

Chapter 1

Section 1.06

Ministry of Transportation

Follow-Up on 2020 Value-for-Money Audit:

Metrolinx Operations and Governance

RECOMMENDATION STATUS OVERVIEW

	# of Actions Recommended	Status of Actions Recommended				
		Fully Implemented	In the Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
Recommendation 1	3	2	1			
Recommendation 2	1		1			
Recommendation 3	3	3				
Recommendation 4	2	2				
Recommendation 5	3	3				
Recommendation 6	3	2			1	
Recommendation 7	1		1			
Recommendation 8	1		1			
Recommendation 9	1			1		
Recommendation 10	2	2				
Recommendation 11	1	1				
Recommendation 12	4	2	2			
Recommendation 13	1	1				
Total	26	18	6	1	1	0
%	100	69	23	4	4	0

Note: Recommendation 9 was made to the Standing Committee on Government Agencies and Recommendations 10 and 13 were made to the Ministry of Transportation.

Overall Conclusion

Metrolinx and the Ministry of Transportation (Ministry), as of November 15, 2022, have fully implemented 69% of the actions we recommended in our *2020 Annual Report*. Metrolinx and the Ministry have made progress in implementing an additional 23% of the recommended actions.

Metrolinx and the Ministry have fully implemented recommendations such as reducing dependence on Accenture by enhancing in-house technical expertise, adding the Accenture master agreement to Metrolinx's contract performance appraisal process, introducing performance monitoring in new and renewed PRESTO contracts, implementing a process to track bus delays and cancellations, updating the Memorandum of Understanding between Metrolinx and the Ministry of Transportation, and conducting an independent peer

review of the estimates for projects greater than \$50 million prior to seeking Treasury Board approvals.

Metrolinx and the Ministry have made progress on implementing recommendations such as undertaking a competitive procurement for the development and delivery of various elements of PRESTO, working with the Greater Toronto and Hamilton Area (GTHA) transit agencies to resolve outstanding issues related to the operation of PRESTO, working with municipal transit agencies to propose fare integration options to the Ministry of Transportation, and ensuring future cost estimates for LRT projects include all cost components before the estimate is submitted to Treasury Board.

However, one action item saw little or no progress, which was addressed to the Standing Committee on Government Agencies (Committee) to have Metrolinx provide regular updates to the Committee on its progress on meeting its legislated mandate and the results of its financial operations. Also, Metrolinx will not be implementing one recommended action, automating the refund process of the Service Guarantee Program, because it does not have the capability to determine which train a customer has boarded. The Office of the Auditor General of Ontario continues to believe that this recommendation should be implemented.

The status of actions taken on each of our recommendations is described in this report.

Background

Metrolinx is a government agency that plays a key role in public transit services in Ontario. Metrolinx operates GO Transit trains and buses in the Greater Toronto and Hamilton Area and the Union Pearson (UP) Express from Union Station in downtown Toronto to the Toronto Pearson Airport. It also awards and manages the contracts for the electronic fare system PRESTO. Regarding its train and bus operations, Metrolinx's on-time performance for GO trains, that is, its ability to keep trains on schedule, was between 92% and 95% between 2015/16 and 2019/20, and for buses approximately 95% consistently. Its on-time performance for

trains is comparable to that of other transit agencies in the United States and the United Kingdom.

Metrolinx is highly dependent on its service provider Accenture for PRESTO's core services. The Ministry contracted Accenture in 2006 to build an electronic fare system with capability for flat fares (same fare regardless of the distance travelled) and zone-based travel (fare based on the number of zones crossed in one trip); fare system equipment (for example, tap devices); an initial website; and capability for customer service access such as in-person, via telephone and email. Since 2006, Accenture's scope of work increased to include services including deploying PRESTO on the TTC in Toronto and OC Transpo in Ottawa.

The Ministry's original contract with Accenture totalled \$231.7 million. Metrolinx took over the contract with Accenture in 2011. As PRESTO services expanded after 2012, Metrolinx engaged Accenture for additional work worth over \$1.7 billion under the existing agreement without competitive procurements.

In 2021/22, Metrolinx's total operating costs were \$1.176 billion (\$1.151 billion in 2019/20). As of March 31, 2022, Metrolinx employed the equivalent of 4,957 full-time staff (4,197 as of December 31, 2019). Since 2014/15, Metrolinx had increasing operating deficits that were being subsidized by the Province. It faced further financial pressure as a result of the COVID-19 pandemic.

On December 18, 2019, the Leader of the Official Opposition in Ontario requested that our Office assess the reasonableness of cost estimates presented to the public under the current and previous governments for rapid transit projects. This request included the Hamilton light rail transit (LRT) system, which the Ministry cancelled on December 16, 2019. We replied on December 19, 2019 that we were in the process of auditing Metrolinx and we would be reviewing this issue.

Our significant findings included the following:

- Although Metrolinx planned to competitively procure the services Accenture provided in anticipation of the PRESTO contract expiration in October 2022, Accenture may have an advantage in being chosen for this work. Between

October 2019 and April 2020, Metrolinx engaged Accenture, under its existing agreement, to develop and pilot an open payment capability (the ability to use debit or credit cards to tap and pay) on UP Express. Engaging Accenture to deliver the open payment pilot work could likely have given Accenture a further advantage over competing service providers when all the PRESTO systems and services are tendered.

- Since the launch of PRESTO in 2010, riders had not yet had two key elements implemented: the convenience of integrated fares across the GTHA, and the ability to use their own debit or credit cards to tap and pay. Metrolinx's vision for integrated fares across the GTHA would allow riders to pay just once when they cross regional and municipal boundaries using different transit systems. However, we found that little progress had been made at the time of our 2019 audit.
- The COVID-19 pandemic had a significant impact on all areas of Metrolinx's business. In March 2020, Metrolinx reduced services and/or suspended routes on GO trains, buses and the UP Express, as ridership declined by as much as 95% as a result of the pandemic. In September 2020, Metrolinx increased services on both its rail and bus lines as schools and some businesses reopened. As of June 2022, GO Transit ridership was at about 41% and UP Express ridership was almost at 50% compared to June 2019 levels (before COVID-19). In 2021/22, Metrolinx received \$946.2 million in operating subsidy from the Province.
- The Ministry of Transportation was aware as early as 2016 that the total cost estimate for the Hamilton LRT would be higher than the \$1 billion in capital costs that the Province had publicly committed to funding in 2015, but it did not make this fact public. The \$1 billion was sufficient to cover only the project's initially estimated construction cost. Subsequently, in December 2016, Treasury Board approved a budget of \$2.981 billion for the project, based on estimated costs that included \$823 million

in construction costs. In March 2018, Treasury Board approved a revised cost estimate of \$3.659 billion, including construction costs of \$1.083 billion because the LRT's estimated length had increased. We found that the 2016 and 2018 estimates did not represent the full cost of the LRT and were significantly understated. These estimates were not made public at those times. Based on a detailed review, we found that the \$5.5 billion cost estimate reported by the Minister of Transportation in December 2019, when the project was cancelled, was reasonable.

We made 13 recommendations consisting of 26 action items to address our audit findings. We received commitment from Metrolinx and the Ministry of Transportation that they would take action to address our recommendations.

Status of Actions Taken on Recommendations

We conducted assurance work between April 2022 and September 2022. We obtained written representation from Metrolinx and the Ministry of Transportation that effective November 15, 2022, they have provided us with a complete update of the status of the recommendations we made in the original audit two years ago.

Accenture Contract for PRESTO

Recommendation 1

In order to have PRESTO operating in a cost-effective manner that meets business and customer needs, we recommend that Metrolinx:

- *reduce dependency on Accenture by improving its in-house technical expertise with respect to knowledge and understanding of PRESTO services and technological solutions;*

Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx was sole-sourcing the development and operations of the PRESTO fare card system from Accenture since it took over the contract from the government in 2011. All subsequent contract extensions and increases occurred without Metrolinx undertaking competitive procurement, which increased its dependency on one vendor. Metrolinx itself indicated that the dependency limited its ability to consider alternative procurement options and evaluate whether Accenture's services and solutions were cost-effective.

In our follow-up, we found that Metrolinx has begun the process to build in-house capabilities to reduce dependency on Accenture. This includes onboarding a Chief Technology and Information System Officer with expertise in technology and information security responsible for overseeing and managing the current PRESTO platform, keeping PRESTO's current technology up-to-date, managing cyber security risk and delivering PRESTO's modernization programs. Since December 2021, Metrolinx has also hired a program director to manage client success and a payment security director to lead the identification, development, implementation and maintenance of PRESTO technologies. In July 2022, Accenture migrated the major components of PRESTO's operations, such as the PRESTO website, the PRESTO app, and the PRESTO Integration Hub from Accenture's cloud platform to Metrolinx's platform.

- *undertake a competitive procurement for the development and delivery of various elements of PRESTO, including the open payment capability, in anticipation of the expiry in 2022 of the current contract with Accenture;*

Status: In the process of being implemented by November 2023.

Details

In our 2020 audit, we found that since Metrolinx took over the Accenture contract from the Ministry of Transportation in 2011, all subsequent contract extensions and increases occurred without Metrolinx undertaking competitive procurement, which limited its ability to

consider alternative procurement options and evaluate whether Accenture's services and solutions were cost effective.

In our follow-up, we found that Metrolinx obtained approval from the Treasury Board in September 2021 on the PRESTO Modernization procurement plan. Based on request for information results completed in February 2021, Metrolinx informed the Treasury Board that it will be moving forward with issuing requests for proposals (RFPs) that will allow for multiple specialized vendors to bid on and win one or more of seven procurement lots. In this way, Metrolinx sought to diversify its vendor base and also reduce overall costs. Metrolinx retained Accenture for two of the seven lots due to subsequent cost benefit and operational analyses. These two lots were contracts for the renewal of TTC Presto devices and the PRESTO software system. At the time of the follow-up, Metrolinx had issued two RFPs in April 2021 and plans to issue the remaining three by January 2023. It expects all procurement activities to be completed by November 2023.

Metrolinx is aiming to completely transition to the new operating system by October 2025. In the meantime, Metrolinx has extended the existing Master Services and Supply Agreement with Accenture until October 5, 2025 at a cost of \$315.6 million as a bridge until the procurement program noted earlier can be fully implemented. According to Metrolinx's presentation to the Treasury Board, this extension will ensure that there is service continuity for customers and transit agencies, enable a more thorough transition of modernization initiatives, including the rollout of the open payment solution across all of PRESTO's GTHA transit agency networks.

- *establish strategies and actions to manage the advantage held by the current service provider and level the playing field for all potential bidders during the planned larger competitive procurement process.*

Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx did not undertake a competitive procurement process for its

open payment pilot for PRESTO, but instead decided to use Accenture to shorten delivery timelines since Accenture had prior knowledge of the fare system. We noted that the pilot could give Accenture an advantage in future bidding since open payment will be part of the services to be included in the planned larger procurement.

In our follow-up, we found that Metrolinx has established a data room that houses all documentation that reflects the current operations of PRESTO. This consolidated archive will be used by Metrolinx to share common operational knowledge with all vendors participating in the procurement process. Metrolinx also reminded all interested vendors and staff of its conflict of interest policy, and provided guidance to all staff. The guidance stated that vendor communications that fall outside of existing business should be directed to one senior Metrolinx staff to minimize conflict of interest situations and streamline information sharing to further ensure that all prospective vendors have access to the same information. In addition, Accenture has been required to sign conflict of interest declaration forms during the request for supplier qualification process for two RFPs that were issued in April 2022. This requires Accenture to declare those individuals with any actual, potential or perceived conflict of interest due to the existing Master Agreement between Accenture and Metrolinx.

Recommendation 2

In order to increase adoption of PRESTO across Greater Toronto and Hamilton Area (GTHA) transit agencies, we recommend that Metrolinx work with the GTHA transit agencies to resolve outstanding issues related to the operation of PRESTO, including an inability to accommodate varying fare types, that prevent its full adoption by respective transit systems.

Status: In the process of being implemented by July 2023.

Details

In our 2020 audit, we found that costs and technological limitations of adding the unique needs of each municipal transit system using the PRESTO fare card system have been barriers to greater adoption of the

card. While PRESTO card adoption has increased considerably over the last decade (71% across the Greater Toronto Area as of January 2020), the adoption rates varied by municipalities.

In our follow-up, we found that Metrolinx has added several new fare types and fare payment options across the GTHA to assist in greater PRESTO adoption. Some of the new options introduced include:

- E-tickets were introduced in September 2020 in Durham Region Transit and Hamilton Street Railway and in January 2022 in Oakville Transit which allows riders to buy digital tickets on their smartphones. This also allowed Durham post-secondary students to receive their UPASS through PRESTO.
- Open payment was launched on the UP Express in March 2021, and GO Transit, Oakville, Brampton and Mississauga in August 2022. This allows customers to be able to pay their fare by tapping their credit card on a PRESTO device. Metrolinx is also working with the TTC to upgrade its equipment and will be able to roll out open payment by July 2023.
- Starting in October 2021, TTC devices across all vehicles were updated to display information such as fare paid, remaining balance and remaining transfer time.
- Metrolinx launched the use of bulk limited use media (LUMs) on the TTC in June 2022. Partnership agreements have been signed with 52 organizations such as the Canadian Red Cross, the Toronto District School Board, and additional partnership agreements have been offered to 50 organizations such as Toronto Public Health and Covenant House Toronto, which are expected to be finalized before the end of the year. The agreements will allow these organizations to buy limited use tickets in bulk for their members/clients. Phase 2 of the program launch will be focused on offering customers additional features related to the bulk LUMs such as automated purchases, daily settlement of transactions, FAQ resources, and self-service capabilities to track orders.

Recommendation 3

To improve its oversight of PRESTO service providers' performance (Accenture and subcontractors), we recommend that Metrolinx:

- include Accenture's PRESTO Agreement (Master Services and Supply Agreement) in Metrolinx's Vendor Performance Management system in order to formally oversee Accenture's performance for the remainder of the contract term;

Status: Fully implemented.

Details

In our 2020 audit, we found that the 2016 master agreement between Metrolinx and Accenture, the key PRESTO vendor responsible for design, build, execution and operations of the entire system, was not managed using Metrolinx's Vendor Performance Management System. As a result, unlike the arrangement with other service providers, Metrolinx did not assess and review Accenture's performance for work under this agreement every six months and provide a performance rating that can be used to assess Accenture for future contracts.

In our follow-up, we found that, as of January 2021, Metrolinx has added the master agreement with Accenture to its contract performance appraisal process and Accenture's performance for the remainder of the contract term will be overseen by the appraisal process.

- undertake risk-based operational/performance audits of PRESTO services currently provided by Accenture;

Status: Fully implemented.

Details

In our 2020 audit, we found that, in accordance with the current master agreement, Metrolinx received monthly operations reports from Accenture, including service-level performance measurements for Accenture and its subcontractors. In these reports, Accenture self-reported whether performance targets had been met but Metrolinx did not validate Accenture's self-reporting against supporting data unless there was an anomaly. While Metrolinx hired third parties to

conduct financial reporting and compliance standards audits with international data security standards for payment cards, it did not conduct any operational and/or performance audits of the PRESTO system.

In our follow-up, we found that Metrolinx developed an internal audit process in June 2021 that consists of bi-monthly assessments of Accenture's delivery of PRESTO, with a focus on data accuracy and completeness of mandatory requirements. Any non-compliance results in direct feedback to Accenture or necessary process and technology updates.

- require agreements with future PRESTO service providers contain robust performance monitoring, reporting and accountability mechanisms with contractual rights for periodic operational and/or performance audits, issue escalation, and compensation or penalties for poor performance.

Status: Fully implemented.

In our 2020 audit, we found that the master agreement between Accenture and Metrolinx was not part of Metrolinx's Vendor Performance Management System. As a result, Metrolinx did not assess and review Accenture's performance for work under this agreement every six months and provide a performance rating that can be used to assess Accenture for future contracts.

In our follow-up, we found that, as of February 2020, Metrolinx has enhanced its contract language to include performance monitoring, reporting and accountability by the responsible vendor, for new and renewed contracts. The updated agreement terms also include service level agreements and penalties for non-performance, issues escalation mechanisms and Metrolinx's ability to perform operational and performance audits on the vendors. For example, the enhanced language is being implemented into new PRESTO contracts as they are signed or renewed. This language has already been implemented in vendor agreements for the installation of PRESTO devices on the Eglinton Crosstown LRT, signed December 2020 and for the supply, installation and maintenance of PRESTO ticket vending machines, signed June 2021.

Oversight and Management of External Service Providers

Recommendation 4

To further reduce the number of train delays and cancellations associated with train operations and maintenance and improve the management of the Bombardier contracts, we recommend that Metrolinx's Commercial Management Division:

- *determine and record the root cause of all delays and cancellations;*

Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx had not consistently tracked the cause of train delays and cancellations related to Bombardier, who provide the crew to operate all GO rail trips and also maintain the entire GO train fleet. We found that while Metrolinx has various mechanisms through its agreement with Bombardier to manage its performance, Metrolinx's data collection and analyses were not consistent in terms of monitoring Bombardier's performance under both agreements.

In our follow-up, we found that Metrolinx established a centralized and dedicated performance team subsequent to our audit to improve its analysis and tracking of root causes of delays and cancellations. The team works with various operation units on a daily basis to determine root causes and planned actions, and creates monthly performance dashboards to report and ensure attribution of delays and cancellations to the proper business units. These dashboards include logs of all delays and cancellations by date, location, and trip number, and include the reasons and root causes for the delay. We also found that eight workshops had been held across various business units between July and September 2022 to identify root causes and planned actions on delays caused by construction events, rail fleet and equipment maintenance, and signals.

- *have Bombardier take corrective actions to reduce the number of operational and equipment failures on trains.*

Status: Fully implemented.

Details

In our 2020 audit, we found that between 2015/16 and 2019/20, Bombardier's train crew operations issues were responsible for 2,353 train delays and 211 train cancellations, which included reasons such as shortage of train crews and platform overshoot. For that same time period, Bombardier equipment issues resulted in 2,804 train delays and 724 train cancellations.

In our follow-up, we found that, as of March 2022, Metrolinx has updated its contract performance agreement with Alstom (formerly Bombardier Transportation) to formalize monthly meetings to hold Alstom accountable when GO train delays and cancellations are attributable to their operations and maintenance. Alstom is required to respond to delay/cancellation causes within 90 days and pay fines when it is responsible for delays and cancellations. Metrolinx and Alstom's fleet maintenance group have also developed a daily huddle group as of October 2021 which identifies leading indicators of delays and cancellations. Alstom uses this data to focus on underperforming systems and continuously improve its fleet performance.

Bus Services

Recommendation 5

To improve measurement and analysis of GO buses' performance and improve on-time bus service, we recommend that Metrolinx:

- *implement a robust process to track bus delays and cancellations with detailed reasons;*

Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx had not consistently tracked the cause of bus delays and cancellations. We found that while Metrolinx used data from GPS devices on GO buses to determine whether a bus is on time, it used a manual process to track the reasons for delays. We also found that not all bus delay reasons were captured, as Metrolinx did not categorize other

reasons for delays such as “vehicle availability” and “late start.”

In our follow-up, we found that, in July 2022, Metrolinx implemented a process to track bus delays and cancellations with detailed reasons using a new Microsoft Form. The Network Operations Control Centre (NOC) enters all delay reasons into a Microsoft Form, which stores all delay reasons in a database. Metrolinx produces a monthly report from this data and holds monthly meetings to discuss service performance and to take corrective actions as necessary.

- *analyze root causes for bus routes that experience more significant delays and cancellations than others;*
- *take corrective action to address common or recurring root causes of bus delays and cancellations.*

Status: Fully implemented.

Details

In our 2020 audit, we found that between 2018 and 2019, Route 47 – Highway 407 West and the Express route Hamilton/Toronto accounted for approximately 14% and 10% of all bus cancellations each year, respectively. However, Metrolinx did not analyze the data for the reasons for the cancellations, and relied on the experiences of bus operations supervisors to infer the reasons for the cancellations. From our review, we noted that the most common reasons provided for cancellations were “cancellation” and “service adjustments”, which did not provide sufficient information for analysis.

In our follow-up, we found that Metrolinx has been analyzing the top re-occurring categories for delays and cancellations and has found that traffic and bus breakdowns are the most common reasons. All categories of delays are discussed during monthly on-time performance meetings and additional corrective actions being applied as necessary, such as supervisor coaching to drivers and Network Operations Control Centre assistance to avoid traffic accidents. Metrolinx has also developed process documents for staff on how to best identify root causes for bus delays and cancellations and how to respond to issues such as mechanical breakdowns. To help identify repeat failures leading

to bus breakdowns, Metrolinx has also implemented a monitoring program to review the number of times that a bus has broken down due to the same issue in the past 60 days.

Service Guarantee

Recommendation 6

To ensure that the Service Guarantee Program (Program) is effective, we recommend that Metrolinx:

- *conduct a review of the Program to determine whether it is effective in improving customer satisfaction;*

Status: Fully implemented.

Details

In our 2020 audit, we found that the Service Guarantee Program (Program) had a number of deficiencies, such as no automatic refund services, a short window to make a claim, and lack of clarity on some denied claims. Customer satisfaction for the Program ranged from 57% to 63% over the last five years and Metrolinx’s GO Contact Centre received over 19,800 customer complaints relating to the Program.

In our follow-up, we found that Metrolinx conducted a review of the Service Guarantee Program in March 2021, and had begun implementing a number of proposed recommendations in phases. In October 2021, Metrolinx expanded the Service Guarantee Program eligibility by adding a total of eight new eligible delay causes such as police investigations, onboard emergencies, trespassing incidents and track obstructions. By April 2022, Metrolinx also added the ability for customers to submit a Service Guarantee claim related to paper tickets and e-tickets through the online refund portal which was previously only available for customers who had paid for their fare using PRESTO. Going forward, Metrolinx will be conducting an annual review of its Service Guarantee Program beginning in September 2022.

- *address customer feedback on the Service Guarantee claim process, including implementing a fully automatic refund process for claims;*

Status: Will not be implemented. The Office of the Auditor General continues to support the implementation of this recommendation.

Details

In our 2020 audit, we found that eligible customers needed to submit a claim to get a refund. Our 2020 audit Information Technology (IT) Systems and Cybersecurity at Metrolinx found that, although Metrolinx had the technology and necessary data to automatically refund customers who qualify, Metrolinx does not do this.

In our follow-up, we found that Metrolinx conducted a review of the Service Guarantee Program in March 2021 and implemented improvements to the claim process, such as extending the window to submit a claim from 7 to 30 days and removing the requirement to have a positive balance to be eligible for a refund. However, the assessment determined that automatic refunds were not possible with existing technology as Metrolinx does not have the capability to determine what train a customer boards. PRESTO cards are associated with stations and not specific trains. Metrolinx will not be implementing this recommended action at this time, but will continue to explore opportunities for automatic refunds in future reviews of the program.

- *improve tracking and analysis of Service Guarantee claims, including denied claims.*

Status: Fully implemented.

Details

In our 2020 audit, we found that between 2015/16 to 2019/20, around 172,000 or 9% of submitted Service Guarantee Program claims were denied. We noted that some data older than one year had been purged from the system. In addition, we noted that Metrolinx is reliant on other systems such as Accenture's PRESTO system to investigate or validate denied claims, meaning that Metrolinx was not able to readily validate some of the denied claims that may have been eligible. We also calculated that only 27% of all eligible passengers made a claim in the last five fiscal years. Metrolinx does not undertake any analysis to

determine why eligible riders do not submit claims, it only tracks and reports the number of claims and the amount claimed.

In our follow-up, we found that Metrolinx developed a new dashboard in January 2022 that tracks and analyses all service guarantee claims. Previously, Service Guarantee claim data was limited to basic reports that included claim counts and claim details (submission date, claim status, reason for claim denial, and refunded amounts). Claim data has been integrated with train performance data and is now being aggregated, trended, and reviewed regularly. As part of the new dashboard is a view of denied claims in more detail to inform future updates to the refund process or to the policy itself. This report uses the number of denied claims as a percentage of all claims submitted as the main key performance indicator.

Integrated Regional Fare System

Recommendation 7

To make progress with the implementation of the integrated fare system in the Greater Toronto and Hamilton Area, we recommend that Metrolinx work jointly with municipal transit agencies to propose fare integration options to the Ministry of Transportation and that the Ministry address barriers to implementation.

Status: In the process of being implemented by December 2022.

Details

In our 2020 audit, we found that Metrolinx did not have the authority or control to set transit fare policies in the GTHA, which makes it difficult to lead and attain fare integration in the region. Fare policies are determined by individual municipalities as part of their budget process, and as a result, different transit agencies have different fares not only for regular one-way travel, but also for specific groups such as seniors and children.

In our follow-up, we found that in June 2021, the Ministry of Transportation (MTO) announced a Minister's Provincial-Municipal Table on Fare and Service Integration, bringing together MTO, Metrolinx and the

transit agencies from the Greater Golden Horseshoe. Through the table, Metrolinx led the development of a three-phased approach to build fare integration options. Under Phase 1, Metrolinx identified short-term actions such as introducing 100% co-fare for 905-GO Transit connections and other systems with GO co-fare agreements, increases to the youth and post-secondary students discount and a new GO Affordability Program for low-income riders, which were launched on March 14, 2022. Under Phase 2, Metrolinx identified three regional fare options to evaluate further in Phase 3. These options include free transfers between transit systems, fare based on geographic zones, and fare by distance. In July 2022, Metrolinx prepared a draft initial business case on the fare structure options and submitted it to the Ministry of Transportation. Metrolinx anticipates finalizing the document by December 2022, after it receives and addresses feedback from the Ministry and transit agencies.

Opportunities to Reduce Operating Costs

Recommendation 8

To demonstrate its legislative accountability, compliance with its mandate, and to reduce its operating costs, we recommend that Metrolinx implement cost-saving strategies, such as reducing management overhead and reliance on external consultants, noted in the Ministry of Transportation's review and in our audit of Metrolinx's Information Technology (IT) Systems and Cybersecurity.

Status: In the process of being implemented by March 2023.

Details

In our 2020 audit, we found that Metrolinx's operating expenses increased by 52% from 2015/16 to 2019/20. This led to an 80% or \$187-million increase in operating subsidies funded by the Province during that period. We noted that there was a February 2020 review of Metrolinx's operations commissioned by the Ministry of Transportation that found there was opportunity to reduce operating costs by reducing management overhead, reducing back-office costs, and

improving operations costs and revenue collection. The review also noted that Metrolinx could save \$10 million to \$15 million annually by bringing in external consulting roles in the capital projects group in-house.

In our follow-up, we found that Metrolinx implemented business improvement plans (BIPs) to help reduce operating costs. For 2021/22, Metrolinx developed a set of 35 BIPs which resulted in savings of \$180.7 million and additional revenue opportunities of \$2.4 million. Metrolinx also conducted a full review of its organization, except for units engaged in business transformation, and developed divisional action plans to address span of controls. Span of control refers to the number of staff that can be managed effectively and efficiently by supervisors or managers in an organization. Metrolinx noted that some of its Executive Vice President (EVP) and Vice President (VP) levels were not set up with appropriate span of control, and divisions were restructured and reorganized to remedy this.

To reduce reliance on consultants and contractors, Metrolinx's Capital Projects Group requested a total of 90 new internal positions. At the time of our follow-up, Metrolinx had filled 30 of those positions and planned to fill another 77 positions with hiring plans that will continue into 2022/23. The remaining 13 positions are on hold pending an evaluation of needs. In addition, the I&IT department has approved a contractor reduction plan, which reduced the number of contractors from 243 in March 2021 to 58 as of July 2022.

Recommendation 9

To strengthen legislative accountability, we recommend that the Standing Committee on Government Agencies have Metrolinx provide regular updates to the Committee on its progress on meeting its legislated mandate and the results of its financial operations.

Note: This recommendation is for consideration by the Standing Committee on Government Agencies.

Status: Little or no progress.

Details

In our 2020 audit, we found that Metrolinx had not recently been called to the Standing Committee on

Government Agencies of the Ontario Legislature (Committee), which is empowered to review and report on the operations of provincial agencies such as Metrolinx. The last time the Committee reviewed Metrolinx's financial performance results or its achievement of its legislated mandate was on November 19, 2013.

In our follow-up, we found that, since our audit in 2020, the Standing Committee has not requested Metrolinx to provide regular updates on its progress on meeting its legislated mandate and the results of financial operations.

Memorandum of Understanding between Metrolinx and Ministry of Transportation is Outdated

Recommendation 10

To publicly and operationally clarify roles and responsibilities, and to reduce the impact on Metrolinx's Board from a change of a high percentage of Board members at the same time, we recommend that the Ministry of Transportation (Ministry):

- *update the Memorandum of Understanding between itself and Metrolinx in line with 2018 amendments in the Metrolinx Act, 2006 and post the updated version on Metrolinx's website;*
Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx's Memorandum of Understanding (MOU) with the Ministry of Transportation (Ministry) was out-of-date and did not reflect current accountability relationships and the respective roles of Metrolinx and the Ministry regarding transportation planning. Since the MOU was signed in 2010, there had been 13 amendments to the *Metrolinx Act, 2006* and the Ministry had also issued 20 letters of direction to Metrolinx. However, the MOU had not been amended to reflect these changes in responsibility and accountability.

In our follow-up, we found that the MOU was updated in September 2020 to establish the accountability relationships between the Minister of Transportation and the Chair of Metrolinx on behalf

of the agency; clarify the roles of the Minister, Deputy Minister, Agency Chair, Agency CEO, and the Agency's Board of Directors; and clarify the various operational, financial, auditing, reporting and other arrangements between Metrolinx and the Ministry. The MOU states that the Minister is responsible for providing the government's strategic direction to Metrolinx for transit in the regional transportation area and for other transit work, approving the development, scope, consultations and amendments to the regional transportation area and outlining high-level expectations, key commitments and performance priorities for Metrolinx. Metrolinx's mandate in the updated MOU includes providing leadership in the co-ordination, planning, development and implementation of an integrated transit network in the regional transportation area, acting as the central procurement agency for local transit system needs and being responsible for the operation of the regional transportation area. This new MOU effectively replaces the MOU that was approved by Cabinet on September 17, 2009. The new MOU has also been posted on Metrolinx's website.

- *stagger the appointments of Board members in the future.*

Status: Fully implemented.

Details

In our 2020 audit, we found that 12 out of 14 Board members had been appointed in the last two years, and that not staggering the appointments of directors could negatively impact a board when a high percentage of members leave at the same time. Appointments to the Metrolinx Board of Directors are made by the Lieutenant Governor in Council on recommendation of the Minister of Transportation.

In our follow-up, we found that two new members were appointed, and six existing members were re-appointed to Metrolinx's Board of Directors in early 2022. The appointment periods of each of these Board members have been staggered, with four members serving for at least two years, and the remaining four for at least three years.

Cost Estimates of LRTs

Recommendation 11

To obtain sufficient information to demonstrate effective Board oversight of Metrolinx, we recommend that the Chief Executive Officer provide the Board with all light rail transit projects being managed by Metrolinx on a quarterly basis, or more regularly, should costing or other issues arise throughout the life of the project.

Status: Fully implemented.

Details

In our 2020 audit, we found that Metrolinx's Board of Directors was not sufficiently apprised by management of the rising cost estimates and the Ministry's intent to cancel the Hamilton LRT project up until the decision was actually made.

In our follow-up, we found that Metrolinx's Board of Directors established a Capital Oversight Committee in October 2020, after the events of the Hamilton LRT project, which enables the Board to obtain information about all major transit projects managed by Metrolinx, including light rail transit projects. Meetings of the Capital Oversight Committee occur at least quarterly, and include the distribution of the latest Capital Projects Monthly Report, which includes detailed performance information on all capital projects, presentations that provide granular project-by-project detail, and a health check memo that identifies key project risks and issues, and summarizes aggregate performance trends. Following each meeting, the Chair of the Committee prepares a report to the full Board summarizing their deliberations and findings and recirculates the health check memo for the full Board's awareness.

Recommendation 12

We recommend that Metrolinx work with Infrastructure Ontario to:

- *estimate the cost of future light rail transit (LRT) projects using estimation techniques consistent with industry best practices and benchmarks;*

Status: Fully implemented.

Details

We found in our 2020 audit that both budget estimates for the Hamilton LRT project used to obtain Treasury Board approval in December 2016 and March 2018 were not a fulsome representation of the project costs and were significantly understated. Metrolinx informed us that the 2016 and 2018 budgets represented the best available data at the time. However, we noted that these budgets used rates based mainly on rates from Finch West and Eglinton LRT projects as opposed to detailed specifications measurements and pricing. The Finch West and Eglinton LRT projects are both in Toronto and it was not accurate to base Hamilton's rates on these two projects.

In our follow-up, we found that Metrolinx revised its estimating policy in August 2021 based on the Association for the Advancement of Cost Engineering Improvements (AACE International) guidelines and industry best practices. Changes to the policy include:

- clarifying the design milestones that require an estimate completed and the level of estimate expected for that milestone;
- checklist of required information to ensure estimating team has all information to complete the estimate;
- requirements for an independent peer review for projects over \$50 million; and
- quarterly review of unit rates to ensure estimates include most current rates.

These improvements have been applied to the re-initiated Hamilton LRT project and will be applied to all future LRT projects. For example, the Hamilton LRT project updated its estimate in June 2021, February 2022 and again in May 2022 to update the unit rates and escalation.

- *have future cost estimates for LRT projects include all cost components such as construction, financing, maintenance and operations and other costs before the estimate is submitted to Treasury Board and any commitments to fund the projects are made by the government;*

Status: In the process of being implemented by December 2022.

Details

Our 2020 audit found that in 2015, the then government made a public announcement that it would “provide up to \$1 billion to build a new light rail transit (LRT) line in Hamilton ... the province will cover 100 per cent of the capital cost of building the LRT.” In a December 2019 internal communication, Infrastructure Ontario’s senior management wrote that the public announcement of \$1 billion was “based upon a very conceptual level of design, and did not account for financing costs, operations, maintenance and lifecycle costs and was not done by IO [Infrastructure Ontario] but rather produced by the City [of Hamilton] and then adopted by the Province without a costing exercise.”

In our follow-up, we found that work has been in progress for the re-initiated Hamilton LRT project since May 2021, the only LRT project initiated since our original report. Metrolinx is currently preparing a Treasury Board Submission, expected to be finalized by the end of 2022, which will include a full estimate that will include construction, financing, operations and maintenance costs. This submission is intended to seek approval to begin procurement for the project.

- *update cost estimates regularly using most recent project specifications and new market data before the end of the procurement stage;*

Status: Fully implemented.

Details

Our 2020 audit found that the 2016 and 2018 budgets for the Hamilton LRT project were prepared at an early concept stage and should have been subjected to rigorous peer review, market sounding and risk analysis in order to provide more accurate estimates.

In our follow-up, as noted above, we found that Metrolinx updated its estimation policy in August 2021 to review unit rates quarterly to ensure estimates include most current rates. Since the Hamilton LRT project was re-initiated in May 2021, its cost estimate was updated in June 2021, February 2022, and May 2022 to reflect the most up-to-date unit rates.

- *communicate all cost estimates, the content of all Treasury Board submissions and related updates*

to the Metrolinx Board and municipal government partners.

Status: In the process of being implemented by December 2022.

Details

Our 2020 audit found that Metrolinx’s Board was not consulted nor notified before the Minister’s cancellation announcement on December 16, 2019. The last Board meeting in 2019 was on November 22nd, where the quarterly capital projects report did not note any issues with the Hamilton LRT project. According to the Ministry, there was also no communication or consultation between the Ministry and the Board prior to the Minister’s cancellation announcement. We also found that the City of Hamilton was still expecting the LRT to go ahead when the Minister announced the cancellation of the project.

As noted above, the Capital Oversight Committee established by Metrolinx’s Board in October 2020, after the events of the Hamilton LRT project, will enable the Board to obtain information about all major transit projects managed by Metrolinx, including light rail transit projects. Per Metrolinx, the re-initiated Hamilton LRT will likely entail a sharing of cost information with municipalities and transit authorities, to the extent necessary and under confidential information-sharing agreements. Metrolinx stated that it will share information that is aligned with the content of Treasury Board submissions, but full submissions will not be disclosed to municipalities out of respect for Cabinet confidentiality. It expects to fully implement this recommendation by the end of 2022 when the contents of the Treasury Board submission for the re-initiated Hamilton LRT can be communicated to its Board and municipal partners.

Recommendation 13

Given the significant risks inherent in project estimates and costs involved with the construction of light rail transit (LRT) projects, we recommend that the Ministry of Transportation independently review, with the assistance of external expertise, Metrolinx and Infrastructure Ontario’s future estimates for LRT projects prior to

seeking Treasury Board approvals.

Status: Fully implemented.

Details

In our 2020 audit, we found that in December 2018, the Ministry of Transportation sought Treasury Board approval to reduce the scope of the Hurontario LRT project. The Ministry did this because Metrolinx had received feedback from the shortlisted bidders that the cost of the LRT would be substantially higher than the Treasury Board-approved initial budget.

In our follow-up, we found that the Ministry of Transportation has identified opportunities to improve the process Metrolinx undertakes when developing project estimates, including determining steps in the process where independent review of the estimates occur. Metrolinx's process now formally includes an independent peer review of estimates for projects greater than \$50 million. For example, we noted that Metrolinx had a peer review of the estimate for its Eglinton Crosstown West Extension project in April 2022.