



Financial and Major Projects Update for the Period Ended April 29, 2023

Date: June 12, 2023

To: TTC Board

From: Chief Financial Officer

Summary

This report sets out the 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 period ended April 29, 2023. Projections to year-end 2023 are also provided.

For the period ended April 29, 2023, operating results indicate a net year-to-date underspending of \$11.2 million driven by \$19.2 million in under-expenditures due to timing of non-labour expenditures, workforce vacancies and deferred Line 5 training and mobilization activities. The under-expenditure is partially offset by \$8.0 million in unfavourable revenue variances, primarily resulting from reduced ridership due to significant weather events experienced in Q1, which impacted travel patterns and passenger revenue given the availability of hybrid work arrangements compared to pre-COVID experience.

For the full year, the TTC's 2023 Operating Budget of \$2.380 billion gross and \$1.326 billion net is forecasted to be underspent by \$5.6 million net, comprised of \$20.7 million of projected under-expenditures primarily due to the deferred opening of Line 5 and projected lower diesel and energy prices and lower incremental COVID costs, including improved absence rates, offset by \$15.1 million in projected unfavourable revenue variances. The projected unfavourable revenue estimated to year-end accounts for the \$8.9 million year-to-date conventional service passenger revenue variance carrying forward to year-end, coupled with deferred incremental revenue to be generated from Line 5, and lower-than-anticipated construction service recoveries due to refinements in project schedules from third parties.

For the period ended April 29, 2023, the TTC's capital expenditures total \$201.2 million and represents a spending rate of 13.9% of the 2023 Approved Capital Budget of \$1.451 billion. Of the total 2023 capital expenditures to date, \$197.6 million or 14.5% of the base capital program's 2023 Approved Capital Budget of \$1.364 billion has been spent. Approximately \$3.6 million or 4.1% of the 2023 Approved Capital Budget for transit expansion-related projects of \$87.4 million has been spent.

By year-end, the TTC's capital spending is projected to be in the order of \$1.335 billion, representing an overall 92% spending rate, with the TTC's base capital program

projected to expend \$1.269 billion or 93.1% and transit expansion-related capital works at a projected total of \$65.8 million or 75.2%. The year-to-date results and year-end projections reflect the recommended adjustments to the 2023 Capital Budget and future year cash flows in the 10-Year Capital Plan to account for the receipt of incremental Federal Zero Emission Transit Funding (ZETF) of \$349 million recently approved for the TTC Green Bus Program. The reported results also account for adjustments for projects that have had accelerated spending and projects that have experienced some delays and therefore lower spending.

Recommendations

It is recommended the TTC Board:

1. Approve the following adjustments to the TTC’s 2023-2032 Capital Budget and Plan for the TTC Green Bus Program by:
 - a. Increasing the 2023-2032 Approved Capital Budget and Plan by \$349 million to a total of \$799 million for the TTC Green Bus Program to be fully offset by \$349 million in incremental funding to be received through Infrastructure Canada’s (INFC) Zero Emission Transit Fund (ZETF) for the procurement of 340 eBuses and 248 charge points;
 - b. Amending the 2023 Capital Budget and 2024-2026 cash flow funding estimates to align with the estimated project delivery schedule to the following:

Projects (000's)	2023 Budget	2024	2025	2026	10-Year Plan
eBus - Purchase	105,477	149,072	320,283	60,838	635,670
eBus Charging System - Purchase	81,272	39,894	15,698	26,528	163,392
Total	186,749	188,966	335,981	87,366	799,062

2. Approve the 2023 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.
3. Authorize that the recommended budget adjustments in Recommendations 1 and 2 above to the TTC’s 2023-2033 Capital Budget and Plan be included in the TTC’s submission for the Capital Variance Report for the four months ended April 30, 2023 for City Council consideration and approval.

Financial Summary

2023 Operating Results

Based on results to the end of Period 4, the TTC has experienced a favourable \$11.2 million operating budget variance comprised of \$19.2 million in under-expenditures partially offset by \$8.0 million in unfavourable revenue variances.

As of Period 4, passenger revenue for TTC Conventional Service is \$8.9 million below budget with the unfavourable variance largely resulting from days with inclement weather. Compared to pre-pandemic travel patterns, a more pronounced ridership impact on inclement weather days occurred given the availability of more flexible work arrangements compared to pre-pandemic work options. For the remainder of the year, TTC Conventional passenger revenue is forecast to be substantially on budget, with the exception of the delayed realization of anticipated incremental revenue associated with the opening of Line 5. For the full year, a projected year-end unfavourable TTC Conventional passenger revenue variance of \$9.7 million is anticipated.

Ancillary revenue and reserve funding are a combined \$0.9 million over budget year-to-date, primarily due to higher bank interest revenue to the end of Period 4. By year-end, ancillary revenues and reserve funding are expected to be a combined \$5.6 million under budget. This projection reflects adjustments to planned third-party construction schedules, which will result in lower-than-budgeted recoveries as well as a higher-than-budgeted reserve draw from the TTC Stabilization Reserve to offset unbudgeted costs associated with community safety response initiatives, in accordance with TTC Board delegated authority and City Council approval.

Unfavourable revenue variances realized during the four-month period have been fully offset by favourable expenditure variances. As of Period 4, expenditures are \$19.2 million below budget driven by lower-than-planned spending due to the timing of non-labour expenditures, deferred Line 5 training and mobilization activities, and lower incremental COVID costs, including improved absence rates. Based on projected results to year-end, operating expenses are anticipated to be \$20.7 million (0.9%) below the 2023 approved expenditure budget based on year-to-date variances noted above, as well as lower-than-budgeted forecasted diesel and hydro prices for the remainder of the year. Recent trends towards higher Wheel-Trans ridership and related costs, higher dental costs and benefit utilization will partially offset under-expenditures. In addition, operator availability for bus and subway services are above budgeted levels due to the return of staff with the elimination of the mandatory vaccine policy and the deferral of Line 5 operator training.

Operating results for the period ended April 29, 2023 and projected year-end operating results are summarized in Table 1.

Table 1 – 2023 Operating Year-to-Date Results and Forecast Summary*

Description (\$Millions)	Year-To-Date Actuals			Year-End Forecast		
	Budget	Actual	Variance	Budget	Forecast	Variance
Revenue						
TTC Conventional						
Passenger Revenue	291.1	282.2	(8.9)	931.4	921.7	(9.7)
Other Ancillary Revenue	17.8	18.7	0.9	81.2	71.4	(9.8)
Wheel-Trans	2.0	2.0	0.0	6.5	6.7	0.2
Reserve Draw	0.0	0.0	0.0	35.6	39.8	4.2
Total Revenue	310.9	302.9	(8.0)	1,054.7	1,039.6	(15.1)
Expenditures						
TTC Conventional	700.2	686.4	(13.8)	2,214.2	2,197.6	(16.6)
Wheel-Trans	46.0	44.1	(1.9)	142.4	145.4	3.0
Subtotal Base Expenditures	746.2	730.5	(15.7)	2,356.6	2,343.0	(13.6)
COVID Incremental Costs	8.6	5.1	(3.5)	23.8	16.7	(7.1)
Total Expenditures	754.8	735.6	(19.2)	2,380.4	2,359.7	(20.7)
Net Expenditure (Funding Required)	443.9	432.7	(11.2)	1,325.7	1,320.1	(5.6)
Operating Funding						
COVID Impact Funding	126.6	130.1	3.5	366.4	366.0	(0.4)
Base Operating Funding	317.3	302.6	(14.7)	959.2	954.0	(5.2)
Total Operating Funding	443.9	432.7	(11.2)	1,325.6	1,320.0	(5.6)

***Note:** An updated Line 5 revenue service commencement date has not been communicated to the TTC. Projections in Table 1 are therefore based on an October 2023 revenue service commencement date, three months later than the date assumed in the approved 2023 Operating Budget.

The TTC's 2023 Operating Budget of \$2.380 billion gross, approved by City Council on February 15, 2023, comprised of \$1.055 billion in revenues, \$959.2 million in Base City Funding and \$366.4 million in anticipated COVID funding requirements to address COVID financial impacts.

Base operating funding requirements are expected to be below budget, as deferred Line 5 training and mobilization costs and anticipated under-expenditures from lower diesel and hydro prices, will partially be offset by a reduction in anticipated ancillary revenues.

The COVID financial impact accounts for lost passenger and ancillary revenues relative to pre-pandemic levels, as well as incremental COVID response expenses. The actual COVID financial impact as of Period 4 is \$130.1 million and is anticipated to be \$366.0 million by year-end, as summarized in Table 2 below.

Table 2 – 2023 COVID-19 Financial Impact

in \$ Millions	Year-To-Date Period 4			Year-End Forecast		
	Budget	Actual	Variance	Budget	Forecast	Variance
COVID-19 Financial Impact						
Lost Passenger revenue, net of PRESTO Commissions	113.4	120.5	7.1	328.1	335.1	7.0
Lost Ancillary Revenues	4.6	4.5	(0.1)	14.5	14.2	(0.3)
Incremental COVID-19 Expenses	8.6	5.1	(3.5)	23.8	16.7	(7.0)
Total COVID-19 Financial Impact	126.6	130.1	3.5	366.4	366.0	(0.4)

The net unfavourable variance of \$3.5 million year-to-date COVID financial impact is primarily due to higher-than-anticipated passenger revenue loss in Q1 from a more pronounced ridership impact on severe weather days compared to pre-pandemic levels given the now widespread use of hybrid work arrangements, offset by reduced COVID-related absenteeism and Personal Protective Equipment (PPE) requirements. Looking ahead to year-end, the anticipated COVID-19 financial impact is anticipated to be slightly below budget (\$0.4 million) as passenger revenue is expected to align with budget for the balance of the year, while trends with lower-than-anticipated PPE requirements and COVID-related absenteeism are expected to continue for the balance of the year.

2023 COVID-19 Relief Funding

From 2020 to 2022, the TTC has received a total of \$1.8 billion in funding relief from other orders of government. This funding support recognized the importance of public transit as an essential service and was critical to supporting an effective COVID-19 response and the continuation of transit service throughout the pandemic and initial phases of recovery.

With the TTC continuing to be impacted by COVID effects, the 2023 anticipated financial impact of COVID is \$366.4 million, primarily due to the continued loss of passenger revenue relative to pre-pandemic levels. As highlighted in the companion report, *Sustaining a Reliable Transit System to Keep Toronto Moving: 2024 Outlook and Beyond*, securing stable and long-term funding to sustain TTC transit services is essential for the economic, environmental and social health and well-being of the city of Toronto and surrounding regions.

2023 Community Safety Response Unbudgeted Expenditures

As summarized in the *Community and Security Update* companion report, and in Table 3 below, unbudgeted expenditures approved under CEO delegated authority to the end of Period 4 total \$1.6 million, with \$4.2 million projected to September 30.

Table 3 – Unbudgeted System Safety and Cleanliness Initiatives

Description (\$Millions)	Actual Cost to April 29, 2023	Projected Cost to September 30, 2023
50 Temporary Security Guards	0.7	2.3
20 Community Safety Ambassadors	0.3	0.9
Special Constables Overtime – High Visibility Patrols	0.2	0.3
6 Transit Control Dispatchers	0.2	0.5
De-escalation Training*	0.1	0.1
Extended Station Cleaning	0.1	0.1
Total Unbudgeted System Safety and Cleanliness Initiatives	1.6	4.2
* Primarily for vendor delivered 'Train the Trainer' Program. Training Delivery to frontline employees, will primarily be delivered by TTC In-House Instructors and accommodated with current resourcing.		

In the Financial Update report presented to the TTC Board at the April 13, 2023 meeting, unbudgeted Safety and Security Response expenses were projected at \$2.1 million to May 31, 2023. The increase of an additional \$2.1 million, to \$4.2 million total up to September 30, largely reflects the extension of contracts for Security Guards and Community Safety Ambassadors to September 30, 2023.

As approved by the TTC Board on February 28, 2023 and City Council on March 30, 2023, these unbudgeted costs will be funded from the TTC Stabilization Reserve. These additional measures will be assessed through the summer with updated response plans reported to the TTC Board in the fall.

2023 Capital Results

As of April 30, 2023, the TTC incurred \$197.6 million in capital expenditures, reflecting a spending rate of 14.5% for the TTC’s base capital program and \$3.6 million or 4.1% for transit expansion-related projects. Combined, a total of \$201.2 million was spent at the end of Period 4, representing a 13.9% overall spending rate for the first four months of 2023.

By year-end, the TTC’s total capital spending is projected to be in the order of \$1.335 billion, representing an overall 92% spending rate, reflective of \$1.269 billion or 93.1% projected spending in the TTC’s base capital program and \$65.8 million or 75.2% spending for transit expansion-related capital works, as summarized in Table 4 below.

Table 4 – 2023 Capital Year-to-Date Results and Forecast Summary

Description (\$ Millions)	2023 Budget	Year-to-Date Actual		Year-End Projection	
		\$	%	\$	%
TTC Base Capital	1,363.8	197.6	14.5%	1,269.3	93.1%
TTC Transit Expansion-Related Projects	87.4	3.6	4.1%	65.7	75.2%
Total	1,451.2	201.2	13.9%	1,335.0	92.0%

The projected underspending at year-end is the result of various drivers, including but not limited to, resourcing and supply chain constraints; protracted negotiations for

complex projects; and adjustments to project schedules due to unforeseen factors and dependencies with third parties. Resourcing challenges have impacted the early works for Line 2 ATC Resignalling and various IT projects, as has supply chain issues for the Corporate Camera Program and the delivery of Hybrid Buses. The Fire Ventilation program's key project schedules have been impacted by unforeseen site conditions and labour disruption, while the Subway Car Overhaul capital project continues to refine its technical requirements. Dependency on third parties has delayed the award for the eBus contract's milestone payment and the installation of fare card readers as part of the Fare Card program. Delays related to the Toronto-York Spadina Subway Extension (TYSSE) contribute to underspending in the Transit Expansion-related projects.

The year-to-date and year-end projections summarized in Table 4 above, and outlined in Appendix 2, reflect the recommended adjustments to the 2023 Capital Budget and future year cash flows in the 10-Year Capital Plan to account for the incremental \$349 million in Federal ZETF funding to be received for the TTC Green Bus Program. The reported results also account for adjustments for projects that have had accelerated spending and projects that have experienced some delays and therefore lower spending.

These budget adjustments, summarized in Table 5 below, and detailed in Appendix 3, are before the Board for approval and will be submitted for City Council approval with the City's Period 4 Capital Variance Report.

Table 5 – Recommended Adjustments to the 2023-2032 Capital Budget & Plan

Capital Plan and Adjustments (\$ Millions)	2023 Budget	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
Council Approved Capital Plan February 15, 2023	1,341.5	1,637.7	1,513.3	1,238.1	1,138.1	1,316.0	1,252.4	1,117.9	1,058.9	877.3	12,491.2
Subsequent Council Approved Amendments											
Incremental Carryforward Adjustment	20.8	60.7									81.5
4M Variance Report Adjustments	88.9	93.3	141.5	25.7							349.4
Revised Capital Plan	1,451.2	1,791.7	1,654.8	1,263.8	1,138.1	1,316.0	1,252.4	1,117.9	1,058.9	877.3	12,922.1

Economic Impacts of TTC Spending

As part of its annual budget, the TTC allocates funds for capital spending, which are 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 Toronto, the GTA region and the rest of Canada. Key findings from research conducted by the University of Toronto regarding the economic impact of TTC investments conclude 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 projected year-end capital spending of \$1.3 billion in 2023, and based on ratios derived from the research conducted by the University of Toronto, it can be

estimated this investment spending will generate \$3.2 billion in economic activity (Gross Output); will contribute \$1.3 billion in Gross Domestic Product (value added); and will create or sustain 20,001 jobs, as summarized in Table 6 below:

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

Year-End Capital Results	\$1.3 Billion
Economic Activity (Gross Output)	\$3.2 Billion
Gross Domestic Product (GDP)	\$1.3 Billion
Jobs	20,001

While research from 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 2023, projected year-end spending on goods and services is expected to be \$683.7 million, which is anticipated to generate \$1.5 billion in economic activity.

The next phase of the research project with the University of Toronto is underway, focusing on quantifying transit rider, social, health and environmental benefits. The findings from this phase of work is expected to be presented to the TTC Board at its October 26 meeting.

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 order to support the accessibility of transit, all passes, Fair Pass fares and seniors’ fares were exempted from the 2023 recommended TTC fare increase. In addition, the 2023 Operating Budget includes a \$2.0-million contribution to the City’s Social Development, Finance and Administration Division to facilitate an expansion of the Fair Pass Program, which provides more affordable single-ride and monthly passes to eligible customers. This summer, Toronto residents aged 20-64 with a family income below 75% of the Low-Income Measure will be eligible to apply for the Fair Pass program. This third phase of the program will be open to approximately 50,000 additional residents experiencing deep poverty who were not eligible in earlier phases, which prioritized individuals receiving social assistance through Ontario Works and Ontario Disability Support Program and low-income individuals receiving City-administered childcare and rent-geared-to-income subsidies. In future years, as funding permits, income eligibility will expand to the Low-Income Measure, plus 15% income threshold.

The 2023-2032 Capital Budget and Plan includes \$118.4 million in 2023 and \$582.9 million over the 10 years for the TTC’s Easier Access program, which continues to make all subway stations accessible with elevators, wide fare gates and automatic sliding doors.

It also provides funding for several improvements elsewhere across the transit system, including Warden and Islington stations, new low-floor streetcars, new accessible bus and Wheel-Trans fleets, as well as a making an additional 322 bus and streetcar stops accessible.

Decision History

At its meeting on January 9, 2023, the TTC Board approved the 2023-2032 TTC Capital Budget and Plan of \$12.491 billion in funding over the 10-year period, with \$1.341 billion approved in the 2023 Capital Budget.

[TTC 15-Year Capital Investment Plan, Real Estate Investment Plan Update and 2023 – 2032 Capital Budget & Plan](#)

At its meeting on January 9, 2023, the TTC Board approved the 2023 Operating Budget of \$2.237 billion gross and \$1.189 billion net for TTC Conventional Service; \$142.8 million gross and \$136.3 million net for Wheel-Trans Service for a total 2023 Operating Budget of \$2.380 billion gross and \$1.325 billion net; and a 2023 total year-end workforce complement of 16,787 positions for the TTC.

[2023 TTC Conventional and Wheel-Trans Operating Budgets](#)

Subsequently on February 15, 2023, City Council approved an amended 2023 TTC Operating Budget to support a one-year pilot for expanding the multidisciplinary teams on the TTC that provide mental health supports to persons experiencing homelessness. The 2023 Operating Budget for TTC Conventional Service was increased by \$0.5 million gross and net, reflecting the estimated cost for the expansion.

[City of Toronto 2023 Capital and Operating Budgets.](#)

At its meeting on February 28, 2023, the TTC Board considered the *Community Safety Issues and Response* report that outlined the TTC's action plan and multidisciplinary approach required to manage the increasing number of societal challenges that have shifted onto public transit. The TTC Board also adopted recommendations to increase the delegated expenditure authority to a cumulative \$15 million to the TTC's Chief Executive Officer to respond to the safety emergency and requested a detailed update on expenditures at the next TTC Board meeting.

[Community Safety Issues and Response](#)

At its meeting on May 10, 2023, City Council approved additional carry-forward funding of \$20.855 million to the 2023 Capital Budget and \$60.684 million added to the 2024 cash flow estimates based on unspent capital project funding in 2022 for the TTC.

[Adjustments to Capital Budget, Carry Forward Funding and Future Year Commitments](#)

At the meeting on May 10, 2023, City Council considered EX4.10 – Transit Priority Measures to Support Scarborough SRT Bus Replacement and directed the TTC to proceed with design work on the Scarborough Rapid Transit busway conversion and request the Province of Ontario to reimburse the TTC in the amount of \$2.9 million for the projected cost of the design-related work.

[Transit Priority Measures to Support Scarborough SRT Bus Replacement](#)

Comments

2023 Operating Budget: Financial Update

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 are 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 \$182.6 million. The final and most significant driver of expenses relates to service hours, which impact labour expenses (\$1.1823 billion) and non-labour expenses (\$318 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

Item	Year-To-Date Actuals			Year-End Forecast			Status
	Budget	Actual	Variance	Budget	Forecast	Variance	
TTC Ridership	124.43M	121.22M	(3.20M)	392.99M	389.34M	(3.65M)	–
TTC Average Fare	2.34	2.33	(0.01)	2.37	2.36	(0.01)	–
TTC Actual Operating Service Hours	3.013M	3.045M	0.032M	8.679M	8.830M	0.151M	✓
Price of Fuel (\$/litre)	1.47	1.37	(0.10)	1.50	1.30	(0.20)	✓
Price of Electric Power (\$/kWh)	0.14	0.12	(0.02)	0.14	0.13	(0.01)	✓
WT Passengers	0.93M	0.92M	0.01M	2.95M	3.10M	0.15M	✓

TTC Conventional Revenue Ridership

TTC Conventional revenue ridership began the year slightly below budget at an average of 69% of pre-COVID levels in January and has since increased to an average of 74% in April, slightly above budget. Overall year-to-date ridership is at 70% of pre-COVID levels versus a budget expectation of 72%.

The budget anticipated most employers would maintain current hybrid work practices with the average number of in-office days increasing marginally throughout the year. Actual ridership to date in 2023 is aligned to these budget assumptions, with the exception of days with inclement winter weather, which caused a direct reduction in ridership on those days given the availability of flexible work arrangements, relative to pre-COVID experience. With no significant winter weather events in April, ridership averaged 74% of pre-COVID levels for the period, slightly above the budgeted 73%, and based on year-to-date experience alignment with budget is expected to be maintained for the balance of the year.

Service Hours

Regular service hours delivered to date are 1% over budget and are anticipated to remain above budgeted levels for the remainder of the year. Operator availability for bus and subway services is above budget levels due to the elimination of the mandatory vaccine policy and subsequent return of employees and the deferral of Line 5 operator training. These resources have been utilized to provide additional demand-responsive service when required, improve service reliability on the bus network and to restore six-minute headway for late-evening service on Line 1 and Line 2.

Diesel Fuel

Diesel prices began the year above budgeted levels at an average of \$1.59 per litre in January before falling below budget in February and to an average of \$1.24 per litre in April. Overall, the average diesel price was 7% below budget overall for the first four months of the year, and based on the latest future market pricing, is forecasted to be \$1.30 per litre for the year as a whole. Savings on diesel price have been partially offset by an increase in the anticipated diesel consumption rate and an increase in actual service hours being delivered as compared with budget.

Wheel-Trans Ridership

Wheel-Trans ridership began the year slightly below budget before increasing to slightly above budget in April. The budget anticipated an increase in in-person medical appointments and increasing customer comfort with travel and event attendance. Year-to-date, actual ridership is consistent with the budgeted expectation, but it is also noted that specifically in Period 4, ridership was above budget due to an increased return in personal shopping and hospital trips. Staff are monitoring recently developing trends, and to accommodate potential ridership increases, additional Wheel-Trans operators are being trained.

2023 Operating Results and Year-End Forecast

For the period end April 29, 2023, the TTC incurred actual expenditures of \$735.6 million gross and \$432.7 million net against year-to-date planned (calendarized) spending of \$754.8 million gross and \$443.9 million net, resulting in a net favourable operating variance of \$11.2 million. The favourable operating variance is primarily due to the timing of non-labour expenditures, deferred opening of Line 5, lower incremental COVID costs, including improved absence rates and higher interest revenue. The favourable variance is partially offset by passenger revenue being below budget due to the significant weather events in Q1, during which the TTC experienced a direct reduction in ridership levels on those days due to more flexible work arrangements.

Based on projected results to year-end, a favourable variance to budget of \$5.6 million is anticipated. A forecasted under-expenditure of \$20.7 million incorporates lower hydro and diesel prices and deferred Line 5 training and mobilization activities. As an updated Line 5 revenue service commencement date has not been communicated to the TTC, year-end projections are based on an October 2023 revenue service commencement date – three months later than the date assumed in the approved 2023 Operating Budget.

Partially offsetting these under-expenditures are increased costs to accommodate higher-than-budgeted Wheel-Trans ridership demand, higher dental costs and benefit utilization and operator availability above budget levels due to the elimination of the mandatory vaccine policy that resulted in the return of staff to the TTC. Table 8 reflects the key drivers of the favourable variances from the 2023 Operating Budget.

Table 8 – TTC Year-to-Date Operating Results and Year-End Forecast*

Description (\$Millions)	Year-To-Date Actuals			Year-End Forecast		
	Budget	Actual	Variance	Budget	Forecast	Variance
Revenue						
TTC Conventional						
Passenger Revenue	291.1	282.2	(8.9)	931.4	921.7	(9.7)
Ancillary Revenue	17.8	18.7	0.9	81.2	71.4	(9.8)
Wheel-Trans Passenger Revenue	2.0	2.0	0.0	6.5	6.7	0.2
Subtotal Revenue	310.9	302.9	(8.0)	1,019.1	999.8	(19.3)
Reserve Draw	0.0	0.0	0.0	35.6	39.5	3.9
Total Revenue	310.9	302.9	(8.0)	1,054.7	1,039.3	(15.4)
Expenditures						
TTC Conventional						
Departmental Labour	375.8	372.6	(3.2)	1,182.2	1,182.2	(0.0)
Departmental Non-Labour	90.0	82.3	(7.7)	310.9	300.5	(10.4)
Employee Benefits	137.6	139.5	1.9	402.0	407.1	5.1
Diesel	32.6	33.5	0.9	102.9	97.9	(5.0)
Traction Power & Utilities	27.5	25.9	(1.6)	79.6	75.7	(3.9)
PRESTO Commissions	12.4	12.3	(0.1)	39.7	39.7	0.0
Corporate Costs	24.3	20.3	(4.0)	96.9	94.2	(2.7)
Wheel-Trans	46.0	44.1	(1.9)	142.4	145.4	3.0
Subtotal Base Expenditures	746.2	730.5	(15.7)	2,356.6	2,342.7	(13.9)
COVID Incremental Costs	8.6	5.1	(3.5)	23.8	16.7	(7.1)
Total Expenditures	754.8	735.6	(19.2)	2,380.4	2,359.4	(21.0)
Net Expenditure (Funding Required)	443.9	432.7	(11.2)	1,325.7	1,320.1	(5.6)
Operating Funding						
COVID Impact Funding	126.6	130.1	3.5	366.4	366.0	(0.4)
Base Operating Funding	317.3	302.6	(14.7)	959.2	954.0	(5.2)
Total Operating Funding	443.9	432.7	(11.2)	1,325.6	1,320.0	(5.6)

***Note:** An updated Line 5 revenue service commencement date has not been communicated to the TTC. Projections in Table 8 are therefore based on an October 2023 revenue service commencement date, three months later than the date assumed in the approved 2023 Operating Budget.

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

2023 COVID-19 Financial Impact

Table 9 summarizes the financial impacts of COVID-19 on the 2023 Operating Budget:

Table 9 – 2023 Operating Budget COVID-19 Impacts

in \$ Millions	Year-To-Date Period 4			Year-End Forecast		
	Budget	Actual	Variance	Budget	Forecast	Variance
COVID-19 Financial Impact						
Lost Passenger revenue, net of PRESTO Commissions	113.4	120.5	7.1	328.1	335.1	7.0
Lost Ancillary Revenues	4.6	4.5	(0.1)	14.5	14.2	(0.3)
Incremental COVID-19 Expenses	8.6	5.1	(3.5)	23.8	16.7	(7.0)
Total COVID-19 Financial Impact	126.6	130.1	3.5	366.4	366.0	(0.4)

The net unfavourable variance of \$3.5 million year-to-date and a favourable \$0.4 million year-end anticipated COVID financial impact is primarily due to higher-than-anticipated passenger revenue loss in Q1 from more pronounced ridership impact on severe weather days compared to pre-pandemic, offset by reduced COVID-related absenteeism, PPE requirements and ventilation filter usage.

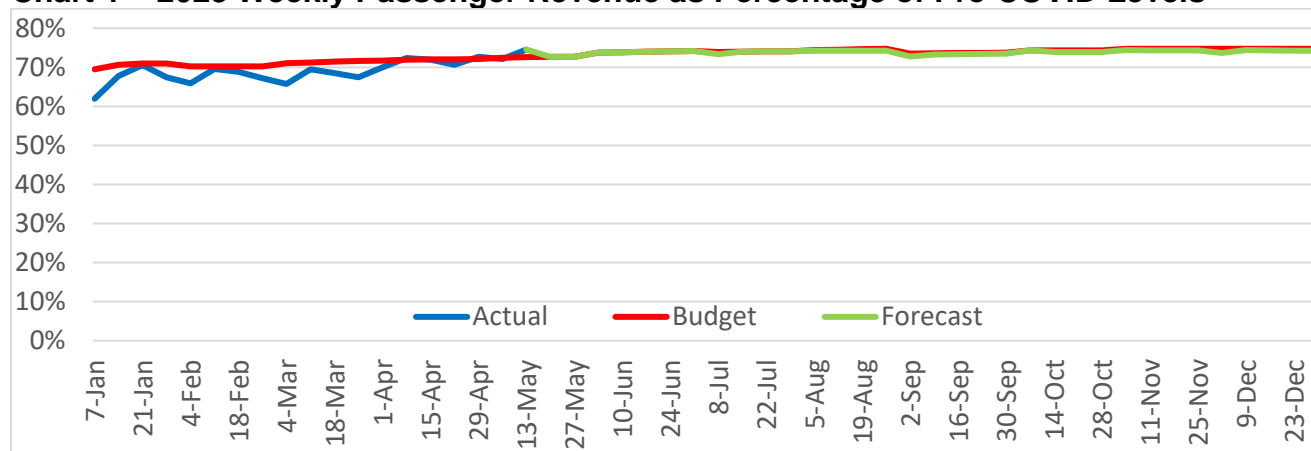
TTC Conventional Passenger Revenue

The year-end passenger revenue is forecast to be approximately \$9.7 million below budget. Of this \$9.7-million variance to budget, \$8.9 million is attributable to year-to-date April actual results, with the lower-than-budgeted passenger revenue primarily due to inclement winter weather events during Q1 that caused a direct reduction in passenger ridership on these specific inclement winter weather days. At this point, it is not anticipated that ridership gains (above budget) will be made during the balance of the year to offset the Q1 unfavourable revenue variance.

Budgeted passenger revenue was expected to reach 75% by year-end 2023, with ridership recovery expected to be limited primarily by the frequency of in-office workdays to approximately twice a week, resulting in marginal change in commuter ridership behaviour in 2023.

As shown below in Chart 1, passenger revenue is anticipated to continue to align with budgeted levels for the balance of the year, with ridership levels forecasting to end the year at 75% of pre-COVID levels. The key assumptions used to establish the fare revenue budget continue to be valid as most employers are anticipated to maintain current hybrid work practices with the average number of in-office days increasing marginally throughout the year, and attendance levels at special events and in-person class settings for post-secondary institutions and schools are anticipated to be maintained. The TTC will continue to monitor ridership trends and recovery and will update forecasts as new information becomes available.

Chart 1 – 2023 Weekly Passenger Revenue as Percentage of Pre-COVID Levels



Ancillary Revenues

The COVID-19 financial impact incorporated into the 2023 Operating Budget included \$14.5 million in lost ancillary revenue as a result of COVID-19 due to lower commuter parking, advertising and subway concession revenue. The year-to-date impact is \$0.1 million below planned revenue and is anticipated to be \$0.3 million below at year-end, as commuter parking has recovered more than budget, which is partially offset by subway concessions recovery not achieving budgeted levels.

COVID-19 Expenses

The COVID-19 financial impact incorporated into the 2023 Operating Budget also included \$23.8 million in COVID-19 response expenses to protect customer and employee safety. Actual expenses to date are \$3.5 million below planned and is anticipated to be \$7.0 million below at end of the year, as COVID-related absenteeism gradually returns to pre-pandemic levels along with reduced PPE requirements.

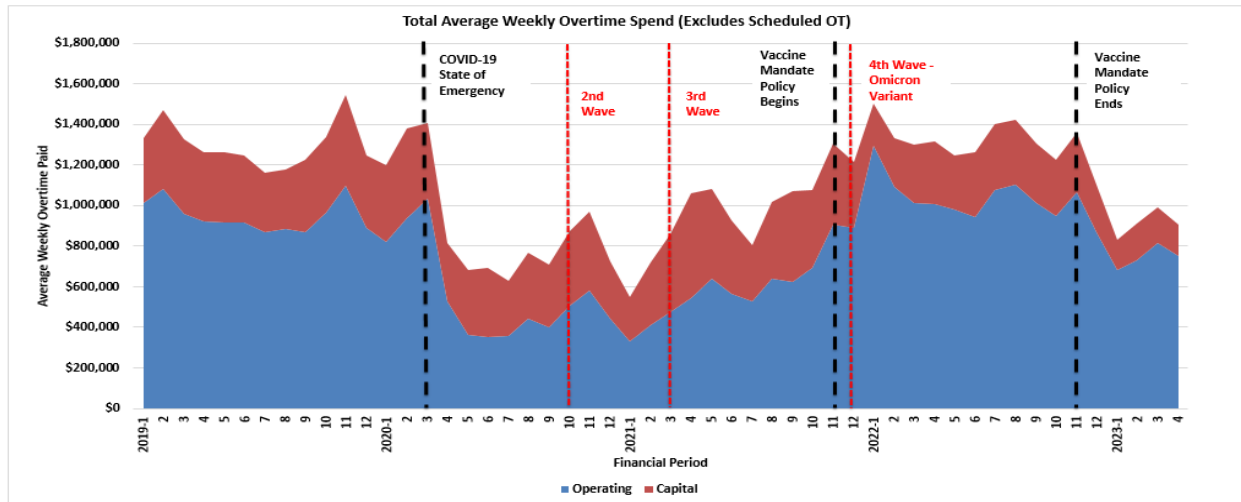
Overtime Management

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) in early 2023 has decreased from an average of \$1.3 million per week down to \$0.9 million per week, a reduction of 31%, and is currently trending below pre-pandemic (2019) levels. A key contributor to this change is improved operator availability. Higher overtime in 2022 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 and the implementation of the mandatory vaccination policy in November 2021, 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.

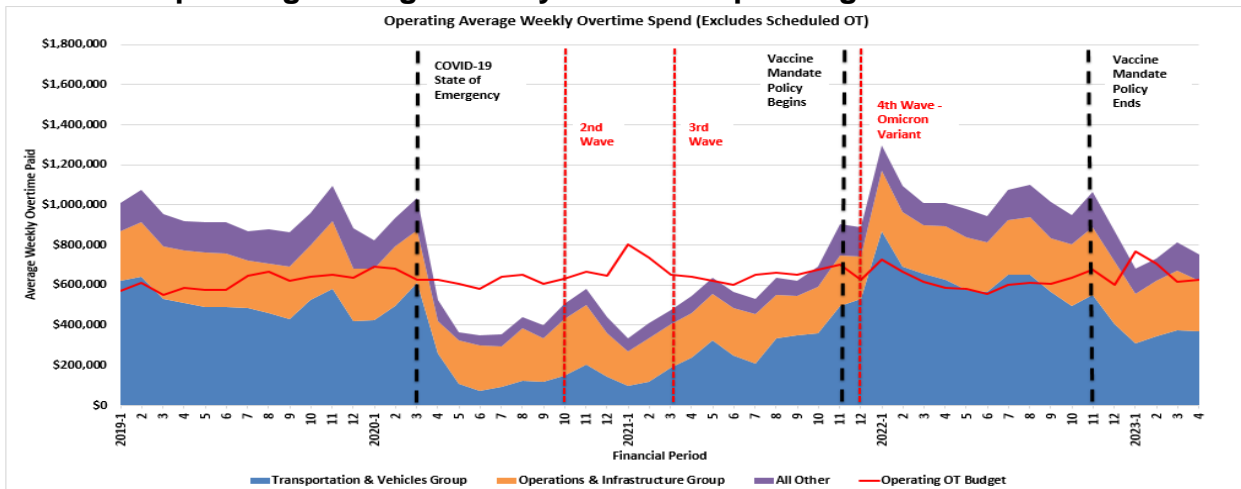
Chart 2 – Total Average Weekly Overtime Spending



Operating Overtime

Consistent with key events and the overall trend noted above, operating overtime in 2023 has decreased relative to the 2022 experience and is below pre-pandemic levels from 2019. Operating overtime has declined approximately 28% in the first four months of 2023 compared to 2022. Overtime has especially declined in the Transportation and Vehicles Group, as hiring efforts were targeted at Operators in late 2022 and in addition to this, many employees in this group were reinstated when the mandatory vaccine policy ended in late 2022. In early 2023, improved operator availability has allowed the TTC to fill absence coverage on regular time through the use of spare operators. Building on this improvement, continuous improvement actions are being taken to enhance the effective deployment of spare operators to achieve further overtime reductions. In addition, going forward the TTC is focused on filling priority vacancies amongst maintenance employees in the Operations and Infrastructure Group to further reduce the reliance on overtime, wherever possible.

Chart 3 – Operating Average Weekly Overtime Spending



2023 Capital Budget: Financial Update

Adjustments to the 2023-2032 Capital Budget and Plan

Incremental Carry-forward Adjustments

At its meeting on April 13, 2023, the TTC Board was presented with the Preliminary Financial and Major Projects Update for the Period Ending December 31, 2022. Based on the year-end results, \$20.8 million of 2022 unspent funding was carried forward and added to the 2023 Capital Budget, and a further \$60.7 million was carried forward and added to the 2024 Capital Plan estimates. These adjustments were approved by City Council at its meeting on May 10, 2023.

Green Bus Program Federal Funding

On April 24, 2023, the Federal government announced a \$349-million contribution to the TTC Green Bus Program, which now enables the TTC to procure 340 new eBuses and 248 charge points. This report seeks to amend the expenditures and funding in the TTC's 2023-2032 Capital Budget and Plan to recognize the contribution from Infrastructure Canada's (INFC) Zero Emission Transit Fund. With this amendment, the total funding for the TTC Green Bus Program increases to \$799 million. The revised 2023 Capital Budget and 2024-2026 cash flow funding estimates for the TTC Green Bus Program to align with the estimated project delivery schedule are outlined in the table below:

Table 10 – TTC Green Bus Program Revised Cash Flow Funding

Projects (000's)	2023 Budget	2024	2025	2026	10-Year Plan
eBus - Purchase	105,477	149,072	320,283	60,838	635,670
eBus Charging System - Purchase	81,272	39,894	15,698	26,528	163,392
Total	186,749	188,966	335,981	87,366	799,062

SRT Bus Replacement: Reallocation of Funding to Complete Busway Design

At the meeting on May 10, 2023, City Council considered EX4.10 – Transit Priority Measures to Support Scarborough SRT Bus Replacement and adopted the following recommendations, amongst others pertaining to this matter:

1. City Council request the Toronto Transit Commission Board to direct the Chief Executive Officer, Toronto Transit Commission, to proceed with design work on the Scarborough Rapid Transit busway conversion; and
2. City Council request the Province of Ontario to reimburse the TTC in the amount of \$2.9 million for design-related work for the Scarborough Rapid Transit busway conversion.

As such, the TTC will transfer funds allocated to the maintenance of the SRT system that have been used to extend its operation, which are provided for within the same project (CTT147) as the SRT Service Transition work, to accommodate this request. Funds are available to transfer due to lower-than-expected expenditures required for the State of Good Repair (SOGR) work. , which will be taken out of service in Q4 of this year.

Additional Period 4 Acceleration and Deferral Budget Adjustments

Recommended in this report and detailed in Appendix 3 are additional 2023 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. These will also be submitted with the Capital Variance Report for the four months ended April 30, 2023 for City Council consideration and approval.

With approval of the amendments included above and in Appendix 3, the TTC’s 10-Year Capital Budget and Plan will be revised as outlined in Table 11 below:

Table 11 – Revised 10-Year Capital Budget and Plan

Capital Plan and Adjustments (\$ Millions)	2023 Budget	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
Council Approved Capital Plan February 15, 2023	1,341.5	1,637.7	1,513.3	1,238.1	1,138.1	1,316.0	1,252.4	1,117.9	1,058.9	877.3	12,491.2
Subsequent Council Approved Amendments											
Incremental Carryforward Adjustment	20.8	60.7									81.5
4M Variance Report Adjustments	88.9	93.3	141.5	25.7							349.4
Revised Capital Plan	1,451.2	1,791.7	1,654.8	1,263.8	1,138.1	1,316.0	1,252.4	1,117.9	1,058.9	877.3	12,922.1

The year-end projections based on the above amendments to the 2023 Capital Budget are reflected in the Financial Update report presented here, and subject to the Board’s approval, will be included in the TTC’s submission for the City’s Period 4 2023 Capital Variance report to the Budget Committee and for City Council’s approval at its meeting on July 19, 2023.

2023 Capital Results and Projection to Year-End

As of April 29, 2023, the TTC incurred \$197.6 million in capital spending, reflecting a year-to-date spending rate of 14.5% for the TTC base capital program and \$3.6 million or 4.1% for transit expansion projects, resulting in an overall spending rate of 13.9% to the end of Period 4.

By year-end, the TTC is projected to spend \$1.335 billion, representing an overall spending rate of 92% of the 2023 Approved Capital Budget, reflecting \$1.269 billion or 93.1% anticipated to be spent on the TTC’s base capital program and \$65.8 million or 75.2% on transit expansion-related projects. Table 12 summarizes the year-to-date and projected year-end results by key project type.

Table 12 – 2023 Capital Budget Results and Forecast

Description (\$ Millions)	2023 Budget	Year-to-Date Actual		Year-End Projection	
		\$	%	\$	%
TTC Base Capital					
Infrastructure Projects	851.9	145.0	17.0%	807.9	94.8%
Vehicle Related Projects	512.0	52.6	10.3%	461.4	90.1%
Total Base Capital	1,363.8	197.6	14.5%	1,269.3	93.1%
TTC Transit Expansion-Related Projects					
Toronto York Spadina Subway Extension	56.1	1.1	2.0%	34.9	62.3%
SRT Life Extension / Transition	27.4	1.9	7.1%	27.3	100.0%
Waterfront Transit - Design	4.0	0.5	13.7%	3.5	87.5%
Total Transit Expansion Related Projects	87.4	3.6	4.1%	65.7	75.2%
Total	1,451.2	201.2	13.9%	1,335.0	92.0%

Key Project Variances

The TTC's capital spending is being impacted by various factors, including but not limited to, resourcing and supply chain constraints; protracted negotiations for complex projects; adjustments to project schedules due to dependencies with third parties; and scope/schedule deferrals.

The TTC's 2023 projected year-end capital results are primarily driven by underspending in Vehicle Related projects, with the key project underspending attributable to the Purchase of Buses and Subway Car Overhaul capital projects. Underspending in Infrastructure programs is projected in the following capital projects: the ATC Resignalling project; Fire Ventilation Upgrades, Fare System as well as IT-related projects, while delays related to the Toronto-York Spadina Subway Extension (TYSSE) contribute to underspending in the Transit Expansion-related programs.

Vehicle-Related Projects

Purchase of Buses

The 2023 year-end spending projection is estimated at \$248.7 million or 83% of the 2023 Approved Capital Budget of \$299.4 million. As a result of supply chain constraints, the TTC has experienced delays in the delivery hybrid bus purchases from NOVA and New Flyer. Due to changes in the delivery schedule as a result of these delays, approximately \$50.7 million in milestone payments originally planned for 2023 will now occur in 2024.

Subway Car Overhaul

\$11.9 million or 39% of the 2023 Approved Capital Budget of \$30.5 million was spent as of the end of Period 4. The 2023 year-end spending projection is estimated at \$25.9 million or 85% of the 2023 Approved Capital Budget. The projected underspending is attributed to an ongoing review and refinement of technical requirements.

Infrastructure Projects

Lines 1 and 2 Automatic Train Control (ATC) Resignalling

\$11.1 million or 22% of the 2023 Approved Capital Budget of \$50.2 million approved for the ATC Resignalling projects was spent as of the end of Period 4. The projected year-end spending is anticipated to be \$44.7 million or 89% of the 2023 Approved Capital Budget. The underspending is mainly driven by the Line 2 ATC Resignalling project. The early works construction activities have been re-forecasted due to resource availability as higher-priority SOGR programs have taken precedence, and construction resources will be utilized for that work.

Fire Ventilation Upgrades and Second Exits

\$4.3 million or 11% of the 2023 Approved Capital Budget of \$37.9 million was spent to the end of Period 4. The projected year-end spending is anticipated to be \$33.7 million or 89% of the 2023 Approved Capital Budget. The underspending is primarily driven by the unforeseen site conditions and labour disruptions for College Second Exit and Donlands Second Exit, which has caused a delay in the construction schedule.

Fare System

\$0.5 million or 5% of the 2023 Approved Capital Budget of \$9.2 million was spent as of the end of Period 4. The projected year-end spending is expected to be \$6.0 million or 65% of the 2023 Approved Capital Budget. The projected underspending is mainly attributed to the delay in delivering the cash payment system (Machine Readable Transfers) as the TTC is reliant on the delivery by PRESTO staff who are managing competing priorities.

Computer Equipment and Software

\$11.2 million or 14% of the 2023 Approved Capital Budget of \$80.1 million was spent to the end of Period 4. The projected year-end spending is anticipated to be \$71.2 million or 89% of the 2023 Approved Capital Budget. The underspending is primarily driven by changes to the design and hardware delivery schedule on the Corporate Camera Delivery project as a result of supply chain issues. In addition, a number of SOGR projects have experienced schedule delays, shifting expected work plans and funding to 2024 due to resourcing challenges.

TTC Transit Expansion-Related Projects

Toronto-York Spadina Subway Extension (TYSSE)

\$1.1 million or 2% of the \$56.1 million included in the 2023 Approved Capital Budget for the YYSSE project was spent as of the end of Period 4. The projected year-end spending is anticipated to be \$34.9 million or 62% of the 2023 Approved Capital Budget. The underspending is primarily driven by changes to the expected timing for some of the project close-out costs.

Additional information summarizing 2023 capital spending results for the period and projected year-end spending by capital program is provided in Appendix 2 – 2023

Capital Spending Summary by Program. Appendix 3 itemizes the budget adjustments that will be included in the TTC's submission to the City for inclusion in the Period 4 Variance report to City Council for its approval.

Major Capital Projects Update

The TTC's approved 2023-2032 Capital Budget and Plan consists of capital investments to provide customers with safe, seamless and reliable transit that is inclusive as well as accessible, while also building resiliency to meet future demand. The TTC's delivery of a multi-billion-dollar capital program is guided by the TTC's Project Management Framework. The TTC's framework consists of three classifications of projects: Category 1, 2 and 3. Category 3 projects and programs represent the TTC's major projects and are afforded more project management rigour and oversight. The categorization takes into consideration, amongst other things, the budget, scope, risks and complexity, as well as the strategic importance to the organization.

Category 3 projects and programs comprise approximately 61% of the TTC's Capital Plan. These projects and programs are grouped into specific mode-based portfolios: Subway, Streetcar, Bus & Wheel-Trans and Network Wide. This portfolio-based approach ensures integrated planning, co-ordination and oversight for projects and programs with many complex interdependencies.

Attachment 1 contains the Major Projects Update, portfolio dashboards and individual project profiles (for the period ending April 30, 2023), and includes an update on the capital delivery performance for each major project against the approved budget, planned schedule and in-scope activities within the TTC's Capital Plan.

Contact

Alex Cassar, Director – Budgets, Costing and Financial Reporting
416-393-3647
alex.cassar@ttc.ca

Jennifer Imbrogno, Director – Capital Accounting
416-393-3619
jennifer.imbrogno@ttc.ca

Signature

Josie La Vita
Chief Financial Officer

Attachments

Appendix 1 – Period Ended April 29, 2023 Operating Results by Service

Appendix 2 – 2023 Capital Spending Summary by Program

Appendix 3 – 2023-2032 Capital Budget and Plan Adjustments for Council Approval

Attachment 1 – Major Projects Update Report (Periods 1-4, 2023)

Appendix 1 – Period Ended April 29, 2023 Operating Results by Service

TTC Conventional Service: 2023 Operating Results by Key Account Grouping and Comparison to 2022

As of April 29, 2023, the TTC Conventional Service net under-expenditures total \$9.3 million (2.3%), comprising of base under-expenditures of \$12.9 million offset by COVID-19 over-expenditures of \$3.6 million.

Key drivers of underspending include:

- Deferred Line 5 training and mobilization activities.
- Timing of material and service expenditures.
- Lower average hydro prices.
- Lower COVID incremental expenditures due to lower PPE usage and sick benefit returning to pre-pandemic levels.

The net under-expenditure is partially offset by:

- Cost of service hours operated for bus and subway services above budget levels due to higher-than-anticipated operator availability resulting from return of staff due to the elimination of the mandatory vaccine policy and the deferral of Line 5 operator training.
- Increased benefit expenditure due to higher utilization and an 8.5% dental fee guide increase.
- Lower-than-anticipated passenger revenue due to significant weather events impacting ridership on inclement weather days.

The year-end net under-expenditure of \$8.4 million reflects a favourable expenditure variance of \$23.7 million, resulting from drivers noted above as well as diesel price forecasts trending below budgeted levels. The favourable expenditure variance is partially offset by an unfavourable revenue variance of \$15.3 million due to lower construction service recoveries and the unfavourable passenger revenue variance.

Key drivers to the favourable actual and projected year-end variances is reflected in Table 13 on the following page.

Table 13 – TTC Conventional Service: 2023 Operating Results by Key Account Grouping

Item (\$Millions)	Year-To-Date Actuals			Year-End Forecast			Status
	Budget	Actual	Variance	Budget	Forecast	Variance	
Revenues							
Passenger Revenue	291.1	282.2	(8.9)	931.4	921.7	(9.7)	✘
Other Ancillary Revenue	17.8	18.7	0.9	81.2	71.4	(9.8)	✘
Reserve Draw	0.0	0.0	0.0	35.6	39.8	4.2	–
Total Revenue	308.9	300.9	(8.0)	1,048.3	1,032.9	(15.3)	✘
Expenses							
Departmental Labour	375.8	372.6	(3.2)	1,182.2	1,182.2	(0.0)	–
Departmental Non-Labour	90.0	82.3	(7.7)	310.9	300.8	(10.1)	✔
Employee Benefits	137.6	139.5	1.9	402.0	407.1	5.1	✘
Diesel	32.6	33.5	0.9	102.9	97.9	(5.0)	✔
Traction Power & Utilities	27.5	25.9	(1.6)	79.6	75.7	(3.9)	✔
PRESTO Commissions	12.4	12.3	(0.1)	39.7	39.7	0.0	–
Other Corporate Costs	24.3	20.3	(4.0)	96.9	94.2	(2.7)	✔
Subtotal Base Expenses	700.2	686.4	(13.8)	2,214.2	2,197.6	(16.6)	✔
COVID-19 Costs	8.5	5.0	(3.5)	23.4	16.3	(7.1)	✔
Total Expenses	708.7	691.4	(17.3)	2,237.6	2,213.9	(23.7)	✔
Net Expenditure (Funding Required)	399.8	390.5	(9.3)	1,189.3	1,180.9	(8.4)	✔
Operating Funding							
COVID Funding Impact	126.4	130.0	3.6	366.0	365.6	(0.4)	✔
Base City Funding	273.4	260.5	(12.9)	823.3	815.4	(7.9)	✔
Total Operating Funding	399.8	390.5	(9.3)	1,189.3	1,180.9	(8.4)	✔

TTC Conventional Service: 2023 versus 2022 Results Comparison

Year-end passenger revenue is projected to be \$183.9 million (25%) higher in 2023 than in 2022, largely reflecting the impact of ridership recovery continuing as anticipated over the course of 2023. Year-to-date 2023 ridership has averaged 71% of pre-pandemic levels, up from the 47% for the same time period in 2022.

Other year-over-year revenue changes include higher ancillary revenue in 2023 reflecting the impact of increased ridership recovery, higher interest rate and construction cost recovery, and the impact of the budgeted 2023 Stabilization Reserve funding, with no comparable amount drawn in 2022.

Year-over-year expenditures is estimated to be \$146.5 million (7%) higher in 2023 than in 2022, prior to reserve contributions. Key drivers of this net increase include:

- Mobilization costs to prepare for the start of Line 5 revenue service in addition to maintenance costs after commencement of Line 5 revenue service, based on an October 2023 revenue service commencement date – three months later than the date assumed in the approved 2023 Operating Budget.
- Additional resources to advance System Safety, Cleanliness and Accessibility initiatives.

- Impact of Collective Agreement arbitrated settlement and staff economic increase.
- Inflationary impacts on materials, services and employee benefits.
- Higher PRESTO Commissions, commensurate with the increase in Passenger Revenue.

COVID expenditures are forecasted to be \$15.0 million (47.8%) lower in 2023, primarily due to lower COVID-related sick benefit payments and the full year impact of 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 – TTC Conventional Service 2023 versus 2022 Results Comparison

Item (\$Millions)	Year-To-Date Actuals			Year-End		
	2023 Actuals	2022 Actuals	Change	2023 Forecast	2022 Actuals	Change
Revenues						
Passenger Revenue	282.2	192.0	90.2	921.7	737.8	183.9
Other Ancillary Revenue	18.7	11.7	7.0	71.4	52.3	19.1
Reserve Draw	0.0	0.0	0.0	39.8	0.0	39.8
Total Revenue	300.9	203.7	97.2	1,032.9	790.1	242.8
Expenses						
Departmental Labour	372.6	351.8	20.8	1,182.2	1,126.3	55.9
Departmental Non-Labour	82.3	66.7	15.6	300.8	250.6	50.2
Employee Benefits	139.5	130.2	9.3	407.1	371.0	36.1
Diesel	33.5	32.2	1.3	97.9	109.9	(12.0)
Traction Power & Utilities	25.9	28.5	(2.6)	75.7	71.5	4.2
PRESTO Commissions	12.3	8.2	4.1	39.7	31.7	8.0
Other Corporate Costs	20.3	24.3	(4.0)	94.1	75.1	19.0
Subtotal Base Expenses	686.5	641.9	44.6	2,197.5	2,036.1	161.6
COVID-19 Costs	5.0	16.2	(11.1)	16.3	31.3	(15.0)
Total Expenses	691.5	658.1	33.5	2,213.8	2,067.4	146.5
Net Expenditure (Funding Required)	390.7	454.4	(63.7)	1,180.9	1,277.2	(96.3)
Operating Funding						
COVID Funding Impact	130.0	231.3	(101.3)	365.6	543.5	(177.9)
Base City Funding	260.7	223.1	37.6	815.3	733.7	81.6
Total Operating Funding	390.7	454.4	(63.7)	1,180.9	1,277.2	(96.3)

Wheel-Trans Service: 2023 Operating Results by Key Account Grouping and Comparison to 2022

On a year-to-date basis, Wheel-Trans expenses are \$2.0 million (4.5%) below budget with under-expenditures primarily due to lower maintenance costs from higher reliability on the new fleet and lower fuel prices. This is partially offset by a higher average cost per trip on Contracted Taxis. Revenue and ridership began the year slightly below budgeted levels and has since increased to being slightly above budget at the end of April, and is currently forecast to exceed budget by 5% at the end of the year.

As a result of higher-than-anticipated ridership levels, additional operators are being trained and the year-end projection reflects higher-than-budget expenditures for the balance of the year to accommodate the forecast ridership demand. Currently, the projected over-expenditure on the Wheel-Trans Service is expected to be offset by a net under-expenditure on the TTC Conventional Service.

Table 15 – 2023 Wheel-Trans Service: 2023 Operating Results by Key Account Grouping

Item (\$Millions)	Year-To-Date Actuals			Year-End Forecast			Status
	Budget	Actual	Variance	Budget	Forecast	Variance	
Passenger Revenues	2.0	2.0	0.0	6.5	6.7	0.2	✓
Expenses							
Bus Service	17.4	15.9	(1.5)	53.5	53.1	(0.4)	✓
Vehicle Fuel	1.4	1.2	(0.2)	4.3	3.9	(0.4)	✓
Contracted Taxi	15.7	16.5	0.8	50.1	54.4	4.3	✗
Employee Benefits	6.4	6.0	(0.4)	18.8	18.8	(0.0)	–
Administration/Management	5.1	4.5	(0.6)	15.7	15.2	(0.5)	✓
Subtotal Base Expenses	46.0	44.1	(1.9)	142.4	145.4	3.0	✗
COVID-19 Costs	0.2	0.1	(0.1)	0.4	0.4	0.0	–
Total Expenses	46.2	44.2	(2.0)	142.8	145.8	3.0	✗
Net Expenditure (Funding Required)	44.2	42.2	(2.0)	136.3	139.1	2.8	✗
Operating Funding							
COVID Impact Funding	0.2	0.1	(0.1)	0.4	0.4	0.0	–
Base City Funding	44.0	42.1	(1.9)	135.9	138.7	2.8	✗
Total Operating Funding	44.2	42.2	(2.0)	136.3	139.1	2.8	✗

As noted in Table 16 on the next page, expenses are \$9.2 million (26.4%) higher and revenue is \$0.6 million (44.6%) higher on a year-to-date basis compared to 2022, primarily due to a gradual return in ridership demand and the resultant requirements for contracted taxi services and operator workforce costs.

Year-end passenger revenue is projected to be \$1.7 million (34.2%) higher in 2023 than in 2022 largely reflecting the impact of ridership recovery continuing above anticipated levels over the course of 2023. For the full year, ridership is expected to be 35% higher compared to 2022.

Year-over-year expenditure are estimated to be \$23.7 million (19.5%) higher in 2023 than in 2022. Key drivers of this net increase include:

- Gradual return in ridership demand resulting in increased requirements for contracted taxi services and operator workforce
- Inflationary impacts on materials and contracted taxi services
- Employee benefits inflation and utilization increase
- Increased labour expenditures as prior year workforce vacancies are filled.

Table 16 – Wheel-Trans Service: 2023 versus 2022 Results Comparison

Item (\$Millions)	Period 4 (Year-To-Date)			Year-End		
	2023 Actuals	2022 Actuals	Change	2023 Forecast	2022 Actuals	Change
Passenger Revenues	2.0	1.4	0.6	6.7	5.0	1.7
Expenses						
Bus Service	15.9	14.2	1.7	53.1	48.3	4.8
Vehicle Fuel	1.2	1.1	0.1	3.9	3.6	0.2
Contracted Taxi	16.5	9.8	6.7	54.4	39.0	15.4
Employee Benefits	6.0	5.1	0.9	18.8	15.5	3.3
Administration/Management	4.5	4.7	(0.2)	15.2	15.1	0.0
Subtotal Base Expenses	44.1	34.9	9.2	145.4	121.5	23.8
COVID-19 Costs	0.1	0.1	0.0	0.4	0.5	(0.1)
Total Expenses	44.2	35.0	9.2	145.8	122.0	23.7
Net Expenditure (Funding Required)	42.2	33.6	8.6	139.1	117.0	22.1
Operating Funding						
COVID Impact Funding	0.1	0.1	0.0	0.4	0.5	(0.1)
Base City Funding	42.1	33.5	8.6	138.7	116.5	22.2
Total Operating Funding	42.2	33.6	8.6	139.1	117.0	22.1

Appendix 2 – 2023 Capital Spending Summary by Program

Toronto Transit Commission
2023 Capital Budget Variance (Pd 4)
For the Period Ended April 29, 2023

EXPENDITURES BY PROGRAM	Year-to-Date				2023			
	Budget	Actuals	Variance	%	Budget	YE Projection	Variance	%
TRACK	16.007	14.226	1.781	89%	84.341	90.994	(6.653)	108%
1.1 Subway Track	9.970	9.772	0.198	98%	30.801	31.502	(0.701)	102%
1.2 Surface Track	6.037	4.455	1.583	74%	53.540	59.493	(5.952)	111%
ELECTRICAL SYSTEMS	25.156	25.924	(0.768)	103%	116.599	113.371	3.227	97%
2.1 Traction Power	5.336	6.309	(0.973)	118%	24.505	25.196	(0.691)	103%
2.2 Power Distribution/Electric Systems	1.373	1.610	(0.237)	117%	8.245	8.032	0.213	97%
2.3 Communications	3.263	3.140	0.122	96%	15.874	13.561	2.313	85%
2.4 Signal Systems	3.581	3.809	(0.228)	106%	17.780	21.908	(4.128)	123%
ATC Resignalling	11.604	11.056	0.548	95%	50.194	44.675	5.520	89%
BUILDINGS & STRUCTURES	108.424	87.701	20.723	81%	506.116	470.275	35.841	93%
3.1 Finishes	6.520	3.162	3.358	48%	25.650	28.694	(3.045)	112%
3.2 Equipment	16.270	13.579	2.692	83%	110.694	73.040	37.655	66%
3.3 Yards & Roads								
Streetcar Network Upgrades & BRT	0.208	0.369	(0.161)	177%	0.342	0.708	(0.366)	207%
On-Grade Paving Rehabilitation Program	3.865	1.797	2.068	46%	11.362	12.445	(1.083)	110%
Bicycle parking at stations	0.000	0.043	(0.043)		0.043	0.043	0.000	100%
Transit Shelters & Loops	0.000	0.001	(0.001)		0.500	0.500	0.000	100%
3.4 Bridges & Tunnels	11.103	9.638	1.465	87%	44.428	46.008	(1.579)	104%
3.9 Buildings and Structures Projects								
Fire Ventilation Upgrades & Second Exits	6.784	4.337	2.447	64%	37.908	33.704	4.204	89%
Easier Access Phase III	25.644	21.741	3.903	85%	118.452	121.612	(3.160)	103%
Leslie Barns	0.183	0.517	(0.334)	282%	0.566	0.959	(0.393)	170%
Toronto Rocket/T1 Rail Yard Accommodation	7.991	4.667	3.324	58%	30.335	30.584	(0.249)	101%
McNicoll New Bus Garage	0.148	0.283	(0.135)	192%	0.550	0.478	0.072	87%
Warehouse Consolidation	0.018	0.006	0.012	35%	0.711	0.711	0.000	100%
Yonge-Bloor Capacity Enhancement	2.043	3.004	(0.961)	147%	19.351	19.351	0.000	100%
Line 1 Capacity Enhancement	5.692	6.040	(0.348)	106%	25.426	24.904	0.522	98%
Line 2 Capacity Enhancement	5.353	3.190	2.163	60%	13.343	13.344	(0.000)	100%
Other Buildings and Structures	16.601	15.327	1.275	92%	66.454	63.190	3.264	95%
VEHICLES	49.333	52.594	(3.261)	107%	511.951	461.397	50.554	90%
REVENUE VEHICLES								
4.11 Purchase of Buses	1.146	1.101	0.045	96%	299.410	248.713	50.697	83%
4.11 Purchase of Buses - Wheel Trans Buses	6.380	6.292	0.088	99%	26.979	26.979	(0.000)	100%
4.12 Purchase of Subway Cars	0.595	0.624	(0.029)	105%	2.310	2.578	(0.268)	112%
4.13 Bus Overhaul	20.148	23.214	(3.065)	115%	64.991	65.291	(0.300)	100%
4.15 Streetcar Overhaul	5.615	4.772	0.843	85%	17.309	15.418	1.891	89%
4.16 Subway Car Overhaul	10.250	11.920	(1.670)	116%	30.470	25.860	4.610	85%
4.18 Purchase of Streetcars	2.659	2.629	0.030	99%	57.189	63.263	(6.074)	111%
NON-REVENUE VEHICLES								
4.21 Purchase Automotive Non-Revenue Vehicles	1.730	1.611	0.118	93%	9.712	9.713	(0.001)	100%
4.22 Rail Non-Revenue Vehicle Overhaul	0.595	0.375	0.220	63%	1.806	1.807	(0.001)	100%
4.23 Purchase Rail Non-Revenue Vehicles	0.215	0.057	0.158	26%	1.775	1.775	(0.000)	100%
TOTAL OTHER	32.562	17.184	15.378	53%	144.833	133.225	11.608	92%
TOOLING, MACHINERY & EQUIPMENT								
5.1 Shop Equipment	1.694	1.054	0.641	62%	8.198	8.373	(0.175)	102%
5.2 Revenue & Fare Handling Equipment	2.450	0.048	2.402	2%	11.345	10.462	0.883	92%
5.3 Other Maintenance Equipment	0.436	0.013	0.423	3%	3.560	3.509	0.051	99%
5.4 Fare System	3.050	0.457	2.593	15%	9.177	5.981	3.197	65%
ENVIRONMENTAL PROGRAMS								
6.1 Environmental Programs	3.811	2.060	1.751	54%	12.678	13.692	(1.014)	108%
6.1 Safety and Reliability	0.479	0.148	0.331	31%	2.130	2.130	0.000	100%
COMPUTER EQUIPMENT & SOFTWARE								
7.1 Computer Equipment & Software	17.770	11.229	6.541	63%	80.148	71.214	8.934	89%
OTHER								
9.1 Furniture & Office Equipment	0.030	0.020	0.010	66%	0.477	0.447	0.031	94%
9.2 Service Planning	2.842	2.156	0.686	76%	17.119	17.418	(0.298)	102%
Total Base Programs	231.483	197.630	33.852	85%	1,363.840	1,269.263	94.578	93%
Toronto York Spadina Subway Extension	5.620	1.123	4.497	20%	56.061	34.900	21.161	62%
SRT Life Extension / Transition	4.732	1.944	2.788	41%	27.355	27.355	(0.000)	100%
Waterfront Transit - Design	1.487	0.543	0.944	37%	3.979	3.482	0.497	88%
Total Transit Expansion Projects	11.839	3.611	8.228	31%	87.396	65.737	21.658	75%
Total Base & Transit Expansion Projects	243.322	201.241	42.080	83%	1,451.236	1,335.000	116.236	92%

Appendix 3 – 2023-2032 Capital Budget and Plan Adjustments for Council Approval

CTT	Program	2023 Recommended Capital Budget Adjustments (\$000s)
CTT001	Subway Track	(\$3,322)
CTT002	Surface Track	\$3,473
CTT003	Traction Power	(\$2,389)
CTT006	Communications	\$1,250
CTT008	Signal Systems	(\$4,128)
CTT010	Finishes	\$598
CTT012	Equipment	\$38,422
CTT018	On-Grade Paving Rehabilitation Program	(\$475)
CTT020	Bridges & Tunnels	\$2,873
CTT024	Fire Ventilation Upgrade	\$4,078
CTT028	Easier Access Phase III	\$10
CTT045	Replacement Wheel-Trans Vehicles	\$1,528
CTT046	Subway Car Purchases	(\$268)
CTT050	Streetcar Overhaul Program	\$652
CTT051	Subway Car Overhaul Program	(\$652)
CTT052	Automotive Non-Revenue Vehicles	\$124
CTT055	Tools & Shop Equipment	(\$124)
CTT058	Environmental Programs	(\$1,100)
CTT061	Information Technology Systems-Infrastructure	\$600
CTT110	Other Buildings & Structures Projects	(\$1,856)
CTT111	Purchase of Buses	\$52,345
CTT112	Bus Overhaul	(\$300)
CTT113	Other Maintenance Equipment	(\$43)
CTT122	Purchase of Streetcars	(\$1,260)
CTT130	Kipling Station Improvements	\$194
CTT145	Leslie Barns Maintenance & Storage Facility	(\$84)
CTT146	TR Yard and Tail Track Accommodation	\$84
CTT149	Bicycle Parking at Stations	\$43
CTT151	Waterfront Transit	(\$791)
CTT154	Corporate Initiatives-CLA	\$2,161
CTT155	Bloor-Yonge Capacity Improvements	(\$1,304)
CTT157	Line 2 Capacity Enhancement	(\$1,450)
Total Adjustments		\$88,888



MAJOR PROJECTS UPDATE REPORT

Period 1-4 2023

Table of Contents

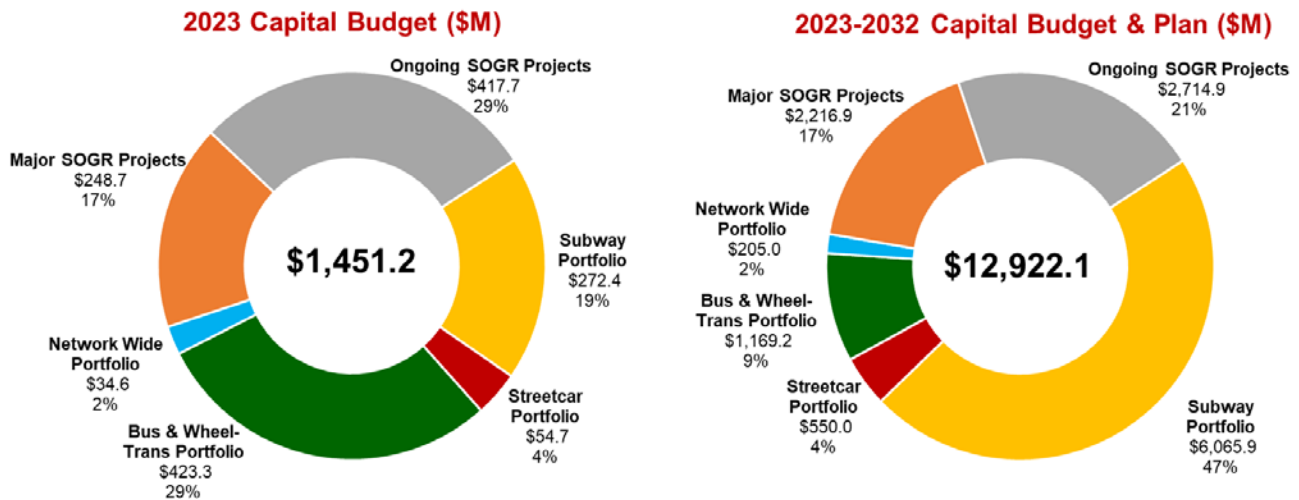
Overview.....	2
Subway Portfolio	3
Bus and Wheel-Trans Portfolio	21
Streetcar Portfolio.....	33
Network Wide Portfolio	40

Overview

The TTC's delivery of a multi-billion-dollar capital program is guided by the TTC's Project Management Framework. The TTC's framework consists of three classifications of projects: Category 1, 2, and 3. Category 3 projects and programs represent the TTC's major projects and are afforded more project management rigour and oversight. The categorization takes into consideration, amongst other things, the budget, experience in delivery, risks and complexity, as well as the strategic importance to the organization.

These major projects and programs, referred to hereafter as projects, have been included in the Category 3 Major Project Capital Spending Dashboard due to their magnitude and/or strategic significance. This Major Projects Update highlights the performance of these projects against their approved budget, planned schedule, and in-scope activities.

The TTC's approved 2023-2032 10-Year Capital Plan is \$12.922 billion, which consists of capital investments to provide customers with safe, seamless and reliable transit that is inclusive as well as accessible, while also building resiliency to meet future demand. Category 3 projects and programs comprise approximately 61% of the TTC's Capital Plan. These projects and programs are grouped into specific mode-based portfolios: Subway, Streetcar, Bus and Wheel-Trans, and Network Wide. This portfolio-based approach provides co-ordination and oversight for projects and programs with many complex interdependencies.



Please see the Category 3 Major Projects Capital Spending Dashboard by Portfolio.

Subway Portfolio

Category 3 / Major Projects & Programs	Project Category	Financial Summary (\$ Millions)							Status			
		2023 YTD		2023 Budget	10-Year Approved Budget (2023 - 2032)	Total Approved Budget	Spend-to-Date	Total Projected EFC	Schedule	Cost	Scope	Overall
		Budget	Actual									
Subway Portfolio												
Line 1 - Capacity Enhancement Program (Line 1 CEP)	SI	\$5.7	\$6.0	\$25.4	\$1390.0	\$1430.3	\$46.4	\$5949.3	G	G	G	G
Line 1 - Automatic Train Control (ATC) Resignalling	SOGR	\$8.4	\$8.1	\$35.6	\$69.9	\$710.2	\$648.4	\$710.2	G	G	G	G
Purchase of New Subway Trains (T1 Replacement & Growth)	Growth/SOGR	\$0.6	\$0.6	\$2.3	\$811.6	\$817.1	\$6.0	\$2492.7	Y	R	G	R
Line 2 - Capacity Enhancement Program (Line 2 CEP)	SI	\$5.4	\$3.2	\$13.3	\$847.6	\$867.2	\$22.8	\$2770.5	G	G	G	G
Line 2 - Automatic Train Control (ATC) Resignalling	SOGR	\$3.2	\$2.9	\$14.6	\$619.7	\$624.9	\$8.1	\$812.6	G	G	G	G
Bloor-Yonge Capacity Improvements	SI	\$2.0	\$3.0	\$19.4	\$1380.0	\$1440.1	\$63.1	\$1514.0	Y	G	G	Y
Easier Access Phase III	Legislative	\$25.6	\$21.7	\$118.5	\$582.9	\$1123.7	\$562.6	\$1168.7	Y	Y	G	Y
Fire Ventilation Upgrades & Second Exits	Legislative	\$6.8	\$4.3	\$37.9	\$347.8	\$726.9	\$383.5	\$836.2	Y	G	G	Y
Stations Transformations	SI	\$2.0	\$2.2	\$5.4	\$16.4	\$50.8	\$36.6	\$50.8	G	G	G	G
Total Subway Portfolio		\$59.7	\$52.2	\$272.4	\$6065.9	\$7791.1	\$1777.3	\$16304.9				
Performance Scorecard Status		Total Category 3 Portfolio Cost (\$ Millions)					EFC: Estimated Final Cost YTD: Year-to-Date H&S: Health & Safety SI: Service Improvement SOGR: State-of-Good-Repair					
		2023 Year-to-Date Budget	2023 Year-End Budget	10-Year Approved Budget (2023-2032)	Total Approved Budget	Total EFC						
G	On Track											
Y	Caution											
		\$89.9M	\$784.8M	\$7,990.2M	\$10,486.0M	\$22,928.6M						
R	At Risk											

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 the frequency of trains and reduce travel times, which will result in improved customer service.

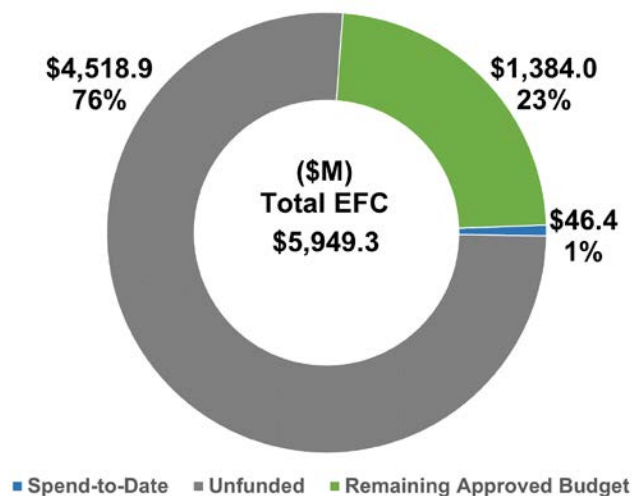
Scope Description

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

- Station Capacities: Stations Modifications to improve station capacities and increase service.
- Systems and Infrastructure: Electrical Traction Power Upgrades; Fire Ventilation Requirements; Guideway Enhancement.
- Train Maintenance and Storage Facility (TMSF), which includes:
 - Storage for 34 trains, including a test track, and access track to the site;
 - Carhouse with five Bays for Preventative and Corrective Maintenance to support daily service;
 - Operations and 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).

Financials

Project/Program Start	2019
Forecast Completion Year	2041
Estimated Final Cost (EFC) ¹	\$5,949.3M
Total Approved Budget	\$1430.3M
10-Year Approved Budget (2023-2032)	\$1,390.0M
2023 Budget	\$25.4M
2023 YTD Budget	\$5.7M
2023 YTD Actuals	\$6.0M
Overall Performance Status	G



Progress Update

Line 1 CEP:

- Detailed Design for the Positive and Negative Feeders and Duct Bank Replacement at the Duncan Shop commenced as planned in Q1 2023.

- Preliminary Design (30%) has been completed and is currently under review for the Concourse Expansion and Additional Exit at King Station, and the St Clair West Station Fire Ventilation System.
- Preliminary Design (30%) for the Markdale Emergency Service Building (ESB) is underway.

The TTC is undertaking the necessary due diligence for potential site locations for a new Line 1 TMSF. A Stakeholder Management Plan is under development. The Owners Engineer consulting services scope of work is also being developed in parallel.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- The TTC is assessing the status of new train funding and enabling procurement, where any deferral will impact the availability of trains that will be required to support an increase in service capacity within the target horizon years of the Line 1 CEP 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 as well as schedule as required.

Next Steps

Systems and Infrastructure: The following activities are scheduled to be completed in 2023:

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

Stations (2023):

- Advance/monitor construction for St Andrew Concourse Modification (Phase 1) project.
- Release bid documents for Sign Box Procurement for Tactics Implementations at Priority Stations (Pilot Project).

Train Maintenance and Storage Facility (TMSF):

- Continue to advance due diligence and consultation with municipal partners on potential site locations.
- Develop a market-sounding strategy.

Note: ¹\$2,405.1M is currently unfunded in the 10-year plan (2023-2032), and \$2,113.8M is unfunded post-2032.

Line 1 – Automatic Train Control (ATC) Resignalling

Description

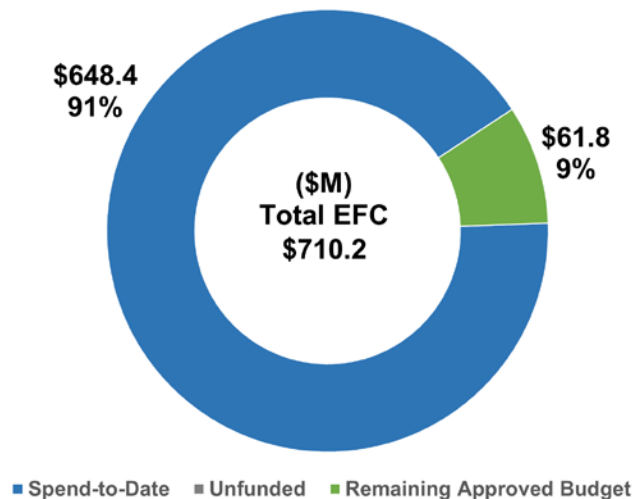
The program includes resignalling Line 1 (Vaughan Metropolitan Centre to Finch) to improve reliability, on-time service, faster travel times, and increase capacity to reduce crowding.

Scope Description

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

Financials

Project/Program Start	2009
Forecast Completion Year	2023
Estimated Final Cost (EFC)	\$710.2M
Total Approved Budget	\$710.2M
10-Year Approved Budget (2023-2032)	\$69.9M
2023 Budget	\$35.6M
2023 YTD Budget	\$8.4M
2023 YTD Actuals	\$8.1M
Overall Performance Status	G



Progress Update

- Phase 1-5: Fully operational from Vaughan Metropolitan Centre to Finch stations.
- Phase 6: Works completed including the opening of the Eglinton platform extension modifications in Q2 2023.

Next Steps

- Complete Reliability, Availability, and Maintainability (RAM) works by Q2 2024.

Purchase of New Subway Trains (T1 Replacement + Growth)

Description

This project provides for the purchase of 80 New Subway Trains (NST) to replace the Line 2 T1 subway fleet, which is at the end of its useful life, address capacity constraints, increase operational efficiencies and accommodate ridership growth on Line 1.

Scope Description

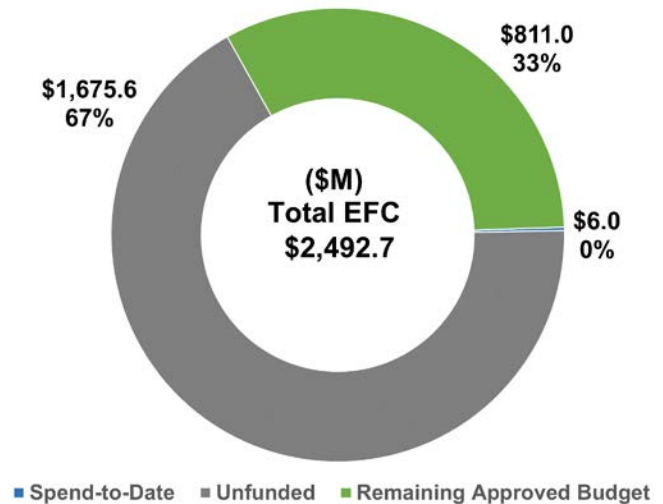
Procurement and delivery of 80 subway trains required to be delivered starting in 2029:

- 55 subway trains to replace the 30-year-old T1 fleet on Line 2.
- 25 subway trains to accommodate growth on Line 1.

Procurement to also enable options for future growth train requirements (post-2032) and for Metrolinx expansion trains subject to funding.

Financials

Project/Program Start	2020
Forecast Completion Year	2035
Estimated Final Cost (EFC) ¹	\$2,492.7M
Total Approved Budget	\$817.1M
10-Year Approved Budget (2023-2032)	\$811.6M
2023 Budget	\$2.3M
2023 YTD Budget	\$0.6M
2023 YTD Actuals	\$0.6M
Overall Performance Status	R



Progress Update

In order to prepare for the anticipated replacement of the Line 2 T1 fleet, which will reach 30 years of service starting in 2026, the TTC has initiated the following procurement-related activities:

- Issued Request for Information (RFI) in August 2020.
- Conceptual designs of exterior and interior in December 2020.
- Market sounding exercise in June 2021.
- Issued Request for Supplier Qualifications (RFSQ) in January 2022.
- Issued Request for Proposal (RFP) in October 2022.

The TTC had previously communicated the requirement for matching funding by Q1 2023 to the prospective vendors and other levels of government, in order to proceed with the next steps of procurement. As of this submission, there is no committed funding for the new subway train order from Provincial or Federal partners. The TTC continues to have ongoing

engagement with the Provincial and Federal governments and is in the process of evaluating the next steps for the RFP for the new trains.

The TTC is also updating project costing based on the latest market price escalation, including the costing associated with the T1 Life Extension Overhaul (LEO), should the funding for the new trains not materialize.

Key Issues/Risks and Mitigation Activities

Key Issues and Mitigation:

- Delays in securing the required funding for the procurement of new trains will result in declining reliability, longer wait times between trains, increased crowding, and higher maintenance costs. The TTC is actively engaged with its Federal and Provincial partners.

Key Risks and Mitigation:

- The operation of new trains is interdependent with the planned resignalling on Line 2 (ATC). All T1 trains on Line 2 need to be replaced with new subway trains to operationalize ATC on Line 2. As a result, any delay in the funding decision for the procurement of the new trains will have an impact on the ATC requirements as well as the cost and schedule for both projects.
- Recent increases in escalation will potentially 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

- Award Contract in 2024, subject to partner funding. Should the partner funding be delayed or not available, the TTC will commence planning for the T1 Life Extension Overhaul (LEO) program to ensure service continuity.

Note: ¹\$1,618.6M is currently unfunded in the 10-year plan (2023-2032), and \$57.0M is unfunded post-2032.

Line 2 – Capacity Enhancement Program (Line 2 CEP)

Description

This program includes modifications to Greenwood Yard to accommodate the T1 replacement trains, maintenance requirements and other infrastructure enhancements to expand capacity and improve circulation on Line 2, reduce overcrowding, increase the frequency of trains and reduce travel times and improving customer service.

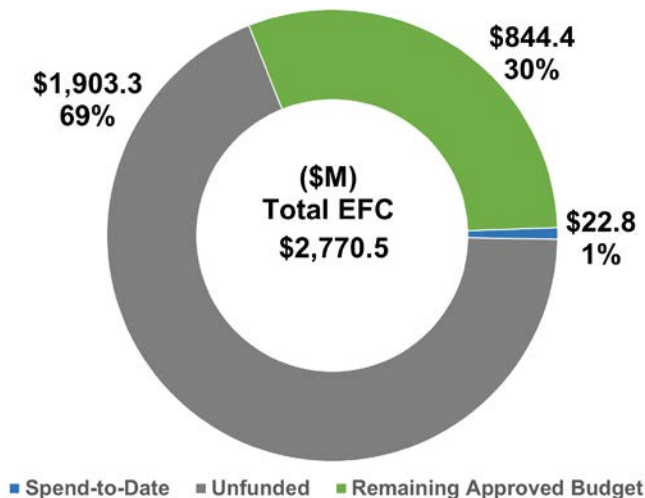
Scope Description

The scope as defined in the Line 2 CEP Stage Gate 1 Preliminary Business Case includes:

- Station Capacities: Stations Modifications to improve station capacities and increase service.
- Systems and Infrastructure: Electrical Traction Power Upgrades; Guideway Enhancement.
- Trains and Yards – Greenwood Yard: Facility carhouse modification; overhaul shop modifications; and signalling system upgrades.

Financials

Project/Program Start	2019
Forecast Completion Year	2041
Estimated Final Cost (EFC) ¹	\$2770.5M
Total Approved Budget	\$867.2M
10-Year Approved Budget (2023-2032)	\$847.2M
2023 Budget	\$13.3M
2023 YTD Budget	\$5.4M
2023 YTD Actuals	\$3.2M
Overall Performance Status	G



Progress Update

Line 2 CEP: The following has been completed and is currently under review:

- Concept Design (10%) for the Extension Storage Track at Warden Station.
- Concept Design (10%) for the Positive and Negative Feeders for Kipling to Kennedy.
- Concept Design (10%) for the Traction Power Substation at Landsdowne Station.
- Detailed Design (100%) for the Streetcar Platform Extension at Spadina Station.

Greenwood Facility:

- The Facility Carhouse has received Stage Gate 2 Approval (Approved for Design).
- The Preliminary Design (30%) for the Facility Carhouse has been completed and is currently under review.

- The Concept Design (10%) for the Overhaul Shop has been completed and is currently under review.
- The Concept of Operations for Signalling has been completed.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- 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.
- New Subway Train (NST) Program: Changes to T1 replacement trains delivery strategy and schedule may have a significant impact on program scope, cost and schedule. The TTC is proactively monitoring and co-ordinating with stakeholders to confirm train delivery strategy.

Next Steps

Systems and Infrastructure: Obtain approval for Feasibility and Concept Design (10%) for the following works:

- Positive and Negative Feeder Cables from Kipling to Kennedy.
- Negative Reinforcement Cables from Kipling to Kennedy.
- Lansdowne Traction Power Substation upgrade.

Stations:

- Obtain Detailed Design (100%) approval for Spadina Streetcar Platform Extension.

Trains and Yards – Greenwood Yard:

- Obtain Preliminary Design (30%) approval for Greenwood Yard Carhouse Modifications.
- Obtain Feasibility Study and Concept Design (10%) approval for Greenwood Overhaul Shop.
- Commence equipment room design for Greenwood Yard Signalling.

Note:

- Stage Gate: This program is comprised of multiple projects, which are at various stages in the project life cycle. The class estimates for each of the projects within the program are dependent on their current stage gate within the project life cycle.
- \$194.5M is currently unfunded in the 10-year plan (2023-2032), and \$1,708.8M is unfunded post-2032.

Line 2 – Automatic Train Control (ATC) Resignalling

Description

This program includes the resignalling of Line 2 (Kipling to Kennedy) in order to improve reliability, on-time service, faster travel times and increase capacity to reduce overcrowding.

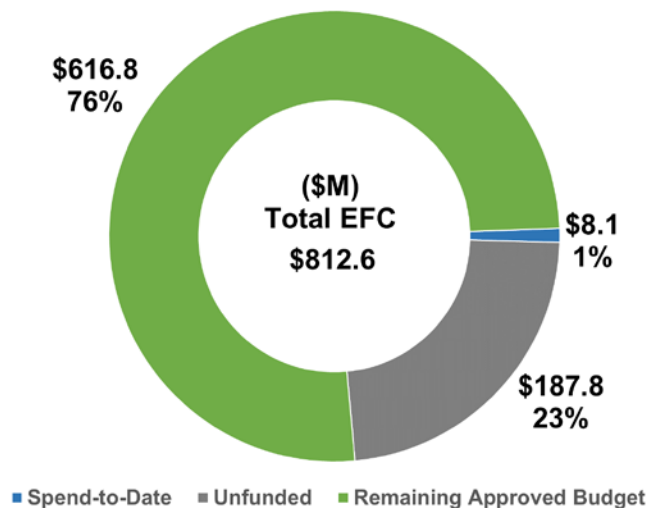
Scope Description

Improve safety, reliability, capacity and service levels on Line 2 with the:

- Installation of ATC between Kipling to Kennedy.
- Modifications to the Centralized Signalling System (CSS).
- Automatic Train Protection (ATP) system for work cars.

Financials

Project/Program Start	2021
Forecast Completion Year	2035
Estimated Final Cost (EFC) ¹	\$812.6
Total Approved Budget	\$624.9M
10-Year Approved Budget (2023-2032)	\$619.7M
2023 Budget	\$14.6M
2023 YTD Budget	\$3.2M
2023 YTD Actuals	\$2.9M
Overall Performance Status	G



Progress Update

- Stage Gate 1 (Approved for Planning) has been completed and the development of Technical Specifications and Request for Proposal (RFP) document is in progress.
- The design enabling works for the Cable Route Management System is in progress.
- Commenced early works in Q2 2023.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- Any changes to the New Subway Train (NST) delivery schedule will affect the ATC cutover schedule as they are interdependent and require all T1 trains to be decommissioned before ATC cutover can occur.

Next Steps

- Confirm Crossline Train Operation business requirements.
- Complete ATC supplier specifications and RFP.
- Continue ATC Line 2 enabling works to prepare required ATC infrastructure.

Note:

- Program Stage-Gate: Stage Gate 1 (Planning).
- Cost Estimate Class: Class 5.
- ¹\$187.8M is unfunded post-2032.

Bloor-Yonge Capacity Improvements

Description

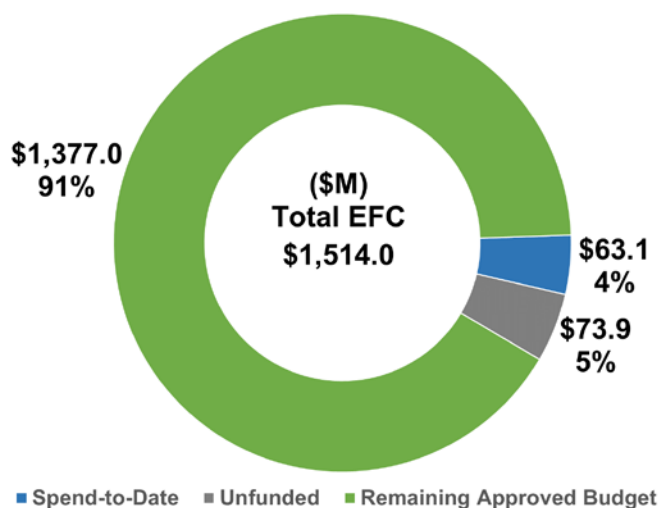
This project provides for a design retrofit and expansion of the Bloor-Yonge interchange station, including a new Line 2 platform, and the expansion of the Line 1 platforms to address overcrowding, improve accessibility and accommodate future ridership growth from expansion.

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.

Financials

Project/Program Start	2015
Forecast Completion Year	2033
Estimated Final Cost (EFC) ¹	\$1,514.0M
Total Approved Budget	\$1,440.1M
10-Year Approved Budget (2023-2032)	\$1380.0M
2023 Budget	\$19.4M
2023 YTD Budget	\$2.0M
2023 YTD Actuals	\$3.0M
Overall Performance Status	Y



Progress Update

- The early works demolition package for the removal of the existing structures on 81 Bloor St., 40/42 Hayden St. and 830 Church St. (TTC-owned carwash building) was released to the market on November 11, 2022, closed on December 19, 2022 and awarded on March 15, 2023. These properties will be utilized for the construction of a new accessible entrance and electrical building on Bloor Street as well as a fan plant building on Church Street under the main construction work.
- The early works construction package for the relocation of existing utilities was released to the market on March 30, 2023 and closed on May 3, 2023. Utility relocations, including

sewer and hydro within the Bloor Street East right-of-way, are necessary prior to the commencement of 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 Q3 2023, followed by an evaluation of submissions before issuing the Request for Proposal (RFP).
- The early works construction package for utility relocations, which closed on May 3, 2023, is scheduled to be awarded by Q3 2023.

Note:

- 1\$73.9M is unfunded post-2032.
- Stage Gate: Stage Gate 3 (Detailed Design).
- Cost Estimate Class: Class 3.

Easier Access Phase III

Description

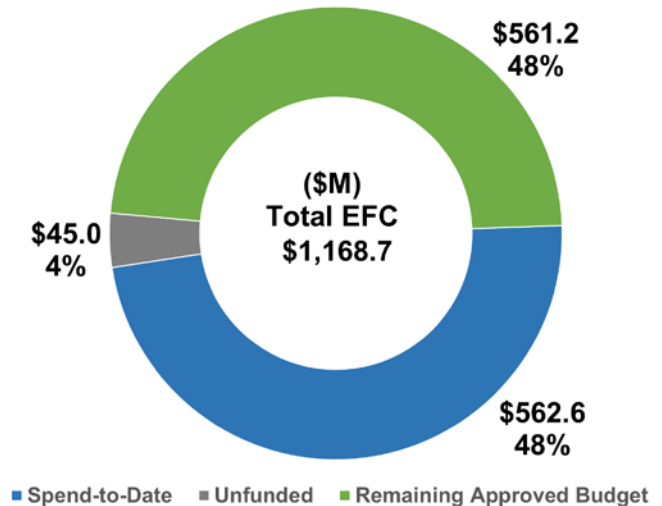
The Easier Access Phase III program provides upgrades to all TTC subway stations with accessible features such as elevators, automatic sliding doors, updated signage and wayfinding. The program also includes the redevelopment of Islington and Warden stations. The program contributes to the TTC's efforts to meet accessibility requirements in accordance with the Accessibility for Ontarians with Disabilities Act, 2005 (AODA). AODA has identified a January 1, 2025 date for compliance.

Scope Description

The TTC's Easier Access Phase III program is renovating subway stations across the city to design for universal accessibility and enhanced pedestrian access. The program includes making subway stations accessible by providing elevators, ramps, automatic sliding doors and signage improvements. This program also includes the redevelopment of Islington and Warden stations, which incorporates the construction of a new accessible bus terminal at each station once completed.

Financials

Project/Program Start	2007
Forecast Completion Year	2026 ¹
Estimated Final Cost (EFC)	\$1,168.7M
Total Approved Budget	\$1,123.7M
10-Year Approved Budget (2023-2032)	\$582.9M
2023 Budget	\$118.5M
2023 YTD Budget	\$25.6M
2023 YTD Actuals	\$21.7M
Overall Performance Status	⚠



Progress Update

As of April 30, 2023, 56 subway stations have been made accessible. The following summarizes the current phase of the remaining stations in the program:

- 15 stations are under construction, with seven stations having commenced construction in 2022 (Lawrence, High Park, Christie, Museum, Warden (Easier Access), Spadina, and King) as well as Islington Station having commenced in 2023.
- Yorkdale and Dupont stations are accessible and construction continues in order to reach Substantial Performance (SP).
- The contract award for Islington Station Redevelopment was approved by the Board in May 2023.

- The Warden Station Redevelopment contract is currently out for tender and construction is expected to be awarded by Q3 2023.

Key Issues/Risks and Mitigation Activities

A comprehensive analysis of risks and issues, impacting the delivery schedules is currently underway. A full update on all program activities is being developed and will be included in a detailed report at the September Board meeting. Further consultation with ACAT and related communications will also be outlined.

Key Risks and Mitigation:

- The program is experiencing cost pressures due to current market conditions and escalations, as well as design development and maturity. The TTC is continuing to monitor costs and look for opportunities to reduce costs where possible.
- Design and Construction complexities pose significant challenges. Impacts due to retrofit of complex stations, including stairs/escalators, adjacent properties and utility conflicts result in longer design durations to resolve issues. The project team continues to resolve issues to completion, including continued support from the operations group during construction, service relocations, support for track-level access and closures to facilitate the work.

Key Issues and Mitigation:

- Construction at Old Mill Station is delayed because the property acquisitions required for the construction have not yet been secured through negotiated agreements. The TTC is working with the City on the required property acquisitions/easements.
- The program schedule has been impacted due to labour strikes, third-party conflicts, labour shortages, permits/approvals and property acquisitions/easements. The TTC is working closely with contractors, third parties and all relevant stakeholders to mitigate construction issues, looking for opportunities to advance work by removing constraints and accelerate work activities where feasible.

Next Steps

Elevators in Service: The Donlands Station will be made accessible in 2023.

The following activities are underway for the two stations that are currently pre-construction:

- Warden (Redevelopment): The project team is advancing the procurement process in order to award the redevelopment construction contract for Warden Station (Redevelopment). A further report will be brought forward to the Board in Q3 2023.
- Old Mill: Continue negotiations with affected property owners, including expropriation proceedings and secure outstanding property requirements, permits and approvals.

The project team also continues to monitor and update the progress and outlook of the 15 stations currently under construction. A full update report on the Easier Access Program will be included at the September Board meeting.

Note: ¹In addition to station accessibility, this program will also deliver the redevelopment of Warden and Islington stations, which will not be complete until 2026. Overall program schedule is also under review and will be reported in September 2023.

Fire Ventilation Upgrades and Second Exits

Description

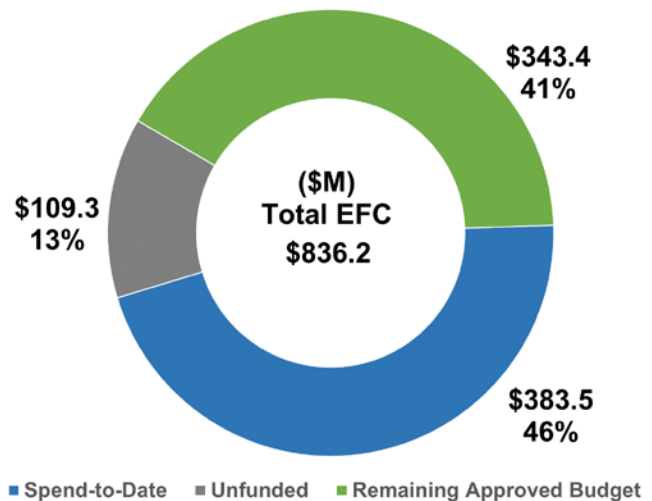
This program provides for the improvement of ventilation in subway tunnels, the construction of second exits at 14 high-priority stations to provide a second means of egress, and the replacement of the existing subway ventilation equipment and associated services, which are nearing the end of its service life or due to failure.

Scope Description

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

Financials

Project/Program Start	1998
Forecast Completion Year	2032 ¹
Estimated Final Cost (EFC) ²	\$836.2M
Total Approved Budget	\$726.9M
10-Year Approved Budget (2023-2032)	\$347.8M
2023 Budget	\$37.9M
2023 YTD Budget	\$6.8M
2023 YTD Actuals	\$4.3M
Overall Performance Status	Y



Progress Update

Fire Ventilation Upgrades:

As of April 30, 2023, the following works have been completed:

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

The following work is 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 Improvements project.

Second Exits/Entrances:

As of April 30, 2023, the following outlines the status of the 14 Second Exits in the program:

- Seven stations now have second exits/entrances in-service: 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 was 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, 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. Additionally, higher costs due to current market conditions, supply chain issues and escalations and/or exchange rates are being closely monitored.

Next Steps

- Advance 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:

- ¹2032 represents the completion of the funded scope.
- ²\$47.6M is currently unfunded in the 10-year plan (2023-2032), and \$61.7M is unfunded post-2032.
- Stage Gate: This program is comprised of multiple projects, which are at various stages in the project life cycle. The class estimates for each of the projects within the program are dependent on their current stage gate within the project life cycle.

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.

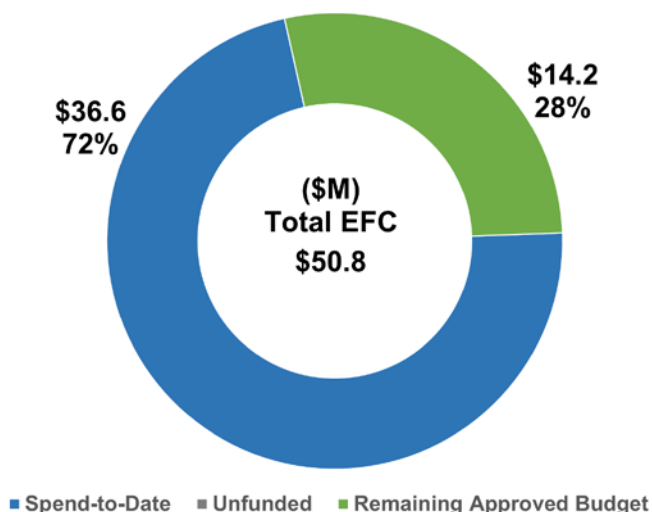
Scope Description

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 and 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 CSAs to proactively assist customers facing barriers in navigating the system.

Financials

Project/Program Start	2017
Forecast Completion Year	2024
Estimated Final Cost (EFC)	\$50.8M
Total Approved Budget	\$50.8M
10-Year Approved Budget (2023-2032)	\$16.4M
2023 Budget	\$5.4M
2023 YTD Budget	\$2.0M
2023 YTD Actuals	\$2.2M
Overall Performance Status	G



Progress Update

Passenger Assistance Intercoms (PAI):

- Completed in Q4 2021. This upgraded system features a dual button that 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 and commissioning of all Zone Hubs is now complete, with the final hubs located at St Clair West and Sheppard-Yonge stations commissioned in Q2 2023. These Hubs provide zone management, security monitoring and the ability to respond efficiently to customer service requests.

CCTV Cameras:

- 24 stations now have at least 90% camera coverage out of 70 stations (excludes SRT stations that are being decommissioned in 2023). The 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 14 additional stations by the end of Q2 2023. The remaining 32 stations are scheduled to be completed by the end of Q4 2024. Note: at present all stations have at least 75% camera coverage as of Q1 2022.
- CCTV fare gate monitors have been installed at all secondary entrance (46 stations). This provides visual deterrence for fare evasion, visibility of service conditions to TTC customers prior to crossing the farelines, and the ability for Collectors/CSAs to monitor the stations.

Public Announcement system (PA)

- Currently, a four-station pilot is in progress, and this will inform the rollout to all remaining stations. These upgrades will transition from the existing analog system 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 Downtown 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

CCTV Cameras: Complete 90% Camera coverage at 14 additional stations by Q2 2023.

Bus and Wheel-Trans Portfolio

Category 3 / Major Projects & Programs	Project Category	Financial Summary (\$ Millions)							Status			
		2023 YTD		2023 Budget	10-Year Approved Budget (2023 - 2032)	Total Approved Budget	Spend-to-Date	Total Projected EFC	Schedule	Cost	Scope	Overall
		Budget	Actual									
Bus & Wheel-Trans Portfolio												
Purchase of Buses (Hybrid & Electric)	SOGR	\$1.1	\$1.1	\$298.2	\$902.2	\$1131.9	\$230.8	\$4108.8	Y	G	G	Y
eBuses Charging Systems	SOGR	\$10.1	\$8.7	\$81.3	\$163.4	\$220.8	\$66.1	\$780.2	Y	Y	Y	Y
Purchase of Wheel-Trans Buses	SOGR	\$6.4	\$6.3	\$27.0	\$48.7	\$92.3	\$49.8	\$429.0	G	G	G	G
Wheel-Trans 10-Year Transformation	Legislative	\$0.3	\$0.3	\$0.6	\$17.2	\$49.8	\$32.9	\$49.8	G	G	G	G
SRT Bus Replacement & Modifications	SOGR	\$2.0	\$1.5	\$16.2	\$37.7	\$40.5	\$4.2	\$96.2	G	Y	G	Y
Total Bus & Wheel-Trans Portfolio		\$19.8	\$17.9	\$423.3	\$1169.2	\$1535.2	\$383.9	\$5463.9				
Performance Scorecard Status		Total Category 3 Portfolio Cost (\$ Millions)					EFC: Estimated Final Cost YTD: Year-to-Date H&S: Health & Safety SI: Service Improvement SOGR: State-of-Good-Repair					
		2023 Year-to-Date Budget	2023 Year-End Budget	10-Year Approved Budget (2023-2032)	Total Approved Budget	Total EFC						
G	On Track											
Y	Caution	\$89.9M	\$784.8M	\$7,990.2M	\$10,486.0M	\$22,928.6M						
R	At Risk											

Purchase of Buses (Hybrid and Electric)

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. The TTC's Green Bus Program is a strategy to transition the conventional bus fleet to zero-emissions by the year 2040. To meet this target, the electrification of the TTC's bus fleets is necessary to transform the fleet to zero-emissions by replacing diesel and hybrid buses as they reach end-of-life.

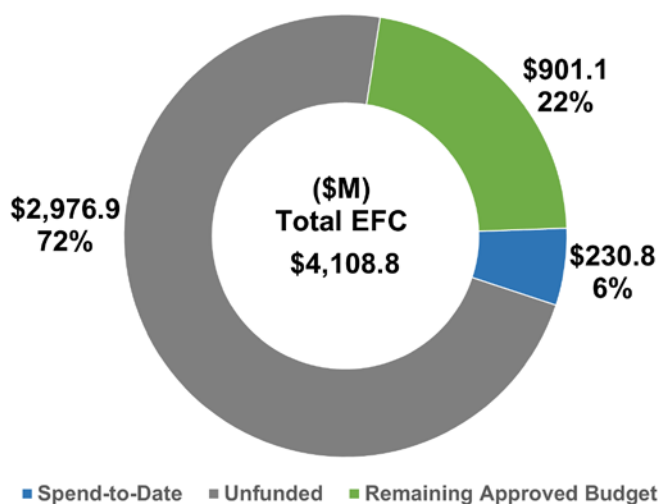
Scope Description

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

Post 2025, the Green Bus Program outlines a plan for approximately 1,840 zero-emission buses to be delivered between 2026 to 2035. This scope is currently unfunded.

Financials

Project/Program Start	2018
Forecast Completion Year	2036
Estimated Final Cost (EFC) ¹	\$4108.8M
Total Approved Budget	\$1131.9M
10-Year Approved Budget (2023-2032)	\$902.2M
2023 Budget	\$298.2M
2023 YTD Budget	\$1.1M
2023 YTD Actuals	\$1.1M
Overall Performance Status	⚠



Progress Update

336 Hybrid-Electric Buses:

- Pre-production meetings with the vendors have been completed and the buses are currently in production.
- The First Article Inspections for the NOVA 12-metre (40-foot), New Flyer 12-metre (40-foot), and New Flyer 18-metre (60-foot) hybrid buses were completed in March 2023.
- Vehicle deliveries commenced in April 2023 and commissioning and training is currently in progress.

340 Zero Emission Buses/eBuses:

- The TTC submitted an application for grant funding under the Federal government's Zero Emission Transit Fund (ZETF). The application was approved and the Federal announcement was made on April 24, 2023.
- A competitive Request for Proposal (RFP) process was concluded for the procurement of eBuses, and two vendors were awarded the Contract (New Flyer and NOVA). Negotiations on all components of the Contract (General Conditions, Technical Requirements) are in progress, with pre-production meetings having commenced in May 2023.

Key Issues/Risks and Mitigation Activities

Hybrid-Electric Buses:

Key Issues and Mitigation:

- 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 with the first bus delivered in April 2023. The commissioning process for these buses has now commenced. The TTC continues to closely monitor the schedule with both vendors and update key stakeholders.

Zero Emission Buses/eBuses:

Key Risks and Mitigation:

- The bus delivery schedule is currently being finalized with the vendor following the recent contract award and announcement of ZETF Federal funding in April 2023. The project team is working closely with the vendors to mitigate potential delays.
- The program is currently funded for bus procurements to the end of 2025. Funding for buses for 2026 and beyond will be required by Q2 2024 in order to transition the fleet to achieve zero-emissions target by 2040 as part of TTC's Green Bus program, which was approved by the Board in November 2017. This plan is in alignment with the City of Toronto's Transform TO Action Plan and the C40 Fossil-Fuel-Free Streets Declaration.

Next Steps

Hybrid-Electric Buses:

- Continue to receive delivery of vehicles from the vendors and ensure an effective commissioning process is in place for the new vehicles to enter revenue service.

eBuses:

- Complete pre-production meetings and negotiate all aspects of the contract with the vendors by Q3 2023.

Note: ¹\$1,610.5M is currently unfunded in the 10-year plan (2023-2032), and \$1,366.4M is unfunded post-2032.

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 zero-emissions fleet along with the City of Toronto's TransformTO target of Net-Zero by 2040.

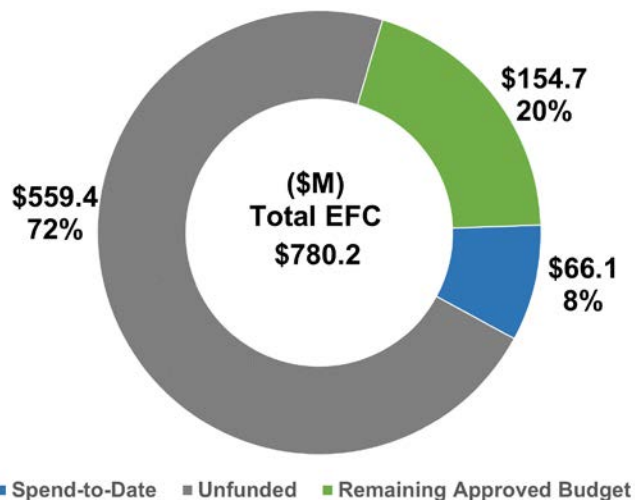
Scope Description

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.

Financials

Project/Program Start	2016
Forecast Completion Year	2040
Estimated Final Cost (EFC) ¹	\$780.2M
Total Approved Budget	\$220.8M
10-Year Approved Budget (2023-2032)	\$163.4M
2023 Budget	\$81.3M
2023 YTD Budget	\$10.1M
2023 YTD Actuals	\$8.7M
Overall Performance Status	ⓘ



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 40% designs for Phase 1 at Birchmount, Eglinton, Malvern, and Wilson garages. The completion of the 40% designs is expected by the end of Q2 2023.
- In 2022, the TTC initiated the installation of its first eBus pantograph charging systems along with a cutting edge centralized charging system at Birchmount Garage to assess performance relative to plug-in chargers fed by individual chargers. This innovative eBus

charging system is the first initiative to increase the TTC's charging capacity since the execution of the Principal Agreement between TTC and PowerON.

- Substantial performance of the Birchmount Proof of Concept (PoC) was achieved on February 28, 2023 and it was launched on April 20, 2023 in advance of Earth Day.
- To assist with the funding constraint, the TTC submitted an application to the Zero Emissions Transit Fund (ZETF) program in April 2022 to secure \$349 million in federal funding towards the TTC's procurement of 340 Zero Emission Buses (eBuses) and delivery of 248 charge points to meet the TTC's eBus fleet needs by March 31, 2026. The TTC's ZETF application was approved and the Federal funding was publicly announced on April 24, 2023.
- Program activities are being baselined to ensure charge points are delivered in advance of the eBus deliveries in accordance with the recent contract award that was enabled by the Federal funding announcement as well as the global supply chain challenges.

Key Issues/Risks and Mitigation Activities

Key Issues and Mitigation:

- A compressed schedule has been developed to deliver the Phase 1 scope. To optimize resources and ensure delivery of 248 charge points by Q1 2026 as per the ZETF agreement, PowerON and the TTC have rearranged the order in which charge points will be delivered at the various garages and have applied a phased approach to achieve commercial operation of the charge points prior to delivery of the Battery Energy Storage System (BESS) where required.

Key Risks and Mitigation:

- Post 2025, the TTC electrification infrastructure to support the required additional buses between 2026 to 2037 remains unfunded in the TTC's Capital Investment Plan. This poses a risk to the achievement of the Net Zero target emissions by 2040. The project team will continue to progress work using the current approved funding.
- The program schedule is at risk of being delayed due to the long lead time for critical equipment. To mitigate this risk, PowerON will initiate early procurement of the long lead time equipment.
- The installation of charge points at Mount Dennis Garage is at risk due to interdependencies with the timing of the Mount Dennis Gravel Parking Lot On-Grade Paving Rehabilitation project. The project team will redistribute the charge points to other garages as a mitigation strategy if the risk trigger occurs.

Next Steps

- Provide PowerON with approval to initiate planning and detailed engineering by the end of May 2023 to achieve Stage Gate 1 (Approval for Planning) and 2 (Approval for Design) milestones.
- Baseline the schedule and scope based on the current approved funding.
- Finalize 40% design for Phase 1 of Birchmount, Eglinton, Wilson and Malvern by the end of Q2 2023.
- PowerON to initiate early procurement of long lead time equipment.
- Final completion of Birchmount Proof of Concept (PoC) by the end of May 2023.

Note: ¹\$499.3M is currently unfunded in the 10-year plan (2023-2032), and \$60.1M is unfunded post-2032.

Purchase of Wheel-Trans Buses

Description

This project provides for the procurement of 137 seven-metre ProMaster buses and 75 six-metre ProMaster buses to replace end-of-life vehicles and grow the fleet to meet the ridership demand.

Scope Description

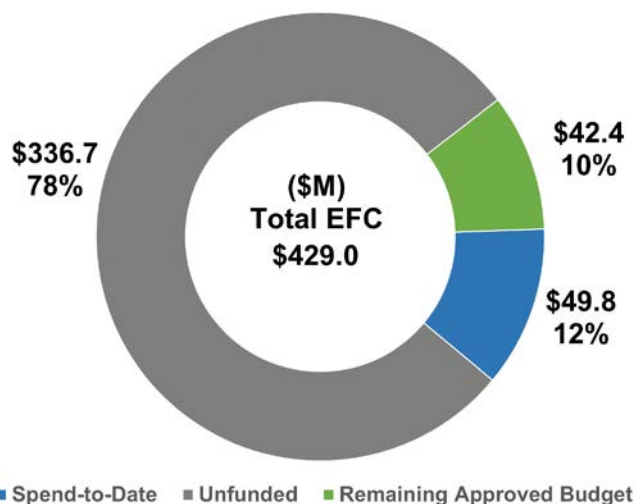
Improved accessibility, customer experience, vehicle reliability, and safety by replacing existing Wheel-Trans buses at end-of-life with the procurement and deployment of:

- 137 seven-metre ProMaster buses between 2021 and 2023.
- 75 six-metre ProMaster buses between 2023 and 2025.

Note: Electric Wheel-Trans buses are planned post 2024.

Financials

Project/Program Start	2016
Forecast Completion Year	2025
Estimated Final Cost (EFC) ¹	\$429.0M
Total Approved Budget	\$92.3M
10-Year Approved Budget (2023-2032)	\$48.7M
2023 Budget	\$27.0M
2023 YTD Budget	\$6.4M
2023 YTD Actuals	\$6.3M
Overall Performance Status	G



Progress Update

- As of May 10, 2023, the TTC has received 85 of 137 vehicles (seven-metre ProMaster), which are all in-service.
- The First Article Inspection for the six-metre ProMaster vehicle was completed on February 21, 2023.
- Electric Wheel-Trans Buses: The Request for Information (RFI) for the Battery-Electric Wheel-Trans vehicles was issued to the market on February 6, 2023 and closed on March 13, 2023. The submissions are currently being reviewed.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- The delay in vehicle deliveries will result in the deferral of the scheduled decommissioning of the 'Friendly' (diesel) vehicles. The project team is working to mitigate this issue and minimize the impact to the maintenance program.
- The lead time for Fiat Chrysler Automotive (FCA) chassis build and delivery has been significantly increased by more than eight months, which will result in 17 vehicles at risk of being delivered late. The project team is meeting with the vendor and FCA on a monthly basis to co-ordinate the chassis build dates and delivery schedules.
- The program is currently funded for bus procurements to the end of 2025. Funding for buses for 2026 and beyond will be required by Q2 2024 in order to transition the fleet to achieve the zero-emissions target by 2040 as part of TTC's Green Bus program, which was approved by the Board in November 2017. This plan is in alignment with the City of Toronto's Transform TO Action Plan and the C40 Fossil-Fuel-Free Streets Declaration.

Next Steps

- 7m ProMaster: Continue to receive production vehicles and complete commissioning process.
- 6m ProMaster: Complete pre-production meetings and receive production vehicles commencing in Q4 2023.
- Electric Wheel-Trans vehicles: Review Request for Information (RFI) submissions and develop Request for Proposal (RFP) for up to 10 electric Wheel-Trans vehicles by Q4 2023.

Note: ¹\$141.0M is currently unfunded in the 10-year plan (2023-2032), and \$195.7M is unfunded post-2032.

Wheel-Trans 10-Year Transformation Program

Description

Implement new policies, processes and systems to support a new service delivery model that integrates Wheel-Trans customers into the TTC's accessible-conventional network through a Family of Services (FOS) approach. A FOS 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.

Scope Description

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

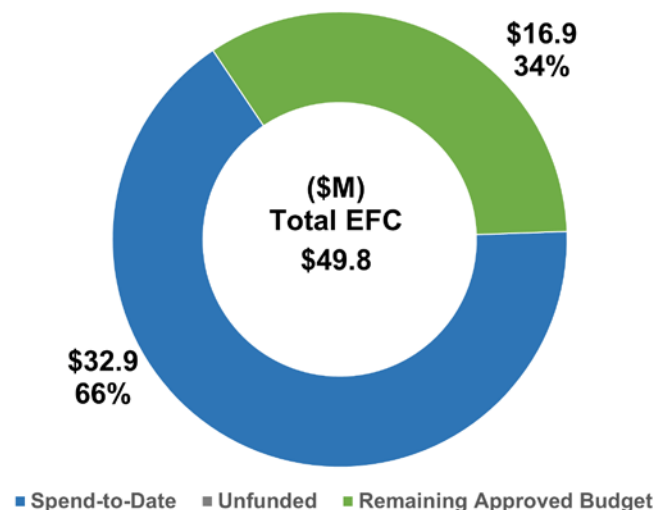
- Family of Services (FOS)
- Re-Registration
- Conditional Trip Matching
- Construction of 16 Access Hubs
- Upgrading RSD to enhance FOS capabilities and introducing the Mobile App pilot
- Implementation of the Customer Relationship Management, which facilitates mass e-mailing capability

Phases 5-8: RSD 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

Financials

Project / Program Start	2017
Forecast Completion Year	2026
Estimated Final Cost (EFC)	\$49.8M
Total Approved Budget	\$49.8M
10-Year Approved Budget (2023 - 2032)	\$17.2M
2023 Budget	\$0.6M
2023 YTD Budget	\$0.3M
2023 YTD Actuals	\$0.3M
Overall Performance Status	G



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. Additional routes for FOS have been ranked for review, which are expected to be operational by October 2023.

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 accessible-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 accessible-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:

A third-party consultant was selected to complete an assessment and provide recommendations to continue the modernization of the Reservations, Scheduling and Dispatch software. Based on those recommendations, the final phases (5-8) of the program are forecasted to be completed by the end of 2026, in alignment with the TTC's 10-year strategy timeline. The Wheel-Trans ITS Solution Assessment for Phase 5-8 review has concluded and a detailed update will be provided to the Board, which outlines the Phase 5-8 program map and schedule.

Next Steps

- Update the scope, schedule and cost for the approved Wheel-Trans program Phase 5-8.

Scarborough Rapid Transit (SRT) – Bus Replacement and Modifications

Description

As a first phase, modifications are required to the bus terminal at Scarborough Centre Station and Kennedy Station due to the closure of the SRT, which is past its useful life. A new temporary bus terminal will be constructed at Kennedy Station as well as the implementation of transit priority measures along Kennedy, Midland, Ellesmere, and Eglinton to accommodate the additional bus traffic until the future opening of the Line 2 East Extension (Scarborough Subway Extension). The second phase would result in the conversion of the SRT right-of-way (ROW) between Kennedy and Ellesmere stations into a bus roadway.

Scope Description

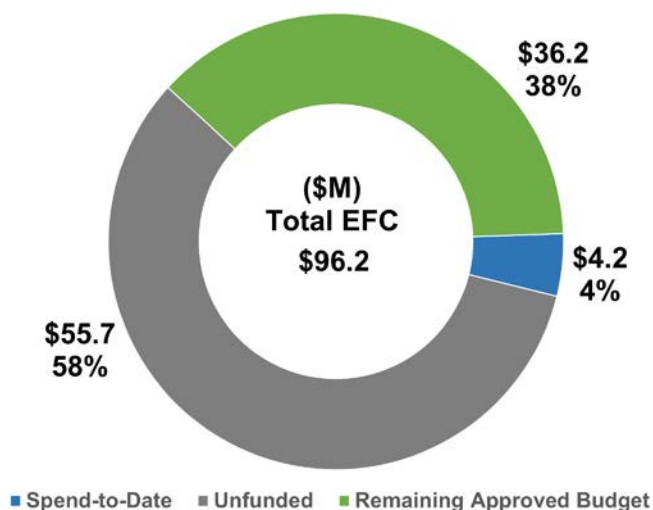
In 2023, the following will be implemented as part of Phase 1: Express bus service via the Kennedy and Midland Couplet from Scarborough Centre Station to Kennedy Station.

- Modifications to the bus platforms at Scarborough Centre and Kennedy stations.
- Construction of a new temporary bus terminal in the south commuter parking lot at Kennedy Station.
- Transit priority measures to facilitate efficient operation of the bus replacement service.

As part of Phase 2, the TTC has authority and funding to undertake the completion of the design work only. Any consideration of the advancement of the construction of the conversion is subject to approval to proceed and associated.

Financials

Project/Program Start	2015
Forecast Completion Year	2023 ¹
Estimated Final Cost (EFC) ²	\$96.2M
Total Approved Budget	\$40.5M
10-Year Approved Budget (2023-2032)	\$37.7M
2023 Budget	\$16.2M
2023 YTD Budget	\$2.0M
2023 YTD Actuals	\$1.5M
Overall Performance Status	Y



Progress Update

Phase 1: Interim Bus Service Requirements

Scarborough Centre Station Bus Terminal:

- Stage 1 construction, which involves platform modifications on the north side of the bus terminal commenced in March 2023 and was completed in May 2023.
- Stage 2 construction, which consists of platform modifications on the south side of the bus terminal commenced in May 2023.

Kennedy Station Bus Terminal Modification and Temporary Bus Terminal:

- The contract, consisting of constructing a new temporary bus terminal in south parking lot of Kennedy Station and modifying select bus bays in main bus terminal, was awarded in March 2023. Work has commenced in May 2023 and the TTC is working closely with the contractor to expedite review/approval of submittals in order meet the November 2023 deadline.

Transit Priority Measures:

- The curb lane on Midland, Ellesmere, Kennedy and Eglinton will be repurposed for new priority bus lanes, which will allow for targeted improvements to decrease travel times. The TTC is proactively engaging with City Councillors on the Transit Priority Measures plan. 100% of the design has been finalized and addressed City's comments from the March 17, 2023 meeting. Tender was posted in May 2023 and the contract award is scheduled for June 2023.

Phase 2: Conversion of the SRT ROW between Kennedy Station and Ellesmere Station into a Busway:

- The TTC is advancing design for the busway from 30% to 100%, and will be re-allocating funding from within the plan. The final cost and schedule will be reported back to the Board and Council in Q4 2023.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- In order to maintain and improve service reliability and availability in the longer term, the conversion of the SRT ROW for buses is critical. However, the SRT ROW conversion is currently unfunded and City Council has approved the design and will be requesting funding from the Province. The TTC has engaged in discussions with the City of Toronto and Metrolinx to define clear roles and responsibilities for the treatment of legacy SRT infrastructures.
- Multiple Metrolinx projects are scheduled and ongoing, in and around the Kennedy Station. The ongoing Eglinton Crosstown LRT project, GO platform expansion project, and the upcoming Scarborough Subway Extension (SSE) project, in and around Kennedy Station may conflict with the scheduled construction work, thus impacting the schedule. The TTC is co-ordinating with Metrolinx and has developed a contract strategy to advance and shorten the construction duration.
- Substantial completion of critical customer service elements like platform modifications and upgrades at Scarborough Centre and Kennedy stations, along with the construction of the new temporary bus platforms at Kennedy Station, is important. Key transit priority measures are to be completed on time for the SRT closure and bus replacement service to begin. These risks will be managed by working with contractors to optimize the schedule in order to achieve all the critical elements by the closure date.

Next Steps

- Complete Stage 2 construction of the platform modifications at Scarborough Centre bus terminal by June 2023.
- Continue with interior modifications at Scarborough Centre bus terminal.
- Continue with construction of temporary bus terminal at Kennedy Station parking lot, scheduled to be completed by October 2023.

- Expedite Transit Priority Measures procurement and award the contract in June 2023.
- Prepare for SRT shutdown and shift to bus replacement by November 2023.
- Report back in Q4 2023 to the Board and Council with an updated estimate for constructing the conversion of the SRT ROW between Kennedy Station and Ellesmere Station to a busway.

Note:

- ¹The conversion of the SRT ROW between Kennedy Station and Ellesmere Station to a busway is forecasted to be completed post-2023.
- ²\$55.7M is currently unfunded in the 10-year plan (2023-2032), with the estimate subject to the completion of 100% design.

Streetcar Portfolio

Category 3 / Major Projects & Programs	Project Category	Financial Summary (\$ Millions)							Status			
		2023 YTD		2023 Budget	10-Year Approved Budget (2023 - 2032)	Total Approved Budget	Spend-to-Date	Total Projected EFC	Schedule	Cost	Scope	Overall
		Budget	Actual									
Streetcar Portfolio												
Purchase of 60 Streetcars	Growth	\$0.8	\$0.6	\$49.1	\$330.9	\$468.0	\$137.7	\$468.0	G	Y	G	Y
Hillcrest Facility	SI	\$0.4	\$0.4	\$1.2	\$97.3	\$100.7	\$3.8	\$100.7	Y	R	G	R
Russell Carhouse	SOGR	\$1.3	\$3.7	\$4.4	\$121.8	\$127.3	\$9.2	\$127.3	Y	R	G	R
Total Streetcar Portfolio		\$2.6	\$4.6	\$54.7	\$550.0	\$696.0	\$150.7	\$696.0				
Performance Scorecard Status		Total Category 3 Portfolio Cost (\$ Millions)					EFC: Estimated Final Cost YTD: Year-to-Date H&S: Health & Safety SI: Service Improvement SOGR: State-of-Good-Repair					
G	On Track	2023 Year-to-Date Budget	2023 Year-End Budget	10-Year Approved Budget (2023-2032)	Total Approved Budget	Total EFC						
Y	Caution	\$89.9M	\$784.8M	\$7,990.2M	\$10,486.0M	\$22,928.6M						
R	At Risk											

Purchase of 60 Streetcars

Description

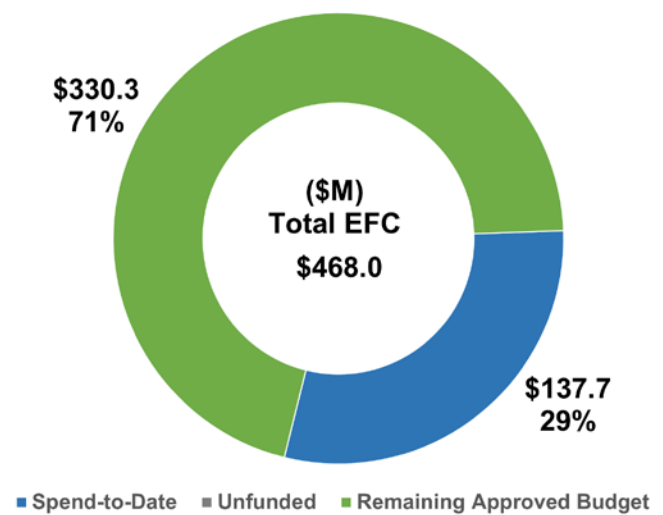
This project provides for the purchase of 60 new, accessible streetcars to address latent service demand, projected increases in travel time due to traffic congestion, and enable growth.

Scope Description

The procurement and delivery of 60 accessible streetcars by 2026.

Financials

Project/Program Start	2019
Forecast Completion Year	2026
Estimated Final Cost (EFC)	\$468.0M
Total Approved Budget	\$468.0M
10-Year Approved Budget (2023-2032)	\$330.9M
2023 Budget	\$49.1M
2023 YTD Budget	\$0.8M
2023 YTD Actuals	\$0.6M
Overall Performance Status	Y



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 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.
- The first major structural assembly milestone was achieved in December 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. The TTC is receiving \$360 million in funding towards the TTC Streetcar Program (60 Streetcars and Hillcrest Facility), from the Provincial and Federal governments.
- 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

Key Risks and Mitigation:

- 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

- Continuing with sub-assembly, First Article Inspections and final assembly activities.
- Prepare for first car delivery and final acceptance, which will be available for service in Q3 2023.

Hillcrest Facility

Description

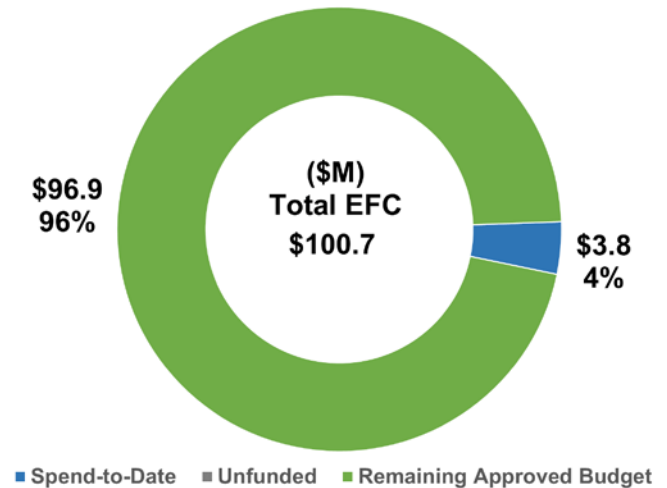
The Hillcrest Facility began operating in 1924, and this project, as part of the larger Streetcar Program, involves the modification of the facility in order to accommodate the storage, pre-service, testing and maintenance of 25 new accessible streetcars. In addition, the Hillcrest Facility Study will provide a long-term strategy for the use of the Hillcrest Complex in alignment with the Real Estate Investment Plan (REIP).

Scope Description

- Phase 1 (Storage for 25 streetcars and temporary pre-servicing).
- Phase 2 (Permanent pre-servicing, including Sand Silo).
- Study: Provide a long-term strategy for the use of the Hillcrest Complex in alignment with the Real Estate Investment Plan (REIP).

Financials

Project/Program Start	2018
Forecast Completion Year	2027
Estimated Final Cost (EFC)	\$100.7M
Total Approved Budget	\$100.7M
10-Year Approved Budget (2023-2032)	\$97.3M
2023 Budget	\$1.2M
2023 YTD Budget	\$0.4M
2023 YTD Actuals	\$0.4M
Overall Performance Status	R



Progress Update

Hillcrest Maintenance and Storage Facility (MSF): To date, the following has been achieved:

- Achieved Stage Gate 3 (Approval for Detailed Design) and commenced Detailed Design in December 2022.

Hillcrest Study: To date, the following has been achieved:

- An Assessment of Operational Requirements at Hillcrest was conducted in Q3 2022 along with a Needs Analysis (short-, medium-, long-term), which were then ranked based on value and necessity.
- Stakeholders from all relevant departments have been engaged.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation Activities: To ensure that the project is delivered on schedule, the TTC has proactively taken the following steps:

- Developed a community engagement plan to address any concerns from the community and avoid potential delays.
- Continuing to co-ordinate with the City with related permits and approvals.
- Staging plans to minimize disruption to be further refined in consultation with stakeholders as part of Detailed Design.
- Monitoring and co-ordinating key interdependencies – Delivery of 60 new streetcars, access for Spur Line, and Harvey Shop State-of-Good-Repair (SOGR).

Key Issues and Mitigation Activities:

- Cost Estimate Baseline: The project planning and design have advanced to Stage Gate 3. As a result of the development of the baseline project scope for the Hillcrest project, this will now inform an updated cost estimate and schedule. Other key SOGR activities will be co-ordinated in the scope of the project for efficiency purposes. Additional funding to complete all required work in scope will be identified in 2024 budget. The TTC is reviewing the funding required in context of overall capital program requirements.

Next Steps

Hillcrest MSF:

- Continue Detailed Design based on project scope baseline established in Q1 2023.
- Update project schedule based on project scope being re-baselined at Stage Gate 3.

Hillcrest Study:

- Continue assessment of parking, adjacent properties for potential use, as well as evaluate space requirement.

Russell Carhouse

Description

Operating since 1921, the Russell Carhouse supports the TTC's streetcar operations. The Russell Carhouse program is comprised of state-of-good-repair and modernization investments to enable the facility to support the new low-floor streetcars.

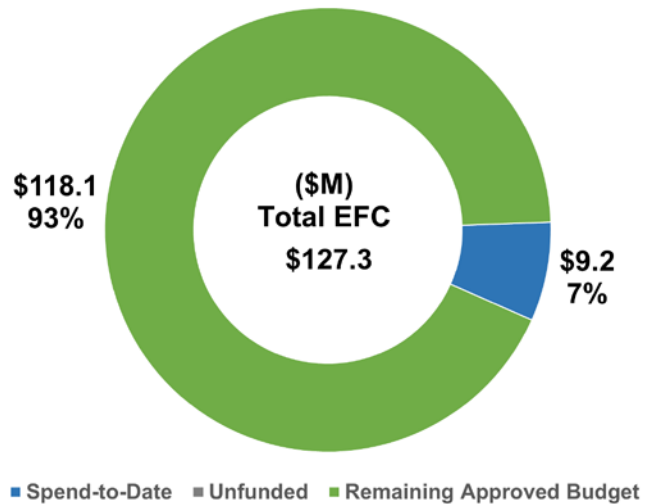
Scope Description

The Russell Carhouse program consists of the following elements to make necessary upgrades to accommodate the new low-floor streetcars. This includes:

- Russell Carhouse Track and Yard Overhaul: Replace tracks with concrete embedded rail; replace underground utility services and provide storm-water management system to meet City requirement; replace overhead system to accommodate streetcar pantograph operations.
- Russell Carhouse Interior Modifications and Extension: West extension of carhouse to allow for additional vehicle maintenance bays; reconfiguration of maintenance tracks and pits in the carhouse for streetcar operational maintenance; maintenance access for rooftop equipment, and additional ancillary facility requirements (e.g. hoist, pit access, lift tables).

Financials

Project/Program Start	2018
Forecast Completion Year	2028
Estimated Final Cost (EFC)	\$127.3M
Total Approved Budget	\$127.3M
10-Year Approved Budget (2023-2032)	\$121.8M
2023 Budget	\$4.4M
2023 YTD Budget	\$1.3M
2023 YTD Actuals	\$3.7M
Overall Performance Status	R



Progress Update

To date, the following has been achieved:

- Russell Carhouse Track and Yard Overhaul: Stage 1 construction on Tracks 1-7 is in progress and scheduled to be completed by November 2023.
- Russell Carhouse Interior Modifications: 100% Construction Design is currently being reviewed by stakeholders.
- Russell Carhouse Extension: 30% Scope Design is also currently being reviewed by stakeholders.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- A delay in completion of the Russell Track and Yard Overhaul work may result in a subsequent delay in commencing the interdependent Carhouse Extension and the Interior Modifications works. The TTC is co-ordinating with the contractor to ensure that the Stage 1 construction on Tracks 1-7 is completed on schedule.

Key Issues and Mitigation Activities:

- Cost Estimate Baseline for Carhouse Extension: The project planning and design has advanced to Stage Gate 3. As a result of the development of the baseline project scope for the Russell Carhouse Extension project, this will now inform an updated cost estimate and schedule. Other key SOGR activities will be coordinated in scope of the project for efficiency purposes. Additional funding to complete all required work in scope will be identified in the 2024 budget. The TTC is reviewing funding required in context of overall capital program requirements.

Next Steps

- Russell Carhouse Track and Yard Overhaul: Continue with construction of Stage 1.
- Russell Carhouse Extension: Advance design based on agreed to scope requirements, and develop baseline project schedule. Advance funding requirements to proceed to construction to 2024 budget process.
- Russell Carhouse Interior Modifications: Complete review by stakeholders and obtain Construction Review sign-offs.

Network Wide Portfolio

Category 3 / Major Projects & Programs	Project Category	Financial Summary (\$ Millions)							Status			
		2023 YTD		2023 Budget	10-Year Approved Budget (2023 - 2032)	Total Approved Budget	Spend-to-Date	Total Projected EFC	Schedule	Cost	Scope	Overall
		Budget	Actual									
Network Wide Portfolio												
PRESTO	Growth	\$2.8	\$0.4	\$8.5	\$13.2	\$79.2	\$66.4	\$79.2	R	G	Y	R
VISION - CAD/AVL	SOGR	\$0.8	\$0.9	\$7.4	\$18.5	\$111.7	\$94.0	\$111.7	G	G	G	G
SAP ERP Implementation	SOGR	\$4.2	\$3.4	\$18.6	\$173.3	\$272.8	\$102.9	\$272.8	G	G	G	G
Total Network Wide Portfolio		\$7.9	\$4.7	\$34.6	\$205.0	\$463.7	\$263.3	\$463.7				
Performance Scorecard Status		Total Category 3 Portfolio Cost (\$ Millions)					EFC: Estimated Final Cost YTD: Year-to-Date H&S: Health & Safety SI: Service Improvement SOGR: State-of-Good-Repair					
G	On Track	2023 Year-to-Date Budget	2023 Year-End Budget	10-Year Approved Budget (2023-2032)	Total Approved Budget	Total EFC						
Y	Caution	\$89.9M	\$784.8M	\$7,990.2M	\$10,486.0M	\$22,928.6M						
R	At Risk											

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.

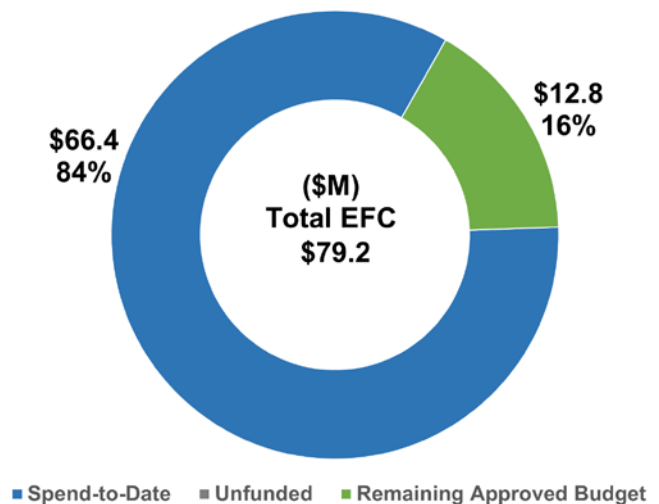
Scope Description

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 account-based payment system with an open architecture using industry standards to accommodate open loop financial cards, mobile applications and future technological innovations (“PRESTO Next Generation”).
- Ensure PRESTO implements and operates a wide range of “managed services” as agreed in the Master Service Agreement in 2012 (i.e. back office operations, customer services, revenue collection and maintenance of all system field equipment).
- Establish the Service-Level Agreement for KPI and performance measurement and tracking.

Financials

Project/Program Start	2012
Forecast Completion Year	2024
Estimated Final Cost (EFC)	\$79.2M
Total Approved Budget	\$79.2M
10-Year Approved Budget (2023-2032)	\$13.2M
2023 Budget	\$8.5M
2023 YTD Budget	\$2.8M
2023 YTD Actuals	\$0.4M
Overall Performance Status	R



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. In 2021, the TTC implemented an enhancement on the HMI to prevent the use of child cards for fare evasion.
- 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). As of April 30, 2023, 100% of devices have been refreshed on buses, streetcars (excluding streetcars that are in long-term maintenance), and Wheel-Trans vehicles. In addition, approximately 60% of fare gates have been refreshed with the installation of a new smart card reader, and with all stations scheduled to be completed by end of Q2 2023. The Open Payment User Acceptance Testing (UAT) is currently underway, and 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.
- There are software defects for the security synchronization for fare gates. The TTC is closely working with the vendor to refine the schedule further and ensure that all of the smart card readers are installed with proper software integration within the PRESTO back-end system 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 [February 28, 2023 Board report](#).

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 release in Google Mobile Wallet, where customers can use their smart phones to make fare payments is scheduled to be launched in Q3 2023.

Note:

- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.

VISION – CAD/AVL

Description

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

Scope Description

The project's scope has been organized in 3 phases:

Phase 1:

- Implement onboard CAD/AVL solution on the TTC's bus 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.

Phase 2:

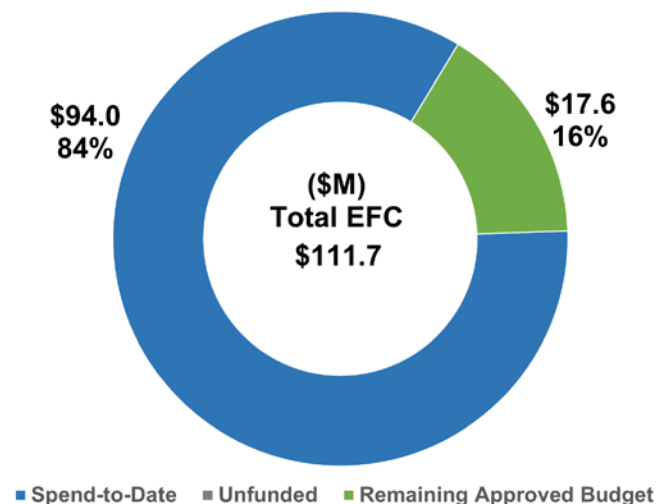
- Installation of CAD/AVL on the 204 streetcars
- Integrate central CAD/AVL solution with automatic passenger counting systems on buses and streetcars in scope.

Phase 3:

- Implement the Operator Performance module.
- Implement Yard Management System at all streetcar carhouses and bus garages.

Financials

Project/Program Start	2016
Forecast Completion Year	2024
Estimated Final Cost (EFC)	\$111.7M
Total Approved Budget	\$111.7M
10-Year Approved Budget (2023-2032)	\$18.5M
2023 Budget	\$7.4M
2023 YTD Budget	\$0.8M
2023 YTD Actuals	\$0.9M
Overall Performance Status	G



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 Phases 1 and 2 has resulted in improved On-Time Performance, improved customer information, reduced road calls, and improved vehicle to Transit Control communications.

Phase 3:

- 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. Operationalization and final testing of the Yard Management System continues at Leslie Barns.
- Recent improvements to CAD/AVL system include the deployment of the new early departure from the end events functionality onboard the vehicles and in Transit Control.

Key Issues/Risks and Mitigation Activities

Key Issues and Mitigation:

- The Yard Management project has experienced delays in its rollout 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, 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.

SAP ERP Implementation

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.

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:

Phase 1:

- Recruiting, Onboarding, Organization Management and Employee Central Service Centre
- Payroll and Benefits Administration
- Budget Planning, Capital Accounting, Cost Centre Accounting and General Ledger

Phase 2:

- Corporate Communications Employee Mobile App
- Learning Management System
- Time and Attendance and Workforce Scheduling for all Employees
- Capital and Operating Costing
- Accounts Payable

Phase 3:

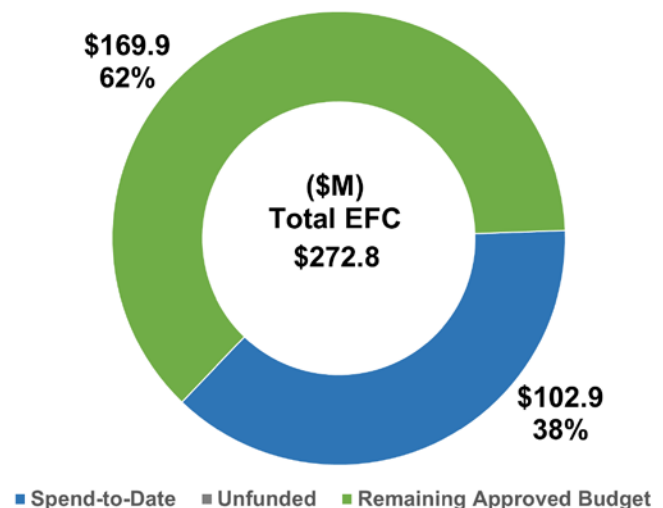
- Procurement, Materials/Warehouse Management
- Accounts Receivable
- Asset Accounting
- Resume Screening Tool powered by AI
- Employee Engagement

Phase 4:

- Employee Performance/Compensation Management, and Succession Planning
- Grievance Management

Financials

Project/Program Start	2014
Forecast Completion Year	2027 ¹
Estimated Final Cost (EFC)	\$272.8M
Total Approved Budget	\$272.8M
Total Approved Budget (2023-2032)	\$173.3M
2023 Budget	\$18.6M
2023 YTD Budget	\$4.2M
2023 YTD Actuals	\$3.4M
Overall Performance Status	G



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:

- The TTC's first Employee Communication App was launched in 2020. This has application, which has been adopted by over 13,000 TTC employees, provides access to corporate information on their mobile devices, including operator run/crew guides, safety, and health and wellness information.
- The MyTTC | Learning Centre online Learning Management System in SuccessFactors was launched in 2021. This platform provides employees with online access to learning, including modern instructor-led learning using WebEx. Additionally, this allows for certification to be tracked for regulatory and compliance purposes.
- The SAP Costing Release 1 Solution for Operations is currently in progress with a targeted completion date of Q4 2023. The Solution Design was approved and data cleansing and build are in progress.
- The Time, Attendance and Workforce Scheduling System is in progress and is targeted for completion by 2025. The staff recovery plan for the Release 1 is in progress for the scheduled go-live in Q4 2023/Q1 2024. The Transit Operator Workforce Management Solution evaluation has been completed. The contract is scheduled to be awarded in Q2 2023.
- The Employee Engagement Platform was deferred to 2025 due to higher corporate priorities within the People Group with no impact to overall schedule.

Phase 3:

- The Procurement/Management/Materials Management/Finance is currently in progress, with the assessment phase completed in Q1 2022, the development of the Request for Proposal (RFP) is 95% complete.
- The assessment phase for the Asset Accounting Module was completed in Q3 2022.
- The Resume Screening Tool Artificial Intelligence (AI) for Talent Management and Talent Acquisition Intelligence module was successfully launched in Q3 2022. The Diversity, Equity and Inclusion module was completed in Q4 2022. The vendor announced in Q1 2023 that there is a change in ownership, resulting in a loss of support for the product. The TTC is evaluating other options.

Key Issues/Risks and Mitigation Activities

Key Risks and Mitigation:

- 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.
- Data Quality from Legacy Records may impact implementation timelines due to the effort required for data cleansing. Records in legacy systems may not be current, which require

additional cleansing efforts prior to loading into the new SAP system. The project team continues to work with departments to have their data cleansed prior to loading into the new SAP system.

Next Steps

Phase 2:

- SAP Costing Solution Release 1 – Achieve Stage Gate 6 (Approval for Deliverables) in Q4 2023.
- Time, Attendance and Workforce Scheduling Release 1 – Achieve Stage Gate 6 (Approval for Deliverables) in Q4 2023 and award contract for Release 3 – Transit Operations Workforce Management Solution.

Phase 3:

- SAP Procurement and Category Management and Materials Management – Achieve Stage Gate 3 (Approval for Project Baseline) in Q4 2023.

Note:

- ¹The contingency for the program was reallocated to 2027 for budgetary purposes only. The overall program schedule is on target.
- The EFC represents the total SAP program cost with the future phases.
- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.