

**To:** Metrolinx Board of Directors

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

**Date:** September 12, 2019

**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 and several light rail transit (LRT) and bus projects. CPG focuses on continuous improvement in the areas of safety, program management, and asset management to ensure it meets our commitment to the public to deliver the benefits of these projects on time, on budget, safely.

CPG is pleased to report the following accomplishments this quarter:

- Contractor Lost Time Injury Frequency Rate (LTIFR) continues to decrease, with the result for June 2019 slightly above the target of 0.1 set for this fiscal year.
- The preferred proponent for the Hurontario LRT was identified and Metrolinx and Infrastructure Ontario have entered into negotiations with them on a project agreement to implement the project.
- Works were completed early at Leslie St. on the Eglinton Crosstown LRT and this busy intersection was reopened 11 days ahead of plan.
- The Stouffville corridor west side noise wall was completed on July 15, 2019.
- In August, construction on the Early Stations Improvements project began at Centennial, Lisgar, and East Gwillimbury GO Stations.
- Concrete tie replacement projects at Exhibition and Newmarket GO Stations were completed on June 30, 2019.
- Infrastructure Ontario and Metrolinx awarded a fixed-price contract for the Davenport Diamond Rail Grade Separation project on July 26, 2019.

## Program Update

### Financial Highlights

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

**Table 1: Program Overview: Incurred Costs to June 30, 2019**

	Current Baseline (\$M)	Incurred Cost (\$M)
<b>Rapid Transit Program</b>		
Eglinton Crosstown LRT	\$12,245 <sup>a</sup>	\$5,630
Finch West LRT	\$3,433 <sup>a</sup>	\$756
Hurontario LRT	\$1,400 <sup>b</sup>	\$348
Hamilton LRT	\$1,000 <sup>c</sup>	\$157
Viva BRT	\$1,755	\$1,689
GO Bus Infrastructure	\$648	\$394
<b>GO Expansion Projects</b>		
Early Works	\$10,523	\$3,728
Off Corridor	\$605	\$21
On Corridor	\$15,334	\$892
<b>Core GO Expansion Total</b>	<b>\$26,462</b>	<b>\$4,641</b>
GO-related Transit-Oriented Development	\$0	\$0
GO Extensions	\$1,800	\$20

All figures are reported in year of expenditure dollars unless otherwise specified; note these figures may not be directly comparable with those in other contexts expressed as nominal dollars.

<sup>a</sup> Includes long-term P3 financing, lifecycle and maintenance costs over concession term.

<sup>b</sup> In active procurement; project's announced capital budget is \$1,400M in nominal 2014 dollars plus escalation. Revised baseline in year of expenditure dollars to be reported upon contract award.

<sup>c</sup> In active procurement; project's announced capital budget is \$1,000M in nominal 2014 dollars plus escalation. Revised baseline in year of expenditure dollars to be reported upon contract award.

### Safety Update

Over the past year, Metrolinx has reduced its construction Lost Time Injury Frequency Rate (LTIFR) target to 0.1 to drive a culture of safety across its projects. In June, Metrolinx's construction contractors reported an LTIFR of 0.13, slightly above target.

Strong LTIFR performance must be matched by adept risk management. Site engagement activities which reduce Lost Time Injuries include inspections, observations, and audits. Contractors demonstrating industry good practices or going beyond the minimum standards prescribed in the *Occupational Health and Safety Act* will be recognized. A target of 106 site engagements per month has been set for this fiscal year.

### Business Update

Program Management services are critical for the successful delivery of a significant capital program. Within CPG, the Program Management department provides

contract oversight, project management, reporting, document controls, and resource management to facilitate the work of the Project Delivery Teams. In the past quarter:

- **Contract Management**, which provides contract administration and vendor management services, as well as payment administration and management, completed transitioning to a project lifecycle management tool designed to increase efficiency and reduce delays.
- **Program Reporting** continues to track progress and measure key performance indicators across all aspects of CPG business. Work continues towards automating project reporting and using consistent system-generated data to provide monthly updates.
- **Project Management Tools, Resources and Services**, which focuses on program controls related to cost, schedule, and risk, conducted a review of how CPG delivers its projects to improve efficiency, achieve increased value for money from procurements and to help successfully deliver projects and programs.

**Asset Management** is another critical component to successful project delivery. Metrolinx owns and manages an asset portfolio valued at approximately \$20 billion, which is used to maintain service to customers. These assets include guideway, fleet, facility, and system assets. Significant work in the quarter included the development of Asset Management Plans for every asset class with the objective of forecasting the State of Good Repair investment for the upcoming 2020-21 fiscal year needed to maintain good service to customers.

## Major Project Updates

### RAPID TRANSIT

Rapid Transit (RT) and Bus Rapid Transit (BRT) projects are ongoing, with total performance reached for one large project. Since the last quarterly update, some key developments required to advance these projects have been achieved:

- The preferred proponent for the Hurontario LRT, Mobilinx, has been selected and Metrolinx and Infrastructure Ontario have entered into final negotiations with them to implement the project. The project team continues to work closely with Infrastructure Ontario to conclude the remaining activities leading up to targeted Financial Close in October.
- Over 41% of the track has now been installed on the Eglinton Crosstown LRT (ECLRT) along with all of the fibre, lighting, overhead catenary system and cabling from Mt. Dennis to Caledonia.
- Also on the ECLRT, the team completed their works early at Leslie St. and reopened this busy intersection 11 days ahead of plan; mining is almost complete for the new Laird Station and the cavern arches have now been

poured; and the frame for the station at Science Centre has been installed along with the escalators.

- Works have commenced on site for the new Maintenance and Service Facility required for the Finch West LRT.
- On August 22, 2019 a section of the VivaNext Bus Rapid Transit Program was handed over to York region for operations. This section was a ramp realignment at Highway 400 which divides the H2-West and H2 East Segments.
- The second version of the Hamilton LRT Project Agreement was issued to proponents on August 14, 2019.
- Total Performance for the segment of the Mississauga Transitway between Erin Mills and Winston Churchill was achieved on August 30, 2019 and Project Close-out was achieved on September 3, 2019.

## GO EXPANSION

### Infrastructure/Expansion

Numerous projects are underway to allow for increased rail and bus service across Southern Ontario on the GO Transit network. Major infrastructure projects will expand tracks, increase clearance and provide noise barriers to communities neighbouring existing train routes. Extensions of some of the rail corridors will increase Metrolinx's service area will allow more residents to take transit and provide customers with more travel options. Notable developments this quarter include:

- Works within the Stouffville corridor to accommodate two tracks are well underway for completion by 2020. The west side noise wall was completed on July 15, 2019.
- Track work along the Kitchener line, from Kipling to Highway 427, and Nickle to Humber was completed on August 7, 2019.
- Total Performance on the Whitby Rail Maintenance Facility was achieved on June 28, 2019.
- Detailed Design began on August 13, 2019 for the project to allow for increased service levels and line speed between Kitchener and Bramalea..
- For the extension to Niagara, the Canadian National (CN) Railway #11 Bayview Crossover was placed into service on July 7, 2019. Construction work on the corridor between Bayview Junction and West Harbour Station commenced on August 7, 2019.
- Metrolinx and Infrastructure Ontario (IO) jointly awarded a fixed-price contract for the Davenport Diamond Rail Grade Separation project on July 26, 2019. This grade separation will allow Metrolinx to provide a more reliable service along the Barrie corridor and enable service improvements for its customers. The successful proponent, Graham Commuter Rail Solutions (GCRS), will design, build and finance the project.

- The vertical access for the Bay Concourse as part of the Train Shed Vertical Access Rehabilitation project at Union Station achieved Total Performance on August 30, 2019.
- The On Corridor project includes the remaining work necessary to deliver the GO Expansion Service Levels plus the fleet required to run the service. The first set of Project Agreement materials were released to the four pre-qualified bid teams on July 24, 2019.

## **GO Stations**

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, as well as construction of new stations will allow for increased service as the GO network is expanded. These projects reached significant achievements during the quarter:

- The early stations improvements project includes a variety of work on more than 29 existing stations, including rail platform edge tile installations, new digital signage, elevator modernization, rooms for reserved bike parking, and electrical room upgrades. In August, construction began at Centennial, Lisgar, and East Gwillimbury GO Stations.
- Bramalea GO Station reached a significant milestone on August 8, 2019 when all bus platforms at the station relocated, advancing construction to increase the station's capacity and bring more amenities to customers.

## **Rail Corridor Maintenance**

The Corridor Maintenance program includes works that are required to keep the GO Transit network operating in a state of good repair. The following work was completed this quarter:

- The replacement of concrete ties at Exhibition and Newmarket GO Stations was completed on June 30, 2019.
- Upgrades to the station backup generator at UP Express Pearson Terminal 1 Station were completed on July 1, 2019.
- The Humber Bridge Replacement project reached substantial completion in August 2019.

Respectfully submitted,

Matt Clark  
*Chief Capital Officer, Capital Projects Group*