

Financial and Major Projects Update for the Year Ended December 31, 2022

Date: April 13, 2023
To: TTC Board

From: Chief Financial Officer

Summary

This report sets out the preliminary operating and capital financial results for TTC Conventional and Wheel-Trans services and provides a status update of the TTC's major capital projects for the year ended December 31, 2022.

Preliminary year-end operating actual expenditures indicate that total spending for 2022 will result in the TTC's 2022 Operating Budget of \$2.233 billion gross and \$1.467 billion net will be underspent by \$72.6 million net. Of this amount, \$17.1 million relates to lower than anticipated COVID-19 expenses, and \$55.5 million is attributable to base budget favourable variances due primarily to service levels operating below budgeted levels, including the deferred opening of Line 5 Eglinton.

Based on the preliminary year-end capital results, the TTC's capital expenditures totalled \$1.175 billion or 81.9% of the 2022 Approved Capital Budget of \$1.434 billion. Of the total 2022 capital underspending of \$259.5 million, \$87 million is directly attributable to the paused spending of capital projects necessary for the TTC to contribute towards the City's \$300-million COVID-19 Backstop Funding Plan. If the 2022 Approved Capital Budget is adjusted to eliminate the \$87 million in paused capital spending, the TTC's capital spending rate increases to 87.2% for 2022.

The preliminary financial results are subject to the year-end audit process and the audited financial statements will be presented to Audit and Risk Management Committee on June 1, 2023 and the TTC Board on June 12, 2023.

This report also includes an update on 2023 spending under the CEO delegated authority for Safety and Security Response initiatives, as requested by the TTC Board.

Recommendations

It is recommended that the TTC Board:

1. Approve the 2022 Capital Budget in-year budget adjustments to offset projects that have had accelerated spending with projects that have experienced delays and lower spending with no debt impact, as outlined in Appendix 3 of this report, and which will also be submitted with the Capital Variance Report for the 12 Months ended December 31, 2022 for City Council consideration and approval.

2. Urge the Provincial and Federal governments for ongoing operating support as the TTC continues to recover from COVID-19 that has an estimated financial impact of \$366.4 million for 2023 and work towards a sustainable funding framework for public transit.

Financial Summary

2022 Preliminary Operating Results

The TTC's preliminary 2022 year-end financial results indicate a favourable \$72.6-million operating budget variance. Of this amount, \$17.1 million relates to lower than anticipated COVID-19 expenses, and \$55.5 million is attributable to base budget favourable variances.

Passenger revenue for TTC Conventional was \$3.2 million below budget for the year. After reaching 68% of pre-pandemic levels in September, further ridership recovery was constrained, as the frequency of in-office work remained at approximately two days per week and did not reach the budget expectation of three days per week by year-end. This unfavourable passenger revenue variance in the second half of the year offset the favourable experience from the first half, which was driven by a faster than expected recovery from the Omicron variant.

A foregone budgeted reserve draw of \$20.7 million was the largest contributor to the overall \$22.1-million revenue shortfall. The planned reserve draw that was approved to fund supplemental bus service to mitigate impact of delays during LRT construction, work on the Service Plan Reset and Fare Collection Strategy, as well as to partially offset insurance and fuel price volatility, was not required due to under-expenditures as outlined below, and the TTC Stabilization Reserve balance will be retained for future requirements.

Overall, operating expenses were \$94.7 million or 4.1% below the 2022 Approved Expenditure Budget due to conventional service levels operating approximately 4% below budgeted levels, the deferred opening of Line 5 and lower than anticipated Wheel-Trans ridership demand. As a result of these under-expenditures, the sharp increase in diesel prices that emerged due to unanticipated global events in early 2022 was accommodated within approved funding. The preliminary 2022 operating results are summarized in Table 1 below.

Table 1 – 2022 Preliminary Operating Results

	Year-End Results			
Description (\$Millions)	Budget	Actual	Variance Over/(Under)	
Revenue				
TTC Conventional				
Passenger Revenue	741.0	737.8	(3.2)	
Other Ancillary Revenue	49.5	52.3	2.8	
Wheel-Trans	6.0	5.0	(1.0)	
Forgone Reserve Draw	20.7	-	(20.7)	
Total Revenue	817.2	795.1	(22.1)	
Expenditures				
TTC Conventional	2,099.1	2,035.9	(63.1)	
Wheel-Trans	133.5	121.5	(12.0)	
Subtotal Base Expenditures	2,232.6	2,157.5	(75.1)	
COVID Incremental Costs	51.4	31.8	(19.6)	
Total Expenditures	2,284.0	2,189.3	(94.7)	
Net Expenditure (Funding Required)	1,466.8	1,394.2	(72.6)	
Operating Funding				
COVID Impact Funding	561.1	544.0	(17.1)	
Base Operating Funding	905.7	850.2	(55.5)	
Total Operating Funding	1,466.8	1,394.2	(72.6)	

The TTC's 2022 Operating Budget of \$2.233 billion gross, approved by City Council on February 17, 2022, comprised of \$817.2 million in revenues, \$905.7 million in Base City Funding and \$561.1 million in anticipated COVID relief funding to offset expected COVID financial impacts.

The COVID financial impact includes lost passenger and ancillary revenues relative to pre-pandemic levels, as well as incremental COVID response expenses. The actual COVID financial impact was \$544.0 million or \$17.1 million lower than planned, as summarized in Table 2.

Table 2 – 2022 COVID-19 Financial Impact

	Year-End Results			
Description (\$Millions)	Budget Actual		Variance Over/(Under)	
COVID-19 Financial Impact				
Lost Passenger revenue,net of PRESTO Commissions	487.1	490.5	3.4	
Lost Ancillary Revenues	22.6	21.7	(0.9)	
Incremental COVID-19 Expenses	51.4	31.8	(19.6)	
Total COVID-19 Financial Impact	561.1	544.0	(17.1)	

The net favourable variance of \$17.1 million in the anticipated COVID financial impact was primarily due to an under-expenditure of \$19.6 million from reduced COVID-19 vehicle and facility disinfection and employee screening requirements in 2022. This favourable variance is offset by a slightly higher than anticipated passenger revenue loss.

2022 COVID-19 Relief Funding

To date, the TTC has received a total of \$1.8 billion in funding relief and funding commitments from other orders of government. On March 20, 2023 the Province confirmed that additional funding of \$37.4 million was being made available to the TTC to cover 2022 COVID impacts from Phase 4 Safe Restart Agreement (SRA) funding not required by other transit systems. Inclusive of this additional funding, the Province has now committed to \$452.6 million in SRA COVID Relief funding for 2022. Funding support to date recognized the importance of public transit as an essential service. The remaining impact of \$91.4 million will be addressed by the City through leveraging the City's COVID Backstop funding, which includes a redirection of \$87 million in capital funding.

The City and the TTC continue to hold discussions with the other orders of government to address the 2023 anticipated COVID impacts of \$366.4 million, and to secure stable and long-term funding to sustain TTC transit services, which are vital to the economic, environmental and social health and well-being of the city of Toronto and surrounding regions.

2023 Community Safety Response Unbudgeted Expenditures

In accordance with the recommendations adopted by the TTC Board at its February 28, 2023 meeting, an update on unbudgeted Community Safety Response expenditures approved through CEO delegated authority will be provided through this and future Financial Update reports.

The current estimate of unbudgeted System Safety expenditures approved through CEO delegated authority to May 31, 2023 is \$2.1 million. Compared to expenditures reported on February 28, 2023, this update includes a new contract for vendor delivery of a 'train the trainer' program to equip TTC in-house Instructors with the ability to deliver enhanced de-escalation training to all frontline employees, as well as the extension of security guard services to May 31, 2023. Committed expenditures to May 31, 2023 are summarized in Table 3 below.

Table 3 – Community Safety Response Unbudgeted Expenditures to May 31, 2023

Description (\$Millions)	Projected Cost to May 31, 2023
50 Temporary Security Guards	1.1
20 Community Safety Ambassadors	0.3
Special Constables Overtime - High Visibility Patrols	0.3
6 Transit Control Dispatchers	0.2
De-escalation Training	0.1
Extended Station Cleaning	0.1
Total Unbudgeted System Safety and Cleanliness Initiatives	2.1

As indicated in the Community Safety Issues and Response report, all response initiatives will be reassessed in April and an update will be provided to the TTC Board through the quarterly Financial Update reports on the continuation of any of these and other measures that may be required, and any associated costs to be incurred beyond May 2023.

2022 Preliminary Capital Results

Based on the preliminary year-end results, the TTC's base capital expenditures totalled \$1.143 billion, representing a year-end spending rate of 83.2% of the 2022 Approved Capital Budget. In addition to the base capital spending, the TTC also incurred \$31.3 million or 52.9% of the 2022 Approved Capital Budget to continue the capital work program for transit-expansion-related initiatives. Combined, the TTC's preliminary year-end spending totalled \$1.175 billion, representing an 81.9% spending rate, as noted in Table 4 below:

Table 4 – Preliminary Capital Results

Description	2022	Year End	l Actuals	2022 Underspend		
(\$ Millions)	Budget	\$ %		\$	%	
TTC Base Capital	1,374.8	1,143.2	83.2%	231.6	16.8%	
TTC Transit Expansion-Related Proj.	59.2	31.3	52.9%	27.9	47.1%	
Total	1,434.0	1,174.5	81.9%	259.5	18.1%	

The 2022 capital underspending of \$259.5 million is the result of various factors. \$87 million (5.3%) of the \$259.5 million (18.1%) in underspending is directly attributable to the paused spending of capital projects necessary for the TTC to contribute to the City's COVID-19 Backstop Funding Plan. The TTC was required to pause/cancel capital projects in the amount of \$87 million to contribute towards the \$300 million in capital expenditure reductions to help address the City of Toronto's COVID-19-related funding gap.

This plan was presented to City Council at its meeting on April 6, 2022 in the 2022 COVID-19 Intergovernmental Funding Update report and again on December 15, 2022 as part of the City's Capital Variance Report for the Nine Months Ended September 30, 2022. The planned underspending was carried forward in the TTC's 2023 Capital

Budget and subsequently redirected during the 2023 Budget process to secure the capital-related funding for the Backstop Funding Plan.

If the 2022 Approved Capital Budget is adjusted to remove the \$87 million in underspending associated with the paused capital works, the spending rate for the TTC's Base Capital Program increases to 88.8%, while the spending rate on Transit Expansion-Related Initiatives remains unchanged. As a result, the overall capital spending rate for 2022 increases to 87.2%, as presented in Table 5 below:

Table 5 – 2022 Preliminary Capital Results Net of \$87M COVID Adjustment

Description	2022	Year End	l Actuals	2022 Und	lerspend		
(\$ Millions)	Budget	\$	%	\$	%		
TTC Base Capital							
Infrastructure Projects	943.4	864.5	91.6%	78.9	8.4%		
Vehicle Related Projects	344.4	278.7	80.9%	65.7	19.1%		
Total - Base Capital	1,287.8	1,143.2	88.8%	144.6	11.2%		
TTC Transit Expansion-Related Projects							
Toronto York Spadina Subway							
Extension	38.0	20.3	53.4%	17.7	46.6%		
SRT Life Extension and Transition	16.4	6.2	37.8%	10.2	62.2%		
Waterfront Transit - Design	4.8	4.8	100.0%	0.0	0.0%		
Total - Transit Expansion-Related Projects	59.2	31.3	52.9%	27.9	47.1%		
Total	1,347.0	1,174.5	87.2%	172.5	12.8%		

Capital spending is also impacted by other factors, including but not limited to, labour market conditions and supply chain constraints; delays due to protracted negotiations for complex projects; adjustments to project schedules due to dependencies with third parties; and scope/schedule deferrals.

Through the 2023 Budget process, an estimated \$174.8 million of anticipated unspent funding in 2022 was carried forward and included in the 2023-2032 Capital Budget and Plan submission. This carry-forward estimate included \$87.8 million in projected underspending related to in-flight capital projects, plus \$87 million in underspending associated with the recommended list of paused capital projects so that the funding could be redirected to the City's COVID Backstop Plan. Once carried forward, the \$87 million in funding capacity was permanently reduced and the TTC absorbed the costs associated with the paused capital works in the 2023 Capital Budget.

Based on the TTC's preliminary year-end results adjusted for the \$87-million reduction for the Backstop Funding Plan, the actual underspending for 2022 is \$172.5 million, of which the TTC requires a total of \$169.3 million to be carried forward into 2023 to complete 2022 capital projects. In accordance with the City's Carry Forward Policy, a total of \$81.5 million of additional funding from underspent capital projects will be carried forward and added to the existing carry-forward funding of \$87.8 million. The \$81.5 million incremental carry-forward funding will be included with the Adjustments to the Capital Budget Carry Forward Funding and Future Year Commitments Report for City Council's consideration and approval. Of this amount, \$20.8 million in incremental

carry-forward funding will be added to the 2023 Capital Budget and the remaining \$60.7 million will be added to the 2024 cashflow estimates.

Economic Impacts of TTC Spending

As part of its annual budget, the TTC allocates funds for capital spending, which is used to invest in infrastructure, equipment and other assets to improve the quality, safety and efficiency of its transit services. This spending generates economic activity that benefits the Toronto, GTA region and the rest of Canada. Key findings from research conducted by the University of Toronto regarding the economic impact of TTC investments concludes that:

- Every \$1 invested creates the equivalent of \$2.40 in economic activity (Gross Output);
- Every \$1 invested adds an additional \$1 dollar in GDP, generating a value-added impact resulting in an increase in profit, taxes and spending on labour; and
- Every \$1 million invested creates 15 new jobs.

Given the actual capital spending of \$1.175 billion incurred in 2022, and based on ratios derived from the research conducted by the University of Toronto, it can be estimated this investment spending generated \$2.819 billion in economic activity (gross output), contributed \$1.175 billion in gross domestic product (value added) and created or sustained 17,618 jobs, as summarized in Table 6 below:

Table 6 – Economic Impact of Year End Capital Spending by the TTC

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Year-End Capital Results	\$1.2 Billion
Economic Activity (Gross Output)	\$2.8 Billion
Gross Domestic Product (GDP)	\$1.2 Billion
Jobs	17,618

While research with the University of Toronto regarding the economic impact of the TTC's operating spending continues, the Multi-Regional Input Output (MRIO) multiplier for Urban Transit Systems of 2.26 can be applied to the TTC's operational expenditures on goods and services. In 2022, spending on goods and services amounted to \$623.1 million, which would result in \$1.408 billion in economic activity.

Equity/Accessibility Matters

The TTC is strongly committed to making Toronto's transit system barrier-free and accessible to all. We believe all customers should enjoy the freedom, independence and flexibility to travel anywhere on the public transit system.

In addition to ongoing efforts to address accessibility, diversity and inclusion, the 2022 TTC Operating Budget provided new investment funding of \$0.7 million to support the implementation of the Embrace Diversity Action Plan, including the provision of employee training and anti-racism initiatives consistent with Ombudsman Toronto recommendations, and to expand outreach initiatives.

The 2022-2031 Capital Budget and Plan included funding of \$82.9 million in 2022 and \$547.6 million between 2023 and 2027 for the TTC's Easier Access Program, which is underway to make all subway stations accessible with elevators, wide fare gates and automatic sliding doors. It also provided funding for several improvements elsewhere across the transit system, including Warden and Islington stations, accessible TTC bus and Wheel-Trans fleets and accessible, low-floor streetcars.

Decision History

At its meeting on December 20, 2021, the TTC Board approved the 2022-2031 TTC Capital Budget and Plan of \$11.902 billion in funding over the 10-year period, with \$1.698 billion approved in the 2022 Capital Budget.

TTC 15-Year Capital Investment Plan, Real Estate Investment Plan and 2022-2031

Capital Budget & Plan

At its meeting on December 20, 2021, the TTC Board approved the 2022 Operating Budget of \$2.102 billion gross and \$1.185 billion net for TTC Conventional Service; \$133.4 million gross and \$127.2 million net for Wheel-Trans Service for a total 2022 Operating Budget of \$2.235 billion gross and \$1.312 billion net; and a 2022 total year-end workforce complement of 16,467 positions for the TTC.

2022 TTC Conventional and Wheel-Trans Operating Budgets

At its meeting on February 10, 2022, the TTC Board approved an increase to the TTC's 2022-2031 Capital Budget and Plan of \$4.3 million to reflect the updated cost required to undertake the Queen Streetcar Infrastructure work for the Ontario Line Project and amended the number of temporary capital positions to 16 from four positions to perform the capital work. The total cost is to be fully recovered from Metrolinx.

Transit Network Expansion Update

Subsequently on February 17, 2022, City Council approved an amended 2022 TTC Operating Budget to reflect the anticipated ridership impact from the Omicron variant. The 2022 Operating Budget for TTC Conventional service was increased by \$99.9 million net to \$1.285 billion net reflecting the estimated revenue loss that was anticipated from the Omicron variant.

City of Toronto 2022 Capital and Operating Budgets.

At its meeting on May 11, 2022, City Council approved additional carry-forward funding of \$45.998 million to the 2022 Capital Budget and \$258.2 million added to the 2023 cashflow estimates based on unspent capital project funding in 2021 for the TTC.

Adjustments to Capital Budget, Carry Forward Funding and Future Year Commitments

At the same meeting on May 11, 2022, City Council approved an increase in taxicab fares of \$1 per trip in response to a rise in gas prices, resulting in a corresponding increase in Wheel-Trans sedan taxi trip costs.

Ensuring Accessibility and Equity for Toronto Taxi Drivers

At its meeting on July 19, 2022, City Council approved an amendment to the 2022-2031 Capital Budget and Plan by reducing the 2022 Capital Budget by \$128.1 million and increasing the 2023 Capital Plan Estimates by \$132.4 million to account for projects that

have had accelerated spending and to account for projects that have experienced some delays.

Capital Variance Report for the Four Months Ended April 30, 2022

At its meeting on July 14, 2022, the TTC Board approved an increase in temporary operating complement fully dedicated to the TTC's project assurance function for Metrolinx projects subject to the approval of the 2022 Annual Work Plan by Metrolinx. This change was also approved by City Council at its meeting on July 21, 2022. In a letter dated October 7, 2022 from Metrolinx to the TTC, Metrolinx provided approval of a 2022 Annual Work Plan, thereby confirming an increase of 29 temporary operating complement, resulting in an updated total of 65.

Transit Network Expansion Update

At its meeting on July 19, 2022, City Council approved the transfer of \$52.0 million to the TTC Operating Budget and \$2.3 million to the Wheel-Trans Operating Budget from the City's Non-Program Budget to fund the impact of the arbitrated collective agreement settlement for 2021 and 2022. The 2022 Operating Budgets were revised to \$2.149 billion gross and \$1.337 billion net for TTC Conventional Service and \$135.4 million gross and \$129.5 million net for Wheel-Trans Service.

City of Toronto Operating Variance Report for the Four Months Ended April 30, 2022

At its meeting on December 15, 2022, City Council approved the Capital Variance Report for the Nine Months Ended September 30, 2022 that included three amendments to the TTC's 2022 Capital Budget and 2023-2031 Capital Plan. The 2022 Capital Budget was reduced by \$185.2 million, with an equal increase across the 2023-2031 Planned Estimates due to the delayed delivery schedule of the bus procurement. The 2022 Capital Budget was further reduced by \$42.688 million net to reflect the revised project costs for the 204 LRV procurement and the property acquisition of the 10th Bus Garage at 800 Kipling Ave.

City of Toronto Capital Variance Report for the Nine Months Ended September 30, 2022

At its meeting on December 15, 2022, City Council was provided with Appendix 6 to the Capital Variance Report for the Nine Months Ended September 30, 2022, which outlined the preliminary list of capital projects that will be paused, with the unspent funds to be redirected to the City's COVID-19 Backstop pending COVID-19 Relief Funding. The TTC's Capital Budget would contribute \$87 million of the City's total \$300 million of estimated capital reductions.

Preliminary List of Projects Paused or Applied Underspending Pending COVID-19 Funding

Comments

2022 Key Service and Capital Results

As part of the annual budget process, the allocation of funding and resources is guided by the service objectives in the TTC's Corporate Plan and capital priorities laid out in the Capital Investment Plan. The Operating and Capital Budget provide the TTC with the funding means to make progress on achieving the service and capital objectives and their intended outcomes.

The 2022 approved operating funding has enabled the TTC to achieve the following results:

- Aligned service capacity to demand;
- Maintained TTC Fares at 2020 rates to ensure affordability and accessibility;
- Implemented LRV Apprenticeship Program in collaboration with Centennial College;
- Increased vehicle maintenance capacity and achieved or exceeded vehicle reliability targets;
- Partnered with City's Streets to Homes to have a dedicated presence of outreach workers on the transit system to help those who need assistance;
- Acquired cybersecurity vendor services to support the TTC's cybersecurity and risk program;
- Acknowledged by Forbes as one of Canada's Best Employers for Diversity in 2022;
- Progressed on the Embracing Diversity: 10 Point Action Plan and launched the first Diversity and Culture Annual Report, which highlighted 50 key accomplishments, including launching the Racial Equity Office and the Fare Inspector and Special Constable Complaint Office;
- Continued gender recruitment outreach events with 45 events being held, leading to the achievement of the gender recruitment target of 40% of new operator hires being women;
- Completed the 5-year Fare Policy and the 10-year Fare Collection Outlook;
- Advanced Line 5 and Line 6 mobilization activities:
- Engaged customers, stakeholders and the general public to understand postpandemic travel patterns to ensure alignment of service hours; and
- Ran multi-media communication campaign focused on ridership recovery.

In 2022, the TTC advanced or completed the following capital priorities:

- Completed and operationalized Automatic Train Control (ATC) on the entirety of Line 1; allowing for an increase in service capacity and achievement of up to 32 southbound trains at Bloor-Yonge between 8 and 9 a.m. weekdays;
- Implemented One-person Train Operation (OPTO) on the entirety of Line 1 and realized a cumulative \$10-million in operating cost savings as a result of operationalizing of ATC;
- Acquired 800 Kipling Ave. as the future site for TTC's 10th Bus Garage and additional operational uses, consistent with the guiding principles in the TTC's Real Estate Investment Plan;
- As part of SOGR program, replaced 16,500 feet subway track and reprofiled1,400 feet of power rail and 122,000 feet of rail; replaced 22,000 feet of tangent surface track, including the completion of overhead upgrades and cable feeders; addressed six platform edge tiles gaps; and completed subway stair rebuilds at three locations:

- As part of the Line 1 Capacity Enhancements Project, awarded the contract for the St Andrew Station Modifications and commenced construction;
- Completed Fire Ventilation Upgrades at York Mills, Sheppard, Finch, Union and Lawrence stations and Subway Ventilation Equipment Replacement at Bloor-Yonge, Sheppard West and Sherbourne stations;
- Completed the Stations Transformation construction of the final two Zone hubs located at St Clair West and Sheppard-Yonge stations in Q2 and Q4 respectively;
- In August 2022, acquired properties for Bloor-Yonge Capacity Improvements Project;
- Updated the Capital Investment Plan and Real Estate Investment Plan and distributed these Plans to elected and key officials in all three orders of government to advance unfunded capital priorities;
- Signed an agreement with PowerON Energy Solutions LP for the delivery, maintenance and operation of electrification infrastructure needed to transition the TTC's fleet and facilities to zero-emissions. In 2022, the TTC initiated the installation of the TTC's first eBus pantograph charging systems along with a cutting-edge, centralized charging system at Birchmount Garage to assess their performance relative to plug-in chargers fed by individual chargers;
- Awarded the contract for the procurement of 336 Hybrid Buses for delivery by 2024;
- Expanded the Wi-Fi pilot to two additional bus routes, bringing the total number of bus routes with Wi-Fi to four since 2021;
- Commenced the upgrade of all PRESTO devices to enable the future fare collection modernization and modernizing the fare collection system making open payment available by Q3 2023.

Appendix 5, Major Projects Update (for the year ending December 31, 2022), provides an update on the capital delivery performance for each major project within the TTC's base capital and transit expansion programs.

Key Operating Budget Indicators

The TTC's operating results are primarily driven by six key indicators. These indicators impact year-to-date spending and revenues, as well as provide the basis for estimated year-end spending projections.

The key indicators include TTC and Wheel-Trans revenue ridership and average fare and market prices for diesel fuel and electric power, which affect a combined fuel and utilities budget of \$170.3 million. The final and most significant driver of expenses relates to service hours, which impact labour expenses (\$1.154 billion) and non-labour expenses (\$303 million), such as parts and maintenance, as well as fuel and utility consumption.

Table 7 details the TTC's key operating indicators, which are discussed below:

Table 7 – Summary of Key Operating Budget Indicators

	Yea			
Item	Budget	Actual	Variance	Status
TTC Ridership	325.2M	318.7M	(6.5M)	
TTC Average Fare	2.28	2.31	0.03	Ø
TTC Actual Operating Service Hours	9.371M	8.968M	(0.403)	×
Price of Fuel (\$/litre)	1.13	1.53	0.40	×
Price of Electric Power (\$/kwH)	0.15	0.13	(0.02)	Ø
WT Passengers	2.7M	2.3M	(0.4M)	8

Revenue Ridership

For 2022, revenue ridership totalled 318.7 million rides, representing 98% of the annual 2022 revenue ridership budget, with the favourable budget variance experienced during the first half of the year largely offset the unfavourable budget variance experienced in the second half of the year.

Revenue ridership experienced substantial recovery in the first half of the year, growing from 37% of pre-pandemic normal levels in January to 63% in June, primarily due to a resumption of special events and festivals, an increase in post-secondary, in-person learning and a gradual hybrid return to office workplaces. Revenue ridership was above the budget expectation during the first half of the year, driven by the faster than expected recovery from the Omicron variant.

Ridership then levelled off in the summer months, but grew again in September with a return to school and a slight increase in the return to in-office work, with revenue rides reaching an average 68% of pre-pandemic levels in September. During the balance of the fall, however, further revenue ridership growth was constrained by the continuation of work-from-home and hybrid work arrangements. Ridership for the week ending December 31, 2022 reached a high of 71% of pre-pandemic levels, with overall revenue ridership averaging 68% of pre-pandemic levels for the month of December, in part due to weather-related events.

Hybrid work practices have led to a travel pattern change from the former daily commuter to a now-less-frequent usage group. During Period 12, 2022, up to 89% of unique PRESTO riders returned to the system each week, compared to pre-pandemic levels. Even though riders have returned to the system, the travel frequency of these riders has dropped. For example, the number of unique riders classified as "commuters" (i.e. ride four or five weekdays each week) are at 56% of pre-pandemic levels in December and below the overall December ridership rate of 68% of pre-pandemic normal. Conversely, riders who use transit less frequently are at 114% of pre-pandemic levels.

Revenue ridership trended below budget in the second half of the year, primarily due to a lower than anticipated frequency of in-office days for office workers as the budget anticipated a return to office of three days a week in the fall, but the frequency of actual in-office work remained closer to two days a week.

Service Hours

On average, regular service hours delivered were 4.3% below budget in 2022. In the first half of the year, service hours were lower than budget due to reduced operator availability during the Omicron wave and the impact of the Mandatory Vaccination Policy. Actions to mitigate service impacts on customers included accelerated operator hiring and training, targeted use of overtime to address spikes in absenteeism and key frontline vacancies, and the use of Run-as-Directed vehicles. In September, service was increased on 31 bus and streetcar routes, as well as on both Lines 1 and 2. These service increases aligned service capacity with anticipated fall ridership demand, accounting for the expected return to school and office travel.

Diesel Fuel

Due to unanticipated global events, the average diesel price was 35% above budgeted levels for the year as a whole, resulting in a total over-expenditure of \$27.9 million. This financial impact was accommodated within approved 2022 funding given other under-expenditures. The 2023 Operating Budget approved by the TTC Board on January 9, 2023 included additional funding of \$36.3 million to accommodate an average diesel price of \$1.50, broadly consistent with both the 2022 experience and 2023 forecasts.

2022 Preliminary Operating Results

For the year ending December 31, 2022, the TTC incurred actual expenditures of \$2.189 billion gross and \$1.394 billion net against an Operating Budget of \$2.233 billion gross and \$1.476 billion net, resulting in a net favourable operating variance of \$72.6 million. Of this amount, \$17.1 million is related to lower than anticipated COVID-19 expenses, and \$55.5 million is primarily attributable to underspending in base service costs and the deferred opening of Line 5 Eglinton.

2022 actual revenues result in an unfavourable variance of \$22.1 million, primarily due to a foregone budgeted reserve draw of \$20.7 million that was no longer required given the favourable base expenditure variance. TTC Conventional passenger revenue was \$3.2 million (0.4%) below budget for the full year. The higher than budgeted passenger revenue variance experienced during the first half of the year due to a faster than anticipated recovery from the Omicron variant was offset in the second half by lower than anticipated office commuting demand due to the continuation of hybrid work arrangements. Ancillary revenues were above budget by \$2.8 million due to higher commuter parking revenue and interest income.

The \$94.7 million in under-expenditures were primarily driven by Conventional service operating below budgeted levels; the opening of Line 5 deferred to 2023; lower than budgeted Wheel-Trans ridership demand; and lower than anticipated COVID response expenses as special vehicle disinfecting and employee screening initiatives were discontinued during the year. Partially offsetting these under-expenditures were diesel fuel costs that averaged 35% above budgeted levels, which due to unanticipated global events in early 2022, increased the market price for diesel fuel throughout the year.

Table 8 below reflects the key drivers of the favourable variances from the 2022 Operating Budget:

Table 8 – TTC and Wheel-Trans Operating Results

Table 6 – 11C and wheel-trans Operating Results						
Description	Year-End Results					
(\$Millions)	Budget	Budget Actual				
Revenue			•			
TTC Conventional						
Passenger Revenue	741.0	737.8	(3.2)			
Ancillary Revenue	49.5	52.3	2.8			
Wheel-Trans Passenger Revenue	6.0	5.0	(1.0)			
Subtotal Revenue	796.5	795.1	(1.4)			
Reserve Draw	20.7	-	(20.7)			
Total Revenue	817.2	795.1	(22.1)			
Expenditures						
TTC Conventional						
Departmental Labour	1,164.2	1,126.3	(37.9)			
Departmental Non-Labour	271.3	250.6	(20.7)			
Employee Benefits	380.4	371.0	(9.4)			
Diesel	82.0	109.9	27.9			
Traction Power & Utilities	88.3	71.5	(16.8)			
PRESTO Commissions	31.4	31.6	0.2			
Corporate Costs	81.6	75.1	(6.4)			
Wheel-Trans	133.5	121.5	(12.0)			
Subtotal Base Expenditures	2,232.6	2,157.5	(75.1)			
COVID Incremental Costs	51.4	31.8	(19.6)			
Total Expenditures	2,284.0	2,189.3	(94.7)			
Net Expenditure (Funding Required)	1,466.8	1,394.2	(72.6)			
Operating Funding						
COVID Impact Funding	561.1	544.0	(17.1)			
Base Operating Funding	905.7	850.2	(55.5)			
Total Operating Funding	1,466.8	1,394.2	(72.6)			

Further analysis of operating results by service is provided in Appendix 1.

2022 COVID-19 Financial Impact

Table 9 summarizes the financial impacts of COVID-19 on the 2022 Operating Budget:

Table 9 – 2022 Operating Budget COVID-19 Impacts

	Year-End Results			
Description (\$Millions)	Budget Actual		Variance Over/(Under)	
COVID-19 Financial Impact				
Lost Passenger revenue,net of PRESTO Commissions	487.1	490.5	3.4	
Lost Ancillary Revenues	22.6	21.7	(0.9)	
Incremental COVID-19 Expenses	51.4	31.8	(19.6)	
Total COVID-19 Financial Impact	561.1	544.0	(17.1)	

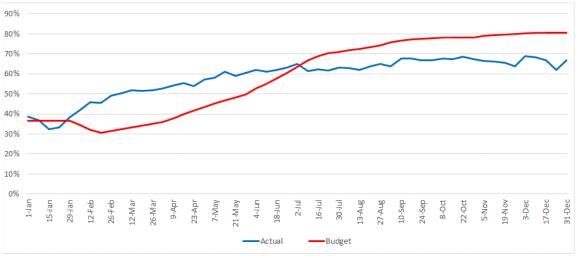
TTC Conventional Passenger Revenue

Total Conventional passenger revenue realized in 2022 totalled \$737.8 million, representing 99.6% of the approved budget of \$741.0 million, resulting in a budget shortfall of \$3.2 million, and \$3.4 million, net of PRESTO commissions.

As shown in Chart 1 below, conventional passenger revenue substantially recovered in the first half of the year, growing from 35% of pre-pandemic normal in January to 63% in June and was above the budget estimate during the first half of the year, driven by the faster than expected recovery from the Omicron variant. Conventional passenger revenue growth then slowed during the second half of the year, with the exception of a pick-up in September, with a return to school and a slight increase in the return to inoffice work, with TTC conventional passenger revenue reaching 68% of pre-pandemic normal in September. TTC conventional passenger revenue remained at 68% of pre-pandemic normal through the fall, with overall revenue ridership averaging 68% of pre-pandemic levels into December as the continuation of work from home and hybrid work arrangements constrained further ridership recovery.

As a result, conventional passenger revenue trended below budget in the second half of the year, primarily due to a lower than anticipated frequency of in-office days for commuters. Office commuters averaged just under two in-office days per week, whereas the 2022 revenue budget anticipated that this would reach three days per week by year-end. The favourable budget variance in the first half of the year was largely offset against the unfavourable budget variance experienced in the second half of the year.

Chart 1 – Weekly TTC Conventional Passenger Revenue as Percentage of Pre-Pandemic Normal



COVID-19 Expenses

The COVID-19 financial impact incorporated into the 2022 Operating Budget included \$51.4 million in COVID-19 response expenses to protect customer and employee safety. As outlined in Table 10, actual expenses in 2022 were \$19.6 million below planned spending, primarily due to the discontinuation of employee screening, facility disinfection and vehicle disinfecting during the year.

Table 10 – 2022 COVID-19 Expenses

Description	Year-To-Date			
(\$Millions)	Budget	Actual	Variance	
Safety and Other Required Measures				
Vehicle Disinfection	11.6	2.5	(9.2)	
Personal Protective Equipment	6.0	2.8	(3.2)	
Vehicle Ventiliation Filters	1.7	1.1	(0.6)	
Facility Disinfection, Decals and Other				
	4.4	1.7	(2.7)	
Hand Sanitizer for Customers	1.6	1.0	(0.6)	
Employee Screening Costs	8.0	2.2	(5.8)	
Managing Resourcing				
Incremental Labour Costs	1.7	1.2	(0.5)	
Operator Hiring (Cadre)	-	0.5	0.5	
WSIB Claims	10.2	10.2	-	
Sick Benefit Payment Impact	6.2	8.5	2.4	
Total COVID-19 Expense	51.4	31.8	(19.6)	

Overtime Management

The management of overtime expenses continues to be a key area of focus for the TTC, one that contributes to meeting the TTC's service objective of enhancing its financial sustainability. Overtime expenditures are required to meet both operating and capital needs. Operating requirements are driven by the need to address incident

response and absence coverage, and capital requirements support efforts to maximize productivity, while minimizing disruption during capital project delivery.

Excluding overtime required for scheduled service, Chart 2 below shows that average weekly overtime spending (operating and capital combined) increased from 2021 levels, and was broadly in line with 2019 levels for the first three quarters of the year, before trending below 2019 levels in the fourth quarter as vacant roles continued to be filled.

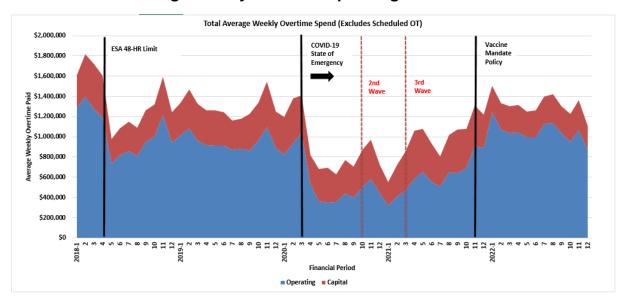


Chart 2 – Total Average Weekly Overtime Spending

The increase in overtime requirements in 2022 during the first half of the year, relative to 2021, was primarily driven by temporary measures to ensure service continuity. Overtime was required as a means to address increased absence coverage during the fourth wave of COVID-19 (Omicron variant) from December to March. The use of overtime was especially necessary in January, at the height of the Omicron wave, where the absence rate amongst operators spiked to as much as 19% compared to an average of approximately 12% in 2021. In addition, the TTC implemented the Mandatory Vaccination Policy in November 2021, which resulted in a reduction of available operators and maintenance staff, and therefore it was necessary for the TTC to rely on overtime to mitigate service impacts. Filling this open work on overtime was a last resort and a temporary measure to ensure service continuity.

In the second half of the year, overtime spending remained elevated in the summer months, due to the number of operators available remaining below service requirements, in part due to a higher vacation quota in the summer months. To mitigate this, accelerated operator hiring throughout the summer and fall months was completed for operators, which led to a gradual decline in overtime spending towards the end of the year.

Operating Overtime

Consistent with key 2022 events and the overall trend noted above, operating overtime in 2022 increased relative to the 2021 experience and was in line with pre-pandemic

levels from 2019. To maintain service continuity and maintain vehicle availability, higher levels of overtime were incurred in the Transportation and Vehicles Group in the operator and maintenance areas than in 2021, particularly due to the fourth wave of COVID and the implementation of the Mandatory Vaccination Policy that led to higher vacancy rates, as noted above. Overtime stabilized in the summer months before starting to decline towards the end of the year. Operating overtime has declined approximately 30% in the first two months of 2023 as vacant roles have been filled, assisted by the elimination of the vaccine mandate and the return of workers to the TTC.

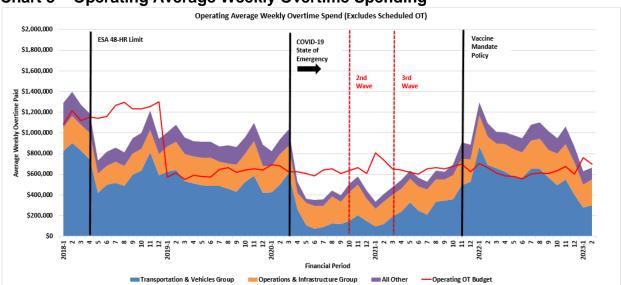


Chart 3 - Operating Average Weekly Overtime Spending

2022 Preliminary Capital Results

For the year ending December 31, 2022, the TTC incurred \$1.143 billion in capital spending, reflecting a spending rate of 83.2% for the TTC base capital program and \$31.3 million or 52.9% for transit expansion-related projects, resulting in total capital spending of \$1.175 billion and an overall spending rate of 81.9% at year-end, resulting in an under-expenditure of \$259.5 million or 18.1%. The year-end results by capital program are detailed in Appendix 2. Table 11 below summarizes the TTC's preliminary year-end results by key project type:

Table 11 – 2022 Preliminary Year End Capital Results

Description	2022	Year End Actuals		2022 Und	derspend
(\$Millions)	Budget	\$	%	\$	%
TTC Base Capital					
Infrastructure Projects	1,023.1	864.5	84.5%	158.6	15.5%
Vehicle Related Projects	351.7	278.7	79.2%	73.0	20.8%
Total - Base Capital	1,374.8	1,143.2	83.2%	231.6	16.8%
TTC Transit Expansion-Related Projects					
Toronto York Spadina Subway					
Extension	38.0	20.3	53.4%	17.7	46.6%
SRT Life Extension and Transition	16.4	6.2	37.8%	10.2	62.2%
Waterfront Transit - Design	4.8	4.8	100.0%	0.0	0.0%
Total - Transit Expansion-Related Projects	59.2	31.3	52.9%	27.9	47.1%
Total	1,434.0	1,174.5	81.9%	259.5	18.1%

\$87 million of the \$259.5 million or 5.3% of the total 18.1% under-expenditure in the 2022 Capital Budget stems from the paused capital spending required in 2022 as the TTC's contribution towards the City's COVID-19 Backstop Funding Plan. The TTC was required to pause/cancel capital projects in the amount of \$87 million to contribute towards the \$300 million in capital expenditure reductions to help address the City of Toronto's COVID-19 related funding gap, as presented to City Council at its meeting on April 6, 2022 and again on December 15, 2022 as part of the Capital Variance Report for the Nine Months Ended September 30, 2022. The planned 2022 underspending was carried forward into the 2023 Capital Budget and subsequently redirected during the 2023 Budget process to secure the capital-related funding for the backstop plan.

If the 2022 Capital Budget is amended to eliminate the \$87 million in base capital program underspending required for the COVID-19 Backstop Funding Plan, the TTC's capital spend rate increases to 88.8% for the TTC's base capital program and 87.2% overall, as summarized in Appendix 2 and Table 12:

Table 12 – 2022 Preliminary Year End Capital Results Net of \$87 Million COVID Adjustment

Description	2022	Year End Actuals		2022 Und	lerspend
(\$Millions)	Budget	\$	%	\$	%
TTC Base Capital					
Infrastructure Projects	943.4	864.5	91.6%	78.9	8.4%
Vehicle Related Projects	344.4	278.7	80.9%	65.7	19.1%
Total - Base Capital	1,287.8	1,143.2	88.8%	144.6	11.2%
TTC Transit Expansion-Related Projects					
Toronto York Spadina Subway					
Extension	38.0	20.3	53.4%	17.7	46.6%
SRT Life Extension and Transition	16.4	6.2	37.8%	10.2	62.2%
Waterfront Transit - Design	4.8	4.8	100.0%	0.0	0.0%
Total - Transit Expansion-Related Projects	59.2	31.3	52.9%	27.9	47.1%
Total	1,347.0	1,174.5	87.2%	172.5	12.8%

2018-2022 Base Capital Program Spending Rates

Chart 4 below provides the TTC's 2022 spending rate by project category for its base capital program adjusted for the \$87 million in paused spending and compares this to the TTC's experience over the previous four years:

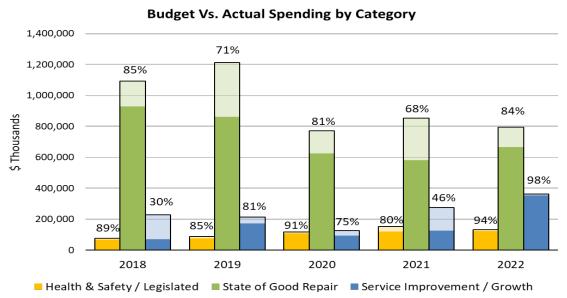


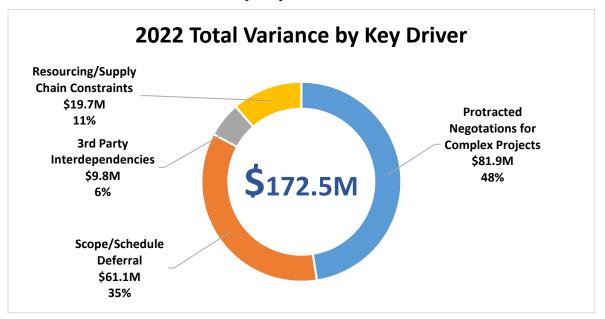
Chart 4 – 2018-2022 Base Capital Program Spend Rate by Category

As illustrated in the above graph, spending improved in 2022 in each of the project categories, in comparison to prior years (except SOGR spending in 2018). The most significant increase in spending has occurred in Service Improvement/Growth capital projects, which tend to be the more complex and/or third-party dependent projects. This increase is mainly attributed to several property acquisitions that were settled in 2022, including the 10th Bus Garage, as well as the HONI Lands property for the Subway Train Maintenance and Storage Facility. Spending returned to historical trends (based on 2020 and prior year average spend rates) for the TTC's SOGR as well as Health and Safety/Legislated programs. This is primarily a result of the recalibration of the Capital Budget and Plan that better aligned annual cashflow estimates with spending, project readiness, activities and timelines.

Underspending in the TTC's base capital program is attributable to several factors. Protracted negotiations for complex projects, such as the purchase of buses, resourcing challenges experienced in the SAP program, as well as supply chain constraints experienced in the purchase of Wheel-Trans buses and various other projects continue to be contributing drivers of underspending. Capital projects that have dependencies with third parties result in delays, schedule changes and, in some cases, the cancellation of work: a change to one schedule or priorities results in delays to and/or the deferral of planned capital work.

The TTC's capital underspending, net of the \$87 million COVID Backstop budget adjustment can be summarized by the following key drivers, as outlined in the following graph:

Chart 5 – 2022 Total Variance by Key Driver



Protracted negotiations for complex projects resulted in underspending of \$81.9 million or 48%, primarily attributable the procurement of eBuses and related infrastructure project. Approximately 35% or \$61.1 million in underspending was driven by scope and schedule deferrals associated with construction projects, which were a direct result of risks identified during the design phase being realized during the construction phase, causing the schedule and/or scope to be revised and/or delayed. Interdependencies with other capital work and slower than expected progress on design activities also impacted planned construction schedules. Another 11% or \$19.7 million in underspending was caused by labour shortages and supply chain uncertainties for various infrastructure and vehicle related capital works across the TTC's capital program. A further 6% or \$9.8 million in underspending was due to delays associated with the need to maintain alignment with third parties who were also experiencing delays in supporting or co-ordinating capital works.

2022 Underspending by Project: Key Variances

The TTC's 2022 year-end capital underspending by project is highlighted below. The majority of the 2022 underspending is primarily driven by delays experienced in Vehicle Related capital projects, with the purchase of Conventional and Wheel-Trans Buses being impacted by protracted procurement and supply chain issues. Underspending in infrastructure programs was primarily experienced in various Buildings and Structures programs as well as Equipment, Computer Equipment and Software programs and Service Planning related projects, while delays experienced in the Toronto-York Spadina Subway Extension (TYSSE) project and changes to the Scarborough Rapid Transit Life Extension capital work plan contributed to underspending in the Transit Expansion-Related program.

The variances noted below, and in Appendix 2, reflect the TTC's results, adjusted for the \$87 million in paused spending of capital projects that was necessary for the TTC to contribute it share towards the City's \$300 million COVID-19 Backstop Funding Plan.

Vehicle Related Projects

Purchase of Buses:

\$125.6 million or 70% of the 2022 Approved Capital Budget of \$180.4 million was spent in 2022. The underspending of \$55.0 million is due to complex negotiations for the procurement of eBuses, which resulted in deferral of the contract award and projected Notice to Proceed payment. The unspent funds have been carried forward to 2023 to complete this work and the 2023-2032 Capital Budget and Plan estimates were adjusted accordingly.

Purchase of Wheel-Trans Buses:

\$15.9 million or 77% of the \$20.7 million allocated in the 2022 Approved Capital Budget for the purchase of Wheel-Trans Buses was spent in 2022. Underspending is a result of the deferral of 24 seven-metre units to 2023 as a result of vendor supply chain delays, technical issues and challenges with production quality. The unspent funds will be carried over into 2023, expecting that all issues will be substantially resolved by Q1 and the delivery schedule can be recovered.

Infrastructure Projects

Equipment:

\$41.6 million or 65% of the \$63.7 million approved in the 2022 Capital Budget was spent in 2022. The under-expenditure was due to protracted negotiations in executing the TTC-PowerON Principal Agreement for the eBus electrification infrastructure that delayed the associated milestone payments, but had no impact to the critical path of required infrastructure.

In addition, spending was impacted by construction delays at Duncan Shop and the requirement for new prequalification of Escalator Replacement program at Spadina and Broadview. As a result, unspent funds associated with the revised construction schedule have been carried forward into to 2023 and the 2023-2032 Capital Budget and Plan estimates were adjusted accordingly.

Revenue and Fare Handling Equipment:

\$0.7 million or 12% of the \$5.6 million allocated in the 2022 Approved Capital Budget was spent in 2022. The year-end underspending primarily relates to the fare gates installation project and is due to the timing of project close-out costs. The unspent funds have been carried over into 2023.

Fare System:

\$3.3 million or 55% of the \$5.9 million allocated in the 2022 Approved Capital Budget was spent in 2022. The underspending is driven by delays in the PRESTO project, primarily due to delays as a result of co-ordinated activities with third parties. The unspent funds have been carried forwarded and included in the 2023 Capital Budget.

Computer Equipment and Software:

\$44.1 million or 71% of the \$62.5 million included in the 2022 Approved Capital Budget was spent in 2022. The underspending is primarily driven by the delay in the deployment of the SAP program's Time and Attendance and Job Based Costing System Replacement projects due to labour constraints as a result of the current competitive market for contractors; resultant milestone delays by the vendor and associated payment delays. For the Vision project, software issues delayed the commissioning of the Smart Yard System.

Service Planning:

\$8.0 million or 64% of the \$12.5 million included in the 2022 Approved Capital Budget was spent in 2022. The underspending is mainly due to various projects being delayed due to interdependencies with third-party schedules. For example, the execution and delivery of Transit Priority projects is dependent on maintaining the project timelines by all parties involved. Furthermore, a requirement for additional modelling work, resulted in certain deliverables of the Bus Lane Implementation project being deferred to 2024. Finally, the TTC and the City had planned to install and enable 100 new transit signal priority locations in 2022. However, due to various co-ordination challenges, only 43 locations were completed with the remaining 57 to be completed in 2023.

TTC Transit Expansion-Related Projects

Toronto-York Spadina Subway Extension (TYSSE):

\$20.2 million or 53% of the \$38.0 million approved in the 2022 Capital Budget for the TYSSE project was spent in 2022. The year-end underspending is due to the timing of project close-out costs and the unspent funds have been carried forward to 2023.

SRT Life Extension and Transition:

\$6.2 million or 38% of the \$16.4 million approved in 2022 for the SRT Life Extension and Transition project was spent in 2022. In February 2021, the Board determined it was necessary to keep the SRT in service until Q3 2023 given its condition rather than until the initially planned 2026 service end date. The scope was reduced to include strictly mission-critical maintenance, which adjusted the work plan and spending activity for 2022, resulting in underspending of \$8.0 million. In addition, some design work related to the SRT Transition (Bus Replacement Infrastructure) progressed slower than anticipated, resulting in underspending of \$2.2 million for that capital work.

2022 Preliminary Capital Results: Adjustments to Carry-Forward Funding

Through the 2023 Budget process, an estimated \$174.8 million of anticipated unspent funding in 2022 was carried forward and included in the 2023-2032 Capital Budget and Plan submission. This carry-forward estimate included \$87.8 million in projected underspending related to in-flight capital projects, plus \$87 million in underspending associated with the recommended list of capital projects, which was necessary to pause in order to redirect that funding to the City's COVID Backstop Plan. Once carried forward, the \$87 million in funding capacity was permanently reduced and the TTC

absorbed the costs associated with the paused capital works in the 2023 Capital Budget.

Based on the TTC's preliminary year-end results, adjusted for the \$87 million reduction for the Backstop Funding Plan, the actual underspending for 2022 is \$172.5 million, of which the TTC requires a total of \$169.3 million to be carried forward into 2023 to complete 2022 capital projects. In accordance with the City's Carry Forward Policy, a total of \$81.5 million of additional underspending will be carried forward and included with the Adjustments to the Capital Budget Carry Forward Funding and Future Year Commitments Report for City Council's consideration and approval. A total of \$20.8 million in incremental carry-forward funding will be added to the 2023 Capital Budget and the remaining \$60.7 million will be added to the 2024 cashflow estimates.

Additional information summarizing 2022 capital expenditure results for the year ending by capital program is provided in Appendix 2 – 2022 Capital Spending Summary by Program that provides results before and after the \$87-million adjustment. Appendix 3 itemizes the recommended budget adjustments that will be included in the TTC's submission to the City for the 2022 Year-End Variance Report for City Council consideration and approval.

Major Capital Projects Update

The TTC's delivery of a multi-billion-dollar capital program is guided by the TTC's Project Management Framework. The broad range of capital projects are categorized into three project types; the greater the category the more complex the project (higher risks and uncertainties). The categorization takes into consideration: budget, staff experience in delivery, risks and uncertainty behind the project itself, amongst other things.

The programs and projects referred to hereafter as projects, have been included in the dashboard due to their value, scope and/or strategic significance. This quarterly update highlights the performance of these projects against their approved budget, planned schedule and in-scope activities.

Appendix 4 highlights the capital performance for the TTC's Category 3 Major Capital Projects and includes the Capital Spending Dashboard. Appendix 5 contains the Major Projects Update (for the year ending December 31, 2022) and includes an update on the capital delivery performance for each major project within the TTC's base capital and transit expansion programs.

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Signature

Josie La Vita Chief Financial Officer

Attachments

- Appendix 1 2022 Preliminary Operating Results by Service
- Appendix 2 2022 Preliminary Capital Spending Summary by Program Before and After \$87M COVID Budget Adjustment
- Appendix 3 2022 Recommended Budget Adjustments for Council Approval
- Appendix 4 Category 3 Projects Capital Spending Dashboard
- Appendix 5 Category 3 Major Projects Update

Appendix 1 – 2022 Preliminary Operating Results by Service

TTC Conventional Service: 2022 Operating Results by Key Account Grouping and Comparison to 2021

For the full year, the TTC Conventional Service net under-expenditures total \$60.2 million (4.5%), comprising of base under-expenditures of \$44.6 million and COVID-19 underspending of \$15.6 million.

Key drivers of 2022 under-expenditures include:

- TTC Conventional Service hours delivered were approximately 4.3% below budget.
- One-time underspending associated with Line 5 opening deferred to 2023.
- Labour and benefit under-expenditures resulting from vacancies and impact of lower benefit expenses.
- Lower average hydro prices.
- Lower COVID incremental expenditures due to discontinuation of vehicle disinfection, employee screening, facility disinfection and lower PPE usage.

The net under-expenditure is partially offset by:

- Increased diesel cost in 2022 due to higher market prices.
- Foregoing the \$20.7 million planned stabilization reserve draw.

The 2022 financial results for the TTC Conventional Service are summarized in Table 13 on the following page:

Table 13 – Passenger Revenue Variances and COVID-19 Expenses Summary

TTC Conv	TTC Conventional Service							
Item	Year-	To-Date Actu	als					
(\$Millions)	Budget	Actual	Variance	Status				
Revenues								
Passenger Revenue	741.0	737.8	(3.2)	8				
Other Ancillary Revenue	49.5	52.3	2.8	(
Reserve Draw	20.7	-	(20.7)	0				
Total Revenue	811.2	790.1	(21.1)	8				
Expenses								
Departmental Labour	1,164.2	1,126.3	(37.9)	(
Departmental Non-Labour	271.3	250.6	(20.7)	8				
Employee Benefits	380.4	371.0	(9.4)	()				
Diesel	82.0	109.9	27.9	×				
Traction Power & Utilities	88.3	71.5	(16.8)	8				
PRESTO Commissions	31.4	31.6	0.2	×				
Other Corporate Costs	81.6	75.1	(6.4)	8				
Subtotal Base Expenses	2,099.1	2,035.9	(63.1)	O				
COVID-19 Costs	49.5	31.3	(18.2)	⊘				
Total Expenses	2,148.6	2,067.2	(81.3)	0				
Net Expenditure (Funding Required)	1,337.3	1,277.1	(60.2)	S				
Operating Funding								
COVID Funding Impact	559.1	543.5	(15.6)	8				
Base City Funding	778.2	733.6	(44.6)	8				
Total Operating Funding	1,337.3	1,277.1	(60.2)					

TTC Conventional Service: 2022 versus 2021 Results Comparison

Passenger revenue was \$285.2 million (63%) higher in 2022 than 2021, largely reflecting the impact of ridership recovery and gradual return over the course of 2022 as COVID restrictions eased throughout 2022 and the implementation of hybrid work models. In 2022, ridership averaged 59% of pre-pandemic levels, up from 37% in 2021.

Other year-over-year revenue changes include lower ancillary revenue in 2022, due to the impact of one-time settlement proceeds on 2021 results, offset by the increase in advertising revenue, commuter parking and interest income in 2022.

Year-over-year expenditures were \$146.7 million (7.7%) higher in 2022 than 2021, prior to reserve contributions. Key drivers of this net increase include:

- Increased diesel market prices in 2022.
- Impact of Local ATU 113 Collective Agreement arbitrated settlement.
- Inflationary impacts on materials and services.
- Higher PRESTO Commissions, commensurate with the increase in Passenger Revenue.
- Increase in service hours operated between 2021 and 2022.

COVID expenditures were \$14.0 million (30.9%) lower in 2022, primarily due to the suspension of employee screening as of May 2022, discontinuation of facility and vehicle COVID-19 disinfecting in July 2022 and November 2022, respectively.

Table 14 – 2022 versus 2021 Results Comparison

TTC Conventional Service						
Item	Year-To-Date Actuals					
(\$Millions)	2022 Actual	2021 Actual	Variance			
Revenues						
Passenger Revenue	737.8	452.6	285.2			
Other Ancillary Revenue	52.3	63.3	(10.9)			
Total Revenue	790.1	515.9	274.2			
Expenses						
Departmental Labour	1,126.3	1,054.1	72.2			
Departmental Non-Labour	250.6	223.7	26.9			
Employee Benefits	371.0	356.6	14.4			
Diesel	109.9	68.8	41.1			
Traction Power & Utilities	71.5	72.5	(1.0)			
PRESTO Commissions	31.6	19.0	12.6			
Other Corporate Costs	75.1	94.6	(19.5)			
Subtotal Base Expenses	2,035.9	1,889.2	146.7			
COVID-19 Costs	31.3	45.3	(14.0)			
Subtotal Expenses	2,067.2	1934.5	132.7			
Reserve Contribution	-	70.1	(70.1)			
Total Expenses	2,067.2	2,004.6	62.6			
Net Expenditure (Funding Required)	1,277.1	1,488.7	(211.6)			
Operating Funding						
COVID Funding Impact	543.5	837.0	(293.5)			
Base City Funding	733.6	651.7	81.9			
Total Operating Funding	1,277.1	1,488.7	(211.6)			

Wheel-Trans Service: 2022 Operating Results by Key Account Grouping and Comparison to 2021

As of the end of 2022, passenger revenues were \$1.0 million (16.8%) below budget due to ridership levels remaining 15.9% below budgeted levels in 2022. While an increase in ridership had occurred, the extent of the return was consistently below the 2022 planned estimate, with the pace of ridership return also slowing in the second half of the year.

As a result of lower ridership demand, Wheel-Trans expenses were \$13.4 million (9.9%) below budget with under-expenditures due to lower contracted taxi and bus services

costs, consistent with lower than anticipated ridership demand, offset by higher than anticipated fuel costs due to higher market prices.

Table 15 – 2022 Wheel-Trans Operating Results

Wheel-Trans Service							
Item	Yea	r-End Resu	lts				
(\$Millions)	Budget	Budget Actual Variance					
Passenger Revenues	6.0	5.0	(1.0)	×			
Expenses							
Bus Service	52.0	48.3	(3.7)	③			
Vehicle Fuel	3.1	3.6	0.5	×			
Contracted Taxi	45.3	39.0	(6.3)	(
Employee Benefits	17.5	15.5	(2.0)	>			
Administration/Management	15.6	15.1	(0.5)	(
Subtotal Base Expenses	133.5	121.5	(12.0)	(
COVID-19 Costs	1.9	0.5	(1.4)	(
Total Expenses	135.4	122.0	(13.4)	0			
Net Expenditure (Funding Required)	129.4	117.0	(12.4)	O			
Operating Funding	erating Funding						
COVID Impact Funding	1.9	0.5	(1.4)	8			
Base City Funding	127.5	116.5	(11.0)	>			
Total Operating Funding	129.4	117.0	(12.4)	8			

Wheel-Trans Service 2022 versus 2021 Results Comparison

As noted in Table 16 below, expenses were \$21.6 million (21.6%) higher and revenue is \$1.5 million (42.7%) higher than 2021 prior to reserve contributions. Both variances were primarily due to a gradual return in ridership demand and the resultant requirements for contracted taxi services, workforce and vehicle maintenance costs in addition to increased fuel costs due to higher market prices.

Table 16 – 2022 versus 2021 Wheel-Trans Results Comparison

Wheel-Trans Service						
Item	Year-End Results					
(\$Millions)	2022 Actual	2021 Actual	Change			
Passenger Revenues	5.0	3.5	1.5			
Expenses	_					
Bus Service	48.3	43.2	5.1			
Vehicle Fuel	3.6	2.6	1.0			
Contracted Taxi	39.0	23.8	15.2			
Employee Benefits	15.5	15.6	(0.1)			
Administration/Management	15.1	14.1	1.0			
Subtotal Base Expenses	121.5	99.3	22.2			
COVID-19 Costs	0.5	1.1	(0.6)			
Subtotal Expenses	122.0	100.4	21.6			
Reserve Contribution	0.0	18.2	(18.2)			
Total Expenses	122.0	118.6	3.4			
Net Expenditure (Funding Required)	117.0	115.1	1.9			
Operating Funding						
COVID Impact Funding	0.5	1.1	(0.6)			
Base City Funding	116.5	114.0	2.5			
Total Operating Funding	117.0	115.1	1.9			

Appendix 2 – 2022 Preliminary Capital Spending Summary by Program Before and After \$87M COVID Adjustment

Program	2022 Budget (Incl. Period 12 Budget Adj.)	2022 Preliminary Year-end Actuals	Variance to 2022 Budget	% Spend	\$87M COVID Budget Adjustment	2022 Budget (with COVID Budget Adjustment)	Variance to 2022 Budget (with COVID Budget Adjustment)	% Spend
Subway Track	37,794	37,758	35	99.9%	-	37,794	35	99.9%
Surface Track	47,657	44,730	2,927	93.9%	(3,348)	44,310	(420)	100.9%
Traction Power	29,073	28,640	433	98.5%	(10)	29,063	422	98.5%
Power Distribution/Electric Systems	11,967	7,757	4,210	64.8%	(567)	11,401	3,643	68.0%
Communications	19,240	15,462	3,778	80.4%	(2,836)	16,404	942	94.3%
Signal Systems	16,193	15,799	394	97.6%	-	16,193	394	97.6%
Finishes	29,196	18,405	10,791	63.0%	(9,627)	19,568	1,164	94.1%
Equipment	75,006	41,646	33,361	55.5%	(11,339)	63,667	22,021	65.4%
Yards & Roads	559	118	441	21.2%	(290)	269	151	44.0%
On-Grade Paving Rehabilitation Program	10,431	9,316	1,115	89.3%	-	10,431	1,115	89.3%
Bridges & Tunnels	38,344	32,194	6,149	84.0%	(3,352)	34,991	2,797	92.0%
Fire Ventilation Upgrade	44,158	40,546	3,612	91.8%	(-)/	44,158	3,612	91.8%
Easier Access Phase II & III	82,891	80,537	2,354	97.2%	_	82,891	2,354	97.2%
Replacement Wheel-Trans Vehicles	20,656	15,910	4,746	77.0%	_	20,656	4,746	77.0%
Subway Car Purchases	2,980	2,980	.,	100.0%	_	2,980	.,,,,,,	100.0%
Streetcar Overhaul Program	6,879	6,789	90	98.7%	(512)	6,367	(422)	106.6%
Subway Car Overhaul Program	31,658	29,513	2,145	93.2%	(3,575)	28,083	(1,430)	105.1%
Automotive Non-Revenue Vehicles	8,507	6,467	2,041	76.0%	(3,373)	8,507	2,041	76.0%
Rail Non-Revenue Vehicle Overhaul	3,471	1,746	1,726	50.3%	(1,733)	1,738	(7)	100.4%
Rail Non-Revenue Vehicle Purchase	2,120	499	1,621	23.5%	(1,361)	759	260	65.8%
Tools & Shop Equipment	10,489	9,364	1,125	89.3%	(1,501)	10,489	1,125	89.3%
Fare Handling Equipment	5,984	661	5,323	11.0%	(364)	5,619	4,958	11.8%
Environmental Programs	9,338	8,527	811	91.3%	(566)	8,772	245	97.2%
Information Technology Systems-Infrastructure	75,624	44,073	31,552	58.3%	(13,089)	62,535	18,462	70.5%
Furniture & Office Equipment	366	67	299	18.2%	(209)	157	90	42.5%
Other Service Planning	25,324	7,970	17,354	31.5%	(12,826)	12,498	4,527	63.8%
Transit Shelters & Loops	500	7,570	500	0.0%	(500)	12,450	(0)	0.0%
Other Buildings & Structures Projects	261,587	254,372	7,214	97.2%	(10,136)	251,450	(2,922)	
Purchase of Buses	180,647	125,622	55,025	69.5%	(197)	180,451	54,828	69.6%
Bus Overhaul	56,980	51,359	5,621	90.1%	(137)	56,980	5,621	90.1%
Other Maintenance Equipment	3,426	847	2,578	24.7%	(619)	2,807	1,960	30.2%
Purchase of Streetcars	37,811	37,797	14	100.0%	(013)	37,811	1,500	100.0%
Kipling Station Improvements	772	689	83	89.3%	_	772	83	89.3%
Fare System	6,420	3,256	3,165	50.7%	(495)	5,925	2,669	55.0%
YUS ATC Resignalling	41,760	33,370	8,390	79.9%	(2,417)	39,343	5,973	84.8%
Leslie Barns Maintenance & Storage Facility	3,001	3,001	0,550	100.0%	(2,417)	3,001	3,373	100.0%
TR Yard and Tail Track Accomodation	30,947	29,643	1,304	95.8%		30,947	1,304	95.8%
McNicoll Bus Garage Facility	1,676	1,005	671	59.9%		1,676	671	59.9%
	1,676	146	6/1	100.0%	_	146	6/1	100.0%
Bicycle Parking at Stations Safety Program	1,477	826	651	55.9%		1,477	651	55.9%
Warehouse Consolidation	596	199	397	33.4%	_	596	397	33.4%
Corporate Initiatives-CLA	7,442	393	7,049	5.3%	(7,049)	393	397	100.0%
I -	· ·	33,327		100.0%	(7,049)	33,327		100.0%
Yonge-Bloor Capacity Improvements	33,327 40,747	40,313	434	98.9%		40,747	434	98.9%
Line 1 Capacity Enhancement	1		434	100.0%				100.0%
Line 2 Capacity Enhancement	19,605	19,605	224 524		[97.024]	19,605	144 510	
Total Base Programs	1,374,774	1,143,243	231,531	83.2%	(87,021)	1,287,753	144,510	88.8%
TYSSE SPT Life Extension and Transition	38,001	20,246	17,755	53.3%	_	38,001	17,755	53.3%
SRT Life Extension and Transition Waterfront Transit	16,358	6,231	10,128	38.1% 98.8%	_	16,358	10,128	38.1%
	4,856	4,797	27.942		-	4,856	27.942	98.8%
Total Expansion Related Projects Grand Total	59,216 1,433,990	31,273 1,174,516	27,942 259,474	52.8% 81.9%	(87,021)	59,216 1,346,969	27,942 172,453	52.8% 87.2%

Appendix 3 – 2022 Recommended Budget Adjustments for Council Approval

The following budget adjustments account for projects that have had accelerated spending offset by projects that have experienced some delays and therefore lower spending.

стт	Program	2022 Recommended Capital Budget Adjustments (\$000s)
CTT001	Subway Track	\$2,622
CTT002	Surface Track	(\$5,202)
CTT003	Traction Power	\$1,694
CTT005	Power Distribution/Electric Systems	\$695
CTT006	Communications	\$3,522
CTT010	Finishes	(\$753)
CTT012	Equipment	(\$1,304)
CTT015	Yards & Roads	(\$57)
CTT020	Bridges & Tunnels	(\$2)
CTT024	Fire Ventilation Upgrade	(\$4,078)
CTT028	Easier Access Phase 11 & III	\$239
CTT045	Replacement Wheel-Trans Vehicles	(\$1,528)
CTT046	Subway Car Purchases	\$200
CTT050	Streetcar Overhaul Program	\$548
CTT051	Subway Car Overhaul Program	(\$549)
CTT052	Automotive Non-Revenue Vehicles	(\$1,164)
CTT054	Rail Non-Revenue Vehicle Purchase	\$4
CTT055	Tools & Shop Equipment	\$1,164
CTT061	Information Technology Systems-Infrastructure	\$259
CTT110	Other Buildings & Structures Projects	(\$28,112)
CTT111	Purchase of Buses	\$8
CTT112	Bus Overhaul	(\$18)
CTT122	Purchase of Streetcars	\$1,260
CTT130	Kipling Station Improvements	\$130
CTT145	Leslie Barns Maintenance & Storage Facility	\$84
CTT146	TR Yard and Tail Track Accomodation	(\$84)
CTT149	Bicycle Parking at Stations	\$46
CTT151	Waterfront Transit	\$791
CTT153	Warehouse Consolidation	\$10
CTT154	Corporate Initiatives-CLA	(\$3,571)
CTT155	Yonge-Bloor Capacity Improvements	\$1,304
CTT156	Line 1 Capacity Enhancement	\$22,428
CTT157	Line 2 Capacity Enhancement	\$9,414
	Total Adjustments	\$0

Appendix 4 – Category 3 Projects Capital Spending Dashboard

Category 3 Projects & Programs - Capital Spending Dashboard

	Project	Cost (\$Millions)			Status						
Category 3 Projects & Programs	Category	2022 Y€		Carry	Approved	Actual	Projected	Cost	Schedule	Scope	Overall
	Category	Budget	Actual	Forward	Budget	LTD	EFC	0031	Ochedule	Осорс	Overan
Subway Portfolio											
Line 1 Capacity Enhancements	SI	\$40.7	\$40.3	\$0.4	\$1,430.3	\$40.3	\$5,949.3	G	G	G	G
Bloor-Yonge Capacity Improvements	SI	\$33.3	\$33.3	\$0.0	\$1,514.0	\$60.1	\$1,514.0	e	0	О	Ø
ATC Resignalling - Line 1	SOGR	\$36.5	\$30.3	\$6.2	\$737.0	\$640.2	\$737.0	G	G	G	G
Fire Ventilation Upgrades & Second Exits	SOGR	\$44.2	\$40.5	\$3.6	\$756.5	\$379.1	\$2,279.5	Y	G	G	Y
Stations Transformation	SI	\$5.8	\$4.0	\$1.8	\$50.8	\$34.4	\$50.8	G	G	G	G
Streetcar, Bus & Wheel-Trans Portfolio		'	'		'				•		
Purchase of Buses	SOGR	\$179.9	\$125.1	\$54.8	\$899.3	\$229.7	\$3,819.8	G	Y	G	Y
eBus Charging Systems	SOGR	\$39.5	\$16.9	\$22.6	\$117.9	\$57.4	\$766.2	Y	G	G	Y
Purchase of 60 Streetcars	GROWTH	\$22.6	\$22.6	\$0.0	\$468.0	\$137.1	\$468.0	e	G	Ө	G
Wheels Trans 10-Year Transformation Program	Legislative	\$3.0	\$1.7	\$1.3	\$49.8	\$32.6	\$49.8	e	G	G	G
Network Wide Portfolio									•		
PRESTO	GROWTH	\$5.5	\$3.0	\$2.5	\$79.2	\$66.0	\$79.2	®	G	®	®
VISION Program (CAD/AVL)	SOGR	\$6.9	\$5.2	\$1.7	\$111.7	\$93.2	\$111.7	G	G	G	G
SAP ERP Implementation	SOGR	\$14.4	\$12.4	\$2.0	\$272.8	\$99.5	\$272.8	G	G	G	G
Total		\$432.3	\$335.3	\$96.9	\$6,487.4	\$1,869.6	\$16,098.1		· · · · · · · · · · · · · · · · · · ·		

Performance
Scorecard Status



On Track to Meet Project Objectives At Risk of Not Meeting Project Objectives Will Not Meet Project Objectives

Total Base Capital Program (Cat 3)

	Cost (\$Millions)						
2022 2022 Approved Estimated YE Budget YE Actual Budget Final Cost							
\$432.3M	\$335.3M	\$6,487.4M	\$16,098.1M				

YE: Year-End

EFC: Estimated Final Cost

LTD: Life to Date

H&S: Health & Safety

SI: Service Improvement

SOGR: State-of-Good-Repair

Line 1 Capacity Enhancement Program (Line 1 CEP)

Description

This program includes the accommodation of train storage and maintenance requirements, and other infrastructure enhancements to expand capacity and improve circulation on Line 1, reduce overcrowding, increase frequency of trains, and reduce travel times, which will result in improved customer service.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2019	2041	\$1,430.3M	\$40.3M	\$5,949.3M
Overall Perfo	rmance Status	2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
	9	\$40.7M	\$40.3M	\$0.4M

Scope Description

The scope as defined in the Line 1 CEP Final Implementation Strategy Report in the Stage Gate 1 Preliminary Business Case includes:

Station Capacities:

Stations Modifications to improve station capacities and increase service.

Systems & Infrastructure:

- Electrical Traction Power Upgrades.
- Fire Ventilation Requirements.
- Guideway Enhancement.

Train Maintenance & Storage Facility (TMSF) which includes:

- Storage for 34 trains including a test track, and access track to site.
- Carhouse with five Bays for Preventative and Corrective Maintenance to support daily service.
- Operations & Infrastructure (O&I) facility to support maintenance activities (small shop building, outdoor and indoor storage tracks for work cars, material storage and staging area).
- Ancillary facilities (Traction Power Substation (TPSS), Hostler platform).

Progress Update

The Program Management Plan, which outlines the framework, consolidates the program plans and defines how the program will be managed, executed, integrated, monitored, and controlled, was completed in Q3 2022.

Line 1 Capacity Enhancement:

 The contract for the St Andrew Station modifications was awarded in Q4 2022 and construction has commenced.

- The design phase for the King Station concourse expansion and addition was approved in Q1 2023.
- The design phase for the Markdale Emergency Service Building Fire Ventilation Upgrade and St. Clair West Station was approved in Q1 2023.

Train Maintenance & Storage Facility (TMSF):

- The draft documentation for the Program of Requirements, 15% Design and Procurement analysis has been completed.
- A project Business Case, Project Charter, Project Management Plan, Class 4 Estimate, Level 2 Schedule, and Preliminary Risk Register are under development.
- The TTC is undertaking the necessary due diligence for potential site locations for the new required TMSF.

Key Issues/Risks and Mitigation Activities

Key Risks & Mitigation:

- The TTC is proactively monitoring the new train delivery schedule, in which any deferral
 will impact the availability of trains that will be required to support an increase to service
 capacity within the target horizon years of the L1CEP program. An assessment of
 potential short-term mitigation strategies is ongoing.
- Potential changes to forecast demand can impact the Target Horizon Years and program objectives. The TTC is closely monitoring the demand model and adjusting program scope and schedule as required.

Next Steps

Line 1 Capacity Enhancements:

Systems and Infrastructure (2023):

- Complete Preliminary Design for St Clair West Fire Ventilation Upgrade.
- Complete Feasibility Study and Concept Design for Lytton Emergency Service Building (ESB).
- Complete Preliminary Design for Markdale ESB Fire Ventilation Upgrade.
- Complete Feasibility Study and Site Selection for the New Traction Power Substation at Highway 407.
- Complete Preliminary Design for the New Siding Track from Bloor-Yonge to Rosedale.
- Complete Detailed Design for Negative Reinforcing Cables from Vaughan Metropolitan Centre to Sheppard West.

Stations (2023):

- Obtain Stage Gate 2 (Approved for Design) approval and advance Detailed Design for King Station Concourse Expansion and Additional Exit.
- Complete construction for Phase 1 St Andrew Station modifications.

Train Maintenance & Storage Facility (TMSF):

 Continue to advance due diligence and consultation with municipal partners on potential site locations.

Bloor-Yonge Capacity Improvement

Description

This project provides for a design retrofit and expansion of the Bloor-Yonge interchange station, including a new Line 2 platform, and the expansion of the Line 1 platforms to address overcrowding, improve accessibility and accommodate future ridership growth from expansion.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2015	2033	\$1,514.0M	\$60.1M	\$1,514.0M
Overall Performance Status		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$33.3M	\$33.3M	\$0.0M

Scope Description

- A new Line 2 eastbound platform and expanded Line 1 platforms to enhance capacity for passengers.
- Line 2 original platform reconfiguration to enhance capacity for westbound passengers.
- Modified main entrance.
- A new accessible entrance on Bloor Street.
- New escalators, elevators and stairs.
- New public art and station finishes.
- One new electrical substation to power new and existing areas of the station and ventilation systems.
- New fan plants to improve ventilation and utility upgrades.

Progress Update

The early works demolition package for the removal of the existing structures on 81 Bloor Street, 40/42 Hayden Street and 830 Church Street (TTC-owned carwash building) was released to the market on November 11, 2022, closed on December 19, 2022 and awarded March 15, 2023. These properties will be utilized for the construction of a new accessible entrance and electrical building on Bloor Street and a fan plant building on Church Street under the main construction work.

A Request For Information (RFI) was issued on November 16, 2022 for the project's Progressive Design-Build pricing structure and closed on November 29, 2022. This information is being used in the development of the RFP procurement documents. A Request for Pre-Qualification (RFPQ) for a Progressive Design-Builder was released on December 6, 2022, which will be closing in Q2 2023. This process allows for greater efficiency to make easy comparisons and shortlist vendors from a list of qualified proponents. The TTC will be

undertaking evaluations and short-listing three proponents before issuing the Request For Proposal (RFP) in Q2/Q3 2023.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

The TTC, City of Toronto and CreateTO will continue with negotiations and/or expropriations for the property requirements of the project to meet project timelines.

Next Steps

The Request for Pre-Qualification (RFPQ) for a Progressive Design-Builder is scheduled to close in Q2 2023, followed by evaluation of submissions before issuing the Request For Proposal (RFP).

An early works construction package for utility relocations is scheduled to be issued by Q2 2023.

Line 1 ATC Resignalling

Description

Resignalling Line 1 (Vaughan Metropolitan Centre to Finch) to improve reliability, on-time service, faster travel times and increase capacity to reduce overcrowding.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2009	2023	\$737.0M	\$640.2M	\$737.0M
Overall Performance Status		2022 YTD Budget	2022 YTD Actuals	2022 – 2023 Carry Forward
G		\$36.5M	\$30.3M	\$6.2M

Scope Description

- Phase 1 (Yorkdale to Dupont) Completed In-service Q4 2017.
- Phase 2 (VMC to Sheppard West) Completed In-service Q4 2017.
- Phase 2B/2C (Wilson Yard Interface) Completed In-service Q4 2018.
- Phase 3A (Dupont to St Patrick) Completed In-service Q2 2019.
- Phase 3B (St Patrick to Queen) Completed In-service Q1 2020.
- Phase 3C (Queen to Rosedale) Completed In-service Q4 2020.
- Phase 4 (Rosedale to Eglinton) Completed In-service Q4 2021.
- Phase 5 (Eglinton to Finch) Completed In-service Q3 2022.
- Phase 6 (ATC enhancements) In progress Targeted for service Q2 2023.

Progress Update

Phase 1-5: ATC is now fully operational from Vaughan Metropolitan Centre to Finch stations. The Phase 5 of ATC (Eglinton to Finch) was commissioned in September 2022, which has improved service and reduced operating costs. This will also ensure that the TTC can accommodate expected additional transit growth.

Phase 6: Testing is ongoing, which includes the Eglinton platform extension modifications.

Key Issues/Risks and Mitigation Activities

The TTC is co-ordinating with Crosslinx Transit Solutions (CTS) on the Eglinton Crosstown Light Rail Transit (ECLRT) project to remove the Eglinton station platform extension hoarding and receive updates on the occupancy permit. Any delay to the occupancy permit may also delay the deployment of the Phase 6 software planned for Q2 2023 and the Alstom contract.

Next Steps

The Phase 6 quotation is under review/negotiation with an agreement targeted by the end of March 2023. A formal quotation will be provided by the vendor for the extended ATC warranty by the end of Q2 2023.

The Phase 6 Static and Dynamic Testing is scheduled for Q2 2023 and the Phase 6 deployment is scheduled for Q2 2023.

Fire Ventilation Upgrades (FVU) and Second Exits

Description

Improvement of ventilation in subway tunnels and construction of second exits at 14 highpriority stations to provide a second means of egress, and replacement of the existing subway ventilation equipment and associated services, which are nearing the end of its service life or due to failure.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
1998	2032 ¹	\$756.5M	\$379.1M	\$2,279.5M ²
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
V		\$44.2M	\$40.5M	\$3.6M

Scope Description

- Upgrades to the Subway Ventilation System on Line 1 and Line 2.
- Replacement of Existing Subway Ventilation Equipment and associated services.
- Construction of Second Exits at 14 high-priority stations.

Progress Update

Fire Ventilation Upgrade:

As of year-end 2022, the following works have been completed:

- Major upgrades have been completed at York Mills, Sheppard, Finch, Union and Lawrence stations.
- Subway Ventilation Equipment Replacement has been completed at Bloor station (Fan #2), Sheppard West and Sherbourne stations.
- Installation of fan assemblies for Dundas West was completed in December 2022.
- The construction contract for Sheppard West and Clanton Park Emergency Service Building (ESB) was completed in January 2023.

The following work is also currently underway as part of the program:

- The construction upgrades at Eglinton station are being completed as part of Eglinton Crosstown LRT project.
- Planning/Design are currently underway at St Clair West station, Markdale and Lytton ESB as part of the Line 1 Capacity program, and at Bloor-Yonge station as part of the Bloor-Yonge Capacity Improvement project.

Second Exits/Entrances:

As of year-end 2022, the following outlines the status of the 14 Second Exits in the program:

- Seven stations have completed construction of the second exit/entrance: Broadview, Castle Frank, Pape, Dufferin, Woodbine, Wellesley and Chester.
- Three stations are currently under construction: Donlands, College and Museum.
- Two stations are in detailed design: Summerhill and Dundas West.
- Two stations are in planning and property search phase: Greenwood and Dundas.

A Memorandum of Understanding (MOU) between the TTC and Metrolinx has been negotiated for the design and construction of the Dundas West Second Exit/Entrance. Board approval for the Dundas West Second Exit/Entrance and Metrolinx Bloor GO/UP Express Interconnection was obtained in February 2023.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

The TTC is working collaboratively with contractors, and developing and executing recovery plans arising from unforeseen site conditions or labour strikes at College, Donlands and Museum stations. The TTC is also conducting early consultations and negotiations with property owners for the required properties, and is advancing design where possible to avoid potential delays and additional costs during construction.

The TTC is also consulting with local Councillors in the early design stage to support the permit approval process for partial or full station closures to mitigate concerns resulting from construction complexities that may impact the community.

As noted above, the overall program status is indicated at caution as the upgrades portion of the program is not yet fully funded.

Next Steps

- Advance the design of two locations for State of Good Repair Subway Ventilation Equipment Replacement: at Russell Hill ESB and Dupont Station and Spadina Station, Lines 1 and 2.
- Close tender for Dundas West and Metrolinx Bloor GO/UP Express Interchange connection Contract (by Metrolinx who is managing the contract).

Note:

¹ 2032 represents the completion of the funded scope.

² EFC includes \$1.5 billion in unfunded post-2030.

Stations Transformation

Description

To enhance the customer experience by introducing Customer Service Agents (CSAs); and infrastructure improvements, which will result in increased safety and security of TTC stations, employees and customers.

Financials				
Program Start	Forecast	Total	Spend to Date	Estimated
	Completion Year	Approved Budget		Final Cost
2017	2024	\$50.8M	\$34.4M	\$50.8M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$5.8M	\$4.0M	\$1.8M

Scope Description

The Stations Transformation program includes the following capital investments:

- Upgrading the Public Announcement system (PA).
- Upgrading the stations Passenger Assistance Intercoms (PAIs) by making them user friendly, improving sound quality and live video feed for customers needing assistance.
- Installing/upgrading of existing CCTV cameras.
- Constructing six Zone Hubs (York University, Union, Kipling, Bloor-Yonge, St Clair West, Sheppard-Yonge) to serve as central command posts monitoring the stations and responding to customer requests in an efficient manner.

In addition to these infrastructure improvements under this program, the TTC has introduced Customer Service Agents (CSAs) to proactively assist customers facing barriers in navigating the system.

Progress Update

Passenger Assistance Intercoms (PAI):

Completed in Q4 2021. This upgraded system features a dual button, which provides an
option for customers to request information (from the Hub) or emergency response (call
connects to Transit Control Centre). This helps to triage calls to the appropriate areas for
action. Furthermore, this system has a built-in camera, which enables staff to have
visibility of the customer requesting assistance. All of these features provide enhanced
customer safety and security.

Zone Hubs:

 The construction of all Zone Hubs, which provide zone management, security monitoring, and the ability to respond efficiently to customer service requests, has been completed. The construction of the last two hubs located at St Clair West and Sheppard-Yonge stations, which were completed in Q2 and Q4 2022, will be commissioned by Q2 2023.

CCTV Cameras:

- 19 stations now have at least 90% camera coverage out of 70 stations (excludes SRT stations that are being decommissioned in 2023). This additional camera coverage provides added visibility for stations staff to improve customer service and augment the safety and security of TTC customers and employees. The TTC plans to have the camera coverage increased to at least 90% at four additional stations in Q1 2023. The remaining 47 stations are scheduled to be completed by the end of Q4 2024. Note, at present all stations have 75% camera coverage as of Q1 2022.
- CCTV fare gate monitors have been installed at 29 out of 46 stations with a secondary entrance. This provides visual deterrence for fare evasion, visibility of service conditions to TTC customers prior to crossing the fare lines, and the ability for Collectors/CSAs to monitor the stations. Installation of the remaining fare gate monitors is in progress and is scheduled to be completed by the end of Q1 2023.

Public Announcement system (PA):

 Currently, a four-station pilot is in progress, and this will inform the roll-out to all remaining stations. These upgrades will transition from the existing analog to a digital system in order to improve the clarity and quality of announcements, as well as include additional features and capabilities.

Other Improvements:

 The stations interface for the Real Time Monitoring System (RTMS) for Escalator and Elevator status was completed in Q4 2022 and will be commissioned in 2023 starting with a soft launch in the Central Zone. Ultimately, RTMS will minimize escalator downtime and allow stations staff to respond to emergencies in an efficient manner to improve customer service.

Next Steps

- Zone Hubs: Commission Zone Hubs located at St Clair West and Sheppard-Yonge stations by Q2 2023.
- CCTV Cameras: Complete 90% Camera coverage at four additional stations in Q1 2023.
 Install fare gate security monitors at all fare lines by March 2023.
- Public Announcement system (PA): Commence upgrades at four pilot stations by Q2 2023.

Note: This program is included under Building and Structures as indicated in Appendix 2.

Purchase of Buses

Description

Replacement of vehicles at end-of-life to maintain service reliability, increase system accessibility for customers, increase fleet capacity to match customer demand and reduce overcrowding. Advance the TTC's transition towards zero-emissions fleet by 2040 and meet the City of Toronto's TransformTO target of Net Zero by 2040.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2018	2036	\$899.3M	\$229.7M	\$3,819.8M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
Y		\$179.9M	\$125.1M	\$54.8M

Scope Description

Current funding allows for the procurement of 336 hybrid-electric buses, and contributes towards approximately 340 zero-emissions, battery-electric buses (or eBuses) (subject to federal matching funding) between 2023 and 2025.

Progress Update

Hybrid-Electric Buses:

- Pre-production meetings with the vendors have been completed and the buses are currently in production.
- The First Article Inspection for the NOVA 12-metre (40-foot) hybrid was completed on March 10, 2023, the New Flyer 40-foot and 18-metre (60-foot) inspections are scheduled for March 20, 2023.
- Deliveries to commence in Q2 2023.

eBuses:

 All stages of the procurement process have been completed and the contract is ready to be awarded, subject to federal funding.

Key Issues/Risks and Mitigation Activities

Key Issues:

Hybrid-Electric Buses:

Scheduled vehicle deliveries have been delayed by both vendors due to supply chain challenges. All buses are now projected to be delivered by Q2 2024. The TTC continues to closely monitor the schedule with both vendors and update key stakeholders.

eBuses:

The TTC submitted an application for grant funding under the federal government's Zero Emission Transit Fund (ZETF). If successful, the TTC will proceed with the issuance of the contract award.

Next Steps

Hybrid-Electric Buses:

- Delivery and commissioning of 336 buses to commence in Q2 2023.
- eBuses:
- Issue contract award subject to federal funding.
- Report back to the Board through the CEO's Report on the successful bidders, the tentative delivery schedule, as well as where and when customers can expect to ride the TTC's newest electric buses.

Note:

This project is included under Purchase of Buses as indicated in Appendix 2.

eBus Charging Systems

Description

The eBus Charging Systems Program consists of the design, delivery, construction, installation, operation and maintenance of charging infrastructure at eight bus garages. This includes the installation of charge points for electric buses, an upgrade of power to each property, installation of substation, battery energy storage system, natural gas emergency backup generators, and solar panels where practical to advance the TTC's transition towards a zero-emissions fleet, along with the City of Toronto's TransformTO target of Net Zero by 2040.

Financials				
Drogram Start	Forecast	Total	Spend to Date	Estimated
Program Start	Completion Year	Approved Budget		Final Cost
2016	2040	\$117.9M	\$57.4M	\$766.2M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023
Overall Performance		2022 Budget	ZUZZ ACIUAIS	Carry Forward
V		\$39.5M	\$16.9M	\$22.6M

Scope Description

Design, delivery, construction, installation, operation and maintenance of charging infrastructure at bus garages to support the TTC's Green Fleet plan. This includes:

- Phase 1 Approximately 25% electrification (average of 32 net new charge points) at six garages: Eglinton, Wilson, Birchmount, Malvern, McNicoll and Queensway by 2024.
- Phase 2 Approximately 50% electrification at each garage: Eglinton, Wilson, Birchmount, Malvern, McNicoll, Queensway, Arrow Road and Mount Dennis by 2030.
- Phase 3 100% electrification at each garage: Eglinton, Wilson, Birchmount, Malvern, McNicoll, Queensway, Arrow Road and Mount Dennis by 2037.

Progress Update

In August 2022, the TTC and PowerON Energy Solutions LP, a subsidiary of Ontario Power Generation, signed the Principal Agreement and PowerON was issued the Notice to Proceed (NTP) upon execution. Since the execution of the Principal Agreement, PowerON and the TTC have been advancing concept designs for Phase 1 at Birchmount, Eglinton, Malvern and Wilson garages. The completion of the concept designs is expected by Q2 2023.

In 2022, the TTC initiated the installation of the TTC's first eBus pantograph charging systems along with a cutting-edge, centralized charging system at Birchmount Garage to assess their performance relative to plug-in chargers fed by individual chargers.

The TTC submitted an application to the Zero Emission Transit Fund (ZETF) in April 2022 to obtain matching funding towards the purchase of 340 eBuses and install the additional 248 charge points required.

Key Issues/Risks and Mitigation Activities

Global supply chain challenges will lead to delays with equipment delivery, which will in turn, impact the project schedule. To reduce this impact, PowerON, the Engineering, Procurement, and Construction (EPC) contractor, has re-sequenced the schedule to allow for the electrification infrastructure to achieve commercial operation prior to delivery of the Battery Energy Storage System (BESS). PowerON will also expedite the development of equipment specifications for long-lead items and the TTC will advance payment to secure production and delivery.

Next Steps

• The TTC's first eBus pantograph charging system will be launched in Q2 2023.

Note: This project is included under Equipment as indicated in Appendix 2.

Purchase of 60 Accessible Streetcars

Description

This project provides for the purchase of 60 new, accessible streetcars to address latent service demand, projected increases in travel time due to traffic congestion, and enable growth.

Financials				
Program Start	Forecast	Total	Spend to Date	Estimated
	Completion Year	Approved Budget		Final Cost
2019	2026	\$468.0M	\$137.1M	\$468.0M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$22.6M	\$22.6M	\$0.0M

Scope Description

The procurement and delivery of 60 accessible streetcars by 2026.

Progress Update

- The first (of four) Canadian Content audits was conducted in September 2022 by an independent auditor. The project's Canadian Content value is projected to be approximately 46%, exceeding the contract requirement of 25%. The audit report also identified that the procurement of the 60 streetcars is anticipated to have a net positive job creation impact (approximately 150-plus additional full-time Canadian jobs) within the Canadian economy over the base contract. Audits will continue to be conducted annually until the end of vehicle delivery.
- The first major structural assembly milestone was achieved on December 15, 2022.
- The Transfer Payment Agreement (TPA) with the Ministry of Transportation (MTO) was executed in March 2023. The Contribution Agreement (CA) with Infrastructure Canada (INFC) is in progress, with completion targeted for Q3 2023.
- Production work for major sub-assemblies continues at all three of Alstom's locations: Thunder Bay, Ontario, La Pocatière, Quebec and Sahagun, Mexico).

Key Issues/Risks and Mitigation Activities

Risk: Recent increases in escalation may result in an increase in overall cost. The TTC will
continue to monitor producer's price indices, update escalation projections and identify
potential offsets to the greatest extent possible.

Next Steps

- Complete the execution of the Transfer Payment Agreement with MTO by Q1 2023.
- Continuing with sub-assembly, First Article Inspections and final assembly activities.
- Prepare for first car delivery, which will be available for service in Q3 2023.

Wheel-Trans 10-Year Transformation Program

Description

Implement new policies, processes and systems to support a new service delivery model that integrates Wheel-Trans (WT) customers into the TTC's conventional network through a 'Family of Services' (FOS) approach. A Family of Services trip includes a combination of Wheel-Trans vehicles and accessible conventional transit for all or part of a customer's journey. The goal is to connect Wheel-Trans conditional-eligible customers to wherever they need to go in the city.

Financials				
Program Start	Forecast	Total	Spend to Date	Estimated
	Completion Year	Approved Budget		Final Cost
2017	2026	\$49.8M	\$32.6M	\$49.8M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$3.0M	\$1.7M	\$1.3M

Scope Description

Phases 1-4: Reservation, Scheduling and Dispatch (RSD):

- Family of Services (FOS).
- Re-Registration.
- Conditional Trip Matching.
- Construction of 16 Access Hubs.
- Upgrading RSD to enhance FOS capabilities and introducing the Mobile App pilot.
- Implementation of the Customer Relationship Management, which facilitates mass emailing capability.

Phases 5-8: Reservation, Scheduling and Dispatch Improvements based on third-party assessment:

- Implement additional system upgrades.
- Expand the Mobile Application pilot.
- Launch the Wheel-Trans Mobile Application.
- Continue the process of FOS expansion.
- Complete the Re-registration process.

Progress Update

Phase 1-4

Family of Services (FOS):

 The FOS approach, which provides Wheel-Trans customers with options for a multi-modal trip that is faster, flexible and efficient was operationalized in 2018. The FOS expansion of 5,000 non-vehicle transfers (walking stops), Wave 3 testing and analyses were completed on March 3, 2023. FOS remains optional at this time.

Re-Registration

- Wheel-Trans introduced new eligibility criteria and application process in January 2017.
 Customers who registered before this date, must re-register by submitting a new eligibility application. Currently, 8,000 legacy customers have already re-registered with another 11,000 that still need to do so by 2025.
- Wheel-Trans Self-Serve Portal allows customers to register or re-register online, eliminating the need of the paper application. Customers can also appeal their eligibility decision online.

Conditional Trip Matching:

Customers with conditional eligibility will be provided with one trip solution that matches
their conditions and abilities. If none of the registered conditions are present, they will be
offered a FOS trip (i.e. a connection to the conventional TTC bus/streetcar or subway).

Access Hubs:

• 16 Access Hub shelters are in service, providing customers with large, accessible, well-lit and heated locations to transfer to and from the conventional TTC system.

Mobile App:

 Mobile pilot extended to more users and it will continue to expand in 2023, and full implementation will follow in Q3 2023. This application provides instant information and self service.

Customer Relationship Management (CRM):

 Completed automation of the customer applications tracking and customer service contacts. This process involved the integration with the CRM system, the TTC's document management provider and the Wheel-Trans RSD system.

Phase 5-8:

 The Wheel-Trans ITS Solution Assessment for Phases 5-8 review is in progress and scheduled to be completed in Q2 2023. The scope, schedule and cost for the proposed Wheel-Trans program Phases 5-8 will be updated based on the approved recommendations included the assessment report. An update will be provided to the Board in Q2 2023 to outline the Phase 5-8 program map and schedule.

Next Steps

The Wheel-Trans ITS Solution Assessment for Phases 5-8 review is in progress and scheduled to be completed in Q2 2023. The scope, schedule and cost for the proposed Wheel-Trans program Phases 5-8 will be updated based on the approved recommendations included the assessment report.

Note: This project is included under Building and Structures as indicated in Appendix 2.

Fare Collection/PRESTO

Description

Transforming the TTC fare collection processes, including the TTC's scope of work supporting Metrolinx activities for the implementation of the PRESTO fare card system, overall project management, assistance with equipment installation, upgrades to TTC facilities to accommodate PRESTO equipment, and oversight to ensure the PRESTO system fully meets the TTC's business requirements.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2012	2025	\$79.2M	\$66.0M	\$79.2M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
R		\$5.5M	\$3.0M	\$2.5M

Scope Description

This program provides oversight over the implementation of the PRESTO fare payment method by Metrolinx, as outlined in the Master E-Fare Agreement signed with Metrolinx in 2012 to meet the TTC's business requirements. The scope of work to be completed by Metrolinx includes:

- Modifications and enhancements to the PRESTO system to allow for an e-fare accountbased payment system with an open architecture using industry standards to accommodate open loop financial cards, mobile applications and future technological innovations ("PRESTO Next Generation").
- Finance, implement and operate the PRESTO Next Generation system and provide a wide range of "managed services" (i.e. back office operations, customer services, revenue collection and maintenance of all system field equipment).

Progress Update

The program milestones that have been achieved since 2012 include:

- The PRESTO Ticket provides fare payment options for customers who would like to purchase one ride, two rides or a day pass without a PRESTO card. The TTC has transitioned approximately 200 institutions from legacy fares to PRESTO tickets via the implementation of a new bulk Limited Use Medias (LUMs) sales program. As a result, this has enabled the TTC to discontinue the sale of legacy fares, and to date, 1.4 million PRESTO tickets have been sold since June 2022.
- The monthly TTC Metropass was moved on to the PRESTO card.

- PRESTO vending machines are available at all subway stations, as well as the Mobile Fare Payment Application on all streetcars, buses, Wheel-Trans vehicles, including contracted accessible vans.
- The City of Toronto's Fair Pass Program was launched in April 2018, which provides a
 discount for eligible adult residents when using the balance on their PRESTO card or a
 monthly pass.
- Two-Hour Transfer was launched in August 2018, which makes short-distance travel more affordable for all customers. In addition, PRESTO payment options have integrated fares and allowed customers to travel seamlessly into Mississauga and York Region.
- Human Machine Interface (HMI) has been fully implemented on all fare gates, buses, streetcars, and Wheel-Trans vehicles, as well as contracted taxis, which provides customers with information on card balances, and time remaining in the two-hour transfer window. This also provides the TTC with additional tools to track and enforce fare compliance.
- New fare gates have been installed at all subway stations.
- Open Payment: This allows customers the flexibility and convenience of using Credit/Debit as fare payment. To allow for the launch of Open Payment, it is essential to refresh the devices (Fare Gate Readers). To date, 100% of devices have been refreshed on Wheel-Trans buses, 98% on streetcars, 67% on buses (to be completed by end of Q1 2023) and 7.9% on fare gates, with all stations scheduled to be completed by end of Q2 2023. The User Acceptance Testing (UAT) is currently underway for the Open Payment, which is scheduled to be completed in Q2 2023.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- The Metrolinx PRESTO procurement program could delay the delivery of all outstanding settlement agreement gaps within the target timeline of 2024 as stated in the Minutes of Settlement.
- TTC requirements related to cash payment (i.e. Machine Readable Transfers) are at risk of not being delivered as PRESTO is heavily focused on Digital Transformation initiatives that discourage the use of cash on transit.
- The fare gate installation rate has trended slower than originally planned. However, the TTC
 is closely working with the vendor to refine the schedule further and ensure that all of the
 smart card readers are installed prior to the Open Payment launch date of Q3 2023.
- In addition, the TTC is also co-ordinating with Metrolinx and engaging vendors in design and commercial discussions to ensure that the fare gate production network connection is successfully integrated with the new Metrolinx Azure platform.

The TTC is closely working with Metrolinx to ensure that both parties are aligned and that the proposed delivery and closeout plans remain on schedule. Please see the <u>February 28, 2023</u> <u>Board report</u>.

Next Steps

- The Service Level Agreement (SLA) Performance and Metrics Reporting work stream, which will formalize service level metrics, critical KPIs and introduce enhanced performance dashboards is scheduled to be completed in Q2 2023.
- The remaining Device Refresh work, which comprises of the installation of validators, fare gate software and the deployment of inspection devices to enable the launch of Open Payments is scheduled to be completed by the end of Q2 2023.
- The Open Payment (with Adult fare type) and the ability for TTC customers to use Credit/Debit fare payment is scheduled to be launched in Q3 2023.
- PRESTO Virtual Card App where customers can use their smart phones to make fare payments is scheduled to be launched in Q3 2023.

Note:

- This project is included under Fare System as indicated in Appendix 2.
- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.

VISION

Description

Implementation of a new Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) System, dubbed VISION, on the TTC's bus and streetcar fleets to provide: a) tracking and managing communications with the TTC's fleet of more than 2,000 buses and streetcars; b) better information for scheduling and planning; c) better real-time information to provide operators and customers during their trip; d) more efficient Transit Signal Priority to keep TTC vehicles moving; and e) more efficient yard management and crew sign-ups.

Financials				
Program Start	Forecast Completion Year	Total Approved Budget	Spend to Date	Estimated Final Cost
2016	2024	\$111.7M	\$93.2M	\$111.7M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$6.9M	\$5.2M	\$1.7M

Scope Description

- Implement onboard CAD/AVL solution on the TTC's bus and streetcar vehicle fleet (i.e. data and voice communications, automatic vehicle location and stop display, stop announcements and vehicle performance monitoring).
- Integrate central CAD/AVL solution with existing onboard camera on buses.
- Integrate central CAD/AVL solution with automatic passenger counting systems on buses and streetcars in scope.
- Implement the Operator Performance module.
- Implement Yard Management System at all streetcar carhouses and bus garages.

Progress Update

Phase 1 and 2 of the program achieved the following:

- Deployment of the Central CAD/AVL System in Transit Control, as well as the completion of Transit Control renovations.
- Deployment of the onboard system to the fleet of buses and streetcars.

The benefits from implementing Phase 1 and 2 includes: improved On-Time Performance, improved customer information, reduced road calls, improved vehicle to Transit Control communications.

Phase 3:

This includes the deployment of the Smart Yard system at the 11 vehicle garages and streetcar carhouses. The Smart Yard system will track the locations of the vehicles in the bus garages and carhouses and automatically assign the scheduled service to the vehicles. The

expected benefits of the system include: improved pull-out performance and efficiencies for tracking and dispatching vehicles from the yards.

The implementation of the Smart Yard Management System at all streetcar carhouses and bus garages is currently in progress. To date, 75% of the construction and 10% of vendor commissioning has been completed. Full implementation is scheduled to be completed by Q2 2024.

Key Issues/Risks and Mitigation Activities

The Yard Management project has experienced delays in its roll-out phase due to issues that have been identified during quality assurance. The testing has revealed that there are problems with vehicle location accuracy, which has had a significant impact on the ability to operationalize the solution.

The TTC has been collaborating closely with the vendor to identify the root causes of the issues and to explore potential mitigation plans. Although the vendor has made progress towards resolution, the TTC is continuing to work on resolving the few remaining issues. To ensure appropriate attention is given, the TTC has escalated the matter to the vendor's management team, and the TTC is closely monitoring progress.

Next Steps

- Commissioning of Yard Management at Leslie Barns Carhouse and Arrow Road Garage.
- General Transit Feed Specification/Real Time to be implemented in Q3 2023.
- Transit Signal Priority (TSP) with the VISION system to be integrated Q1 2024.

Note: This project is included under Information Technology Systems – Infrastructure as indicated in Appendix 2.

SAP Enterprise Resource Planning Program

Description

Implementing an industry-standard enterprise software solution that modernizes the TTC's core systems that aligns with the City of Toronto's SAP Roadmap by integrating business processes through the replacement of legacy systems and modernizing business processes.

Financials				
Program Start	Forecast	Total	Spend to Date	Estimated
	Completion Year	Approved Budget		Final Cost
2015	2025	\$272.8M	\$99.5M	\$272.8M
Overall Performance		2022 Budget	2022 Actuals	2022 – 2023 Carry Forward
G		\$14.4M	\$12.4M	\$2.0M

Scope Description

The SAP implementation will establish a system of record to provide improved information for decision-making for various areas of the business with a focus on:

- a. Payroll, Time, Attendance and Workforce Scheduling for all Employees.
- b. Procurement, Materials/Warehouse Management, Accounts Payable and Receivable.
- c. Costing for Reporting of Vehicle Maintenance Operations, Facilities for Capital and Operating Costs.
- d. Asset Accounting.
- e. Learning Management System.
- f. Corporate Communications Employee Mobile App.
- g. Resume Screening Tool powered by Al.
- h. Employee Performance and Compensation Management.
- i. Succession Development and Planning.
- i. Grievance Management.
- k. Employee Engagement.

Progress Update

Phase 1:

Completed 2018 Launch of SAP Finance General Ledger, Cost Centre Accounting, Project Internal Orders, SAP SuccessFactors: Recruiting, Onboarding, Employee Service Centre and Systems, MyTTC Employee and Manager Self Services and Payroll.

Phase 2:

- SAP Costing Release 1 Solution for Operations In Progress with a targeted completion by Q4 2023. Solution Design was approved and data cleansing and build is in progress.
- Time, Attendance and Workforce Scheduling System In Progress with a targeted completion by 2025. The Transit Operator Workforce Management Solution evaluation has

- been completed, the Release 1 Recovery Strategy is planned to be completed in March and the contract will be awarded in Q2 2023.
- Employee Engagement Platform Deferred to 2025 due to higher corporate priorities within the People Group. (No impact to overall schedule).

Phase 3:

- Procurement/Management/Materials Management/Finance In Progress, Assessment Phase completed in Q1 2022, and Request For Proposal (RFP) is 75% complete.
- Asset Accounting In Progress, assessment phase completed by Q3 2022.
- Talent Management Resume Screening Tool Talent Acquisition Intelligence module
 has successfully launched in Q3 2022 and Diversity, Equity and Inclusion module in Q4
 2022. The vendor has announced in Q1 2023 that there is a change in ownership, which
 will have an impact on product support.

Key Issues/Risks and Mitigation Activities

To combat the difficulties associated with using the current vendor of record to hire contractor resources due to the current competitive market, the TTC is leveraging other vendor of record alternatives to mitigate the impact to the Costing Release 1 Project implementation.

Next Steps

Phase 2:

- SAP Costing Solution Release 1 Stage Gate 6 (Q4 2023).
- Time, Attendance and Workforce Scheduling Release 1 Stage Gate 6 (Q4 2023) and Contract Award for Release 3 – Transit Operations Workforce Management Solution.

Phase 3:

 SAP Procurement and Category Management and Materials Management – Stage Gate 3 (Q4 2023).

Note:

- The EFC represents the total SAP program cost with the future phases.
- This project is included under Information Technology Systems Infrastructure as indicated in Appendix 2.
- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.