

To: Metrolinx Board of Directors

From: Andrew Hope
Chief Capital Officer (Rapid Transit)

Date: November 28, 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 Q2 of FY 2024-25 (July 1 to September 30, 2024) while incorporating some ensuing developments where appropriate.

Project Updates

- It was another busy quarter for the Ontario Line, with over three-quarters of a billion dollars in asset value created in Q2. Construction activities are now visible along all portions of the 15.6-kilometre alignment:
 - Major construction progressed this quarter at all downtown station sites. At King-Bathurst and Queen-Spadina stations, crews are removing soil and bedrock to excavate shafts to a depth of about 40 metres, which will first be used to support station cavern construction and eventually host escalators and elevators that will connect the underground subway to street level. Excavation of Moss Park station's large open-cut structural box also commenced this quarter. At the sites of the future Exhibition and Don River portals, hundreds of piles were installed, setting the stage for further work at each end of the downtown tunnel section.
 - New infrastructure took shape along the above-ground rail corridor where Ontario Line trains will run beside GO trains between the Riverside and Leslieville communities, including new bridges, architectural retaining walls and noise barriers. By completing these installations on-time, a closure and shift of GO tracks that was scheduled for early November proceeded as planned, with a subsequent shift planned for 2025.
 - In July, construction began on underground 'slurry walls' that are vital to supporting the excavation of a new Ontario Line interchange at the existing Line 2 Pape subway station.
- On September 27, 2024, a Request for Proposals for the Stations, Rail and Systems (SRS) package for the Eglinton Crosstown West Extension was released to three prequalified teams of contractors. The successful proponent will deliver the package using a Progressive Design Build contracting model. Elsewhere on the project, Metrolinx's Advance Tunnel 2 contractor, Strabag, commenced piling work at the Jane Portal site this quarter. The western half of the bi-directional south cycle track is now in service, while work on the eastern section is underway. Geotechnical and environmental site investigations proceeded to support the development of the 100 per cent detailed design of the elevated guideway.

- From July 23 to 26, 2024, the Eglinton Crosstown Light Rail Transit (LRT) project's contractor, Crosslinx Transit Solutions (CTS), completed a four-day, 28-train test simulating the intended service pattern that riders will experience. During this testing, all 28 trains successfully launched each day with minimal system or vehicle issues. All 29 trainers have now completed the Train-the-Trainer program and operator training began as of August 12, 2024. Other key deliverables completed this quarter include:
 - A second important series of "operational emergency" tests with operations, maintenance and emergency services personnel were successfully completed in early September. This included testing operational processes and access and safety systems for fire and ambulance services per design requirements.
 - CTS's release and implementation of the revised signalling system software on September 28, 2024 was a key requirement in allowing the TTC operator training to advance and allowed for activities related to the development of the safety assurance and certification to progress further.
- The Hamilton LRT project continued to advance its enabling works program this quarter while final readiness was completed to launch the procurement of its first main works package, an Alliance to deliver a 'swept path' of civil and utility upgrades along the 14-kilometre alignment. As of the end of this quarter, a total of 49 demolitions were completed, with 11 more underway. In July 2024, the Sherman Watermain Enabling Works project was completed on time and under budget. The procurement for the Wentworth Watermain Enabling Works project is currently underway with construction planned to commence in Q3 of FY2024-25. Archaeological assessments were also completed, with over 1000 artifacts catalogued.
- The Scarborough Subway Extension completed \$170 million worth of work this quarter across its early works, advance tunnel, and stations, rail and systems (SRS) elements:
 - Early works continued to progress, including completing the drilling of 36 caissons for the tunnel ventilation system electrical building (TVSEB) foundations at Kennedy Station. Additional milestones included completing the installation of key infrastructure components such as the hydro chamber vault, the micro-tunnel launch shaft, and all five rings of the reception shaft for the TVSEB. In July 2024, dry utilities relocation work for Lawrence East Station was completed on the south side of Lawrence Avenue and McCowan Road. The demolition of the Progress Avenue Bridge over the Labour Day weekend, part of the enabling works for Scarborough Centre Station, was completed ahead of schedule.
 - The Metrolinx team continued to work closely with the design-builder for the SRS package, Scarborough Transit Connect. The third checkpoint for this progressive contract's development phase was achieved in August.
 - After completing its journey under Highway 401, the Tunnel Boring Machine paused for a maintenance stop that will include periodic inspections and replacement of worn cutterhead equipment. Headwall installation for Emergency Exit Building #3 was completed on September 16.
- The final traction power substation on the Finch West LRT was energized in July. Crews have officially finished major construction on all stations and stops along the alignment including Humber College Station, Finch West Station, and every surface level stop in-between.

- On the Hazel McCallion Line, the new Eaglewood Boulevard bridge opened in July 2024, replacing the Inglewood Drive bridge. The new bridge and intersection configuration will allow the light rail vehicles to enter Port Credit Station while helping vehicle traffic run smoothly along Hurontario Street. At Port Credit Station, concrete has been poured to form the floors at street level and work on the internal walls and stairs is progressing smoothly. Elsewhere on the alignment, track work was completed in August 2024 at the intersections of Mineola Road and Hurontario Street and Square One Drive and Hurontario Street. Construction of the elevated guideway over Highway 403 progressed, with 74 of the 78 girders installed by quarter's end with preparations underway for the installation of the remaining four girders over the westbound lanes of Highway 403.
- The Yonge North Subway Extension is now into the late stages of procuring its Advance Tunnel contract, with the first submissions due in late 2024. In parallel, over 30 ground investigations have been completed in an enhanced geotechnical program designed to help better inform bidders of ground conditions.

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 into 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 0.02, with no change from 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. CPG (Rapid Transit) had a TRIR of 1.17 at the end of this quarter, down from the end of last quarter.

Financial

A summary of major capital project incurred costs for CPG (Rapid Transit) is shown in Table 1.

Table 1: CPG (Rapid Transit) Capital Projects Incurred Costs to September 30, 2024

	Current Baseline less Exclusions (\$M)	Incurred Costs to date (\$M)	Incurred Costs this quarter (\$M)
Eglinton Crosstown LRT	\$12,639 ^{a,b}	\$8,698	\$43
Finch West LRT	\$3,530 ^a	\$2,352	\$18
Hazel McCallion LRT	\$5,742 ^a	\$2,459	\$224
Eglinton Crosstown West Extension	\$3,157 ^c	\$1,391	\$87
Ontario Line	\$27,222 ^{a,d}	\$6,287	\$758
Scarborough Subway Extension	\$3,627 ^d	\$1,717	\$170
Yonge North Subway Extension	\$1,456 ^c	\$543	\$35
Hamilton LRT	\$575 ^c	\$103	\$19

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 upon before corresponding costs begin to be incurred.

Respectfully submitted,

Andrew Hope
Chief Capital Officer (Rapid Transit)