

To: Metrolinx Board of Directors
From: Steve Levene
Chief Operating Officer, Rapid Transit
Date: June 29, 2023
Re: **Operations - Rapid Transit Quarterly Report**

This report provides an update on activity and key milestones in the Operations - Rapid Transit division over the past quarter.

Maintenance Delivery Success

The Maintenance Delivery team continues to focus on reducing service disruption to rail customers by maximising the efficient execution of maintenance tasks. Our efforts include increasing the amount of planned maintenance work, thereby reducing unplanned, reactive work. Between March and April, Maintenance Delivery was able to increase planned work from 78 per cent to 91 per cent of total work block hours.

Significant improvements in our maintenance program resulted in record asset reliability, with On Time Performance degradation of only 1.2 per cent (signals) and 0.80 per cent (track) April. The fourth quarter of the 2022-23 fiscal year saw a 15 per cent improvement in Mean Time Between Failure over the previous quarter, an improvement during challenging winter months. These results are attributed to the continued maturity of Lean Control Rooms, improved maintenance processes, and the close collaboration between the Maintenance Delivery and Engineering & Asset Management teams.

Electric Vehicle Program Update

On May 15, 2023, Metrolinx launched the second phase of the electric vehicle (EV) trial program. The two EV buses are now in revenue service and customers travelling along GO Bus routes 19 East, 19 West, 27 East, 27A West, 27F West, 92 West, and 96B East have had the opportunity to ride on them. The second phase of the trial enables Metrolinx engineers to evaluate EV technology in a high-mileage environment and collect data such as battery performance, required for future fleet procurement plans.

As of June 14, 2023, the EV buses have driven a total of 3896.3 km since the launch and have been in service for 133 hours. Both buses have used approximately 7946.55 kWh of energy and regenerated 1752 kWh. The regeneration percentage was found to be approximately 22 per cent. Therefore, an average 1/5th of each trip is spent

regenerating energy which goes back into the battery. In terms of efficiency, the buses averaged a consumption of 1.59 kWh per kilometer.

Even in this early stage of revenue service trials, both passengers and drivers have noted positive differences between the EV and conventional diesel Metrolinx buses. Both passengers and drivers enjoyed the quieter riding experience as there is no engine or exhaust noise being emitted from the buses. It has also been communicated that the air conditioning and heating activates much quicker in the EV buses in comparison to the diesel buses.

Further data analysis and testing will be conducted as service continues, with this information feeding into the Next Gen Bus specifications and requirements.

Light Rail Transit Moving Forward

Metrolinx continues to collaborate with partners and stakeholders to prepare for the opening of the Eglinton Crosstown Light Rail Transit and the Finch West Light Rail Transit. The Operations - Rapid Transit team is working diligently to prepare for its responsibilities during the operating and maintenance periods. The cooperative partnership with the TTC continues to develop as they prepare for their role as the operator of both lines.

Respectfully submitted,

Steve Levene
Chief Operating Officer, Rapid Transit