

To: Metrolinx Board of Directors

From: Andrew Hope
Chief Capital Officer (Rapid Transit)

Date: June 27, 2024

Re: **Capital Projects Group (Rapid Transit) Quarterly Report**

This report addresses activity and performance data for capital projects overseen by CPG (Rapid Transit) in Q4 of FY 2023-24 (January 1 to March 31, 2024) while incorporating some ensuing developments where appropriate.

Project Updates

- Two critical procurement milestones for the Eglinton Crosstown West Extension (ECWE) were achieved in Q4.
 - On February 16, the contract to design and build the second underground segment of the ECWE was awarded to Strabag Inc. The package of work in the second tunnelling contract includes detailed design and construction of a 500-metre tunnel that will connect the existing terminus of the Eglinton Crosstown LRT at Mount Dennis Station to a portal east of Jane Street where the line will run on an elevated guideway, and changes at the station that will accommodate extended Eglinton Crosstown LRT service. The contract also includes supplying mining and tunnelling equipment, construction of launch and extraction shafts, and utility work and road modifications along Eglinton Avenue West to accommodate construction activities. Work is underway to prepare the site for major construction on this segment of the project, expected to begin later in 2024.
 - In March, the Request for Qualifications (RFQ) for the Stations, Rail and Systems (SRS) contract was issued. This package of work includes detailed design and construction of the extension's seven new stations, fitting out the tunnels and 1.5-kilometre elevated guideway with tracks and signals, and installing and commissioning communications, ventilation and other support systems for the new line. Metrolinx and Infrastructure Ontario will review the RFQ submissions received and create a shortlist of qualified teams that will be invited to bid on the contract through a Request for Proposals (RFP).
- The Yonge North Subway Extension (YNSE) project spent the quarter in-market for its first major contract, the Advance Tunnels package. In parallel to key procurement activities such as meetings with the pre-qualified proponents, Metrolinx advanced key investigative activities, such as additional geotechnical boreholes, which will help provide proponents with a better understanding of sub-surface conditions. For the remaining scope of the project (including its stations, rail and systems components), design development continued at pace this quarter. Work is underway to determine the optimal packaging strategy for the works, learning lessons from recent procurements and active projects elsewhere in the Metrolinx portfolio.

- This quarter the Eglinton Crosstown LRT contractor, Crosslinx Transit Solutions (CTS), continued its program of testing and commissioning that is intended to ensure it has built a safe and reliable LRT that will serve the public effectively for decades to come. Deficiency corrections continued across the alignment. By quarter's end, the City of Toronto had granted the closure of building permits and issued occupancy permits for all stations with the exception of Eglinton Station; that station will continue into Q1 2024/25 owing to its complexity.
- Delivery of the Scarborough Subway Extension (SSE) further progressed in Q4:
 - On the Advance Tunnel contract, piling works continued at the future extraction shaft located at Midland Avenue and Eglinton Avenue East. Additional piling work was completed at a majority of emergency exit buildings (EEBs) and continued at EEB-5 which will also provide additional opportunity for inspection and maintenance of the tunnel boring machine.
 - On the Stations, Rail and Systems (SRS) contract, design continued to advance throughout the quarter. Early works construction continued at Kennedy Station, including west fan plant works and room additions beyond the platforms at the station, as well as site clearing work at Lawrence Avenue East and McCowan, Sheppard Avenue East and McCowan, and Nugget Avenue and McCowan.
- On the Finch West LRT, the first light rail vehicle (LRV) movement to the western end of the line was completed this quarter, as well as energization of permanent power for Traction Power Substations (TPSS) #1 and #6. On March 8, the LRV also completed its first end-to-end run from Finch West to Humber College Station. Metrolinx and the contractor have commenced interim inspection walkdowns along the guideway and facilities. Other key milestones achieved include traffic signal pre-activation at 26 of 28 intersections, installation of fare vending equipment at all 18 stops, and achievement of track Engineer of Record certification with no speed restrictions.
- On the Hazel McCallion Line, the first stop canopy along the Hazel McCallion Line was installed at the Hurontario and Derry Road stop in January. The canopy was delivered in three sections that were assembled on-site. Nearby, connections to Alectra's electrical grid and energization of the TPSS substations was achieved, a critical milestone in advance of LRV "burn-in" activities planned for the north end of the line later in 2024. At the south end of the line, the concrete forming for the complex sub-surface station in Port Credit reached its future street access level.
- Several critical milestones for the Ontario Line were achieved.
 - On January 17, the Pape Tunnel and Underground Stations contract was awarded to Pape North Connect. The first of two progressive design-build (PDB) contracts for the Ontario Line, it includes three kilometres of twin tunnels underneath Pape Avenue between the Gerrard portal and the Don Valley bridge, and underground stations at Pape and at Cosburn. The new Pape station below the existing TTC Pape Station on Line 2 will allow for easy transfers between the Ontario Line and the existing Line 2 subway. While a development phase proceeds, work is already underway to prepare for the start of major construction.
 - On February 20, the Elevated Guideway and Stations contract was awarded to Trillium Guideway Partners. This second PDB package includes three kilometres of an elevated guideway and five elevated stations (Riverside-Leslieville, Gerrard, Thorncliffe Park, Flemingdon Park, Science Centre). The Science Centre station will

provide a connection to the Eglinton Crosstown LRT. Early construction work is tracking to start this summer.

- On February 20, piling work started at the site of the future Ontario Line station at Queen and Spadina. This important milestone marked the first groundbreaking activity supporting the excavation of the first of six deep underground stations in the south portion of the Ontario Line. Piling has since also started at King - Bathurst and Moss Park with Queen, Corktown and Exhibition close behind.
- Near the future site of the Ontario Line's Operations, Maintenance & Storage Facility (OMSF), Toronto Hydro Phase 1 relocation works were completed ahead of the January 31, 2024, scheduled completion date. This included installation of multiple new cable chambers and underground duct banks on Overlea Boulevard to relocate existing THESL assets which conflicted with the OMSF.
- Progress continued on the enabling works program for the Hamilton LRT this quarter including the first off-corridor hydro line relocation, which began in March. Design work for the refined LRT route along Dundurn Street and the Frid Street run-in track continued. The project team has also refined designs to enhance the OMSF site. Notices of Application to expropriate 29 full buyouts were issued in February. To date, 64 full buyout agreements have been completed. Environmental due diligence continued including cultural heritage evaluations, species at risk surveys, tree inventories and contamination assessments.

Quarterly Performance Data

Safety

Both the Lost Time Injury Frequency Rate (LTIFR) and the Total Recordable Injury Rate (TRIR) are calculated based on a 12-month rolling number, taking in to account the total hours and number of lost time injuries over the course of the previous year.

- The LTIFR for CPG (Rapid Transit) construction safety at the end of the quarter was 0.016, down slightly from 0.017 at the end of the previous quarter. There were no lost time injury incidents in the quarter.
- The TRIR includes lost time injuries, critical injuries, and external medical care incidents. The Ontario Workplace Safety and Insurance Board target for TRIR is 4.76, and Metrolinx's target remains at 2.41 for this quarter. CPG (Rapid Transit) had a TRIR of 1.39, down from 1.67 at the end of last quarter, which marked the continued achievement of this safety goal.

Financial

A summary of major capital project incurred costs for Rapid Transit is shown in Table 1. This quarter, the completion of major contract awards on the Eglinton Crosstown West Extension and Ontario Line (described earlier in the report) has prompted revisions to the 'Baseline less Exclusions' value for each project reported below. These now omit only the remaining portion of the ECWE's approved project budget allocated to its SRS package, which is now in active procurement, and the remaining portions of the Ontario Line's budget allocated to those parts of the PTUS and EGS packages for which target pricing has yet to be negotiated. All budget figures include a much broader set of costs than traditional "construction costs," as they include various contingency funds, ancillary costs such as property acquisition and capitalized labour, and in some cases (including the Ontario Line), 30 years of operating, maintenance, lifecycle and financing costs.

Table 1: CPG (Rapid Transit) Capital Projects Incurred Costs to March 31, 2024

	Current Baseline less Exclusions (\$M)	Incurred Costs to date (\$M)	Incurred Costs this quarter (\$M)
Eglinton Crosstown LRT	\$12,639 ^{a,b}	\$8,600	\$41
Finch West LRT	\$3,530 ^a	\$2,265	\$34
Hazel McCallion LRT	\$5,742 ^a	\$2,154	\$54
Eglinton Crosstown West Extension	\$3,157 ^c	\$1,229	\$126
Ontario Line	\$27,222 ^{a,d}	\$4,752	\$568
Scarborough Subway Extension	\$3,627 ^d	\$1,426	\$152
Yonge North Subway Extension	\$1,456 ^c	\$478	\$26
Hamilton LRT	\$575 ^c	\$63	\$10

All figures are reported in year-of-expenditure dollars and are not directly comparable with those in other contexts expressed as nominal dollars. Similarly, figures encompass full project implementation costs (i.e., including elements such as property, owner's project management & professional services costs and private financing where relevant) and are not directly comparable to figures provided in other contexts for construction costs or the value of major contract(s).

^a Includes long-term P3 financing, lifecycle, operating and maintenance costs over concession term as applicable per each respective Project Agreement. Excludes funds subject to Metrolinx recovery.

^b Budget and incurred costs associated with the GO Transit elements of Mount Dennis and Kennedy stations are reported within the "GO Expansion Early Works" totals in the *Capital Projects Group (GO & UP) Quarterly Report*.

^c **Value does not reflect the full project cost.** Project includes one or more large contracts awaiting procurement or award. To obtain the best value from the market, the published baseline value omits the portion of the approved project budget allocated to these contracts. The baseline will be updated to disclose the associated project budget upon award, before corresponding costs begin to be incurred.

^d **Value does not reflect the full project cost.** Project includes one or more progressive contracts that are currently in a Development Phase. To obtain the best value from the market, the published baseline value omits the portion of the approved project budget allocated to the future Implementation Phase of this contract. The baseline will be updated to disclose the associated project budget as Implementation Phase pricing is agreed, before corresponding costs begin to be incurred.

Respectfully submitted,

Andrew Hope
Chief Capital Officer (Rapid Transit)