



Financial Update for the Year Ended December 31, 2019 and Major Projects Update

Date: May 13, 2020

To: TTC Board

From: Interim Chief Financial Officer

Summary

This report sets out preliminary operating and capital financial results for TTC Conventional and Wheel-Trans services for the year ended December 31, 2019. These results are subject to audit and it is anticipated that the audited financial statements will be presented to Audit and Risk Management Committee on June 3 and the TTC Board on June 17, 2020

Financial Summary

2019 Operating Results

Description (\$Millions)	Year-End Results		
	Actual	Budget	Variance
TTC Conventional			
Gross Expenditures	1,904.4	1,910.5	(6.1)
Revenue and Reserve Draws	1,283.3	1,288.6	(5.3)
TTC Operating Funding	621.1	621.9	(0.8)

Wheel-Trans			
Gross Expenditures	151.5	149.0	2.5
Revenue	9.0	8.1	0.9
WT Operating Funding	142.5	140.9	1.6

Total	763.6	762.8	0.8
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Based on preliminary results, the TTC Conventional and Wheel-Trans budgets are in a deficit position of \$0.8 million on a combined basis. By service, there is a \$1.6 million deficit for the Wheel-Trans service, which is partially offset by a \$0.8 million surplus for TTC's Conventional service.

2019 Capital Results

Description (\$ Millions)	2019 Budget	Year-to-Date Actuals	
		\$	%
TTC Base Capital Program	1,654.7	1,210.0	73.1%
TTC Transit Expansion	643.8	176.7	27.4%
Total	2,298.6	1,386.7	60.3%

Total TTC base capital expenditures at year end are \$1.21 billion, representing a year-end spending rate of 73.1% of the 2019 Approved Capital Budget.

In addition to base capital requirements, TTC also incurred \$176.7 million or 27.4% of the 2019 Approved Capital Budget in transit expansion initiatives. The low spending rate for the transit expansion projects are due to the change in project responsibility and delivery to the Province as of September 1, 2019. TTC staff have halted all work on the Line 2 East Extension, Relief Line South and Yonge Subway Extension projects.

The 2019 base capital underspending of \$444 million will be carried forward into 2020 to complete capital work, in accordance with the City's carry forward policy. The carry forward of unspent funds for expansion initiatives will be determined through discussions with the City and Metrolinx.

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.

Expenditures required to meet the TTC's accessibility and equity requirements have been provided for in these budgets, including operating funding for elevator maintenance and the continued implementation of Wheel-Trans' Family of Services. Capital funding for the TTC's Easier Access Program is on track to make all subway stations accessible by 2025 with elevators, wide fare-gates and automatic sliding doors.

Decision History

At its meeting on January 24, 2019, the TTC Board approved the 2019-2028 TTC Capital Budget and Plan of \$6.453 billion in funding with \$1.490 billion in 2019 cash flow.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2019/January 24/Reports/10 CIP 2019 2028 Capital Budget Decision.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2019/January%2024/Reports/10%20CIP%202019%202028%20Capital%20Budget%20Decision.pdf)

At its meeting on January 24, 2019, the TTC Board approved the 2019 Operating Budgets of \$1,910.5 million gross and \$621.9 million net for TTC Conventional Service and \$149.1 million gross and \$141 million net for Wheel Trans Service and a 2019 total year-end workforce complement of 15,951 positions.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2019/January 24/Reports/11 2019 TTC Wheel Trans Operating Budget Decision.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2019/January%2024/Reports/11%202019%20TTC%20Wheel%20Trans%20Operating%20Budget%20Decision.pdf)

At its meeting on March 7, 2019, City Council approved the 2019 Operating Budgets and 2019 – 2028 Capital Budget and Plan.

<http://app.toronto.ca/tmmis/viewPublishedReport.do?function=getCouncilMinutesReport&meetingId=15350>

At its meeting on April 16, 2019, City Council amended the Council-Approved 2019-2028 Capital Budget and Plan for the Line 2 East Extension.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.EX4.1>

Comments

Key Indicators – Operating Budget

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

The key indicators include TTC and Wheel-Trans passenger counts and average fare, which impact the \$1.196 billion TTC fare revenue budget. The price of fuel and electric power affect a combined fuel and utilities budget of \$170 million. The final, and most significant, driver of expenses relates to service hours, which impacts labour expenses (\$1.070 billion), non-labour expenses (\$224 million) such as parts and maintenance, as well as fuel and utility consumption.

The table below details the TTC’s key operating indicators:

Item	Year-End Results			Status
	Actual	Budget	Variance	
TTC Passengers	525.5M	526.3M	(0.8M)	⊖
TTC Average Fare	2.25	2.27	(0.02)	✘
TTC Service Hours	9.494M	9.454M	0.040M	✓
Price of Fuel (\$/litre)	0.970	0.971	(0.001)	✓
Price of Electric Power (\$/kWh)	0.148	0.144	0.004	⊖
WT Passengers	4.12M	4.30M	(0.18M)	⊖

Financial Update – Operating

As detailed in the following tables for the year ended December 31, 2019, the TTC Conventional and Wheel-Trans services reported a combined year-end net overexpenditure of \$0.8 million or 0.1%. Also provided are tables reflecting comparative information for 2018.

TTC Conventional

2019 Operating Results

Item (\$Millions)	Year-End Results			Status
	Actual	Budget	Variance	
Expenses				
Departmental Labour	1,063.6	1,070.4	(6.8)	✓
Departmental Non-Labour	227.1	224.2	2.9	✗
Employee Benefits	311.8	314.1	(2.3)	✓
Diesel	80.9	85.9	(5.0)	✓
Traction Power & Utilities	84.7	84.1	0.6	✗
Other Corporate Costs	136.3	131.8	4.5	✗
Total Expenses	1,904.4	1,910.5	(6.1)	✓
Revenue and Reserve Draws				
Passenger Revenue	1,183.8	1,195.8	(12.0)	✗
Other Ancillary Revenue	76.8	70.1	6.7	✓
Reserve Draws	22.7	22.7	0.0	–
Total Revenue and Reserve Draws	1,283.3	1,288.6	(5.3)	✗
Net (Operating Funding)	621.1	621.9	(0.8)	✓

TTC's conventional service is under budget by \$0.8 million or 0.1% based on preliminary results. The key budget variances that account for this variance are highlighted below:

FAVOURABLE VARIANCES

Departmental Labour: \$6.8 million decrease

These savings are primarily due to one-time underspending based on later than anticipated implementation of new service initiatives approved in 2019. This includes the hiring of 70 additional Transit Enforcement personnel, and instructors required to support master sign-up training. Lower average salary rates, given unusually higher levels of operator hiring also contributed to this underspending

Diesel Expenditures: \$5.0 million decrease

The diesel expenditure variance is due to lower consumption rates of the newer bus fleet. These lower consumption rates were reflected in the 2020 Approved Operating Budget.

Accident Claims: \$4.9 million decrease

Payments for accident claim settlements were lower than budget due to limited major claims and settlements.

PRESTO Commissions: \$3.6 million decrease

PRESTO fees are below budget on a one-time basis, due to the continued sales of non-pass legacy fare media in 2019, which resulted in lower than anticipated adoption.

Leasing Expenditures: \$3.0 million decrease

One-time reduced leasing expenses were the result of a delay in the occupation date for the new consolidated warehouse, which will now be occupied in 2020.

Employee Benefits: \$2.3 million decrease

Employee benefits were below budget due to lower pension fund contributions. The level of recent new hires has contributed to the pension fund variance as new employees are not eligible for matching TTC Pension contributions for the first 6 months of their employment.

Other Ancillary Revenue: \$6.7 million increase

Ancillary revenues were over achieved primarily due to proceeds from one-time settlements and rebates and proceeds received from the sale of retired vehicles.

UNFAVOURABLE VARIANCES

Inventory Obsolescence: \$21.5 million increase

As part of the planned 2020 move to the new consolidated warehouse and ongoing vehicle renewal, TTC has been undertaking a thorough review of its \$156 million of inventory. As a result of these reviews and with the transition from legacy streetcars to LFLRVs, \$22.5 million of expenses related to estimated obsolete inventory supplies are included in 2019 year-end results. Of this amount, \$15.3 million related specifically to legacy streetcar parts which were deemed necessary to maintain on hand given the specialized nature of the parts, long production lead times and uncertainty surrounding timing of new vehicle deliveries.

Passenger Revenues: \$12.0 million decrease

Year-end ridership was approximately 0.1% below budget and passenger revenues were 1.0% below budget.

2019 revenue and revenue rides were impacted by:

- Significant inclement weather events experienced in January and February, which were the key contributors to the underachievement of revenue ridership.
- The underachievement of average fare is primarily due to the trend of period pass users transitioning to e-purse given the benefit of the two-hour transfer. 2020 fare revenue was adjusted in TTC's 2020 Operating Budget to reflect this trend.

All other variances net to a \$2.0 million favourable variance.

2019 vs 2018 Results Comparison

Item (\$Millions)	Year-End		
	2019 Actuals	2018 Actuals	Change
Expenses			
Departmental Labour	1,063.6	1,018.6	45.0
Departmental Non-Labour	227.1	214.2	12.9
Employee Benefits	311.8	282.0	29.8
Diesel	80.9	75.0	5.9
Traction Power & Utilities	84.7	77.3	7.4
Other Corporate Costs	136.3	142.3	(6.0)
Total Expenses	1,904.4	1,809.4	95.0
Revenue and Reserve Draws			
Passenger Revenue	1,183.8	1,162.1	21.7
Other Ancillary Revenue	76.8	64.1	12.7
Reserve Draws	22.7	0.0	22.7
Total Revenue and Reserve Draws	1,283.3	1,226.2	57.1
Net (Operating Funding)	621.1	583.2	37.9

Explanation of Year-Over-Year Changes

Expenses were \$95 million (5.2%) higher on a year-over-year basis. Key cost drivers of this increase include:

- Collective Bargaining Agreement: \$29 million increase for Cost of Living adjustment
- Employee Benefits increased for inflation, utilization, and legislative changes arising from Canada Pension enhancements and OHIP+: \$23 million
- Net effect of higher PRESTO Commissions of \$25 million and offsetting legacy fare media savings (\$5 million), as a result of increasing PRESTO adoption rates: \$20 million

- Full year costs of 2018 Capacity Improvements: \$10.5 million
- Net increase in diesel price and consumption: \$5.9 million

The net remaining \$6.6 million increase was comprised of a variety of items including increased fare enforcement costs, service adjustments to maintain standards and general material inflation.

Revenues and Reserve Draws increased by \$57.1 million (4.6%). The additional revenue is mostly attributable to the April 1 fare increase and the utilization of a one-time reserve draw to help balance the 2019 Operating Budget.

Wheel-Trans

2019 Operating Results

Item (\$Millions)	Year-End Results			Status
	Actual	Budget	Variance	
Expenses				
Bus Service	52.2	56.9	(4.7)	✓
Contracted Taxi	70.1	59.0	11.1	✗
Employee Benefits	14.6	16.5	(1.9)	✓
Administration/Management	14.6	16.6	(2.0)	✓
Total Expenses	151.5	149.0	2.5	✗
Passenger Revenues	9.0	8.1	0.9	✓
Net (Operating Funding)	142.5	140.9	1.6	✗

The year-end shortfall of \$1.6M or (1.1%) is largely driven by the following key budget variances:

Contracted Taxi Services: \$11.1 million increase

The increase in costs was attributable to a higher average distance travelled per passenger as longer trips have been assigned to contracted taxi to meet CBA requirements to schedule 38% of trips on Wheel Trans buses. This trend and some partially offsetting efficiency initiatives were accounted for in the 2020 Operating Budget.

Salaries and Wages: \$4.2 million decrease

Timing of workforce hiring experienced in 2019 accounts for this variance. Adjustments were reflected in the 2020 Operating Budget submission to reflect vacancy trends and backfill timeframes.

Employee Benefits: \$1.9 million decrease

This underspending is a direct result of lower than anticipated salary and wage expenses, in addition to lower healthcare expenses experienced.

Customer Service: \$1.6 million decrease

The decrease in customer service costs is primarily due to lower eligibility appeals and lower Family of Services implementation costs.

Passenger Revenues: \$0.9 million increase

The favourable revenue variance is due to an adjusted methodology for the allocation of monthly pass revenue, between Wheel-Trans and TTC Conventional services, based on PRESTO data, that now accounts for 0.9% of all pass revenue. This adjusted methodology was accounted for in the 2020 Operating Budget's fare revenue estimates.

Materials and Supplies: \$0.6 million decrease

Lower than budgeted materials expenses were primarily the result of lower vehicle maintenance expenses resulting from the decommissioning of problematic fleet and replacing them with newly procured fleet. This trend was reflected in the 2020 Operating Budget.

All other changes nets to a \$0.3 million favourable variance.

2019 vs 2018

Item (\$Millions)	Year-End		
	2019 Actuals	2018 Actuals	Change
Expenses			
Bus Service	52.2	51.7	0.5
Contracted Taxi	70.1	61.2	8.9
Employee Benefits	14.6	13.8	0.8
Administration/Management	14.6	13.4	1.2
Total Expenses	151.5	140.1	11.4
Passenger Revenues	9.0	7.4	1.6
Net (Operating Funding)	142.5	132.7	9.8

Explanation of Year-Over-Year Changes

Expenses increased by \$11.4 million (8.1%) on a year-over-year basis. Key sources of this increase include:

- Inflation impact and longer trips on contracted taxis (\$8.9 million)
- Labour and benefit expenses due to additional workforce, including operators and reservationists offset by vacancies. (\$1.0 million)
- Impact of CBA increase (\$1.2 million)
- Increase in vehicle fuel price per litre (\$0.3 million)

Revenues increased by \$1.6 million (21.6%) compared to 2018. This is attributable to the April 1, 2019 fare increase and the adjusted methodology for the allocation of PRESTO monthly pass revenue between Wheel-Trans and TTC Conventional services.

Financial Update – Capital

The TTC incurred \$1.21 billion in capital spending as of December 31, 2019 reflecting a spend rate of 73.1% for the TTC base capital program and \$176.7 million or 27.4% for transit expansion projects.

TTC 2019 Capital Results

Description (\$ Millions)	2019 Budget	Year-End Results	
		\$	%
TTC Base Capital			
Infrastructure Projects	885.6	648.8	73.3%
Vehicle Related Projects	769.1	561.2	73.0%
Total - Base Capital	1,654.7	1,210.0	73.1%
TTC Transit Expansion			
Toronto York Spadina Subway Extension	303.8	79.1	26.0%
Scarborough Subway Extension	117.1	66.1	56.4%
Relief Line - Design	219.6	31.1	14.2%
Waterfront Transit - Design	3.3	0.5	13.6%
Total - Transit Expansion	643.8	176.7	27.4%

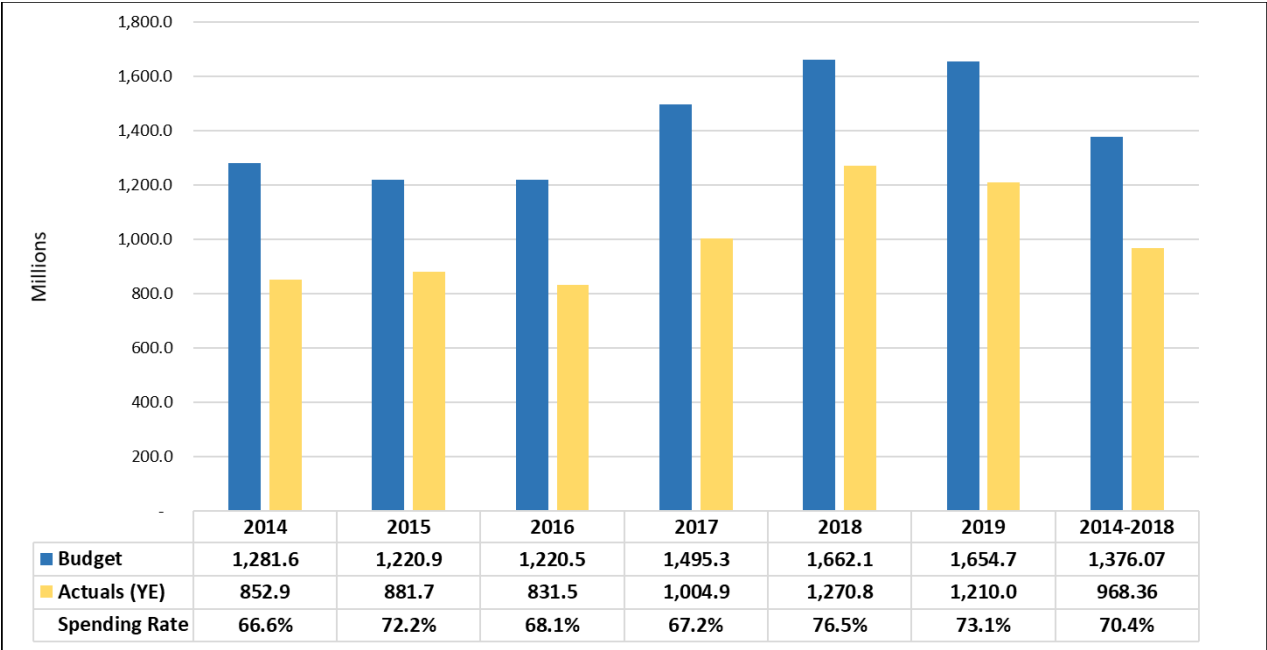
Reflected in the results above and in Appendix 1 are the following in-year budget adjustments. These will be presented to Council for approval with the City's Year-End Capital Variance Report. These adjustments offset accelerated spending in key programs with projects that experienced deferred spending in 2019.

TTC Capital Budget Adjustments

CTT No.	Program	Amount (\$000's)
CTT001	Subway Track	2,978
CTT003	Traction Power	2,505
CTT005	Power Distribution/Electric Systems	256
CTT015	Yards & Roads	438
CTT018	On-Grade Paving Rehabilitation Program	1,228
CTT020	Bridges & Tunnels	2,767
CTT028	Easier Access Phase II & III	7,517
CTT111	Purchase of Buses	(15,705)
CTT113	Other Maintenance Equipment	(1,194)
CTT146	TR Yard and Tail Track Accomodation	1,689
CTT148	McNicoll Bus Garage Facility	6,679
CTT152	Safety Program	(9,156)
Net Adjustment		-

The following chart captures the 2019 spending rate compared to the previous 5 years for TTC's Base Capital Program.

2014-2019 Base Capital Program Spending Rate



As illustrated in the Table above, both the approved Capital Budget and actual capital expenditures have been steadily trending upwards over the last 5 years. Actual capital spending has increased from \$853 million in 2014 to \$1.2 billion in 2019 and the spending rate for 2019 is slightly higher compared to the past 5 years' average.

The TTC's 2019 year-end capital underspending is primarily driven by the purchase of buses and streetcars for vehicle-related projects. For infrastructure projects, the main drivers of underspending are attributable to the ATC Resignalling, Equipment, Other Buildings and Structures, Fare System, Service Planning and Computer Equipment and Software projects.

Key Variances

Vehicle Related Projects

Purchase of Buses:

\$227.2 million or 79.0% of the \$287.7 million 2019 Approved Capital Budget was spent in 2019. Underspending is a result of delays in the delivery of the ebus fleet.

Purchase of Streetcars:

\$235.8 million or 65.9% of the \$357.6 million 2019 Approved Capital Budget was spent in 2019. Underspending is directly attributable to car delivery delays and change allowances no materializing.

Infrastructure Projects

ATC Resignalling:

\$61.3 million or 83.4% of the \$73.5 million 2019 Approved Capital Budget was spent in 2019. Underspending is a result of a decrease in estimated expenditures for 2019 with no impact to the overall project schedule or estimated final cost (EFC).

Equipment:

\$34.5 million or 43.7% of the \$78.9 million 2019 Approved Capital Budget was spent in 2019. Underspending is a result of labour resource constraints and material availability for the Subway Escalator Overhaul Program. Timing and estimate changes to various contracts for the Subway Pump Replacement Program and the Bus Washrack projects were deferred to 2020 due to operational requirements and lower than expected expenditures for the Escalator Replacement Program and late award of work for the energy storage system for the Bus Charging Systems.

Other Buildings and Structures:

\$87.1 million or 52.0% of the \$167.4 million 2019 Approved Capital Budget was spent in 2019. Underspending is mainly a result of work being deferred to future years at Glencairn station for the Skylights Replacement project; slippage and timing issues for the Surface Way Buildings Replacement project; ongoing property negotiations for the New Subway Maintenance and Storage Facility; a delay in technology components and

third party property agreements/building permits for the Wheel-Trans Transformation Programs.

Fare System:

\$6.4 million or 33.3% of the \$19.3 million 2019 Approved Capital Budget was spent in 2019. Underspensing is a result of timing/schedule issues with the Fare Collection/PRESTO project.

Service Planning:

\$8.8 million or 33.5% of the \$26.1 million 2019 Approved Capital Budget was spent in 2019. Underspensing is a result of delays in approvals and installations for transit priorities initiatives as well as delays on the start of construction of the Queue Jump Lanes included in the Opportunities to Improve Transit Service project.

Computer Equipment and Software:

\$59.0 million or 65.9% of the \$89.6 million 2019 Approved Capital Budget was spent in 2019. Underspensing is driven by the deferral of the SAP Accounts Receivable project at the implementation phase as it is dependent on processes in the Job Based Cost System, which is currently being planned for an SAP Assessment phase. Additionally, resource allocation issues for the Trapeze Upgrade project, delays to the contract award and resource hiring for the Cybersecurity project and the Enterprise Asset Management Program, currently under review for the program roadmap in development phase.

TTC Transit Expansion

As of September 1, 2019, TTC staff halted all work on the Line 2 East Extension, Relief Line South and Yonge Subway Extension projects as a result of provincial legislation, which has transferred the projects' responsibility and delivery to the Province. Consequently, the year-end spend on expansion projects is only 27.4% or \$176.7 million of the \$643.8 million 2019 Approved Budget.

Additional Capital Spending Summaries

Additional information on 2019 capital spending by project is included in ***Appendix 1 – 2019 Capital Spending Summary by Project***.

Information on capital delivery performance for major projects within TTC's base capital and transit expansion programs is also available within ***Appendix 2 - Major Projects Update***.

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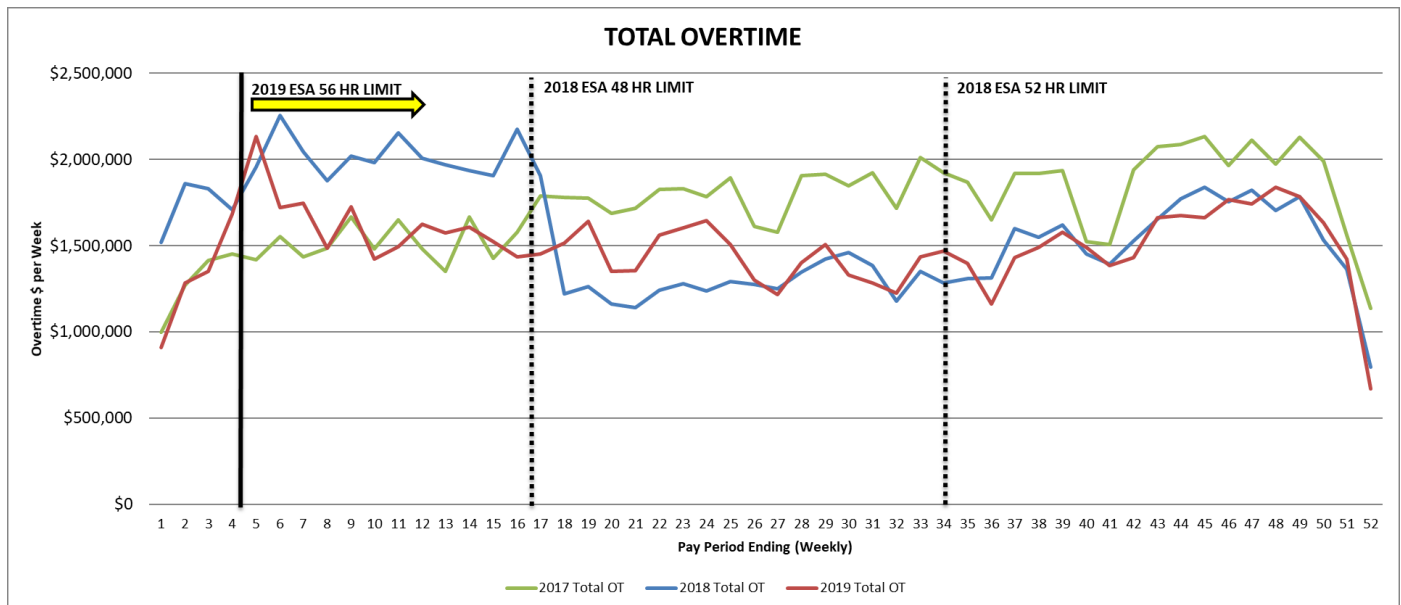
Josie La Vita
Interim Chief Financial Officer

Attachments

Appendix 1 – Overtime Analysis
Appendix 2 – 2019 Capital Spending Summary by Project
Appendix 3 – Major Projects Update

Appendix 1 – Overtime Analysis

Overtime spending was down 7% in 2019, relative to 2018.



Notes:

Includes all budgets: Operating, Wheel-Trans, Capital
 Amounts are **not** adjusted for annual CBA increases

Analysis

Paid overtime, in 2019 was 7% below 2018 levels, with reduced spending in most departments and employee groups. One exception to this trend was overtime spending in Subway Infrastructure. This exception was due to the full resumption of weekend subway closures in 2019 which had been significantly curtailed in 2018.

Excluding Subway Infrastructure, paid overtime was approximately 12% below 2018 experience. The key driver of this decrease was attributable to the additional operator hires in 2018 & 2019, which helped to ensure that all scheduled service was delivered while reducing operator overtime by \$7 million on an annual basis, from May 2018.

Overtime spending trends are actively monitored by all departments. Certain overtime to respond to emergencies and complete trackwork during weekend subway closures is unavoidable. Opportunities to shift other work to resources on regular time continues to be actively pursued.

Appendix 2 – 2019 Capital Spending Summary by Program

EXPENDITURES BY PROGRAM	2019 Budget	Year-End Results		
		Actuals	Variance	%
TRACK	60.7	56.0	4.7	92.3%
1.1 Subway Track	28.5	28.5	0.0	100.0%
1.2 Surface Track	32.2	27.5	4.7	85.5%
ELECTRICAL SYSTEMS	145.3	118.3	27.0	81.4%
2.1 Traction Power	24.3	24.3	0.0	100.0%
2.2 Power Distribution/Electric Systems	9.6	9.6	0.0	100.0%
2.3 Communications	21.3	14.2	7.1	66.8%
2.4 Signal Systems	16.6	8.9	7.7	53.6%
ATC Resignalling	73.5	61.3	12.2	83.4%
BUILDINGS & STRUCTURES	511.1	381.4	129.8	74.6%
3.1 Finishes	19.4	19.4	0.0	99.9%
3.2 Equipment	78.9	34.5	44.4	43.7%
3.3 Yards & Roads				
Streetcar Network Upgrades & BRT	2.3	2.3	0.0	100.0%
On-Grade Paving Rehabilitation Program	7.4	7.0	0.4	94.0%
Bicycle parking at stations	0.9	0.3	0.7	29.0%
Transit Shelters & Loops	0.4	0.4	0.0	93.5%
3.4 Bridges & Tunnels	39.4	39.4	0.0	100.0%
3.9 Buildings and Structures Projects				
Fire Ventilation Upgrade	16.2	12.4	3.8	76.3%
Easier Access Phase III	67.1	69.0	(1.9)	102.9%
Leslie Barns	5.0	3.0	2.0	59.6%
Toronto Rocket/T1 Rail Yard Accommodation	40.0	40.0	0.0	100.0%
McNicoll New Bus Garage	66.7	66.7	0.0	100.0%
Other Buildings and Structures	167.4	87.1	80.3	52.0%
VEHICLES	769.1	561.2	207.9	73.0%
REVENUE VEHICLES				
4.11 Purchase of Buses	287.7	227.2	60.5	79.0%
4.11 Purchase of Buses - Wheel Trans Buses	9.3	8.2	1.1	88.2%
4.12 Purchase of Subway Cars	7.5	2.1	5.4	27.9%
4.13 Bus Overhaul	43.0	42.5	0.5	98.7%
4.15 Streetcar Overhaul	4.4	1.5	2.8	35.2%
4.16 Subway Car Overhaul	34.4	30.1	4.3	87.5%
4.18 Purchase of Streetcars	357.6	235.8	121.8	65.9%
NON-REVENUE VEHICLES	0.0	0.0		
4.21 Purchase Automotive Non-Revenue Vehicles	9.3	6.7	2.6	71.9%
4.22 Rail Non-Revenue Vehicle Overhaul	3.8	1.6	2.2	41.0%
4.23 Purchase Rail Non-Revenue Vehicles	12.1	5.6	6.5	46.2%
TOTAL OTHER	168.6	93.1	75.4	55.2%
TOOLING, MACHINERY & EQUIPMENT				
5.1 Shop Equipment	6.4	3.0	3.4	47.1%
5.1 Warehouse Consolidation	3.0	2.4	0.6	79.4%
5.2 Revenue & Fare Handling Equipment	7.3	1.1	6.2	15.7%
5.3 Other Maintenance Equipment	3.8	2.1	1.7	56.0%
5.4 Fare System	19.3	6.4	12.9	33.3%
ENVIRONMENTAL PROGRAMS	0.0	0.0		
6.1 Environmental Programs	11.8	9.8	1.9	83.8%
6.1 Safety and Reliability	0.8	0.1	0.7	12.1%
COMPUTER EQUIPMENT & SOFTWARE	0.0	0.0		
7.1 Computer Equipment & Software	89.6	59.0	30.6	65.9%
OTHER	0.0	0.0		
9.1 Furniture & Office Equipment	0.4	0.3	0.1	69.4%
9.2 Service Planning	26.1	8.8	17.4	33.5%
Total Base Programs	1,654.7	1,210.0	444.7	73.1%
Toronto York Spadina Subway Extension	303.8	79.1	224.7	26.0%
Scarborough Subway Extension	117.1	66.1	51.0	56.4%
Relief Line South - Design	219.6	31.1	188.5	14.2%
Waterfront Transit - Design	3.3	0.5	2.9	13.6%
Total Transit Expansion Projects	643.8	176.7	467.1	27.4%

Appendix 3 – Major Projects Update

Overview:

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

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

Dashboard: Capital Spending for Category 3 Projects

Category 3 Projects Capital Spending Dashboard																		
Projects/Programs	Critical Path	Cost (millions)								Schedule			Scope			Overall		
		2019 Year End		Approved Budget	Actual			Projected		CS	CT	OS	CS	CT	OS	CS	OS	
		Budget	Actual		LTD	CS	CT	EFC	OS									
Category 3																		
Automatic Train Control (ATC) "Line 1"	3	\$73.3	\$61.3	\$660.9	\$499.0	Y	⇒	\$660.9	Y	Y	⇒	Y	G	⇒	G	Y	Y	
Easier Access Phase III	4	\$67.1	\$69.0	\$829.6	\$315.9	G	⇒	\$829.6	Y	G	⇒	G	G	⇒	G	G	Y	Y
Fire Ventilation Upgrade & Second Exits	Safety	\$16.2	\$12.4	\$494.6	\$290.8	Y	⇒	\$599.0	Y	G	⇒	G	G	⇒	G	Y	Y	Y
McNicoll Bus Garage	3	\$66.7	\$66.7	\$181.0	\$122.7	G	⇒	\$181.0	G	G	⇒	G	G	⇒	G	G	G	G
Toronto Rocket T1 Rail Yard (Subway Vehicles Facilities)	3	\$40.4	\$40.0	\$495.4	\$287.8	G	⇒	\$495.4	G	Y	⇒	Y	G	⇒	G	Y	Y	Y
Purchase of Buses	3	\$351.9	\$237.7	\$1064.5	\$726.1	G	⇒	\$2867.2	Y	Y	⇒	Y	G	⇒	G	Y	Y	Y
Purchases of 204 Light Rail Vehicles	3	\$357.6	\$235.7	\$1186.5	\$1044.1	G	⇒	\$1186.5	G	R	↓	R	G	⇒	G	Y	Y	Y
Wheels Trans 10-Year Transformation Program	4	\$11.4	\$7.0	\$49.8	\$17.3	R	⇒	\$49.8	Y	G	⇒	Y	G	⇒	Y	G	Y	Y
FARE COLLECTION / PRESTO	3	\$18.2	\$5.5	\$81.8	\$56.9	G	⇒	\$128.8	G	Y	⇒	Y	Y	⇒	Y	Y	Y	Y
Stations Transformation	4	\$13.1	\$8.0	\$50.8	\$16.1	Y	⇒	\$50.8	G	Y	⇒	Y	G	⇒	G	Y	G	G
VISION Program (CAD/AVL)	3	\$37.3	\$28.1	\$117.2	\$69.3	G	⇒	\$117.2	G	Y	⇒	G	G	⇒	G	Y	Y	Y
SAP ERP Implementation	5	\$13.9	\$5.7	\$93.2	\$70.0	G	⇒	\$163.2	G	Y	⇒	G	Y	⇒	G	Y	G	G
Total		\$1,067.1	\$777.0	\$5,305.3														

Total Base			
Cost (\$Millions)			
2019 Approved Budget	2019 YTD Actual	Approved Budget	Estimated Final Cost
\$1,067.1M	\$777.0M	\$5,305.3M	\$7,329.3M

Performance Scorecard Status		Trend Values	
G	On Track to Meet Project Objectives	↑	Performance Improving
Y	At Risk of Not Meeting Project Objectives	→	No Change
R	Will Not Meet Project Objectives	↓	Performance Declining

EFC: Estimated Final Cost
LTD: Life to Date
CS: Current State
CT: Current Trend
OS: Outlook to Completion Status

Note:

- Financials are reported as of Period 12 including Carry Forward amounts from 2018 and reflect budget approvals as of March 7, 2019. All other Project Performance Indicators (overall status, schedule and scope) reflect year end results as of December 31, 2019.

AUTOMATIC TRAIN CONTROL (ATC) “LINE 1”

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2015	2022	\$660.9M	\$499.0M	660.9M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$73.3M	\$61.3M	

Project Description:

Objective: To enable reliability and provide customers with increased on-time service and reduced travel time.

TTC is re-signaling Line 1 (Yonge-University-Spadina) to improve reliability and capacity. Benefits include real time central train control with precise train location data, automatic control of train speed and separation between trains which will allow for reduced travel times and more consistent service.

Re-signaling of Line 1 to introduce ATC includes the design, installation, testing and commissioning of an upgraded Centralized Signaling System as well as the design, installation, testing & commissioning of ATC trainborne equipment in the Toronto Rocket fleet.

Project Update & Accomplishments:

- Completed 100% of Phase 3B (St. Patrick to Queen) testing.
- Completed 60% construction (Rosedale to Eglinton Phase)
- Commenced Phase 5 cable tray installation and equipment location surveys are in progress.

Key Issues/Risks & Mitigation Plan:

- Closure cancellations: cancellations continue to be high risk for successful project completion. Mitigation: Prioritize and plan alternate closure weekends.
- Eglinton Crosstown LRT interface: The project timeline is impacting ATC design and implementation. Mitigation: Coordinate with Crosslinx Transit Solutions (CTS), and provide timeframes identifying platform completion dates to avoid schedule impacts to the program.
- Asbestos removal program interface: Delays to the asbestos removal in the Phase 5 area may cause equipment installation delays and determination of final ATC equipment location may cause changes to the asbestos removal program. Mitigation: Coordinate with Alstom to ensure equipment survey accuracy. Maintain communication with Asbestos removal team to coordinate timelines.
- Workcar Testing: Rail Cars and Shops (RC&S) may not be able to provide retrofitted workcars on time for Alstom to complete the Statement of Work by Sept 2022. Mitigation: RC&S is looking into other companies to assist with retrofitting workcars with ATC equipment.

Note:

- EFC has been increased to \$737.0M as part of the 2020 budget process.

Forecast Completion Year: In-service 2022

ATC Phases	Construction and Installation of ATC Assets	Testing	In Service Date	Status
Phase 1 (Yorkdale to Dupont)	100%	100%	Q4 2017	Completed
Phase 2 (VMC to Sheppard West)	100%	100%	Q4 2017	Completed
Phase 2B/2C (Wilson Yard Interface)	100%	100%	Q4 2018	Completed
Phase 3A (Dupont to St. Patrick)	100%	100%	Q2 2019	Completed
Phase 3B (St. Patrick to Queen)	100%	100%	Q1 2020	Completed
Phase 3C (Queen to Rosedale)	100%	20%	Q4 2020	On Schedule
Phase 4 (Rosedale to Eglinton)	22%	0	Q4 2021	On Schedule
Phase 5 (Eglinton to Finch)	0	0	Q3 2022	On Schedule

Note:

- This project is included under 2.4 Signal Systems as indicated in Appendix 1.

EASIER ACCESS III

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2007	2025	\$829.6M	\$315.9M	\$829.6M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
G	Y	\$67.1M	\$69.0M	

Project Description:

Objective: To make all subway stations accessible and compliant with required legislation.

TTC's Easier Access Program will make all remaining subway stations accessible by providing elevators, wide fare gates, automatic sliding doors and signage improvements. Currently, 46 stations are accessible to people with disabilities. This Program also addresses a Legislated requirement to make all subway stations accessible by 2025.

Note: Scarborough Rapid Transit (SRT) – Line 3 station locations are not part of the program as the SRT line will be replaced by the Line 2 East Extension.

Project Update & Accomplishments:

- Construction for station accessibility is on-going at 10 stations: Dupont, Wellesley, Yorkdale, Chester, Runnymede, Wilson, Lansdowne, Bay, Keele and Sherbourne Stations, all remaining stations are in design phase.
- Islington and Warden redevelopments have commenced preliminary design and proceeding towards Stage Gate 3.
- Elevators were put in service at Royal York Station in December 2019.
- Contracts for Donlands and College Stations have been Issued for Bid.

Key Issues/Risks & Mitigation Plan:

- **3rd Party Constraints:** other work priorities/schedule do not align with project schedule. Mitigation: Add dedicated resources, planning utility work in advance and identifying and expropriating property needs early.
- **Design complexities: installing elevators in existing stations may present** larger amount of design complexities and construction challenges. Mitigation: Add additional resources and advancing detail designs.

Note:

- This project is included under 3.9 Building and Structures as indicated in Appendix 1.
- In addition to the Estimated Final Cost (EFC) noted, there is an additional \$250M in estimated project costs post 2028 included in the Capital Investment Plan.

FIRE VENTILATION UPGRADE & SECOND EXITS

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
1998	2028	\$494.6M	\$290.8M	\$599.0
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$16.2M	\$12.4M	

Project Description:

Objective: To improve ventilation in subway tunnels and construct second exits at 14 high priority stations.

Fire Ventilation Upgrade (FVU) is a fire and life safety initiative originating in 1998 to improve ventilation performance in the subway tunnels. The project was expanded in 2003 to include second exits to improve egress at 14 high priority stations.

Project Update & Accomplishments:

- Continuing construction of second exit/entrance at Chester Station.
- Designs in progress for the second exit/entrance for Museum, Summerhill, and Dundas West stations.
- Donlands and College stations – Second Exit/Entrance combined with Easier Access: contracts were Issued for Bid.
- Sheppard West Station and Clanton Park ESP – Subway Ventilation Equipment Replacement was Issued for Bid and closed.

Key Issues/Risks & Mitigation Plan:

- Design complexities for installing second exits present challenges and require design changes. Mitigation: Advance design work and review potential opportunities. Request for additional funding may be identified as projects proceed through the stage gate process.

Note:

- This project is included under 3.9 Building and Structures as indicated in Appendix 1.
- TTC 2019-2028 Budget included unfunded amount of \$104M. In addition to the EFC noted, there is an additional \$1.5B in estimated project costs Post 2028 included through the Capital Investment Plan.

MCNICOLL BUS GARAGE

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2013	2020	\$181.0M	\$122.7M	\$181.0M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
G	G	\$66.7M	\$66.7M	

Project Description:

Objective: To improve the transit system and meet growing ridership demands.

McNicoll Bus Garage is part of TTC's commitment to improving transit service and meeting growing ridership demands. This new bus garage will be fully compliant with Toronto Green Standards and will be the first major Design-Build project for TTC in over a decade. The new facility is being constructed at Kennedy Road and McNicoll Avenue in Scarborough. Project scope is for construction only.

Project Update & Accomplishments:

- Overall project remains on time and on budget within prior project approval by TTC and City of Toronto of \$181M.
- Most major building systems and equipment have been installed and commissioned. Most interior and exterior finishes are complete and the building is undergoing final cleaning and paint touch-ups.
- Contractor is awaiting final Occupancy review by City of Toronto. Substantial Performance of the construction contract will follow shortly thereafter. Building will be available to Bus Maintenance, Bus Transportation, and M&P Stores to begin their fit-out by the end of June.
- Balance of exterior work including landscaping, final paving & line painting, decorative fencing, and signage, will continue after Occupancy and should be complete by early summer.

Key Issues/Risks & Mitigation Plan:

- None

Note:

- This project is included under 3.9 Building and Structures as indicated in Appendix 1.

TORONTO ROCKET/T1 RAIL YARD ACCOMODATION (SUBWAY VEHICLE FACILITIES)

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2010	2025	\$495.4M	\$287.8M	\$495.4M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$40.4M	\$40.0M	

Project Description:

Objective: To increase subway train storage and maintenance capacity.

Design and construction at various subway vehicle maintenance and repair facilities and yards to increase the subway train storage and maintenance capacity for Toronto Rocket (TR) subway trains, including Wilson and Davisville Yards for Line 1, and T1 trains at Greenwood, Keele Yard and Kipling tail tracks for Line 2. Key scope elements include:

- Expansion to the north and south at Wilson Carhouse as well as the installation of new storage tracks within the yard.
- Expansion to north and south at Davisville Carhouse along tracks 3 & 4.
- Conversion of existing CN rail delivery track at Greenwood Yard into a powered and signalled storage track.
- Track and Structural work at Keele Yard to provide additional storage capacity.
- Refurbishment of the box structure within Kipling Station for the installation of a 3rd track to be used for the storage of two subway trains.

Project Update & Accomplishments:

- The contract for ‘Wilson Yard Fencing and Miscellaneous Site Services’ has achieved Substantial Performance.
- Contractor for Wilson Carhouse Expansion has completed the slab on grade, mezzanine deck and structural steel for the HVAC overhaul/office block and installation of the bridge crane in stage one.
- Greenwood Yard – the contract for the Track & Structures building renovation and the pendent retrofit for the carhouse has achieved substantial performance. All tracks in the shop now have new traction power system.
- Contractor for “Greenwood Carhouse – Facility Pressure Washers, Heaters, and Lighting Upgrade” commenced installation of pressure washer on Track 32 and 33.

Key Issues/Risks & Mitigation Plan:

- None

Note:

- This project is included under 3.9 Building and Structures as indicated in Appendix 1.

PURCHASE OF BUSES

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
Ongoing	2028	\$1,064.5M	\$726.1M	\$2,867.2M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$351.9M	\$237.7M	

Project Description:

Objective: To a) replace old vehicles and grow our fleet to increase overall system capacity and reduce overcrowding; b) utilize vehicles which will be more accessible, more comfortable and more reliable; c) aid the City of Toronto in meeting its TransformTO target of an 80% reduction in greenhouse gas emissions by 2050 by adopting zero emission buses.

This ongoing program covers the procurement of buses according to the Green Bus Technology Plan approved by the Board in June 2018. The 2019 delivery plan includes 260 new buses, including 200 latest generation hybrid-electric buses and 60 zero-emissions battery electric buses (eBus).

The Green Procurement Plan currently projects a mix of hybrid electric and fully electric bus procurements for the years 2021-2024 as we transition to a steady-state procurement of solely fossil fuel free/zero emissions buses in 2025 and a zero-emissions fleet by 2040.

Project Update & Accomplishments:

Hybrid Buses (200):

- 200 of 200 hybrid-electric buses scheduled for delivery in 2019 have been delivered, all buses are available for service.

eBuses (60):

- 23 of the 60 buses were delivered in 2019. The remaining buses were expected to be received by Q1 2020.

Charging System (Garages):

- Completed installation of charging systems at all 3 garages (for 60 buses).

Key Issues/Risks & Mitigation Plan:

- BYD's delivery schedule slipped further from October 2019 to January 2020.
- After successfully delivering the base bus orders, both New Flyer and Proterra reported slips in schedule for their remaining 15 eBuses from Q4 2019 to Q1 2020.
- All three vendors are bound by Liquidated Damages in the amount of 50% of the contract value should the buses be delivered after the PTIF deadline of March 31, 2020.

PURCHASE OF 204 NEW STREETCARS

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2009	2019	\$1,186.5M	\$1044.1M	\$1,186.5M

Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$357.6M	\$235.7M	

Project Description:

Objective: To: a) replace legacy vehicles and grow our fleet to increase overall system capacity and reduce overcrowding; b) utilize vehicles which will be more accessible, and more reliable.

This project provides for the purchase of 204 new fully accessible new streetcars to replace the existing fleet of 196 Canadian Light Rail Vehicles (CLRVs), 52 Articulated Light Rail Vehicles (ALRVs) and additional vehicles for ridership growth and congestion relief efforts.

Project Update & Accomplishments:

- 202 of the 204 streetcars were shipped by the end of 2019. In total, 6 cars remained to be fully commissioned and handed over to the TTC. Despite this shortfall, the total 2019 deliveries represent approximately a 30% increase from 2018. The remaining streetcars were expected to be received by Q1 2020.
- The next phase of the program will focus on: completing the delivery and commissioning of outstanding cars, completing all outstanding vehicle reliability improvement; addressing warranty items; and strengthening the inventory supply chain.
- Root cause analysis of technical issues affecting vehicle reliability (Mean Distance Between Failure) is ongoing.

Key Issues/Risks & Mitigation Plan:

- Issue: Contractual reliability target (Mean Distance Between Failures) not met.
Mitigation: Root cause analysis of technical issues as well as the implementation of various modification programs.
- Risk: Lack of availability of consignment spares impacts vehicle availability.
Mitigation: Weekly review of parts availability and monitoring parts at all production/vendor sites.

Note:

- This project is included under 4.18 Purchase of Streetcars.
- The Capital Investment Plan identifies the need for the procurement of up to an additional 100 streetcars for ridership growth, which is currently not fully funded.

WHEEL-TRANS 10-YEAR TRANSFORMATION PROGRAM

Program Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2017	2021	\$49.8M	\$17.3M	\$49.8M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
R	Y	\$11.4M	\$7.0M	

Project Description:

Objective: To support the new service delivery model which integrates Wheel-Trans customers into the conventional network.

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

Project Update & Accomplishments:

- Scheduling and Dispatch Project: Phase 2 implementation date will be determined post completion of a successful test cycle.
- Family of Services (FOS) project: Weekly FOS survey indicates a significant number of respondents are satisfied with FOS travel and would recommend to other customers.
- Access Hubs: All 14 sites are either completed or near completion. Commissioning into service pending Occupancy Permits.
Change Management: Ran TTC TV ads on Family of Services and conducted town halls with conventional and Wheel Trans operators.

Key Issues/Risks & Mitigation Plan:

- Continuing to deliver customer communication to mitigate a potential negative response related to re-registration and conditional trip matching. Legacy customers are voluntarily choosing to re-register indicating that customer communications have been effective.

Note:

- This project is included under 3.9 Building and Structures as indicated in Appendix 1.

FARE COLLECTION / PRESTO

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2012	2020	\$81.8M	\$56.9M	\$128.8M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$18.2M	\$5.5M	

Project Description:

Objective: To implement a holistic approach to fare enforcement to enable us to a) measure fare compliance system-wide, across buses, streetcars and stations; b) extend the use of Automatic Passenger Counting technology on buses and streetcars to provide accurate measurement of boardings compared to fares paid. The project encompasses all activities to transform TTC fare collection processes including TTC's scope of work supporting Metrolinx activities for the implementation of the PRESTO farecard 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 TTC's business requirements.

Project Update & Accomplishments:

- Commenced revenue service PRESTO Payment Solution for Wheel Trans Sedan Taxis.
- The installation of the PRESTO Mobile Fare Payment Application (MFPA) continues for Wheel Trans sedan taxis (Beck - 805 and Co-Op 616). All installations are expected to be completed by the end of Q2 2020.
- Ongoing operational improvements for cash collection at stations and carhouses, remote device monitoring, and enhanced performance reporting.

Key Issues/Risks & Mitigation Plan:

- Business Requirements per Master Service Agreement (MSA): Fundamental business requirements such as Open Payment functionality (fare payment with debit/credit cards) and Service Level Agreements (SLAs) remain undelivered. Ongoing negotiations with Metrolinx to confirm delivery plan.
- Availability and system performance data from Metrolinx may be subject to inaccuracies in some instances. Work continues with Metrolinx to improve the methodology for determining availability including the frequency in which the devices are polled for availability status. Technical changes are also being developed to improve the reliability of card readers and other PRESTO equipment.

Note:

- This project is included under 5.4 Fare System as indicated in Appendix 1.
- Faregate program is not included in this up-date.
- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.

An additional \$47 million is included as an unfunded amount for fare collection capital work to address the collection of cash on surface vehicles and other long term fare collection items outside of the PRESTO implementation activities.

STATIONS TRANSFORMATION

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2017	2024	\$50.8M	\$16.1M	\$50.8M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	G	\$13.1M	\$8.0M	

Project Description:

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

Stations Transformation involves the modernization of how we staff our stations, our communications infrastructure and our business processes. A major part of the program, the introduction of Customer Service Agents (CSA), builds on the transformation of the customer experience by adding a world-class skillset and increasing engagement with our customers. These Agents are mobile, enabling them to approach and offer assistance to customers who face barriers in accessing and using the TTC. Their mobility along with infrastructure improvements (including upgraded passenger assistance intercoms(PAI), public announcement system (PA) and CCTV cameras) will lead to the increased safety and security of our stations, employees and customers.

The milestones include those funded by the Stations Transformation budget and those that are highly related but separately funded. They are listed here together to provide a holistic picture of the status of the program in conjunction with its interdependencies.

Project Update & Accomplishments:

- Completed construction of the following Zone Hubs which are now operational: Union; Kipling & Bloor-Yonge. These centralized zone hubs have enabled staff to respond to customer inquiries & emergencies in a more efficient manner resulting in enhanced customer experience.
- Received Customer Service Agent (CSA) Interest Arbitration Award on May 2, 2019.
- CSA staffing implemented at Lawrence West and Yorkdale, bringing the total to 10 stations with CSAs.

Key Issues/Risks & Mitigation Plan:

- Contractor Performance Delays: Issues in contractor performance could delay construction completion and zone hub operational dates of remaining hubs, impacting CSA go-live dates. Mitigation: Detailed contractor evaluation, monitoring, management and recovery.
- Fare Policy: Cash on surface strategy and bulk strategy delayed. Action Plan: Coordinate with Farecard and Customer Experience teams.

Note:

- This program is included under 3.9 Building and Structures as indicated in Appendix 1.

VISION (CAD/AVL)

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2016	2020	\$117.2M	\$69.3M	\$117.2M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	Y	\$37.3M	\$28.1M	

Project Description:

Objective: Implement VISION (Vehicle Information System and Integrated Operations Network) to a) modernize the backbone of how the TTC tracks, manages and communicates with any one of our 2,000 buses and streetcars on the streets at any moment; b) provide better information for scheduling and planning; c) provide better real-time information to provide operators and customers during their trip; d) provide more efficient Transit Signal Priority to keep TTC vehicles moving; and e) provide more efficient yard management and crew sign-ups.

This modernization initiative was initiated to transform the way in which the TTC manages its surface fleet of buses and streetcars. The core component of the program is the implementation of a new Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) System which is being installed on the TTC's bus and streetcar fleets. The system provides for: data and voice communications, automatic vehicle location; automated stop display, stop announcements, vehicle performance monitoring; integration with the onboard camera and automatic passenger counting systems; tools and automation of selected business rules. In addition, the program will implement an integrated Yard Management System at all streetcar car-houses and bus garages.

Project Update & Accomplishments:

- Completed the installation of the VISION system on 28 of 204 Low Floor Light Rail Vehicles (LFLRVs).
- Completed Yard Management indoor installations at Arrow Road, switches have been installed and powered up.
- Completed 80% of Eglinton indoor electrical work and 80% of outdoor gateways.

Key Issues/Risks & Mitigation Plan:

- Installation of VISION on streetcars: The vendor supply of materials and issues encountered during testing pose risks to the installation schedule. Working with vendor to expedite issue resolution.

Note: This project is included under 7.1 Computer Equipment & Software as indicated in Appendix 1.

SAP ENTERPRISE RESOURCE PLANNING PROJECT

Project Start	Forecast Completion Year	Approved Budget	Spend to Date	Estimated Final Cost
2015	2023	\$93.2M	\$70.0M	\$163.2M
Overall Performance		2019 Budget	2019 Actuals	
Current Status	Outlook to Completion			
Y	G	\$13.9M	\$5.7M	

Project Description:

Objective: To implement an industry-standard enterprise software solution that modernizes our core systems and aligns with the City of Toronto's SAP Roadmap.

Project Update & Accomplishments:

SAP Projects - Phase II

- Completed 100% of the Accounts Payable Release 1 Solution Design Workshops.
- Completed 90% of the SAP Learning Management Solution Design Workshops.
- Completed draft RFP for Time and Attendance procurement and executing final round of revisions
- Kicked off business focused discovery sessions to initiate the documentation of the existing legacy business processes for the Accounts Receivable and Job Based Costing System Assessment project.
- Completed first phase of the proposal evaluation for the shared service SAPIT contingent labour RFP in collaboration with the City's IT department.
- Completed the soft launch of the Employee Mobile Communication app for the pilot group of employees.
- Kicked off SAP Phase 3 Materials and Procurement planning.

Key Issues/Risks & Mitigation Plan:

- None

Note:

- The EFC represents the total SAP program cost with the future phases.
- This project is included under 7.1 Computer Equipment & Software as indicated in Appendix 1.
- Approved budget and completion year adjusted to reflect approval to end of 10-year envelope.
- Approval for funding is required to deliver the program from 2021-2029.