconstruction of the existing Birchmount Road Bridge.

Project Name	Additional Information
Barrie Corridor Expansion	Grading, noise walls, retaining walls, culvert extensions, and utility relocations, on the southern portion of the corridor. Sheppard Avenue Bridge, Downsview GO Station west platform.
Rouge Hill Station Expansion - Lakeshore East	Platform work, parking and station building rehabilitation.
Accessibility and Tunnel Rehabilitation - Eglinton - Lakeshore East	The Eglinton Accessibility Upgrades project scope includes the completion of pedestrian tunnels, new stairs and elevators to the platforms and other features.
Weston Station - Kitchener	The Weston Station scope includes a new GO rail platform with tunnel and associated infrastructure.
Kitchener Track Work	Predominately track work and reconstruction of sections of the West Toronto Rail Path.
Vegetation Removal and Compensation	The GO Rail Expansion Program will require removal of vegetation to account for clearances required for the implementation of electrification of the rail corridors.
Utilities Early Works (Network-Wide, includes Downsview Park)	A review of the existing utilities within the current electrification footprint has identified utility assets that may need to be relocated.
On-Corridor Project	
Galloway, Poplar and Islington (Network-Wide Structures)	These network-wide projects will ensure safety at crossings.
Danforth Road Rail Tunnel (Scarborough Junction)	A new rail tunnel will be constructed that maintain the Danforth Road at-grade.
St. Clair Avenue East Bridge Expansion	The existing St. Clair Avenue East bridge will be expanded to accommodate the additional Stouffville track.
Corvette Ave	At existing at-grade crossing will be closed and a multi-use crossing will be provided for pedestrians and cyclists either over or under the railway corridor.
Rail-Rail Grade Separation (Scarborough Junction)	<p>The new second Stouffville track will drop below grade and cross under the Lakeshore East tracks before meeting with the existing Stouffville track.</p> <p>The Stouffville line will continue within a lowered rail corridor to accommodate the rail tunnel at Danforth Road.</p>

Project Name	Additional Information
Havendale Road	A road closure is required at Havendale Road, a multi-use crossing will be provided for pedestrians and cyclists either over or under the railway corridor.
Progress Ave	A road over rail will be constructed.
Huntingwood Drive	A road under rail will be constructed.
McNicoll Ave	A road under rail will be constructed.
Passmore Ave	A road under rail will be constructed.
USRC OnCorr (USEP Package 3)*	Required fixed infrastructure changes at Union Station to provide faster train speed, greater ridership capacity and increased pedestrian movement capacity.
USRC (Early Works)	
Union Station New Bus Terminal Project	Moving Union Station Bus Terminal to the east side of Bay Street, south of the rail corridor.
USEP Heritage Restoration and Early and Enabling Works Project*	Involves completing early works prior to the enhancement and expansion of Union Station to accommodate more frequent (and higher speed) train service, increased passenger demand levels, and the electrification of the Metrolinx rail network throughout the Greater Toronto and Hamilton Area.

** Project deals with Union Station building itself and as such a separate or supplementary agreement will be required for the activities and works being performed by Metrolinx within Union Station as part of the Program.*