

**To:** Metrolinx Board of Directors

**From:** Matt Clark  
*Chief Capital Officer, Capital Projects Group*

**Date:** February 20, 2020

**Re:** **Capital Projects Group Quarterly Report**

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## **Recommendation**

That this report be received for information.

## **Executive Summary**

The Capital Projects Group (CPG) continues to advance a large program of signature transit expansion projects, including a suite of projects within the GO Expansion program as well as a variety of subway, light rail transit (LRT) and bus projects.

CPG is pleased to report the following accomplishments since the last quarterly update:

- Progress continues on the Eglinton Crosstown LRT, as Caledonia and Mount Dennis stations reached construction milestones allowing for systems and track work to advance.
- The Viva H2 West & East project entered service, enabling faster bus journeys across Vaughan.
- Detailed design for Kipling Bus Terminal was completed in January.
- Metrolinx was granted access to the new Union Station Bus Terminal space to begin fit-up in February.
- Geotechnical drilling for the subway program has advanced, with core samples being taken for multiple projects in order to refine designs.
- The Rail Corridor Maintenance team continued its work to keep the GO rail network in a state of good repair by replacing ties, surfacing track and replacing rail, which will enhance customer experience and safety.

## Program Update

### Financial Highlights

A summary of Metrolinx's major capital project incurred costs is shown in Table 1.

**Table 1: Program Overview: Incurred Costs to December 31, 2019**

	Current Baseline (\$M)	Incurred Cost (\$M)
<b>Light Rail and Bus Projects</b>		
Eglinton Crosstown LRT	\$11,996 <sup>a</sup>	\$6,207
Finch West LRT	\$3,433 <sup>a</sup>	\$916
Hurontario LRT	\$5,632 <sup>a</sup>	\$544
Viva BRT	\$1,882	\$1,773
GO Bus Infrastructure	\$650	\$405
<b>Light Rail and Bus Total<sup>b</sup></b>	<b>\$21,061</b>	<b>\$9,845</b>
<b>GO Expansion Projects</b>		
Early Works	\$10,534	\$4,214
Off Corridor	\$605	\$23
On Corridor	\$15,322	\$989
<b>Core GO Expansion Total</b>	<b>\$26,462</b>	<b>\$5,226</b>
GO-related Transit-Oriented Development	\$0	\$0
GO Extensions	\$1,800	\$37

All figures are reported in year-of expenditure dollars and are not directly comparable with those in other contexts expressed as nominal dollars. These figures reflect overall project budgets rather than the values of each respective project's major contract(s).

<sup>a</sup> Includes long-term P3 financing, lifecycle, operating and maintenance costs over concession term as applicable per each respective Project Agreement.

<sup>b</sup> Totals do not include the Hamilton LRT project, for which \$170 M in costs have been incurred to December 31, 2019.

### Construction Safety Update

Metrolinx has reported a Lost Time Injury Frequency Rate of 0.12 for the rolling 12-month period ending December 2019. This rate is slightly above Metrolinx's target of 0.10, which was adopted over the past year as a measure to drive a culture of safety across its projects.

Actions to continually improve safety performance include site engagement, risk management and governance. Site engagement activities include inspections, observations and audits on CPG construction sites. As part of the construction process, safety is the number one priority and plays a foundational role in how Metrolinx will work towards delivering successful construction projects. Metrolinx will hold itself and its contractors responsible for keeping employees and the public safe.

## Business Update

CPG Program Management provides contract oversight, project management, reporting, document controls and resource management to facilitate the work of the project delivery teams. These services are critical for the successful delivery of a significant capital program.

Since the last quarterly update, CPG Reporting has begun a new work program to enhance the suite of Key Performance Indicators (KPIs) available to project managers and senior leaders. This program will develop new metrics as well as expand and improve upon existing measures to support data-driven performance.

## Major Project Updates

### LIGHT RAIL AND BUS

Since the last quarterly update, key developments required to advance light rail transit (LRT), bus rapid transit (BRT) and regional bus infrastructure projects have been achieved:

- Crosslinx Transit Solutions, the consortium delivering the Eglinton Crosstown LRT project, continues work to construct the 25 stations along the 19-kilometre route from Mount Dennis to Kennedy. Key milestones achieved in February include the Caledonia station box reaching readiness for track work and Mount Dennis Station achieving readiness for systems.
- Following completion of the H2 East phase in December, the VivaNext BRT H2 West & East Vaughan to Richmond Hill project achieved substantial completion in the same month.
- On December 16, the Minister of Transportation announced the Hamilton LRT project would not be moving forward. CPG staff have begun a responsible and orderly wind down of project activities, including closing out contracts and discontinuing in-flight property acquisitions. Metrolinx will provide support as requested to the Hamilton Transportation Task Force announced by the Minister.

## GO EXPANSION

Numerous projects are underway to allow for increased rail service on the GO Transit network. These improvements will bring more residents in reach of transit and provide customers with more and better travel options. Notable developments since the last quarterly update include:

- Detailed design for the Union Station Rail Corridor (USRC) east track enhancement project was completed in February. This project will expand and modify rail infrastructure in the eastern approaches to Union Station to provide additional mainline track capacity and increased track speed capabilities, thereby supporting increased passenger and train volumes.
- Also in the USRC, the Don Yard Upgrade and Expansion project completed construction in December.

GO station improvements and expansions are designed to provide customers with comfortable and safe environments as they begin and end their journeys on the GO Transit network. Improvements to existing stations and construction of new stations will support increased service as the GO network is expanded. The following projects reached significant achievements since the last quarterly update:

- Caledonia station will provide a direct underground interchange between the Eglinton Crosstown LRT and the GO Barrie line, with the latter being upgraded to provide frequent all-day, two-way service connecting Toronto, York Region and Simcoe County. The station complex will also include a new TTC bus loop, a passenger pick-up and drop-off area, and 60 bike parking spaces. As construction continues on the LRT component of the station (see above), the GO component is proceeding through the design phase. The RFQ was released on January 21 and the tender process will continue throughout 2020.
- In December, work progressed on the new Kitchener line GO station at Woodbine with the issuing of the Metrolinx Asset Protection Package (MAPP) Version 2.0 to Woodbine Entertainment Group, the developer that will be delivering the station. MAPPs are used to share Metrolinx's requirements for developers in designing and delivering market-driven strategy station projects. The MAPP outlines Metrolinx's principles, governance, rules of engagement and standards that will apply to a particular project.
- The Cooksville station and parking garage project continues to advance, with lands handed over to the Hurontario LRT project team in December so work can progress on the LRT line.

To create new connections for our customers, two major bus terminals are under construction at existing GO train stations. These projects, along with their associated budgets, are included within the GO Expansion delivery stream. Achievements since the last quarterly update include:

- The final package of detailed design work for the Kipling Bus Terminal was completed by the design-build contractor in January. This transit hub's connections to the Milton line, Bloor-Danforth subway line, and more than 10 bus routes operated by three transit providers, including express access to the airport, will provide for seamless travel across the region.
- Metrolinx gained access to the new Union Station Bus Terminal to allow fit-up to proceed. This new facility will replace and double the capacity of the current terminal.

## **SUBWAYS**

Metrolinx's newest series of capital projects, which will bring improved rapid transit service to Toronto and surrounding communities, is moving forward. Key accomplishments since the last quarterly update include:

- Geotechnical evaluation of underground conditions and surveying of the areas where projects will be built. In December, work began to collect soil and rock samples for further testing. This work will determine the approach for the construction of these projects, and will support the creation of foundation designs and other structural plans.
- Awarding of the Ontario Line Technical Advisor contract on December 16.
- Continued project planning and work on environmental approvals including due diligence and further refinements to design and engineering.

## **RAIL CORRIDOR MAINTENANCE**

The Corridor Maintenance program supports Transit Operations and keeps the GO network rail corridors in a state of good repair by managing track, signals, bridge and communications maintenance projects. The work completed has a positive impact on ride quality, asset resilience and rail on-time performance. Since the last quarterly update:

- More than 2,800 ties were replaced;
- More than 11.3 kilometres of track were surfaced;

- 3.2 kilometres of track were realigned;
- 724 metres of rail were replaced; and
- Slow orders were removed where work had been completed on the Kitchener line, saving two minutes on travel time through the area.

Respectfully submitted,

Matt Clark  
*Chief Capital Officer, Capital Projects Group*