



# TTC 15-Year Capital Investment Plan & 2019 – 2028 Capital Budget & Plan

**Date:** January 24, 2019  
**To:** TTC Board  
**From:** Chief Financial Officer

## Summary

---

The purpose of this report is to

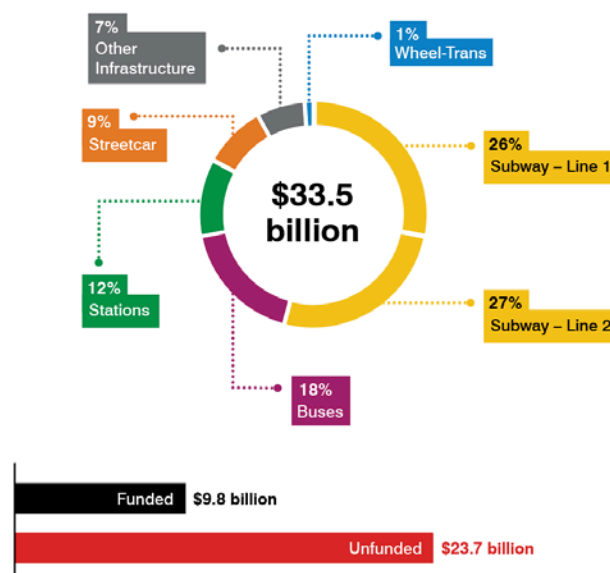
1. Submit for Board consideration the TTC 15-Year Capital Investment Plan (CIP), ***Making Headway, Capital Investments to Keep Transit Moving***, and
2. Seek approval for the staff-recommended 2019 – 2028 TTC Capital Budget and Plan.

### 15-Year Capital Investment Plan

Development of the Capital Investment Plan began following approval of the TTC Corporate Plan (2018 – 2022) in January 2018. The Corporate Plan identified Transforming for Financial Sustainability as its critical path #1, noting that fiscal sustainability depends on our ability to fund what the TTC is expected to deliver.

The TTC undertook a comprehensive review of all state-of-good-repair needs and capital requirements needed to support ridership growth. Total needed capital investments of \$33.5 billion over the next 15 years were identified.

### 2019 – 2033 Investment Summary



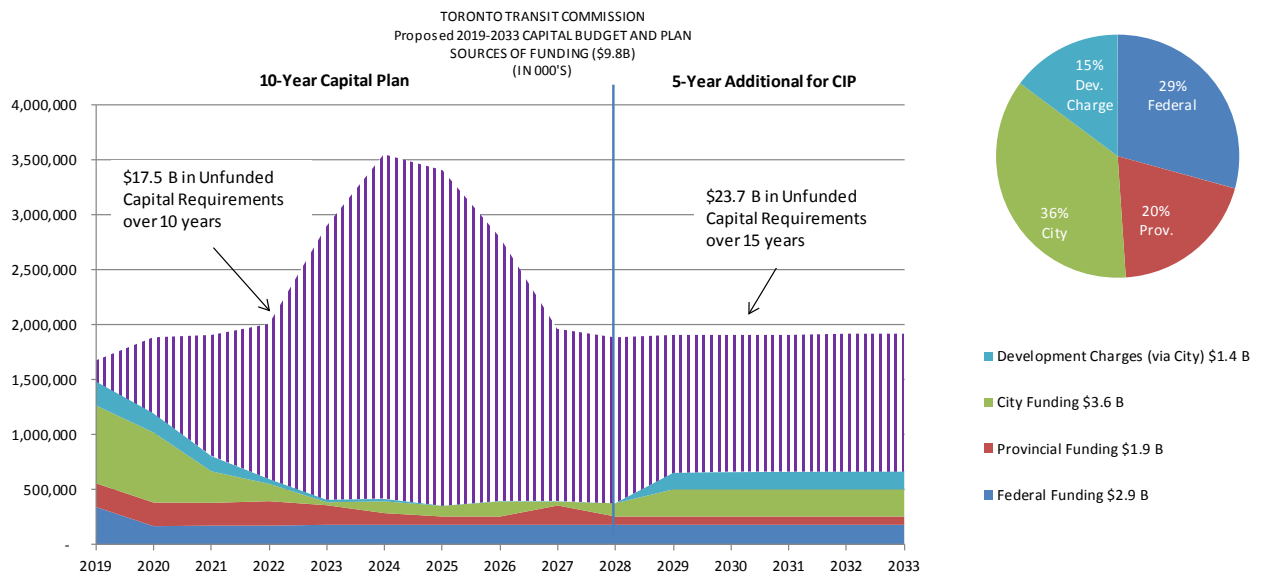
The Capital Investment Plan is intended to provide:

- ✓ A clear overview of the state-of-good-repair and growth investments that the TTC needs to make over the next 15 years;
- ✓ Increase focus on good repair and growth, as distinct from transit expansion;
- ✓ Be crystal clear about which capital needs are funded vs. unfunded;
- ✓ Put the need for funding into the larger economic context; and
- ✓ Demonstrate the value of investing and the risks of failing to invest.

### 2019 – 2028 Capital Budget and Plan (Base Capital Program)

The recommended 2019 - 2028 Capital Budget and Plan reflects the capital needs identified and cash flowed in the first 10 years of the Capital Investment Plan. The Capital Investment Plan details \$33.5 billion in capital funding requirements over a 15 year planning period, of which nearly \$24 billion is required from 2019 to 2028.

Traditional sources will fund \$6.5 billion in capital expenditures over the 10-Year Capital Budget & Plan, resulting in a funding gap of \$17.5 billion:



### Overview of the recommended 2019-2028 Capital Budget & Plan:

- The proposed 2019 Capital Budget and associated \$1.5 billion in funding aligns with 2019 affordability limits.
- The overall requirement for the base capital program for the ten year planning period from 2019 to 2028 is \$23.9 billion, \$17.5 billion greater than the current capital funding capacity.
- \$429 million (\$177 million Federal share) in remaining funding is available as part of the Federal Public Transit Infrastructure Fund (PTIF) Phase 1 program.
  - Under PTIF, total funding of up to \$1.712 billion gross (\$856 million Federal

share) has been made available to the City of Toronto/TTC for transit upgrades and improvements.

- Capital projects commenced after April 1, 2016 and completed by March 31, 2020 may receive up to 50% funding of eligible costs.

## **2019 – 2028 Capital Budget and Plan - Transit Expansion Projects**

A 10-Year Capital Plan of \$3.8 billion is also recommended for transit expansion projects which are separate and distinct from the Capital Investment Plan. Transit expansion projects include:

- Line 2 East Extension (formerly Scarborough Subway Extension) - \$117 million in 2019 and \$3.4 billion in funding over the 10 year planning period.
- Relief Line South - Funding of \$135 million in 2019 and \$250 million in 2020 to advance planning and design of the project, which includes \$325 million in added funding to implement a schedule improvement strategy including early work opportunities. The City has identified \$162.5 million to support this added funding and the remaining 50% will be requested from our funding partners.
- Waterfront Transit – Completion of the preliminary design for the Exhibition to Dufferin Gate Loop with funding of \$27 million from 2019 to 2021 included in the 10-Year Capital Plan.
- Toronto-York Spadina Subway Extension (TYSSE) – Following the successful opening on December 17, 2017, \$60 million will be spent in 2019 to support project closeout. This funding is consistent with prior budget approval and does not reflect any additional project funding.

The TTC 2019-2028 Capital Budget Summary is contained in Appendix A. The full Project Detail Listing revised for 2019 to clearly indicate project funding status (commonly known as the “Blue Pages”) is included in the supplementary link.

## **Recommendations**

---

It is recommended that the TTC Board:

- 1) Receive the Capital Investment Plan, Making Headway – Capital Investments to Keep Transit Moving;
- 2) Direct the CEO to maintain the Capital Investment Plan on an annual basis, refining cost and schedule estimates as projects progress through stage gates;
- 3) Direct the CEO to begin steps required to prioritize critical base capital needs in advance of the Board’s consideration of the 2020 Capital Budget;
- 4) Direct the CEO to engage the City Manager to pursue a tri-party partnership between the Federal government, Provincial government and the City of Toronto for a dedicated, long-term, stable and predictable funding plan to address the TTC’s

rolling stock, state-of-good-repair, capacity building, service improvement and growth needs;

- 5) Forward the Capital Investment Plan to the City Budget Committee and the City Manager to inform the City's Long-term Financial Plan;
- 6) Approve the recommended TTC 2019-2028 Base Capital Budget & Plan of \$6.453 billion as outlined in Appendix A of this report;
- 7) Approve the recommended TTC 2019-2028 Capital Budget & Plan of \$3.832 billion for transit expansion projects including the Line 2 Subway Extension (formerly Scarborough Subway Extension), Relief Line South, Waterfront Transit and Toronto-York Spadina Subway Extension as outlined in Appendix A of this report; and
- 8) Forward this report to the City Budget Committee and the City Manager as the official 2019 - 2028 Capital Budget and Plan submission for the Toronto Transit Commission.

## Financial Summary

---

The Capital Investment Plan includes \$33.5 billion in base capital needs over a 15 year period. As reflected in the table below the total of all amounts in the 2018 approved 10-Year Capital Plan was \$12.6 billion. The \$20.9 billion difference between the two plans is made up of two components:

1. \$11.3 billion from new or revised project estimates related in particular to critical subway capacity enhancements, bus purchases and related bus infrastructure; and
2. \$9.6 billion from the extension of the time horizon from 10 years to 15 years.

Description \$Billions	Years 1 - 10	Years 11 - 15	15-Year Total
<b>2018 Capital Budget Process</b>			
2018 - 2027 Funded 10-Year Plan	6.5	0.0	6.5
Unfunded Projects	2.7	0.5	3.2
Projects for Future Consideration	2.2	2.8	5.0
Deferred Consideration	1.2	0.0	1.2
<b>2018 Capital Budget Process (sub-total)</b>	<b>12.6</b>	<b>3.3</b>	<b>15.9</b>
<b>Capital Investment Plan Changes</b>			
Line 1 Capacity Enhancements	5.5		5.5
Line 2 Capacity Enhancements	1.0	1.5	2.5
Western Yard (Excluding Land Acquisition)	2.1		2.1
Ninth Bus Garage	0.5		0.5
Bus Procurement Program (Increase Only)	0.9	1.4	2.3
T1 (Subway Car) Life Extension Overhaul	0.7		0.7
Added Years 11 - 15 and Other Changes	0.6	3.4	4.0
<b>Capital Investment Plan Changes (sub-total)</b>	<b>11.3</b>	<b>6.3</b>	<b>17.6</b>
<b>2019 - 2033 Capital Investment Plan Total</b>	<b>23.9</b>	<b>9.6</b>	<b>33.5</b>

Traditional sources will fund \$6.5 billion in capital expenditures over the 10-Year Capital Plan, resulting in a funding gap of \$17.5 billion. Over the 15 years of the CIP planning period, \$23.7 billion is currently unfunded if current funding levels continue.

<b>Funding Sources \$Billions</b>	<b>Years 1 - 10</b>	<b>*Years 11 - 15</b>	<b>15-Year Total</b>
Provincial Funding	1.5	0.4	1.9
Federal Funding	2.0	0.9	2.9
City Funding (Including TTC Internal Funding)	2.4	1.2	3.6
Development Charges	0.6	0.8	1.4
<b>Total Funding</b>	<b>6.5</b>	<b>3.3</b>	<b>9.8</b>
<b>Remaining Unfunded</b>	<b>17.4</b>	<b>6.2</b>	<b>23.7</b>

*\*Funding sources in years 11 - 15 are based on current levels of city, provincial and federal funding included in the 10-Year Capital Plan*

## **Equity/Accessibility Matters**

---

The TTC has a strong organizational commitment 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, regardless of ability.

One of the cornerstones of the Capital Investment Plan is Accessibility, ensuring the customer journey is easy, frictionless and barrier-free, regardless of accessibility needs.

The Capital Investment Plan includes the TTC's Easier Access Program, which is on track to make all subway stations accessible by 2025 with elevators, wide fare-gates and automatic sliding doors. It also notes several improvements elsewhere across the transit system, including accessible low-floor streetcars, accessible buses, new Wheel-Trans buses, a growing number of accessible bus and streetcar stops.

## **Decision History**

---

At its meeting on March 19, 2018, Executive Committee adopted with amendments the City of Toronto Long-Term Financial Plan.

Guided by the Long Term Financial Plan, the 2019 Budget Process, Directions and Guidelines report provided City Programs and Agencies with debt affordability targets. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EX32.1>

## Comments

---

### **2019 – 2033 Capital Investment Plan**

Since 2014, the TTC has been increasing its emphasis on the risk of unfunded capital needs. At-risk projects were submitted to the City and presented to Council and the Board. In response, City Council directed staff on multiple occasions to work with federal and provincial governments to secure additional funding.

Aside from gains achieved through the Public Transit Infrastructure Fund (PTIF) Phase 1, limited funding progress since 2014 has occurred and as a result, the TTC as part of the development of the Corporate Plan 2018 – 2022 included Critical Path #1, Transform for Financial Sustainability.

Fiscal sustainability in the context of the Capital Program has been defined by our ability to fund what the TTC is expected to deliver over the long-term. Work on the Capital Investment Plan began shortly after approval of the Corporate Plan as a means to clearly define what the TTC is expected to deliver over the next 15 years.

Following completion of the comprehensive review of base capital needs, the TTC identified \$33.5 billion in projects requirements over the next 15 years, split between the various modes and other infrastructure requirements. Please refer to the Capital Investment Plan for additional document detail.

### Process

To develop the CIP, every TTC department was engaged and requested to review and submit their long-term base capital needs focusing on:

- Health & safety, accessibility and legislative requirements;
- Current state of existing assets;
- Fleet replacement, maintenance and storage requirements; and
- Projected existing-system capacity requirements.

Extensive interviews were then conducted across the TTC to assess and gather further detail on project needs and benefits. Key City stakeholders were also engaged.

### Accuracy of Capital Cost Estimates

In many cases, CIP capital cost estimates are preliminary rough order of magnitude projections intended for planning purposes only.

The planning and design of large capital projects proceeds through a series of “stage gates”, which increase certainty and accountability and reduce risk. At each gate, estimates are further refined. As a result, these estimates will inevitably be subject to change

## 2019 CAPITAL BUDGET

The recommended 10-Year Base Capital Plan of \$6.453 billion includes \$1.490 billion in project funding required for our 2019 Base Capital Budget.

TTC 2019 BASE CAPITAL BUDGET (Funded)		(\$Millions)
<b><u>Vehicle Related Programs:</u></b>		
Purchase of Buses - SOGR & Growth	182.7	
Purchase of Buses - Service Improvements	139.1	
Purchase of Future Wheel Trans Buses	7.6	
Purchase of Subway Cars - Growth	2.4	
Purchase of StreetCars (204) - SOGR	331.7	
Vehicle Overhaul Programs (Bus, Subway, Streetcar)	77.6	
Other (Non-Revenue Vehicle Purchase & Overhaul)	23.1	
		<b>\$764.2 51%</b>
<b><u>Infrastructure Related Programs:</u></b>		
Track Programs	57.6	
Electrical Systems	39.3	
Signal Systems (Incl. Line 1 (YUS \$ 65M) and Line 2 (BD \$ 0.2M))	77.5	
Finishes	19.2	
Equipment	26.6	
Yards & Roads	8.3	
Bridges & Tunnels	31.9	
Other Buildings & Structures		
- <i>New Subway Maintenance &amp; Storage Facility</i>	41.0	
- <i>Fire Ventilation Upgrade</i>	17.8	
- <i>Easier Access Phase III</i>	58.4	
- <i>TR/T1 (Subway Car) Rail Yard Accommodation(Subway Vehicle Facilities)</i>	34.6	
- <i>McNicoll Bus Garage</i>	46.0	
- <i>Streetcar Carhouse facility Renewal</i>	11.2	
- <i>New Transit Control Centre</i>	10.0	
- <i>Wilson Garage Ventilation Upgrade</i>	9.6	
- <i>Wheel-Trans 10 Yr Transformation Program</i>	10.6	
- <i>Duncon Shop Ventilation Upgrade</i>	8.3	
- <i>Stations Transformation</i>	12.2	
- <i>Other Building &amp; Structure Projects</i>	<u>55.4</u>	
		<b>\$725.8 49%</b>
Fare System	17.4	
Information Technology	94.1	
Other Projects	38.8	
<b>Total - Base Funded Program</b>	<b><u>1,490.0</u></b>	

## 2019-2028 CAPITAL BUDGET & PLAN

The TTC has identified nearly \$24 billion in base capital needs required during the 10-Year Capital Plan. Available funding over this time period is limited to approximately \$6.5 billion, resulting in a funding shortfall of \$17.5 billion over the 10 year planning period.

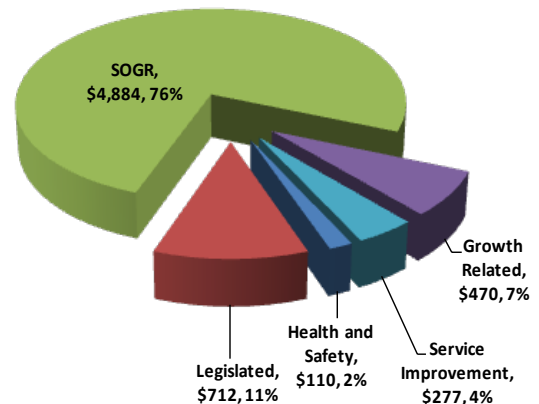
The table below highlights capital needs by year from 2019 to 2028, available funding sources over that same period and required adjustments for capacity to spend and additions to the unfunded list to balance the 10-Year Capital Plan to available funds.

2019 - 2028 Capital Budget and Plan											
(\$Millions)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	10-Year Total
2019 - 2028 Proposed Capital Plan Request	1,673.6	1,883.5	1,907.7	2,003.2	2,889.7	3,548.8	3,399.3	2,797.6	1,962.0	1,880.7	23,946.1
<b>Funding Sources</b>											
Provincial Funding	215.0	214.8	206.8	222.1	177.7	105.9	75.2	75.2	175.2	75.2	1,543.2
Federal Funding (Including PTIF)	344.0	169.1	174.1	174.1	181.7	181.7	181.7	181.7	181.7	181.7	1,951.6
Debt Funding	309.1	572.0	261.8	146.2	14.9	97.7	87.5	121.7	20.2	105.5	1,736.7
2017 Carry Forward Funding (Debt portion)	224.4										224.4
Capital Financing Reserve	146.8	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.4
TTC Internal (Depreciation)	25.7	25.3	23.0	9.9	10.5	7.1	8.0	13.2	13.2	13.3	149.2
Development Charges	223.2	178.6	137.6	45.0	24.9	21.9	5.4	3.4	3.5	2.6	646.1
TTC Other	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	17.6
<b>Total Funding Sources</b>	<b>1,490.0</b>	<b>1,199.2</b>	<b>805.1</b>	<b>599.1</b>	<b>411.5</b>	<b>416.1</b>	<b>359.5</b>	<b>397.0</b>	<b>395.6</b>	<b>380.1</b>	<b>6,453.2</b>
<b>Funding Shortfall</b>											
	183.6	684.3	1,102.6	1,404.1	2,478.2	3,132.8	3,039.7	2,400.5	1,566.4	1,500.6	17,492.9
<b>Reductions to address shortfall:</b>											
Capacity to Spend (CTS) Adjustments	47.8	81.7	81.7	74.0	65.5	72.6	74.3	80.4	88.3	88.8	755.1
Existing Unfunded Projects	135.8	602.6	1,020.9	1,330.0	2,412.8	3,060.2	2,965.4	2,320.2	1,478.0	1,411.9	16,737.8
<b>Total CTS Adjustments and Unfunded Projects</b>	<b>183.6</b>	<b>684.3</b>	<b>1,102.6</b>	<b>1,404.1</b>	<b>2,478.3</b>	<b>3,132.8</b>	<b>3,039.7</b>	<b>2,400.5</b>	<b>1,566.3</b>	<b>1,500.7</b>	<b>17,492.9</b>

Funded expenditures in the order of \$6.453 billion for the next 10 years from 2019 to 2028 within the TTC's 10-Year Capital Plan are highlighted below by project category.

### Base Capital Plan Ten Year Capital Needs By Major Categories (\$ millions)

	2019	2020 to 2028	2019 to 2028	Total 10 Year %
Health and Safety	13	97	110	2%
Legislated	85	627	712	11%
SOGR	1,077	3,807	4,884	76%
Growth Related	122	348	470	7%
Service Improvement	193	84	277	4%
<b>Total Funded Request</b>	<b>1,490</b>	<b>4,963</b>	<b>6,453</b>	<b>100%</b>



\* **Note:** the 10 year Gross Base Capital Request is \$23.9 billion

As reflected above, over \$5.7 billion or about 89% of the Funded 10-Year Capital



Budget and Plan is committed to State-of-Good-Repair (76%), Legislated (11%), and Health and Safety (2%) projects. This represents what is needed to keep the Commission's capital assets in good repair and provides for the orderly replacement of assets at the end of their useful life.

Key elements of the funded base capital program over the next ten years include:

Vehicle acquisitions (\$2.1 billion):

- ✓ Purchase of Buses (replacement, service improvements and growth) (\$548 million)
- ✓ Wheel Trans Bus replacement (\$71 million)
- ✓ Balance of the 420 Toronto Rocket Subway car order (\$14 million)
- ✓ Balance of the 204 Streetcar order (\$367 million)
- ✓ Vehicle Overhaul Programs (\$991 million comprising of: Bus \$352 million; Streetcar \$82 million; Subway Car \$557 million)
- ✓ Other (\$85 million)

Building and Infrastructure Projects (\$4.4 billion):

***Transit Infrastructure Projects (\$1.6 billion)***

- ✓ Track replacement (\$595 million)
- ✓ Traction Power (\$123 million)
- ✓ Streetcar overhead system rebuild (\$54 million)
- ✓ Power Distribution/Electrical Systems (\$71 million)
- ✓ Communications (\$89 million)
- ✓ Signal Systems (\$67 million)
- ✓ Installation of automatic train control and re-signalling on Line 1 (YUS subway line) (\$215 million)
- ✓ Initial work on the installation of automatic train control and re-signalling on Line 2 (BD subway line) (\$8 million)
- ✓ Streetcar network upgrades for new Streetcars (\$7 million)
- ✓ Various bridges and tunnels infrastructure rehabilitation (\$362 million)

***Transit Station and Related Projects (\$1.0 billion)***

- ✓ Subway Escalator Overhaul and Replacement Programs (\$114 million)
- ✓ Easier Access Phase III (\$590 million)
- ✓ Upgrading of fire ventilation equipment and second exits in the subway (\$218 million)
- ✓ Subway Facility Renewal (\$54 million)
- ✓ Stations Transformation (\$41 million)

***Transit Garages/Yards and Related Projects (\$1.0 billion)***

- ✓ Bus Hoists (\$43 million)
- ✓ Roofing rehabilitation and paving programs (\$236 million)

- ✓ TR/T1 (Subway car) Rail Yard Accommodation (Subway Vehicle Facilities) (\$244 million)
- ✓ McNicoll Bus Garage (\$122 million)
- ✓ Land Acquisition for the New Subway Maintenance & Storage Facility (\$41 million)
- ✓ Wilson Garage Ventilation Upgrade (\$42 million)
- ✓ Streetcar Carhouse Facility (\$50 million)
- ✓ Ninth Bus Garage – Property Acquisition Only (\$200 million)

**Other Transit Infrastructure Projects (\$0.8 billion)**

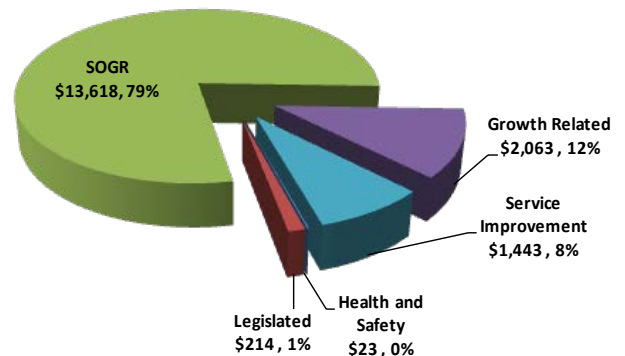
- ✓ Backflow Preventers (\$23 million)
- ✓ Wheel Trans Transformation (\$37 million)
- ✓ TTC Presto and fare and revenue collection and infrastructure needs (\$25 million)
- ✓ Environmental Programs (\$104 million)
- ✓ Upgrades to information technology assets (\$260 million)
- ✓ Service Planning (\$68 million)
- ✓ Other (\$274 million)

**UNFUNDED TTC CAPITAL PROJECTS**

As a result of current funding limitations, the 10-Year Base Capital Plan includes unfunded expenditures in the order of \$17.5 billion for the next 10 years from 2019 to 2028 reflected by budget category in the table below.

**Base Capital Plan  
Ten Year Capital Unfunded Needs  
By Major Categories  
(\$ millions)**

	2020 to 2019 to	2019 to 2019 to	
	2019	2028	2028
Health and Safety		23	23
Legislated	5	209	214
SOGR	132	13,618	13,750
Growth Related	45	2,018	2,063
Service Improvement	2	1,441	1,443
Total Funded Request	184	17,309	17,493
			Total 10 Year %
			0%
			1%
			79%
			12%
			8%
			100%



\* **Note:** the 10 year Gross Base Capital Request is \$23.9 billion

As noted above, nearly \$14 billion or about 80% of unfunded projects in the 10-Year Capital Plan are related to State-of-Good-Repair (79%) and Legislated (1%) requirements.

Of the \$17.5 billion in unfunded projects, \$16.7 billion reflect projects that are considered unfunded and the remaining \$755 million reflects capacity to spend

adjustment. The following table summarizes the projects included on the unfunded list with the cash flow reductions by year.

<b>Unfunded Projects</b>											
<b>(\$Millions)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>10-Year Total</b>
Capacity to Spend (CTS) Adjustments (Various Projects)	47.8	81.7	81.7	74.0	65.5	72.6	74.3	80.4	88.3	88.8	755.1
Unfunded Projects:											
Line 1 Capacity Enhancement	57.0	168.0	279.0	420.0	1,235.0	1,161.0	1,007.0	752.0	346.0	73.0	5,498.0
New Subway Maintenance and Storage Facility (Western Yard)	0.0	26.1	68.0	113.0	170.0	501.0	471.0	409.0	305.0	140.0	2,203.1
Purchase of 40ft Diesel Buses Reduction SOGR	0.0	0.0	174.7	177.1	196.5	265.7	224.8	293.6	200.2	270.1	1,802.6
Bloor-Yonge Capacity Improvements	0.0	18.6	137.4	223.7	299.9	264.9	112.8	0.0	0.0	0.0	1,057.3
Line 2 Capacity Enhancement	0.0	0.0	0.0	0.0	0.0	27.0	76.0	127.0	191.0	561.0	982.0
New Streetcar Maintenance and Storage Facility	0.5	61.0	15.0	28.0	29.1	230.0	271.5	145.8	85.9	33.2	900.0
Purchase of 60 Streetcars for Ridership Growth Reduction	0.0	0.0	0.0	0.0	0.0	45.9	151.7	149.3	14.0	0.0	360.9
Platform Edge Doors - YUS Line	0.7	5.9	11.7	5.0	46.4	61.8	62.8	64.2	4.3	94.4	357.1
T1 (Subway Car) Life Extension Overhaul Reduction	0.0	0.0	0.0	66.1	138.9	63.5	63.5	0.0	0.0	0.0	332.0
Building and Structures Budget Reduction	0.0	11.4	4.2	37.4	91.1	91.1	94.7	0.0	0.0	0.0	329.9
Bloor-Danforth ATC Resignalling Reduction	0.0	0.0	0.0	10.5	13.5	45.0	51.3	53.0	55.8	62.6	291.7
Collision Centre for Bus Maintenance Reduction	0.0	0.0	0.0	0.0	0.0	62.5	62.5	62.5	62.5	0.0	250.0
Bus Heavy Overhaul Facility	0.0	0.0	0.0	0.0	0.0	60.0	60.0	60.0	60.0	10.0	250.0
Streetcar Facility Upgrade Reduction	0.0	0.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	240.0
Office Consolidation	44.0	74.0	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	210.0
Purchase of Streetcars for Ridership Growth	0.0	0.0	0.0	0.2	2.2	19.8	126.4	1.3	0.0	0.0	149.8
Purchase of Future Wheel-Trans Buses Reduction	1.4	22.0	14.7	16.1	19.3	8.2	1.4	7.8	8.5	38.0	137.6
New Transit Control - ITS Centre Reduction	0.0	41.5	39.0	36.0	8.0	0.0	0.0	0.0	0.0	0.0	124.5
Fire Ventilation Upgrade Reduction	0.0	0.0	0.0	0.0	0.0	39.4	27.2	19.6	9.1	9.1	104.4
Enhanced Station Access Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	100.0
Davenport Garage Renewal	0.0	0.1	0.3	0.3	0.5	0.5	0.6	90.6	0.0	0.0	93.0
Lighting in Open Cut - Subway Right of Way	0.0	0.3	0.9	3.9	6.2	8.8	10.6	16.8	24.1	0.0	71.6
SAP ERP Implementation Reduction	0.0	0.0	15.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	70.0
Building and Structures Budget Reduction	0.0	3.5	36.8	17.8	7.3	4.2	0.0	0.0	0.0	0.0	69.6
ITS-End User Devices	4.5	4.0	6.7	8.9	8.1	6.1	6.1	7.0	8.7	8.9	69.0
Subway Bus Platform Ventilation Equipment Replacement Reduction	0.0	0.0	0.0	6.5	15.0	15.6	10.3	0.0	0.0	0.0	47.3
TTC PRESTO Project Reduction	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
Surface Track Budget Adjustment	1.8	34.1	2.8	3.7	3.7	0.0	0.0	0.0	0.0	0.0	46.0
Purchase Auto Non-Revenue Vehicles Reduction	7.7	2.3	7.6	3.0	2.9	6.6	5.8	2.4	1.8	2.9	43.1
Other Projects (Various Projects)	18.2	82.9	85.0	107.9	74.1	36.6	32.6	23.2	16.2	23.7	500.4
<b>Total CTS Adjustments and Unfunded Projects</b>	<b>183.6</b>	<b>684.3</b>	<b>1,102.6</b>	<b>1,404.1</b>	<b>2,478.3</b>	<b>3,132.8</b>	<b>3,039.7</b>	<b>2,400.5</b>	<b>1,566.3</b>	<b>1,500.7</b>	<b>17,492.9</b>

As noted the unfunded list is comprised of \$16.738 billion in unfunded projects and \$755 million in capacity to spend adjustments.

- Capacity to spend adjustments do not reflect a decrease in capital need but rather a reduction to ensure cash flows for capital projects (exclusive of buses) are aligned with the TTC's capacity to spend/deliver on each project on an annual basis.
- Capacity to spend adjustments are consistent with Council budget directions that require:

***Annual cash flow funding estimates be examined to more realistically match cash flow spending to project activities and timing, especially in the first 5 years of the Capital Plan's timeframe***

- During the 2019 to 2028 Capital Budget process, a detailed analysis was undertaken and capacity-to-spend adjustments were applied based on project performance and prior year spending rates, resulting in the following cash flow changes:

Capacity to Spend Adjustments (\$755 million)

- Track Replacement Programs (\$197 million)
- Bus Overhaul (\$117 million)
- Electrical Systems Programs (\$89 million)
- Bridges & Tunnels (\$78 million)
- Subway Car Overhaul (\$62 million)
- Buildings & Structures Programs (\$61 million)
- Information Technology System (\$59 million)
- Equipment (\$31 million)
- Finishes (\$20 million)
- Tools, Machinery and Equipment (\$18 million)
- Automotive/Rail Non-Revenue Programs (\$16 million)
- Environmental Programs (\$4 million)
- Transit Priority Project (\$3 million)

## **Transit Expansion Projects**

In addition to the base capital budget, staff are recommending a 10-Year Capital Plan for the construction and/or initial design of various Transit Expansion projects with requested funding of \$3.8 billion from 2019 to 2028.

The Capital Plan is comprised of four projects as detailed below:

- **Toronto-York Spadina Subway Extension** (TYSSE) – Following the successful opening on December 17, 2017, \$60 million will be spent in 2019 to support project closeout. This funding is consistent with prior budget approval and does not reflect any additional project funding.
- The **Line 2 East Extension** (formerly Scarborough Subway Extension) project is a 6.2 km extension of Line 2 from Kennedy Station to Scarborough Centre, via Eglinton Avenue, Danforth Road and McCowan Road.

- While the 10-Year Capital Plan includes \$3.360 billion in funding for this project (between 2019 to 2028), this project has an overall budget of \$3.560 billion. This estimate, which includes \$132 million to extend the life of the SRT until the Line 2 East Extension commences operation and a further \$123 million to decommission and demolish the SRT, was based on 0% design. The project budget and schedule will be re-baselined in Stage Gate 3 report to City Council in April 2019, factoring in delivery strategy and schedule risk analysis.
- The **Relief Line South** is a new 8 stop, 7.5 km subway from Pape-Danforth to Downtown, interchanging with Line 1 at Queen and Osgoode Stations. The 10-Year Capital Plan includes funding of \$385 million to complete current work only, which includes completing the preliminary design and engineering to between 15% and 30% complete, including developing a project budget and schedule.
- Included in the \$385 million requested Capital Plan is \$325 million in funding added as part of the 2019 Budget process to carry out schedule improvements and early work opportunities. Of this \$325 million in additional funding, \$162.5 million or 50% is City funded and the remaining amount will be requested from our funding partners.
- **Waterfront Transit** – Several co-ordinated streetcar projects are in planning or design to improve and expand surface transit along the Waterfront. The 10-Year Capital Plan includes \$27 million in funding to complete the preliminary design for the Exhibition to Dufferin Gate Loop.

## Contact

---

Stephen Conforti  
Head of Finance & Treasurer  
416-393-3654  
Stephen.Conforti@ttc.ca

## Signature

---

Dan Wright  
Chief Financial Officer

## Attachments

---

Attachment A – 2019 – 2028 Capital Plan Summary  
Attachment B – 2019 – 2028 Capital Plan Funding Summary

**TORONTO TRANSIT COMMISSION  
2019-2028 CAPITAL PLAN SUMMARY  
NET OF CAPACITY-TO-SPEND ADJUSTMENT AND UNFUNDED PROJECTS**

**Appendix A**

Programs	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019 to 2028
\$Millions											
<b>Infrastructure Related Programs:</b>											
<b>Tracks:</b>	<b>57.6</b>	<b>73.2</b>	<b>69.6</b>	<b>59.2</b>	<b>60.1</b>	<b>49.1</b>	<b>53.5</b>	<b>59.5</b>	<b>56.7</b>	<b>56.7</b>	<b>595.2</b>
1.1 Subway Track	18.8	39.2	45.2	37.6	38.2	33.6	34.1	34.1	35.8	32.9	349.5
1.2 Surface Track	38.8	34.1	24.5	21.6	21.9	15.6	19.3	25.4	20.9	23.8	245.7
<b>Signals, Electrical, Communications:</b>	<b>116.8</b>	<b>121.3</b>	<b>122.1</b>	<b>60.6</b>	<b>33.6</b>	<b>31.0</b>	<b>30.6</b>	<b>33.4</b>	<b>37.6</b>	<b>40.4</b>	<b>627.4</b>
2.1 Traction Power	17.3	17.8	15.9	15.7	16.5	16.5	17.4	18.6	20.9	21.0	177.5
2.2 Power Distribution	7.3	9.3	7.6	8.4	6.2	5.9	5.9	6.5	7.0	6.7	70.9
2.3 Communications	14.7	11.5	11.8	7.3	7.6	5.5	5.6	6.6	8.0	10.8	89.3
2.4 Signal Systems	12.3	17.6	14.3	9.1	3.3	3.1	1.7	1.7	1.8	1.9	66.7
2.4 YUS/BD Resignalling	65.2	65.2	72.6	20.0							223.0
<b>Buildings and Structures:</b>	<b>401.2</b>	<b>659.3</b>	<b>415.2</b>	<b>321.2</b>	<b>261.1</b>	<b>207.9</b>	<b>144.3</b>	<b>106.6</b>	<b>76.3</b>	<b>73.5</b>	<b>2,666.5</b>
3.1 Finishes	19.2	26.5	19.9	21.2	12.8	7.9	6.5	7.9	6.9	7.0	135.8
3.2 Equipment	26.6	34.5	29.4	14.9	11.7	10.2	11.4	16.1	16.1	18.0	186.7
3.3 Yards & Roads	8.3	20.3	16.7	17.5	11.1	10.2	10.4	10.5	10.7	10.8	126.5
3.4 Bridges & Tunnels	31.9	35.7	42.3	32.7	37.0	35.3	37.2	37.7	38.3	33.5	361.6
3.9 Fire Ventilation Upgrade	17.8	33.9	53.2	60.9	52.0						217.7
3.9 Easier Access Phase III	58.4	70.6	82.4	96.5	93.5	83.2	69.7	35.6			590.0
3.9 Leslie Barns	3.6	1.4									4.9
3.9 Toronto Rocket (Subway Car) Yard & Storage Track Accommodation	34.6	75.5	69.3	46.6	12.5	5.7					244.1
3.9 McNicoll Bus Garage	46.0	52.8	22.9								121.7
3.9 Other Buildings & Structures	154.8	308.3	79.0	30.9	28.4	53.9	10.4	3.4	4.4	4.2	677.6
<b>Tooling, Machinery and Equipment</b>	<b>26.7</b>	<b>6.4</b>	<b>3.5</b>	<b>3.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.4</b>	<b>2.8</b>	<b>3.0</b>	<b>55.5</b>
5.1 Shop Equipment	5.0	2.0	2.0	1.8	1.4	1.4	1.4	1.3	1.7	0.9	18.9
5.2 Revenue & Fare Handling Equipment	1.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	5.5
5.3 Other Maintenance Equipment	3.1	1.7	1.1	0.8	0.8	0.7	0.7	0.7	0.8	0.8	11.3
5.4 Fare System	17.4	2.4									19.8
<b>Environmental Issues</b>	<b>18.6</b>	<b>28.0</b>	<b>30.5</b>	<b>4.2</b>	<b>3.8</b>	<b>3.6</b>	<b>3.7</b>	<b>3.8</b>	<b>3.9</b>	<b>3.9</b>	<b>103.9</b>
6.1 Environmental Program	18.6	28.0	30.5	4.2	3.8	3.6	3.7	3.8	3.9	3.9	103.9
<b>Computer Equipment &amp; Software</b>	<b>94.1</b>	<b>68.6</b>	<b>19.5</b>	<b>8.4</b>	<b>9.9</b>	<b>6.8</b>	<b>7.9</b>	<b>17.0</b>	<b>16.3</b>	<b>11.3</b>	<b>259.6</b>
7.1 IT Systems/Infrastructure	94.1	68.6	19.5	8.4	9.9	6.8	7.9	17.0	16.3	11.3	259.6
<b>Other:</b>	<b>10.9</b>	<b>19.5</b>	<b>11.1</b>	<b>7.6</b>	<b>5.5</b>	<b>4.8</b>	<b>4.9</b>	<b>1.9</b>	<b>1.9</b>	<b>2.1</b>	<b>70.1</b>
9.1 Furniture & Office Equipment	0.2	0.4	0.3	0.2	0.3	0.1	0.3	0.2	0.1	0.3	2.4
9.2 Service Planning	10.7	19.1	10.9	7.4	5.1	4.6	4.6	1.8	1.8	1.8	67.7
<b>Subtotal - Infrastructure Related Programs</b>	<b>725.8</b>	<b>976.5</b>	<b>671.5</b>	<b>464.1</b>	<b>376.4</b>	<b>305.7</b>	<b>247.2</b>	<b>224.6</b>	<b>195.5</b>	<b>190.9</b>	<b>4,378.2</b>
<b>Vehicle Related Programs:</b>											
4.11 Purchase of Buses	321.8	87.2	52.5	86.2							547.7
4.11 Purchase of Wheel Trans Buses	7.6	2.0				12.1	12.5	4.8	26.8	4.8	70.8
4.12 Purchase of Subway Cars	2.4	7.4	3.8								13.7
4.13 Bus Overhaul	40.1	45.1	31.6	11.2	11.2	41.4	42.0	42.6	43.2	43.8	352.3
4.15 Streetcar Overhaul	3.7	3.0	5.0	9.2	9.3	9.4	9.6	13.1	9.9	10.1	82.2
4.16 Subway Car Overhaul	33.8	26.3	22.4	14.7	9.8	46.1	46.7	109.9	118.1	128.9	556.8
4.18 Purchase of Streetcars	331.7	35.3									366.9
4.21 Purchase Non-Revenue Vehicles	2.4	2.5	1.5	2.3	2.4	0.8	0.9	1.4	1.5	0.8	16.6
4.22 Rail Non-Revenue Vehicle Overhauls	3.1	4.3	7.7	3.2	1.3	0.6	0.6	0.6	0.6	0.6	22.6
4.23 Purchase Rail Non-Revenue Vehicle	17.5	9.6	9.1	8.1	1.2						45.6
<b>Subtotal - Vehicle Related Programs</b>	<b>764.2</b>	<b>222.7</b>	<b>133.6</b>	<b>135.0</b>	<b>35.1</b>	<b>110.4</b>	<b>112.3</b>	<b>172.5</b>	<b>200.1</b>	<b>189.2</b>	<b>2,075.0</b>
<b>TOTAL - BASE PROGRAM</b>	<b>1,490.0</b>	<b>1,199.2</b>	<b>805.1</b>	<b>599.1</b>	<b>411.5</b>	<b>416.1</b>	<b>359.6</b>	<b>397.0</b>	<b>395.6</b>	<b>380.1</b>	<b>6,453.2</b>
<b>Transit Expansion Programs:</b>											
Line 2 East Extension	117.1	243.9	387.8	551.0	487.5	608.1	459.3	227.5	225.9	51.7	3,359.7
Relief Line South	135.0	250.1									385.0
Waterfront Transit	0.3	2.6	24.2								27.1
Toronto-York Spadina Subway Extension (TYSSE)	60.0										60.0
<b>TOTAL - TRANSIT EXPANSION PROGRAM</b>	<b>312.4</b>	<b>496.5</b>	<b>412.0</b>	<b>551.0</b>	<b>487.5</b>	<b>608.1</b>	<b>459.3</b>	<b>227.5</b>	<b>225.9</b>	<b>51.7</b>	<b>3,831.8</b>
<b>TOTAL - BASE &amp; TRANSIT EXPANSION PROGRAMS</b>	<b>1,802.4</b>	<b>1,695.7</b>	<b>1,217.1</b>	<b>1,150.1</b>	<b>899.0</b>	<b>1,024.2</b>	<b>818.8</b>	<b>624.5</b>	<b>621.5</b>	<b>431.8</b>	<b>10,285.1</b>

**TTC 2019-2028 CAPITAL PLAN FUNDING SUMMARY**

**APPENDIX B**

	\$Millions										
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2019-2028</u>
<b>2019-2028 Proposed Capital Budget Request</b>	1,673.6	1,883.5	1,907.7	2,003.2	2,889.7	3,548.8	3,399.3	2,797.6	1,962.0	1,880.7	23,946.1
<b>Funding Sources</b>											
Provincial Gas Tax	109.9	135.0	206.8	222.1	177.7	105.9	75.2	75.2	175.2	75.2	1,358.4
Canada Strategic Infrastructure Fund (CSIF) - Interest	0.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Capital Reserve	0.0	57.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.9
204 Streetcar Funding	105.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.2
<b>Total Provincial Funding</b>	<b>215.0</b>	<b>214.8</b>	<b>206.8</b>	<b>222.1</b>	<b>177.7</b>	<b>105.9</b>	<b>75.2</b>	<b>75.2</b>	<b>175.2</b>	<b>75.2</b>	<b>1,543.2</b>
Base Federal Gas Tax - 5 cent (population)	169.4	166.6	174.1	174.1	181.7	181.7	181.7	181.7	181.7	181.7	1,774.4
Public Transit Infrastructure Fund (PTIF)	174.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	177.2
<b>Total Federal Funding</b>	<b>344.0</b>	<b>169.1</b>	<b>174.1</b>	<b>174.1</b>	<b>181.7</b>	<b>181.7</b>	<b>181.7</b>	<b>181.7</b>	<b>181.7</b>	<b>181.7</b>	<b>1,951.6</b>
TTC Internal (Depreciation)	25.7	25.3	23.0	9.9	10.5	7.1	8.0	13.2	13.2	13.3	149.2
Other Reserves / Funding Partners (Water; Roads DC - Transit Priorities)	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	17.6
Development Charges - Transit	223.2	178.6	137.6	45.0	24.9	21.9	5.4	3.4	3.5	2.6	646.1
<b>Total Other Funding</b>	<b>250.7</b>	<b>205.7</b>	<b>162.4</b>	<b>56.6</b>	<b>37.2</b>	<b>30.7</b>	<b>15.1</b>	<b>18.4</b>	<b>18.5</b>	<b>17.7</b>	<b>812.9</b>
City Debt Target - CFO Recommended	309.1	572.0	261.8	146.2	14.9	97.7	87.5	121.7	20.2	105.5	1,736.7
Total Carryforward Funding (Debt Portion)	224.4										224.4
City Funding - Capital Financing Reserve Fund (re: asset monetization)	146.8	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.4
<b>Total City / Other Funding</b>	<b>931.0</b>	<b>815.3</b>	<b>424.2</b>	<b>202.8</b>	<b>52.0</b>	<b>128.4</b>	<b>102.6</b>	<b>140.1</b>	<b>38.7</b>	<b>123.2</b>	<b>2,958.4</b>
<b>Total Funding</b>	<b>1,490.0</b>	<b>1,199.2</b>	<b>805.1</b>	<b>599.1</b>	<b>411.5</b>	<b>416.1</b>	<b>359.5</b>	<b>397.0</b>	<b>395.6</b>	<b>380.1</b>	<b>6,453.2</b>
<b>Funding Shortfall/(Surplus)</b>	<b>183.6</b>	<b>684.3</b>	<b>1,102.7</b>	<b>1,404.1</b>	<b>2,478.3</b>	<b>3,132.8</b>	<b>3,039.7</b>	<b>2,400.5</b>	<b>1,566.4</b>	<b>1,500.6</b>	<b>17,492.9</b>
<b>Unfunded Projects</b>	(135.8)	(602.6)	(1,020.9)	(1,330.0)	(2,412.8)	(3,060.2)	(2,965.4)	(2,320.2)	(1,478.0)	(1,411.9)	(16,737.8)
<b>Capacity to Spend Budget Adjustment</b>	(47.8)	(81.7)	(81.7)	(74.0)	(65.5)	(72.6)	(74.3)	(80.4)	(88.3)	(88.8)	(755.1)
<b>Net Funding Shortfall/(Surplus)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>