# EX2.5I

**For Action**

# 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

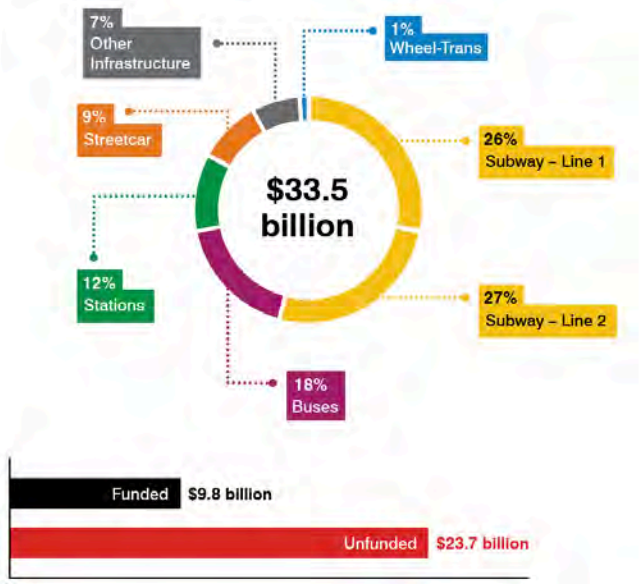
1. Submit for Board consideration the TTC 15-Year Capital Investment Plan (CIP), ***Making Headway, Capital Investments to Keep Transit Moving***, and
2. Seek approval for the staff-recommended 2019 – 2028 TTC Capital Budget and Plan.


### 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**



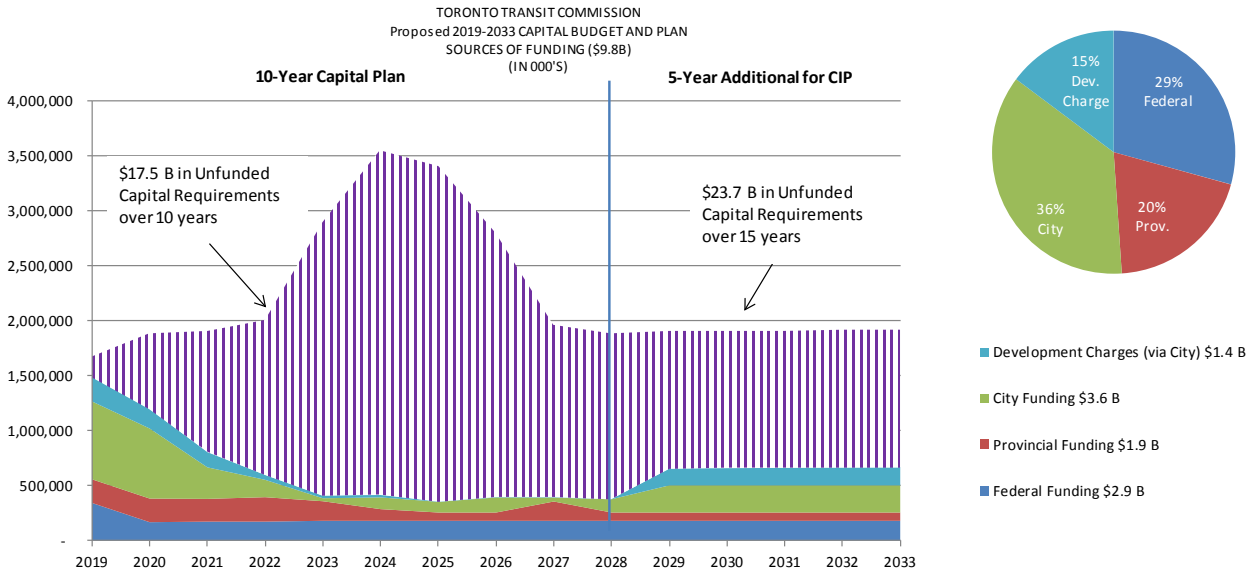
The Capital Investment Plan is intended to provide:

- ✓ 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<br>$Billions | Years<br>1 - 10 | Years<br>11 - 15 | 15-Year<br>Total |
|---|---|---|---|
| **2018 Capital Budget Process** | | | |
| 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 |
| **2018 Capital Budget Process (sub-total)** | **12.6** | **3.3** | **15.9** |
| **Capital Investment Plan Changes** | | | |
| 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 |
| **Capital Investment Plan Changes (sub-total)** | **11.3** | **6.3** | **17.6** |
| **2019 - 2033 Capital Investment Plan Total** | **23.9** | **9.6** | **33.5** |

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.

| Funding Sources $Billions | Years 1 - 10 | *Years 11 - 15 | 15-Year Total |
|---|---|---|---|
| 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 |
| **Total Funding** | **6.5** | **3.3** | **9.8** |
| **Remaining Unfunded** | **17.4** | **6.2** | **23.7** |

**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) | | | |
|---|---|---|---|---|
| **Vehicle Related Programs:** | | | | |
| 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 | **$764.2** | **51%** |
| Purchase of StreetCars (204) - SOGR | | 331.7 | | |
| Vehicle Overhaul Programs (Bus, Subway, Streetcar) | | 77.6 | | |
| Other (Non-Revenue Vehicle Purchase & Overhaul) | | 23.1 | | |
| **Infrastructure Related Programs:** | | | | |
| 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 | | | | |
| *- New Subway Maintenance & Storage Facility* | *41.0* | | | |
| *- Fire Ventilation Upgrade* | *17.8* | | | |
| *- Easier Access Phase III* | *58.4* | | | |
| *- TR/T1 (Subway Car) Rail Yard Accommodation(Subway Vehicle Facilities)* | *34.6* | | **$725.8** | **49%** |
| *- McNicoll Bus Garage* | *46.0* | | | |
| *- Streetcar Carhouse facility Renewal* | *11.2* | | | |
| *- New Transit Control Centre* | *10.0* | | | |
| *- Wilson Garage Ventilation Upgrade* | *9.6* | | | |
| *- Wheel-Trans 10 Yr Transformation Program* | *10.6* | | | |
| *- Duncon Shop Ventilation Upgrade* | *8.3* | | | |
| *- Stations Transformation* | *12.2* | | | |
| *- Other Building & Structure Projects* | *55.4* | 315.1 | | |
| Fare System | | 17.4 | | |
| Information Technology | | 94.1 | | |
| Other Projects | | 38.8 | | |
| **Total - Base Funded Program** | | **1,490.0** | | |

## 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.

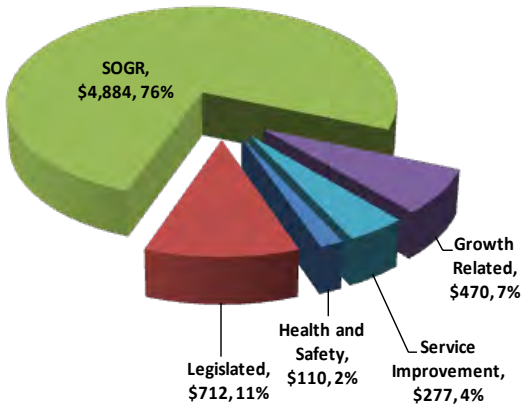
The table below highlights capital needs by year from 2019 to 2028, available funding sources over that same period and required adjustments for capacity to spend and additions to the unfunded list to balance the 10-Year Capital Plan to available funds.

| 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** |
| | | | | | | | | | | | |
| **Funding Sources** | | | | | | | | | | | |
| 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** |
| **Total Funding Sources** | **1,490.0** | **1,199.2** | **805.1** | **599.1** | **411.5** | **416.1** | **359.5** | **397.0** | **395.6** | **380.1** | **6,453.2** |
| | | | | | | | | | | | |
| **Funding Shortfall** | **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** |
| **Reductions to address shortfall:** | | | | | | | | | | | |
| 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** |
| **Total CTS Adjustments and Unfunded Projects** | **183.6** | **684.3** | **1,102.6** | **1,404.1** | **2,478.3** | **3,132.8** | **3,039.7** | **2,400.5** | **1,566.3** | **1,500.7** | **17,492.9** |

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% |
| Total Funded Request | 1,490 | 4,963 | 6,453 | 100% |




* ***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)***

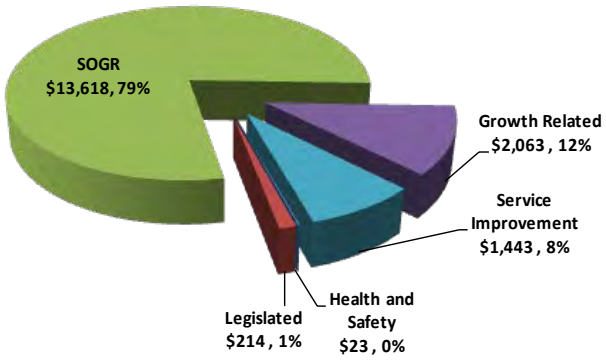
- ✓ Backflow Preventers ($23 million)
- ✓ Wheel Trans Transformation ($37 million)
- ✓ TTC Presto and fare and revenue collection and infrastructure needs ($25 million)
- ✓ Environmental Programs ($104 million)
- ✓ Upgrades to information technology assets ($260 million)
- ✓ Service Planning ($68 million)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

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

| Unfunded Projects | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **($Millions)** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** | **10-Year Total** |
| 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 Equpment 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 Vehecles 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 |
| **Total CTS Adjustments and Unfunded Projects** | **183.6** | **684.3** | **1,102.6** | **1,404.1** | **2,478.3** | **3,132.8** | **3,039.7** | **2,400.5** | **1,566.3** | **1,500.7** | **17,492.9** |

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

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## 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**

$Millions

| Programs | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2019 to 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Infrastructure Related Programs:** | | | | | | | | | | | |
| ***Tracks:*** | ***57.6*** | ***73.2*** | ***69.6*** | ***59.2*** | ***60.1*** | ***49.1*** | ***53.5*** | ***59.5*** | ***56.7*** | ***56.7*** | ***595.2*** |
| 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 |
| ***Signals, Electrical, Communications:*** | ***116.8*** | ***121.3*** | ***122.1*** | ***60.6*** | ***33.6*** | ***31.0*** | ***30.6*** | ***33.4*** | ***37.6*** | ***40.4*** | ***627.4*** |
| 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 |
| ***Buildings and Structures:*** | ***401.2*** | ***659.3*** | ***415.2*** | ***321.2*** | ***261.1*** | ***207.9*** | ***144.3*** | ***106.6*** | ***76.3*** | ***73.5*** | ***2,666.5*** |
| 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 | 14.0 | 11.7 | 10.2 | 11.4 | 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 |
| ***Tooling, Machinery and Equipment*** | ***26.7*** | ***6.4*** | ***3.5*** | ***3.0*** | ***2.5*** | ***2.5*** | ***2.5*** | ***2.4*** | ***2.8*** | ***3.0*** | ***55.5*** |
| 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 |
| ***Environmental Issues*** | ***18.6*** | ***28.0*** | ***30.5*** | ***4.2*** | ***3.8*** | ***3.6*** | ***3.7*** | ***3.8*** | ***3.9*** | ***3.9*** | ***103.9*** |
| 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 |
| ***Computer Equipment & Software*** | ***94.1*** | ***68.6*** | ***19.5*** | ***8.4*** | ***9.9*** | ***6.8*** | ***7.9*** | ***17.0*** | ***16.3*** | ***11.3*** | ***259.6*** |
| 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 |
| ***Other:*** | ***10.9*** | ***19.5*** | ***11.1*** | ***7.6*** | ***5.5*** | ***4.8*** | ***4.9*** | ***1.9*** | ***1.9*** | ***2.1*** | ***70.1*** |
| 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 |
| **Subtotal - Infrastructure Related Programs** | **725.8** | **976.5** | **671.5** | **464.1** | **376.4** | **305.7** | **247.2** | **224.6** | **195.5** | **190.9** | **4,378.2** |
| **Vehicle Related Programs:** | | | | | | | | | | | |
| 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 |
| **Subtotal - Vehicle Related Programs** | **764.2** | **222.7** | **133.6** | **135.0** | **35.1** | **110.4** | **112.3** | **172.5** | **200.1** | **189.2** | **2,075.0** |
| **TOTAL - BASE PROGRAM** | **1,490.0** | **1,199.2** | **805.1** | **599.1** | **411.5** | **416.1** | **359.6** | **397.0** | **395.6** | **380.1** | **6,453.2** |
| **Transit Expansion Programs:** | | | | | | | | | | | |
| 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 |
| **TOTAL - TRANSIT EXPANSION PROGRAM** | **312.4** | **496.5** | **412.0** | **551.0** | **487.5** | **608.1** | **459.3** | **227.5** | **225.9** | **51.7** | **3,831.8** |
| **TOTAL - BASE & TRANSIT EXPANSION PROGRAMS** | **1,802.4** | **1,695.7** | **1,217.1** | **1,150.1** | **899.0** | **1,024.2** | **818.8** | **624.5** | **621.5** | **431.8** | **10,285.1** |

## TTC 2019-2028 CAPITAL PLAN FUNDING SUMMARY

**APPENDIX B**

$Millions

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2019-2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2019-2028 Proposed Capital Budget 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 |
| **Funding Sources** | | | | | | | | | | | |
| 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 |
| **Total 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** |
| 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 |
| **Total Federal Funding** | **344.0** | **169.1** | **174.1** | **174.1** | **181.7** | **181.7** | **181.7** | **181.7** | **181.7** | **181.7** | **1,951.6** |
| 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 |
| **Total Other Funding** | **250.7** | **205.7** | **162.4** | **56.6** | **37.2** | **30.7** | **15.1** | **18.4** | **18.5** | **17.7** | **812.9** |
| 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 |
| **Total City / Other Funding** | **931.0** | **815.3** | **424.2** | **202.8** | **52.0** | **128.4** | **102.6** | **140.1** | **38.7** | **123.2** | **2,958.4** |
| **Total Funding** | **1,490.0** | **1,199.2** | **805.1** | **599.1** | **411.5** | **416.1** | **359.5** | **397.0** | **395.6** | **380.1** | **6,453.2** |
| **Funding Shortfall/(Surplus)** | **183.6** | **684.3** | **1,102.7** | **1,404.1** | **2,478.3** | **3,132.8** | **3,039.7** | **2,400.5** | **1,566.4** | **1,500.6** | **17,492.9** |
| **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) |
| **Capacity to Spend Budget Adjustment** | (47.8) | (81.7) | (81.7) | (74.0) | (65.5) | (72.6) | (74.3) | (80.4) | (88.3) | (88.8) | (755.1) |
| **Net Funding Shortfall/(Surplus)** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** |

CAPITAL INVESTMENT PLAN

# Making Headway

## Capital Investments to Keep Transit Moving

2019–2033

# headway

(/ˈhed wā/) *noun*

1. forward movement or progress, especially when the way is difficult.
2. the average interval between trains, streetcars, or buses. The shorter the headway, the more passengers carried per hour.

# Making Headway — Capital Investments to Keep Transit Moving

January 2019

## From the Chief Executive Officer

In January 2018, the TTC published a new Corporate Plan that clearly laid out our priorities for the next five years. At the top of the list was transforming for financial sustainability. “Fiscal sustainability,” we said, “depends on our ability to fund what the TTC is being asked to deliver over the long term.” We committed to providing better budget information for improved long-term decision-making. Over the past 12 months, we have undertaken a massive, multi-department review of all of our assets. The result is this Capital Investment Plan.

Toronto’s transit system is hailed as among the most multi-modal systems in the world, with seamless integration between buses, streetcars, Wheel-Trans and the subway. The TTC’s interdependent network of fleet, track, power, maintenance and other infrastructure moves more than half a billion people annually.

Funding for critical maintenance and system improvements is necessary. Projects that have been approved are still awaiting funding. Line 2 Capacity Enhancement is unfunded. Buses past 2021 are unfunded. The expansion of Bloor-Yonge Station, which is needed to accommodate ridership growth even before planned transit expansion, is unfunded.

The TTC Way, which was introduced in our Corporate Plan, establishes clear guidelines for how we at the TTC work with each other, with customers and with our partners, including our funding partners. We respect each other’s expertise, work together to achieve our common goal, offer solutions rather than roadblocks and seek outcomes that work for everyone.

It’s in that spirit that we submit this Capital Investment Plan and look forward to continuing the conversation.

**Richard J. Leary**
Chief Executive Officer
Toronto Transit Commission

# Table of Contents

# The Transit Imperative

## Every weekday, about 1.7 million rides are taken on Toronto's public transit system, which is one of the most integrated multi-modal transit networks in the world. It carries our customers to work, to school, to appointments, to cultural events, to meetings with friends and meals with family, to their communities and back home again.

Accounting for 85 per cent of all transit trips in the GTA, the TTC is the primary public sector connector of people, leisure, services and employment in an economy that represents 20 per cent of Canada's total GDP. As such, it plays a unique role in the vibrancy and health of our province and our nation.

Canada's largest city is a place where multi-modal mobility thrives, regional economic opportunities and cross-boundary travel boom, new development abounds and emissions targets are met. But continuing to realize these benefits depends on the investments we make in transit.

A backlog of deferred maintenance has grown, putting the safety, accessibility and sustainability of our transit system at risk despite the need to move more customers more reliably than ever before.

Delivering the future we all want requires a new approach to predictable, sustainable funding for capital investments.

## It is easy for the need to invest in our base transit system to be overshadowed by the need to fund transit expansion. But investing to properly maintain and increase the capacity of our current system is arguably even more important.

Population growth and planned transit expansion projects such as SmartTrack, the Relief Line South, the Line 2 East Extension to Scarborough and new LRT lines on Eglinton and Finch West will add hundreds of thousands more customers to Toronto's transit network.

The result will dramatically increase pressure on a system already grappling with an aging fleet, outdated signals on key subway lines, inadequate maintenance and storage capacity, and tracks and infrastructure in need of constant repair.

Without the investments outlined in this Plan, service reliability and crowding will worsen, as the maintenance backlog grows and becomes more difficult and costlier to fix. This is the fate now faced by some other major transit systems in North America that allowed their assets to badly deteriorate.

Our customers, our city, our province and our nation can't afford to let that happen.


126 CHRISTIE
TO CHRISTIE STN
TD
salsa
TORONTO
Festival

# This Capital Investment Plan provides a full and clear view of what is required to keep transit in Toronto moving, based on the province's Regional Transit Plan and the Council-approved plans of the City of Toronto.

In 2014, the TTC began including "unfunded projects" in its annual budget submissions. These included necessary state-of-good-repair, safety, legislated, reliability-improvement and capacity-enhancement projects for which funding had not been provided. Despite the TTC's and the City's efforts to advocate with other levels of government, the list has grown each year.

In line with its commitment to transform for financial sustainability, the TTC redesigned its capital budgeting process over the course of 2018, including asset-based budgeting and capital projections based on asset life. All departments embarked on a comprehensive review of base capital needs over the next 15 years. The results are summarized in this Plan.

**This document is not a fully costed, detailed budget. In many cases, the estimates are preliminary. Given the scale of the investment required, however, it would be irresponsible to delay conversations about funding until estimates are exact.**

## What are base capital investments?

Base capital investments are investments in our current fleet, facilities and infrastructure, as distinct from planned expansion projects like new subway extensions. Base capital investments include undertaking major state-of-good-repair maintenance to preserve current levels of service, replacing vehicles, infrastructure and equipment at the end of their life, and making improvements to support projected ridership demand.

## How accurate are capital cost estimates?

In many cases, the estimates in this Plan 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.

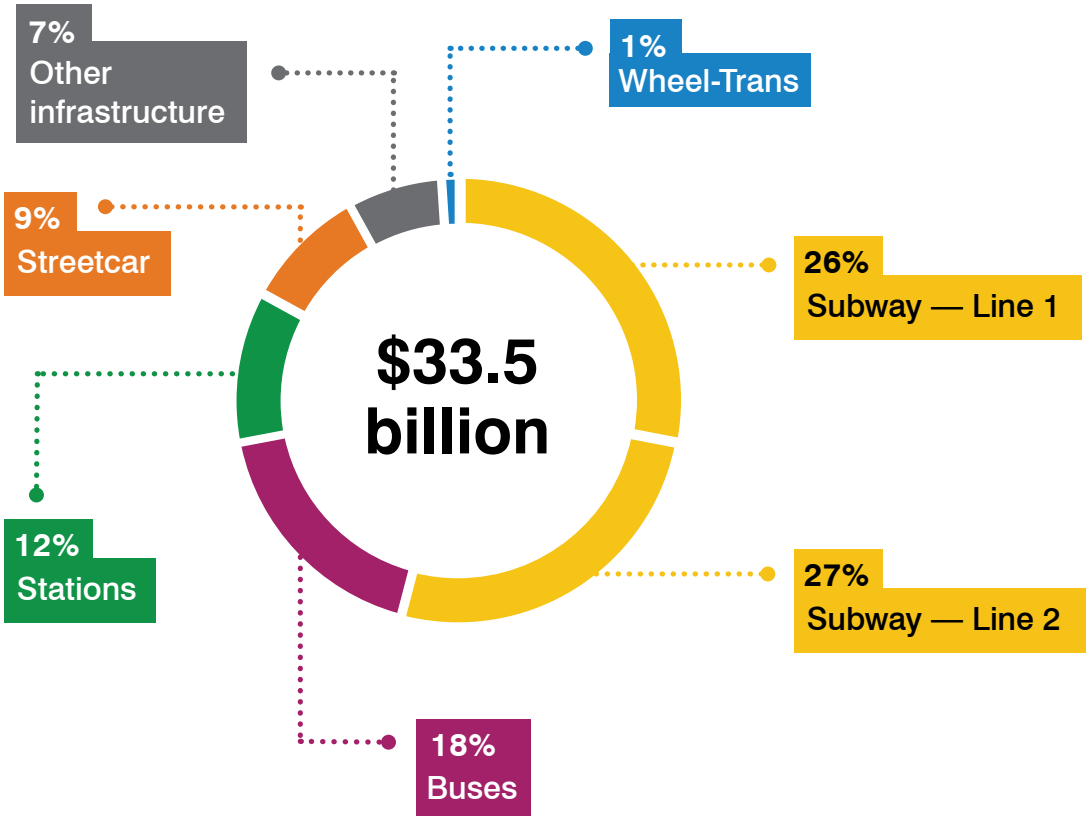
## What is the time horizon?

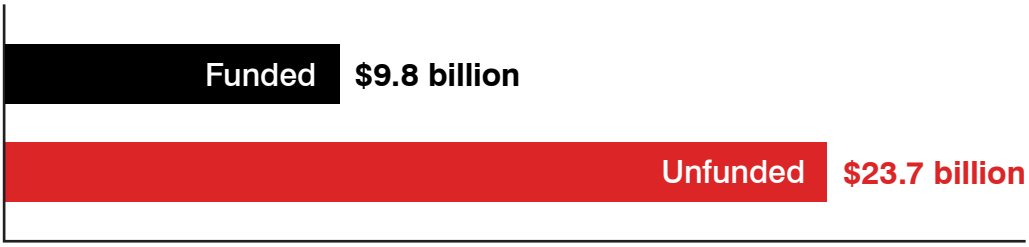
Traditionally, TTC Capital Budgets cover a 10-year period. To enable long-term decision-making, predictable and sustainable funding and a proactive approach to maintenance based on the useful life of our assets, this Capital Investment Plan extends the horizon to 15 years, through 2033.

2019–2033

# Investment Summary

## Required Base Capital Investment Outlook 2019–2033




For funding details, see the Appendix.

Funding for TTC capital projects comes from the federal gas tax, the Public Transit Infrastructure Fund (PTIF), provincial gas tax, City of Toronto property tax-supported debt funding and capital reserves and development charges. For a breakdown of funding sources, see page 71.

## Investment Highlights

| | | |
|---|---|---|
| Subway | Line 1 | $8.9 billion total<br>76% unfunded |
| | Line 2 | $9.1 billion total<br>75% unfunded |
| Buses | New and replacement buses | $3.7 billion total<br>85% unfunded |
| | New garages | $1.3 billion total<br>70% unfunded |
| Stations | Bloor-Yonge Station expansion | $1.1 billion total<br>100% unfunded |
| | Easier Access & accessibility improvements | $0.9 billion total<br>11% unfunded |
| | Platform edge doors (as possible) | $1.3 billion total<br>100% unfunded |
| Streetcars | New and replacement streetcars | $0.9 billion total<br>58% unfunded |
| | Hillcrest Complex (under consideration) | $0.9 billion total<br>100% unfunded |
| Wheel-Trans | New and replacement buses | $0.3 billion total<br>55% unfunded |
| Other Infrastructure | Information systems | $0.8 billion total<br>50% unfunded |
| | Facilities | $0.7 billion total<br>36% unfunded |

These major investments reflect $29.9 billion of the $33.5 billion total.

2019–2033

# Keeping Transit Moving: Base Capital Investments

Subway

Buses

Stations

Streetcars

Wheel-Trans


Cornerstones
SAFETY & SECURITY
ACCESSIBILITY
SUSTAINABILITY


# Cornerstones

# Three values form the cornerstones for capital investments at the TTC.

## Safety & Security

Our fleet, stations, facilities and infrastructure must be safe for our customers, employees and the public. Base capital investments include legislated health and safety measures, the introduction of new safety features such as turn warnings on buses and streetcars and potentially the installation of Platform Edge Doors, which form a barrier between customers and subway tracks. Security is embedded in the design of our stations, fleet, infrastructure, systems and facilities.

## Accessibility

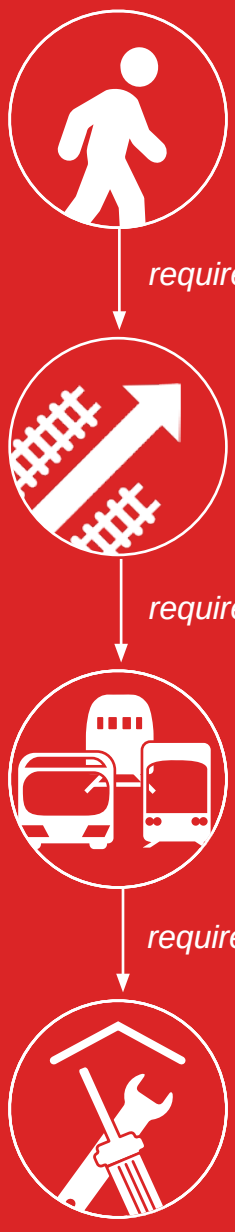
In accordance with the Human Rights Code in Ontario and the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), accessibility features are embedded in all fleet and station investments and include the Easier Access program, which is making all subway stations accessible by 2025. We are transforming the TTC's integrated network of subway, bus, streetcar and Wheel-Trans service into a flexible and accessible Family of Services.

## Sustainability

Keeping assets well maintained is critical to safety and reliability, as well as to reducing capital and operating costs in the long run. Base capital investments are designed to preserve the quality and maximize the life of our transit system's assets. This includes a preventative and predictive approach to maintenance, rooted in Enterprise Asset Management.

# What's needed to move more customers more reliably?

Capital investments deliver on "Moving more customers more reliably," a critical path in the 2018–2022 TTC Corporate Plan.



*require...*

*requires...*

*requires...*

## More Customers

Population growth and planned transit expansion in and around Toronto means more customers taking the TTC.

## More Capacity

Improvements to track, signals, power and stations make it possible for the TTC fleet to move through the system faster and more reliably.

## More Fleet

A larger fleet of accessible subway cars, buses, Wheel-Trans vehicles and streetcars deliver the benefit of increased capacity to move more customers per hour.

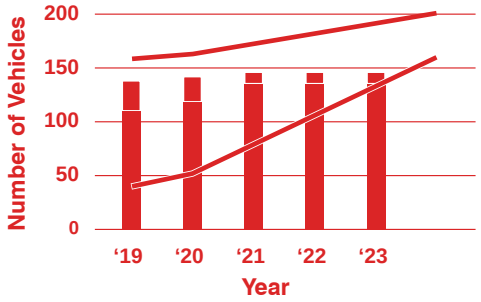
## More Maintenance & Storage

More garages, shops, carhouses and yards maintain and store the larger fleet.

# Understanding the Charts

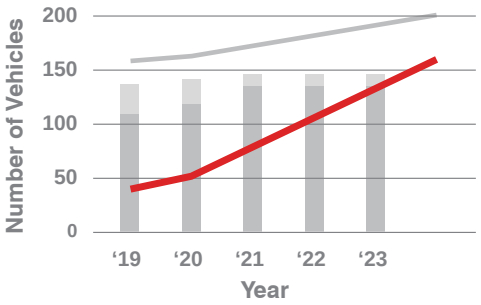
Service needs, fleet size and maintenance and storage capacity illustrate base capital needs over the next 15 years

*Illustrative Example*



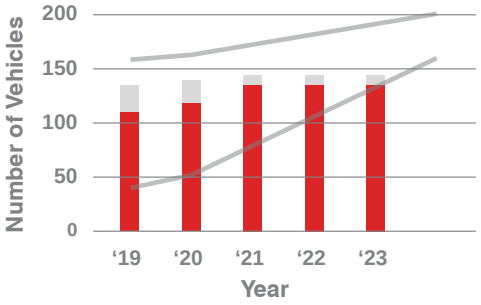

## Service Needs

Number of vehicles required to meet ridership demand



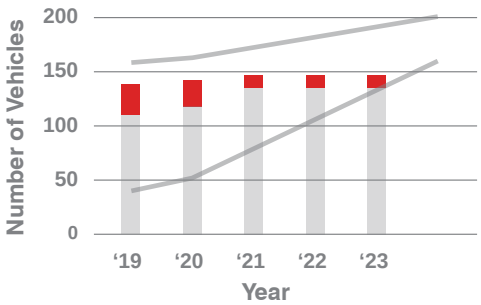

## Vehicles in Service

Planned number of vehicles in service



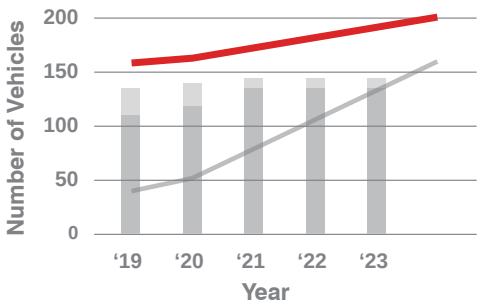

## Spare Vehicles

Number of extra vehicles available to fill in for those in need of repair or to meet other service needs. Industry standard is 18–22 per cent.




## Storage Capacity

Number of vehicles for which there would be sufficient storage




# Base Capital Investments

# Subway


## Today

**289 million**
subway boardings each year

**876**
subway cars

**1,000+**
customers per 6-car train

**96 million**
kms travelled annually

**4**
train yards

# The subway is the backbone of the GTA's transit system, arriving every two to six minutes at 75 different stations. It's also a backbone of regional transportation. One in five of all GO Transit riders regionally use Toronto's subway for part of their trip.

Toronto's subway is a complex system of trains, tracks and tunnels that must be maintained, a signalling system that governs how quickly and closely together trains can run and a traction power infrastructure (also known as "third rail" electricity) — augmented by the work trains, pumps, substations, shops and yards that keep it all running. If one part of the system fails or fails to keep up, the entire system slows down.

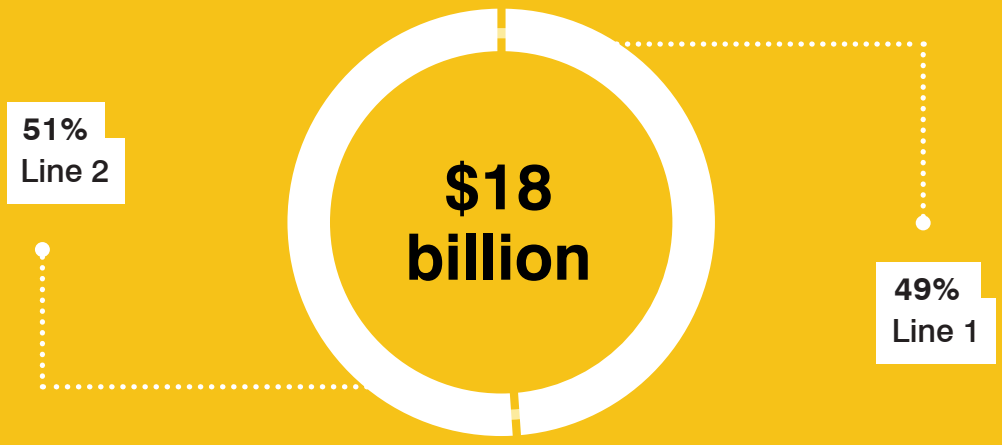
Unless key decisions are made now, population growth and planned transit expansion projects will collide with an outdated signal system, obsolete subway cars and tracks and tunnels in need of repair.

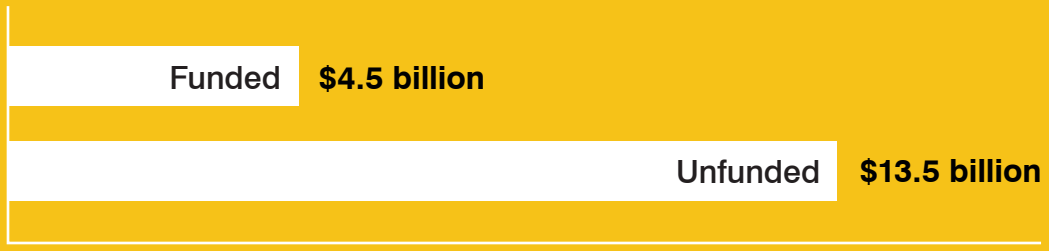
Increasing capacity and improving the reliability of the TTC's oldest subway lines, accounting for 85 per cent of all subway kilometres travelled, will be critical.

## Subway

# Investment Summary

## Required Investment Outlook 2019–2033



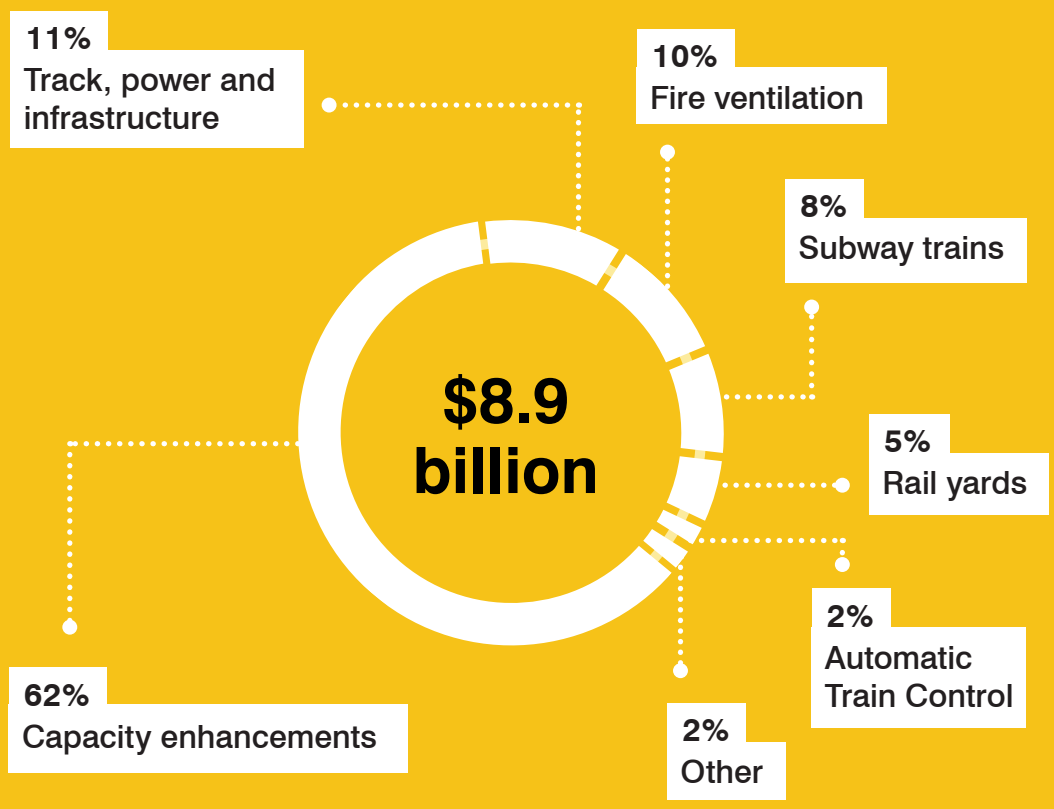



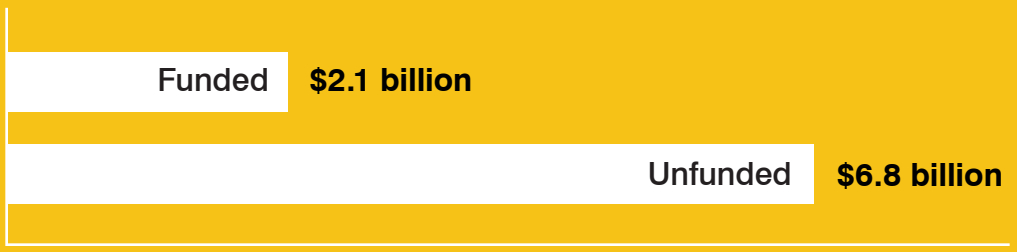

Includes $0.1 billion for Line 4. For funding details, see the Appendix.

## Subway

# Line 1

## Required Investment Outlook 2019–2033



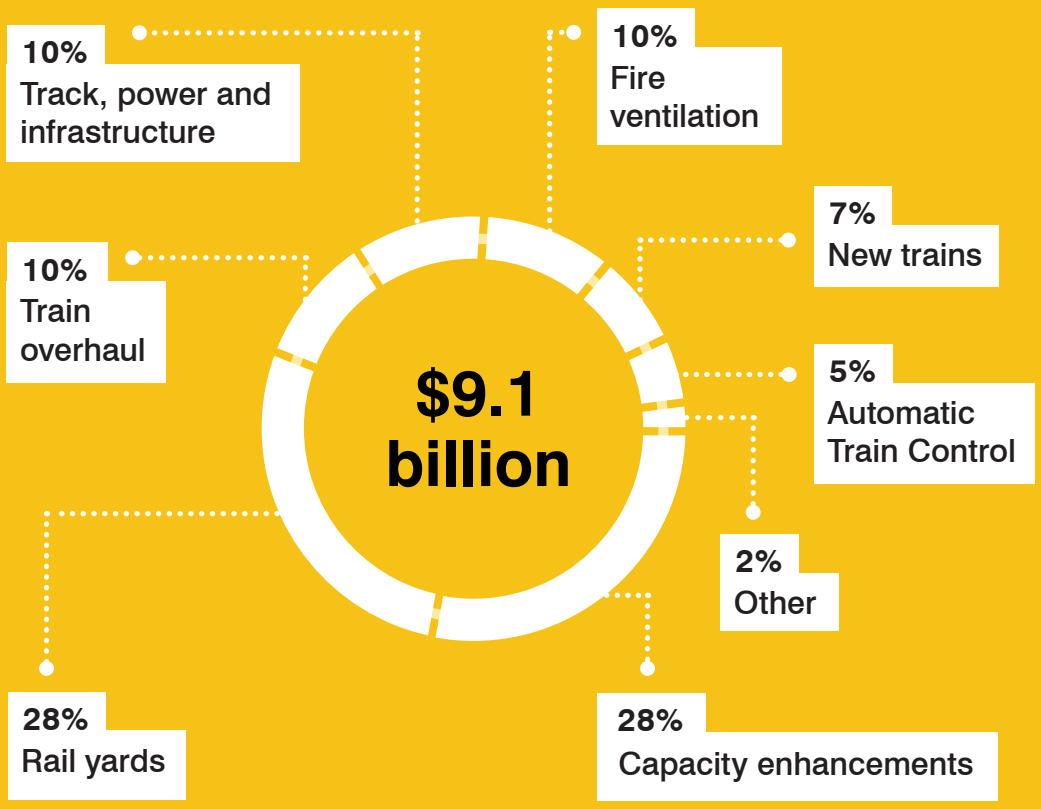



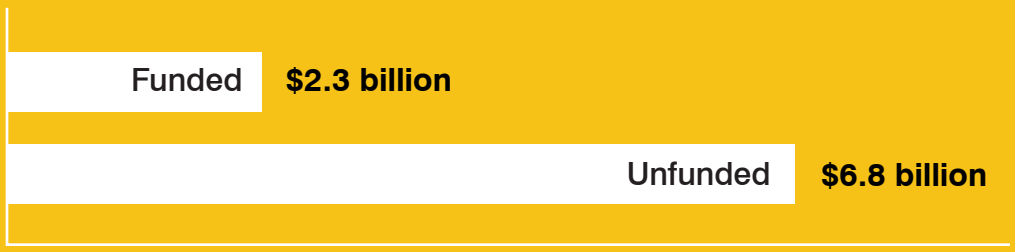

For funding details, see the Appendix.

## Subway

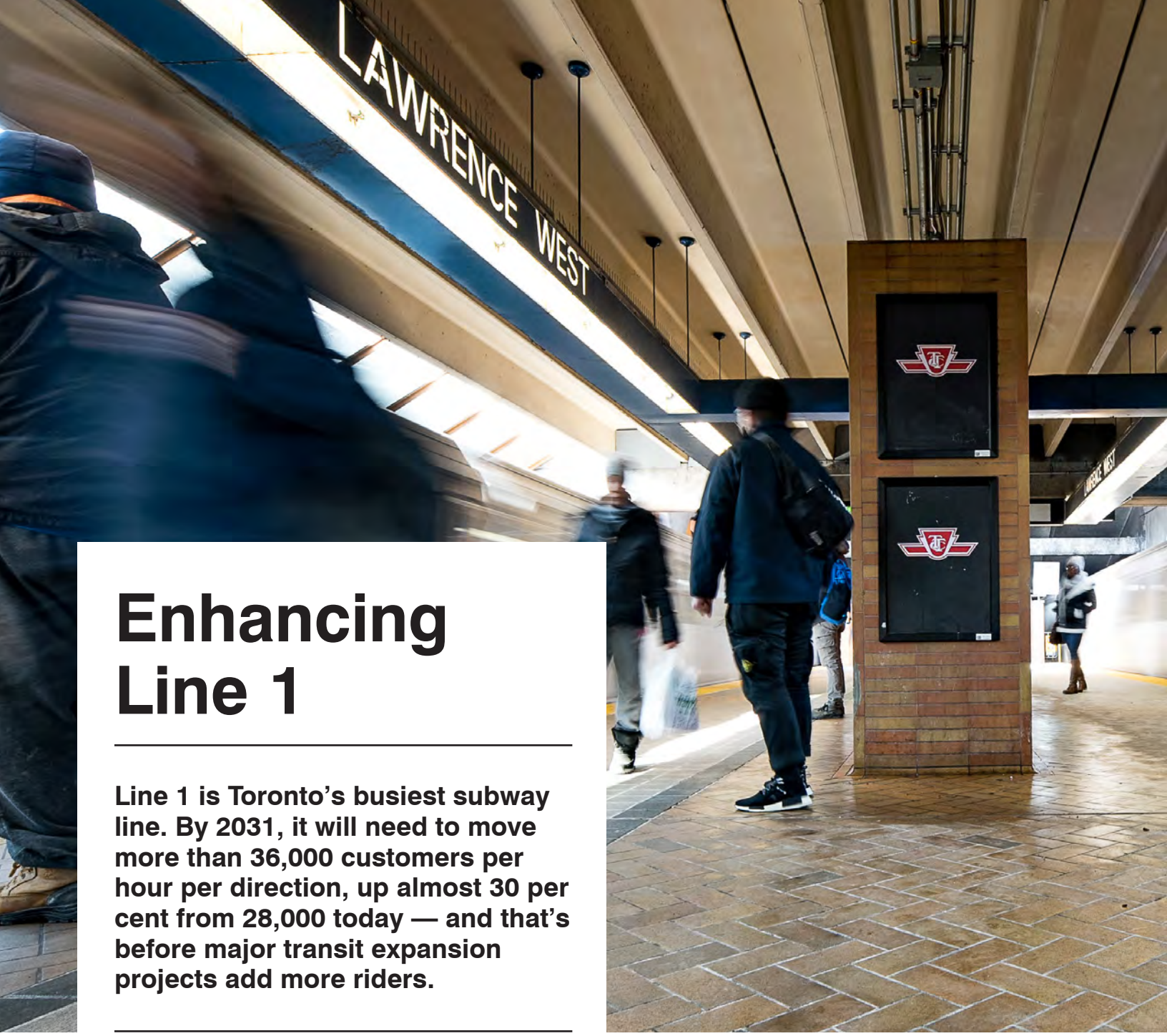
# Line 2

## Required Investment Outlook 2019–2033




For funding details, see the Appendix.




# Enhancing Line 1

**Line 1 is Toronto's busiest subway line. By 2031, it will need to move more than 36,000 customers per hour per direction, up almost 30 per cent from 28,000 today — and that's before major transit expansion projects add more riders.**

+ Complete the installation of Automatic Train Control (ATC) so that more trains can safely run closer together with more consistent travel times, increasing capacity.

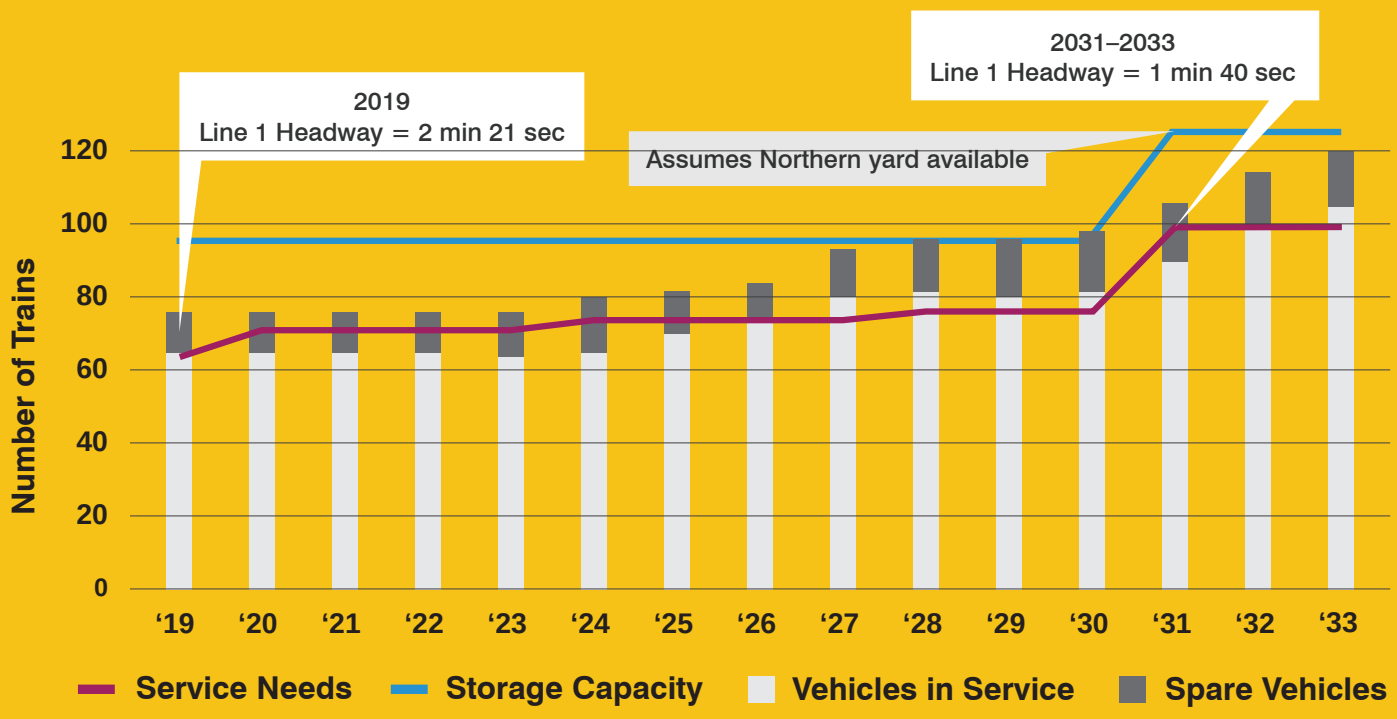
+ Upgrade traction power to support more trains running on the line.

+ Purchase 44 new subway trains, translating into a more than 50 per cent increase in the size of the Line 1 fleet.

+ Make safety-related improvements, such as expanding more emergency exit buildings and installing new or upgraded fan plants.

+ Establish a new train yard and repair and maintenance facility in the north end to accommodate the larger fleet.

+ Modify station layout and second exits to improve station capacity.




## Benefits of investing

+ Trains that come 40 per cent more often during rush hour on Line 1

+ Less crowded trains and platforms during rush hour

+ Fewer delays, improved reliability and more consistent travel times

+ Sufficient maintenance and storage capacity to support transit expansion

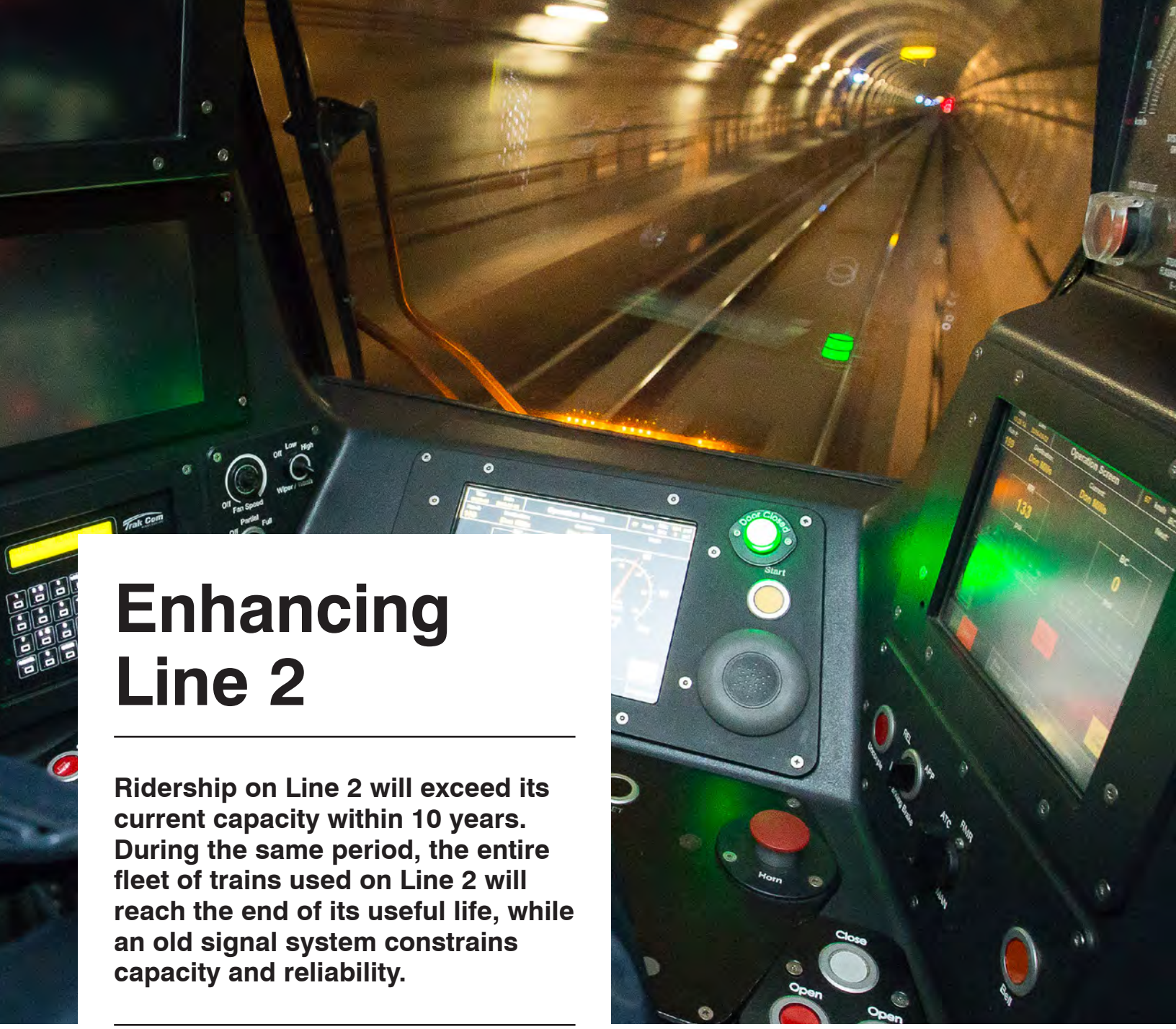
## Risks of failing to invest

+ More subway delays as reliability declines

+ Longer wait times between trains

+ Trains so crowded that at times they bypass stations during rush hour

+ Insufficient capacity to support increased ridership from transit expansion projects




# Enhancing Line 2

**Ridership on Line 2 will exceed its current capacity within 10 years. During the same period, the entire fleet of trains used on Line 2 will reach the end of its useful life, while an old signal system constrains capacity and reliability.**

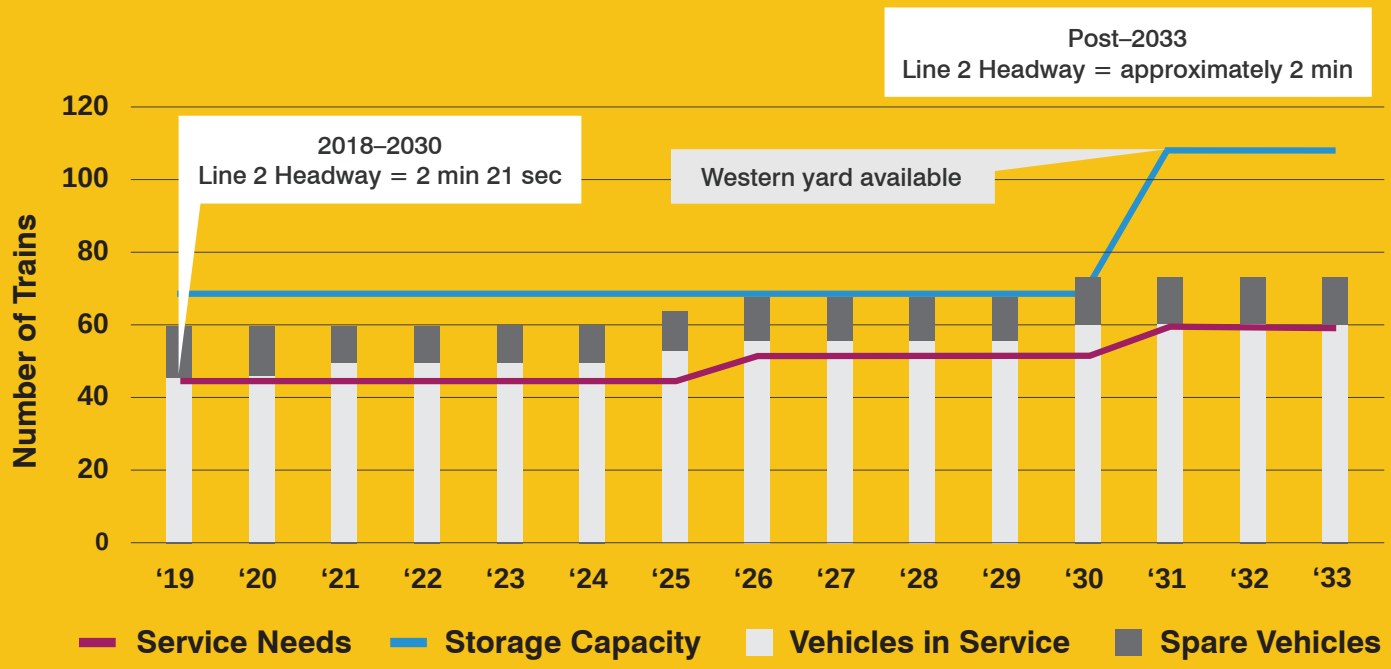
+ As with Line 1, install Automatic Train Control (ATC), to allow for safe, faster, more consistent travel times, once ATC-equipped trains are in service.

+ Upgrade traction power to support more trains running on the line.

+ Make safety-related improvements, such as expanding more emergency exit buildings and installing new or upgraded fan plants.

+ Overhaul 30-year-old trains to extend their useful life by another ten years.

+ Establish a new Western train yard near Kipling Station for storage and maintenance of the larger fleet of Line 2 cars.




## Benefits of investing

+ Less crowded trains
+ Fewer delays, improved reliability and more consistent travel times
+ Sufficient maintenance and storage capacity to support transit expansion

## Risks of failing to invest

+ More subway delays as reliability declines
+ Longer wait times between trains
+ Increased crowding on Line 2
+ Closing stations during crowded peak periods
+ Aging fleet in need of repair means safety issues and higher maintenance costs

SPOTLIGHT ON

# Toronto's Role in Regional Transportation

# Because it serves the nation's largest city, Toronto's transit system plays a unique role.

**As Toronto and the region around it grow, so too does pressure on the TTC as a regional transit provider along with GO Transit, UP Express, MiWay in Mississauga, YRT / Viva, Durham Region Transit and Brampton Transit.**

**89%**

of TTC ridership is from within Toronto

**85%**

of all transit rides in the GTA are on the TTC

**24%**

Portion of regional commuters to Toronto who take transit (highest of comparable cities)

**87**

Regional transit routes, including GO Transit, connect to TTC services


# Base Capital Investments

# Buses


## Today

**456 million**
bus boardings annually

**2,000+**
buses

**142 million**
kms travelled annually

**1 million**
kms travelled by the average bus over its 13-year life

**60%**
reduction in the frequency of bus breakdowns since 2014

**7**
garages

# 60 per cent of all people who travel on the TTC take a bus for at least part of their trip. In fact, buses carry more customers than any other TTC mode, including the subway.

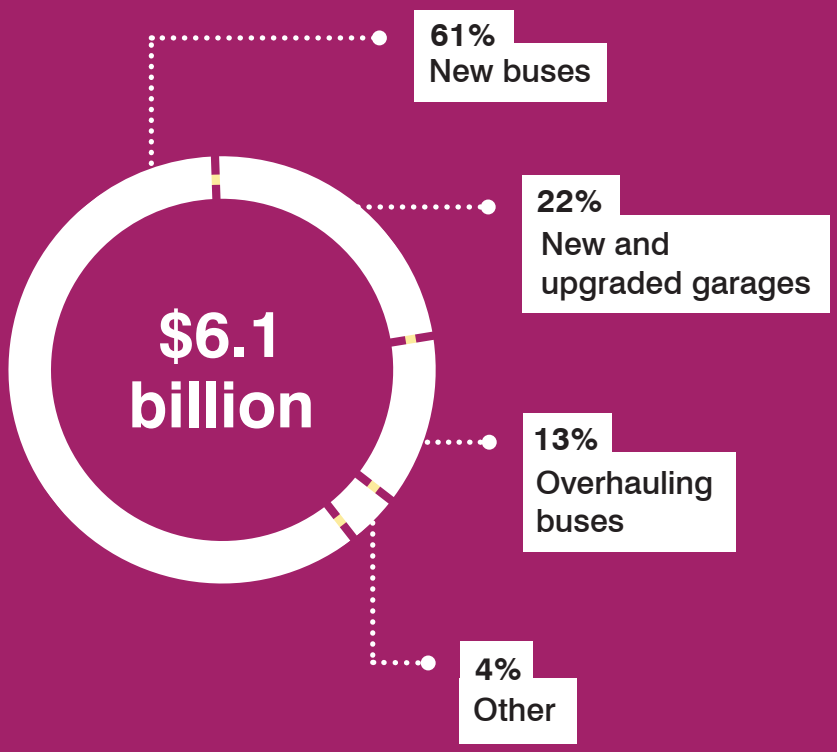
Keeping Toronto moving with our current fleet of more than 2,000 buses is a feat of proactive maintenance. Over the course of its 13-year life, the average TTC bus will travel one million kilometres. To make the most of its fleet, the TTC completely overhauls every bus when it is six years old — from rebuilding the engine and transmission, to replacing panels and repainting the exterior, to refurbishing flooring and seats. The rebuild alone typically costs as much as $400,000; the cost of a new electric bus is more than $1 million.

The next 15 years will see a dramatic shift in the technology and fuel consumption of our bus fleet. With the City committed to an 80 per cent reduction in greenhouse gas emissions by 2050, the TTC is also leading the way with a zero-emissions bus fleet target of 2040.

Buses

# Investment Summary

## Required Investment Outlook 2019–2033

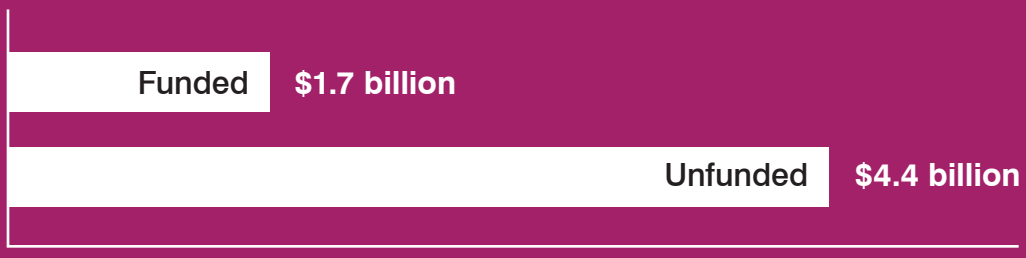



## Key Investments

**2,300**
low/zero emissions buses purchased

**2,500**
buses overhauled at mid-life

**2**
new bus garages




For funding details, see the Appendix.


# New buses to maintain current service

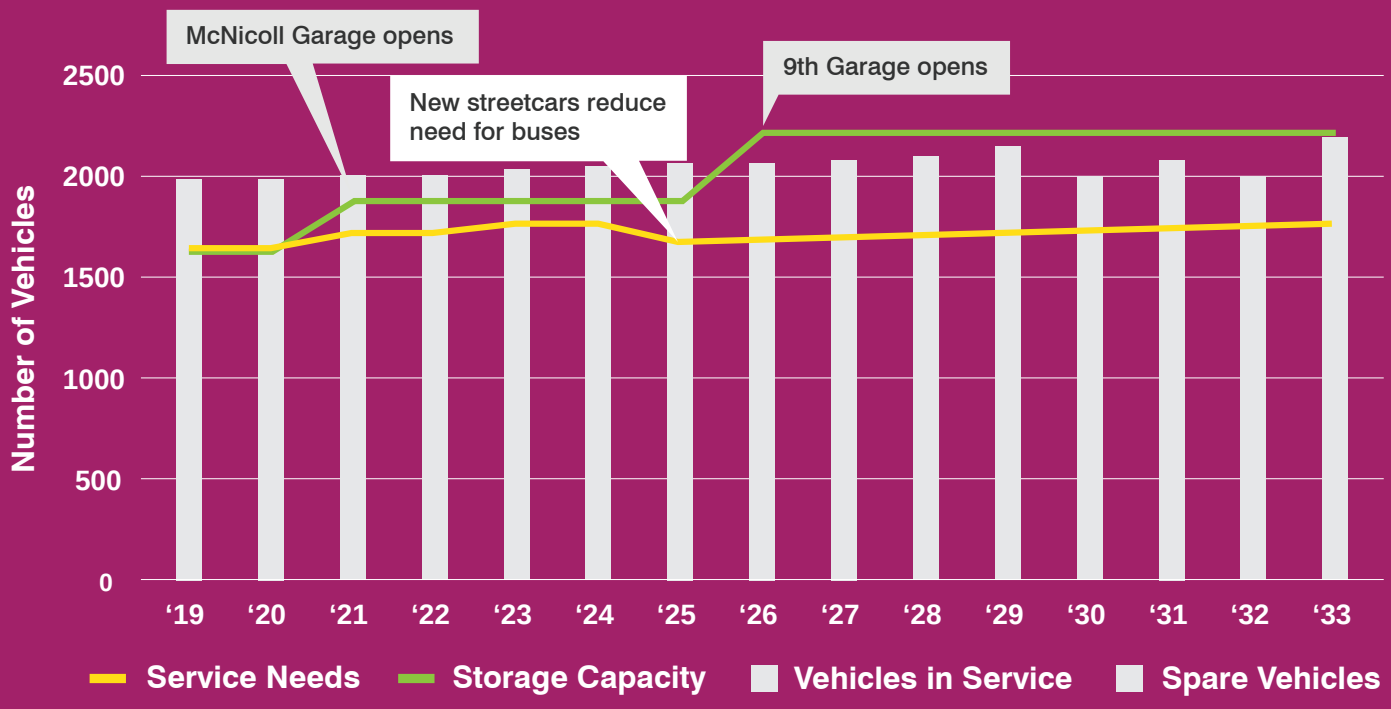
**Simply maintaining our current fleet size will require purchasing between 120 and 160 buses every year to replace retiring vehicles, but there is currently limited bus funding in 2021 and 2022 and no funding thereafter. Accommodating increased ridership will require an additional 15 buses per year. At the same time, we are determined to transition to zero emissions technology as soon as practical.**

+ Purchase 2,300 new low/zero-emissions buses at a total cost of nearly $3.7 billion, representing a complete replacement of our fleet as older buses reach the end of their 13-year useful life. By moving to steady-state procurement for new buses — which means buying them in similar quantities every year — we limit sudden spikes in our capital funding needs and increase the efficiency of our maintenance operations.

+ By 2025, all new bus procurement will be zero emissions. In 2033, our bus fleet will emit only 43,000 tonnes of $CO_2$, compared to 247,000 tonnes in 2019 — an 83 per cent decrease in annual emissions.

+ All buses will be accessible, with low floors, to make it as easy as possible for those with accessibility needs to use our service and transfer to and from buses, streetcars, subway and Wheel-Trans, as part of the TTC Family of Services.

+ Build two new garages at a remaining cost of more than $600 million: McNicoll Garage, which is already under construction, and a ninth bus garage, which will include the ability to maintain, charge and store electric vehicles.




## Benefits of investing

+ More frequent service
+ Less crowded buses on key routes
+ Improved service reliability for customers
+ Reduction of 1.7 million tons of CO2

## Risks of failing to invest

+ Not enough buses means cancelled routes and less frequent service
+ Increased breakdowns of aging fleet mean more delays, poor customer service and higher maintenance costs
+ No buses to relieve crowding on overcrowded routes
+ No buses to provide service in the event of streetcar or subway disruptions
+ Continued pollution and failure to meet climate targets

SPOTLIGHT ON

# Making Best Use of Resources

## Capital Project Delivery

In 2021, we will complete a four-year plan to advance our project, program and portfolio management and bring the TTC in line with best-in-class public sector project management practices. This includes learning from the delivery of recent major projects like the Toronto-York Spadina Subway Extension.

## Enterprise Asset Management

A key element of the TTC's 2018–2022 Corporate Plan is the transition to Enterprise Asset Management for all of its major asset classes, based on a 30-year-plus outlook on assets. This means advancing preventative and predictive maintenance, so vehicles and infrastructure fail less often and last longer and customers can keep moving more reliably.

## Operating Efficiency

The TTC receives a low government operating subsidy per rider compared to other major transit systems in the US and Canada. Only 32 per cent of the TTC's direct operating costs are subsidized, compared to 41 per cent in New York, 44 per cent in Montreal and 81 per cent in Los Angeles.

Derived from CUTA/APTA 2017 Annual Agency Profiles


# Base Capital Investments
# Stations


## Today

**75**
**stations**

**200,000+**
**daily passengers at Bloor-Yonge Station**

**333**
**escalators**

**113**
**elevators**

## The TTC's 75 stations serve more than the subway. They let customers transfer seamlessly to and from buses, streetcars and Wheel-Trans, giving Toronto its uniquely well-integrated transit network. Stations such as Union, Finch, Kennedy and Kipling are major multi-modal transit hubs, connecting customers with other regional transit systems.

The safety, security, accessibility and sustainability of our system is only as robust as our stations. Working elevators make stations accessible for those with mobility devices, while working escalators allow the steady flow of passengers. Safe, well-designed platforms and public spaces make it easy for customers to quickly get on and off trains. Digital signage allows us to communicate directly with customers, while cameras and other security infrastructure keep the system safe. All of this requires investments in maintaining a state-of-good-repair.

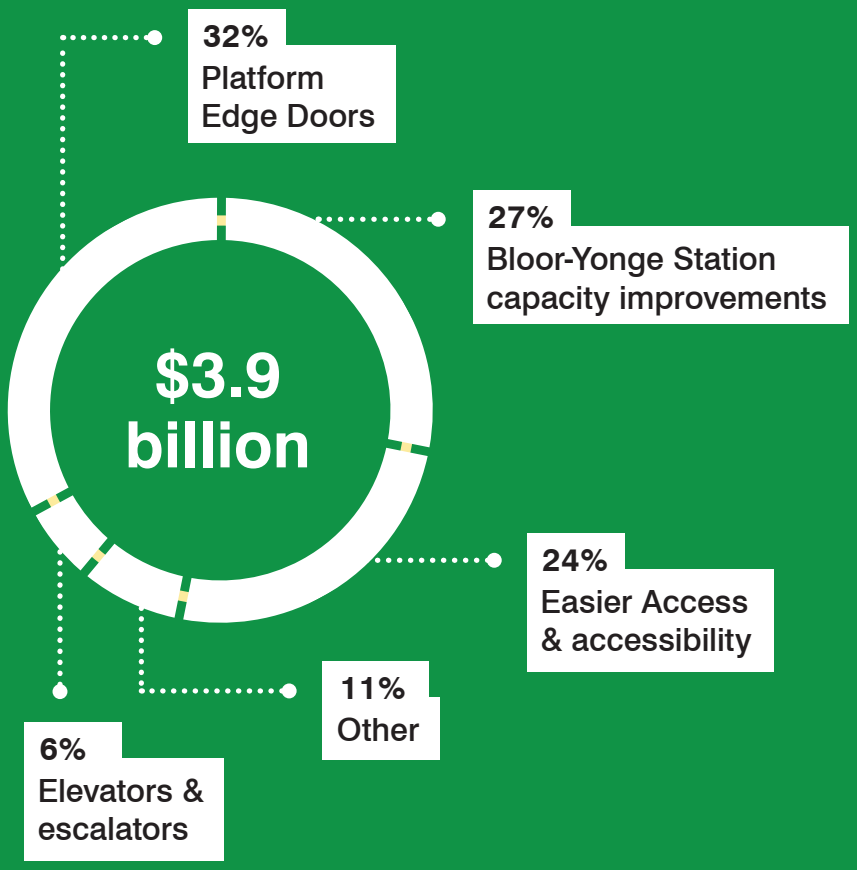
For instance, the TTC operates more escalators and elevators than any other public entity in Canada. Hundreds of escalators and elevators are reaching the end of their useful life, which will mean more breakdowns, inconvenienced customers and climbing maintenance costs. Overhauling an escalator can extend its life by as much as 25 years.

In the coming years, regional growth and transit expansion will bring more people into stations and add to rush hour crowding. We must ensure our stations can safely and accessibly support the increased flow of passengers.

## Stations

# Investment Summary

### Required Investment Outlook 2019–2033

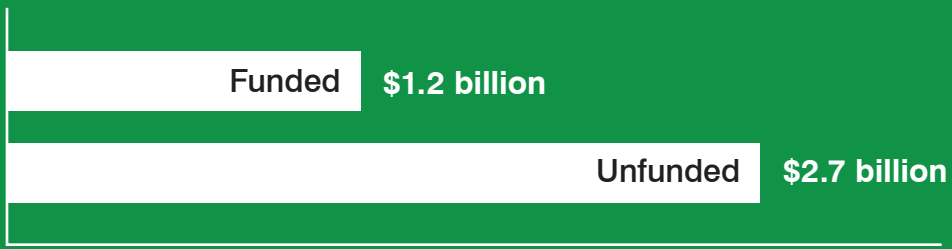



## Key Investments

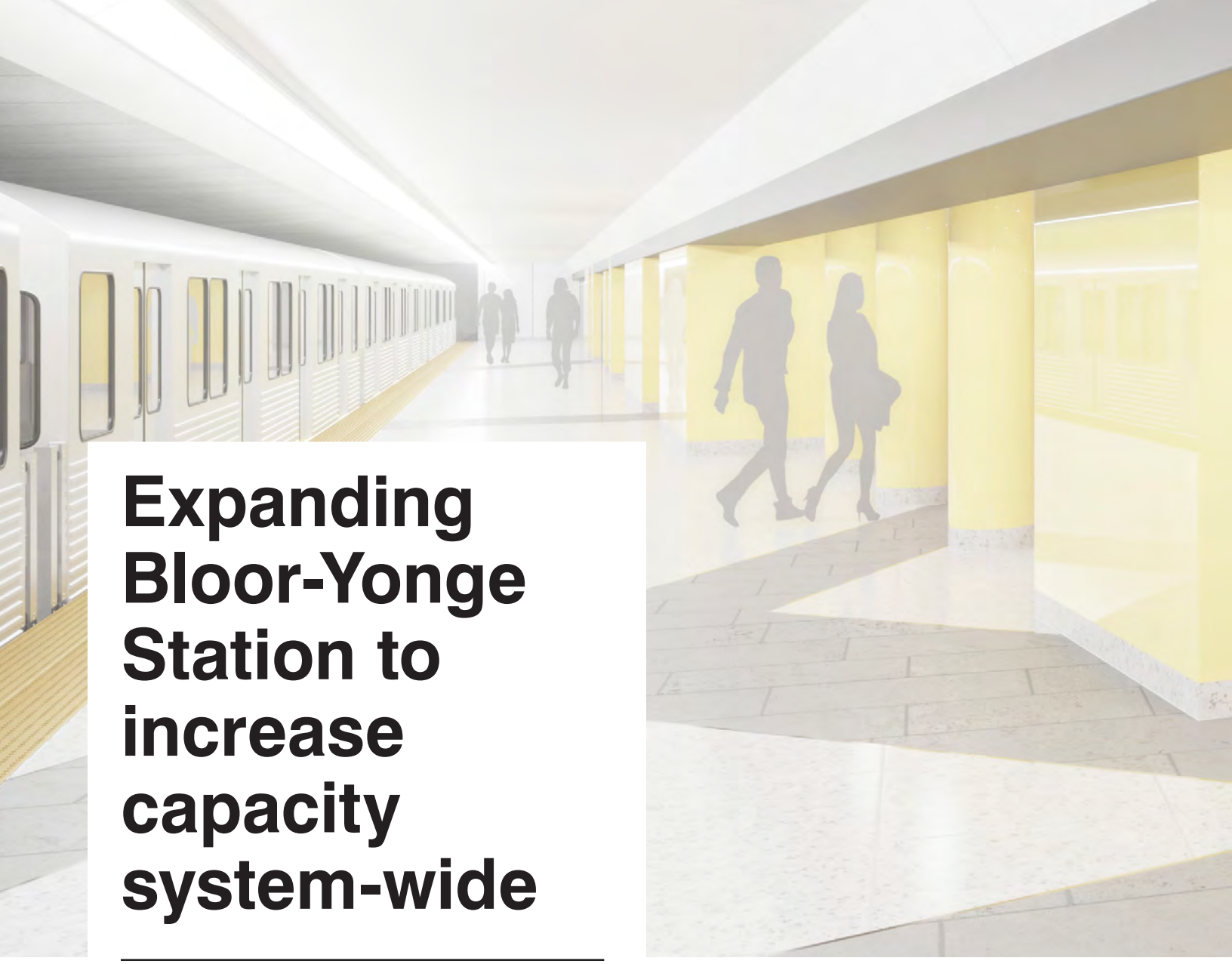
**Bloor-Yonge Station**
expanded

**Platform Edge Doors**
installed (as possible) on Lines 1 & 2

**AODA-compliant**
all stations by 2025




For funding details, see the Appendix.



# Expanding Bloor-Yonge Station to increase capacity system-wide

**More than any other station, capacity and crowding at Bloor-Yonge Station impacts the customer experience: if it's too crowded, trains can't pick up and drop off quickly, and the entire line slows down. The advantages of Line 1 and 2 capacity enhancements, as well as of transit expansion, depend on enhancing Bloor-Yonge Station.**

+ Similar to Union Station, construct a second platform serving Line 2, which currently suffers from extremely limited platform space.

+ Expand public areas to make it easier for customers to move through the station and move away from platforms.

+ Provide more and wider staircases, escalators and elevators to carry more people and improve flow throughout the station.

## Benefits of investing

+ Less frequent overcrowding at Bloor-Yonge Station, with customers more evenly distributed along platforms

+ Trains dwelling in station for less time, as customers get on and off more quickly

+ More frequent trains on Line 1 and Line 2

## Risks of failing to invest

+ Extreme overcrowding at Bloor-Yonge Station

+ Increased safety concerns due to crowded platforms

+ A decrease in frequency of trains on Line 1 and Line 2 during rush hour, despite other capacity enhancement efforts

# Station repairs and improvements to keep customers moving

**While Bloor-Yonge poses the most significant challenge, the next 15 years will require widespread improvements at most of our stations — from capacity enhancements that improve passenger flow to the final phase of our efforts to make all TTC stations accessible by 2025.**

+ Make improvements at a number of stations to accommodate more customers and allow them to clear more quickly from platforms, enabling more frequent service. For instance, work at Eglinton Station to accommodate the introduction of Line 5 Eglinton will be complete in 2021.

+ The Easier Access program, which includes installing elevators, accessible fare gates, automatic sliding doors and other improvements, will make all subway stations accessible by 2025, up from 45 accessible stations today, at a remaining fully funded cost of $590 million.

+ Consider installing platform edge doors (PEDs) on Lines 1 and 2 as possible. PEDs form a barrier between customers and tracks, with sliding doors that open automatically in alignment with train doors. This improves the safety of the subway system in several ways, including reducing suicide attempts, risk of accidental falls and litter that can cause track fires.

+ Overhaul or replace hundreds of escalators and elevators that are at or approaching the end of their useful life, at a cost of more than $200 million.

## Benefits of investing

+ Stations that are easier to move through, including to and from platforms

+ Stations that are more accessible to people of all abilities, enabling passengers to use the entire TTC Family of Services

+ Reduced suicide attempts and fewer track-level injuries with platform edge doors

+ More frequent trains during rush hour, as customers get on and off more quickly

+ Improved accessible signage and way-finding

## Risks of failing to invest

+ More crowded stations

+ More frequent escalator and elevator outages that slow passengers and hamper accessibility

+ Increased safety concerns due to crowded platforms

SPOTLIGHT ON

# Changing Landscape, Emerging Options


**Advancing technology and changing customer behaviour present both challenges and opportunities for our public transit system. The sharing economy and the rise of on-demand services mean customers have more options and higher expectations than ever before.**

**The coming years will see a new level of pressure to provide transit that is both highly reliable and seamlessly integrated with all transportation options, whether those are personal, public or commercial.**

## Ride-hailing

Companies like Uber and Lyft are providing customers with flexible, responsive transportation options at the touch of a screen. Unfortunately, they can also increase congestion if not well integrated with public transit. In the future, transit will both need to compete for customers with companies like these and work with them to help make travel more efficient for customers.

## Vehicle Automation

The City of Toronto is taking a transit-centric approach to vehicle automation and advanced driver assistance systems, starting with features like turn warnings and auto-braking on vehicles to make our streets safer. By 2050, vehicle automation will be central to improving the reliability, efficiency, safety and seamlessness of transit.

## Mobility-as-a-Service

The future of mobility lies in seamless integration of different transportation options. This could mean allowing customers to stitch together multiple modes of transportation, such as bike-share, subway and a taxi or ride-hailing company, and easily plan, book and pay for their trip from end to end.

# Base Capital Investments
# Streetcars


## Today

**91 million**
streetcar boardings each year

**84,000**
customers daily on 504 King, the busiest streetcar route

**248**
streetcars

**10**
streetcar routes

**11.4 million**
kms travelled annually

**3**
carhouses

**As the largest streetcar network in North America, Toronto's 10 streetcar routes criss-cross the downtown core, complementing subway and bus service to provide transit coverage in the city's densest areas. The King Street Transit Pilot, which saw the number of customers carried by the city's busiest streetcar route balloon from 65,000 to 84,000 per day, revealed the demand that can be unlocked by giving streetcars priority through traffic.**

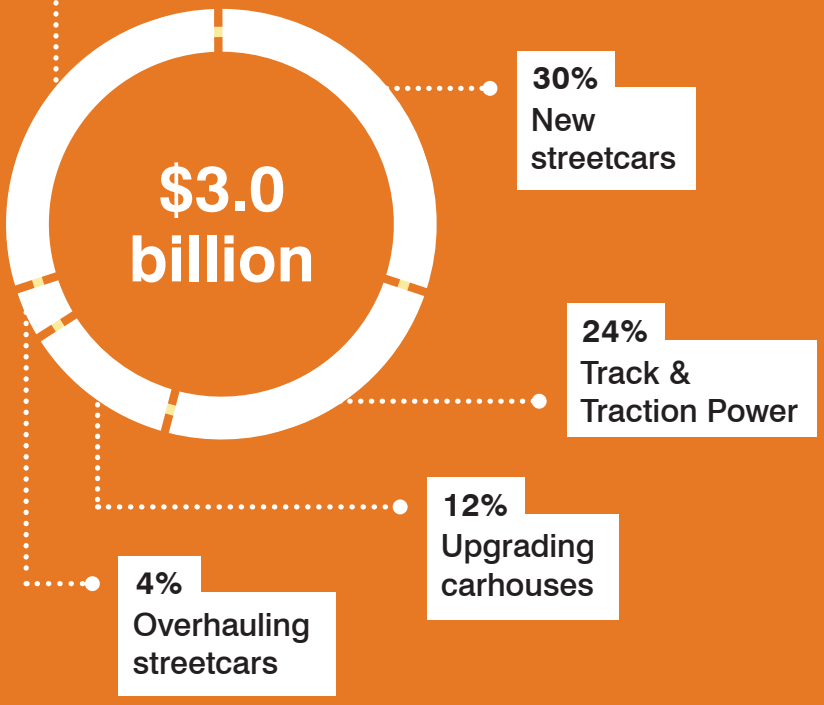
Keeping our streetcar network moving is a complex dance involving streetcars, track and 177 kilometres of overhead wire. Our oldest streetcars are now over 40 years old and will be completely removed from service by 2021. Our new Bombardier streetcars are longer, larger and more accessible; they also use nearly 50 per cent more power, which increases demand on our overhead wires. Every four years, a streetcar undergoes at least a partial overhaul to keep it reliable and increase its useful life.

In recent years, delays in streetcar deliveries have meant that service normally provided by streetcars has been provided by buses on a number of routes. The coming years will require returning to and then surpassing previous levels of streetcar service to meet ridership demand.

## Streetcars

# Investment Summary

## Required Investment Outlook 2019–2033





For funding details, see the Appendix.

## Key Investments

**204**
streetcars delivered, completing current order

**Up to 100**
additional streetcars purchased to accommodate ridership growth

**Hillcrest Complex converted**
to streetcar-only maintenance and storage (under consideration)


# 100 additional streetcars and investments in reliability

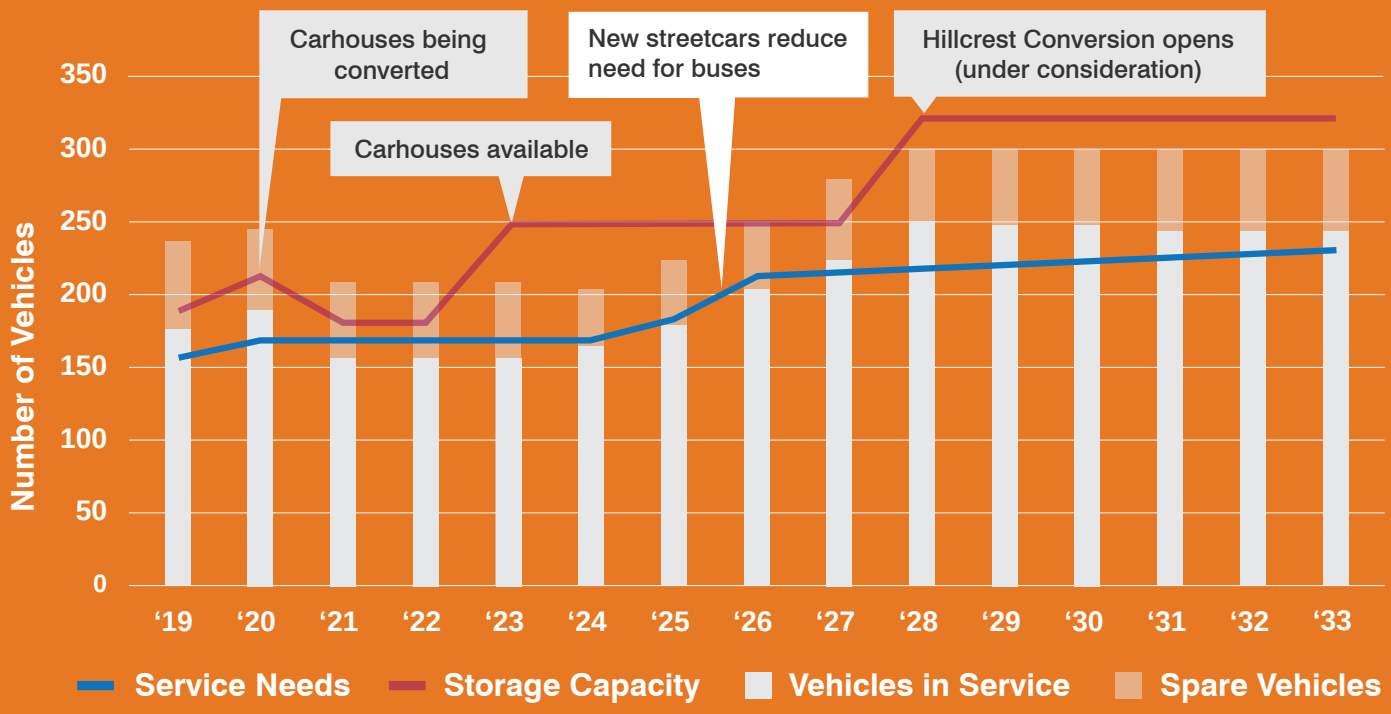
**To maintain current service and meet ridership demand, we must buy new streetcars and pro-actively maintain them as they age, fix track, upgrade overhead electricity and ensure we have enough space to maintain and store our fleet.**

+ Purchase streetcars on a schedule that uses economies of scale to reduce purchase price per vehicle. This involves completing the current purchase of 204 streetcars, plus approximately 100 additional streetcars from 2025 to 2028 to meet demand, at a cost of $510 million.

+ Consider converting and expanding Hillcrest Complex, which is currently used to repair buses and streetcars, to a streetcar-only maintenance and storage facility at a cost of approximately $900 million. This would provide a five-fold increase in the TTC's capacity to overhaul streetcars. The carhouses at Roncesvalles and Russell are being retrofitted to accommodate new streetcars.

+ All streetcars will be accessible, with low floors, to make it as easy as possible for customers of all abilities to travel using the TTC Family of Services.

+ To support the increased power required by larger streetcars, upgrade to pantograph technology, which replaces single trolley poles with broader contacts for more reliable and powerful transfer of electricity to streetcars.




## Benefits of investing

+ Improved service reliability for customers
+ More frequent streetcar service at peak times on key routes
+ More reliable streetcars with longer useful lives due to increased capacity for overhauls
+ Increased speed of streetcars due to transit priority measures
+ Safer streets, with the introduction of streetcar features like turn warnings and auto-braking

## Risks of failing to invest

+ Slower streetcars due to insufficient power
+ Failing reliability that must be taken over by buses
+ More frequent breakdowns due to insufficient maintenance facility capacity
+ Increased crowding on key streetcar routes

SPOTLIGHT ON

# Working with Partners to Deliver

## Coordinating Projects to Minimize Inconvenience

To minimize inconvenience to customers, we're working with the City on improving the coordination of capital projects. We're also working to achieve a consistent, coordinated process for fast-tracked permitting and site plan approvals to deliver transit projects.

## Working with Toronto's Utilities to Get Work Done Faster

Maintaining and making improvements to our infrastructure requires close cooperation with Toronto's utilities. Upgrading the electricity grid to power our subway trains or charge our electric buses depends on Toronto Hydro; upgrading subway pumps depends on Toronto Water. The better we work together, the faster we get work done.

## Collaborating with City of Toronto Transportation Services

Transportation Services plans, constructs and manages the city's transportation infrastructure. We work closely together on everything from transit priority measures like the King Street Transit Pilot to the location of bus and streetcar shelters.

## Working with Provincial Partners to Keep Toronto Moving

We're working closely with Metrolinx and Infrastructure Ontario. This includes ensuring the connection between LRT lines and the subway system is as smooth as possible and providing supplemental bus service as construction on projects like Line 5 Eglinton continues.


## Base Capital Investments

# Wheel-Trans


## Today

**45,000+**
active registrants

**264**
Wheel-Trans buses

**11,000+**
daily trips

**5**
community bus routes

## For customers with disabilities, Wheel-Trans is far more than a transportation option. It is a lifeline to shopping, appointments, family, friends, culture, employment and services that would be extremely difficult to get to otherwise.

While the Wheel-Trans fleet of accessible vehicles shares the infrastructure used to maintain our conventional buses, they have a shorter useful life, which requires replacing the fleet more than twice between now and 2033.

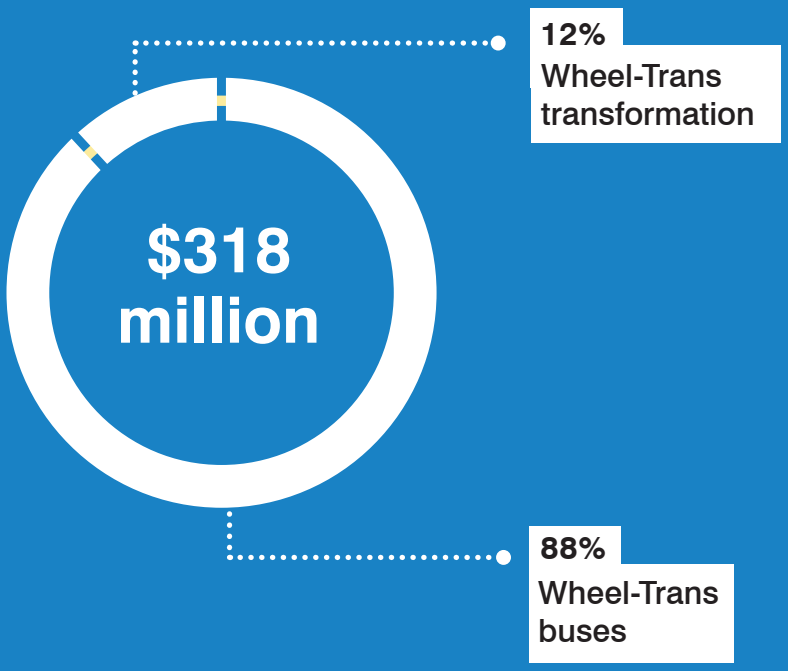
In 2017, in accordance with the AODA, eligibility for Wheel-Trans was expanded to include customers with cognitive, sensory and mental health disabilities, in addition to those with physical disabilities. This increased demand for Wheel-Trans services, which will grow further as Toronto's population ages.

Meanwhile, Wheel-Trans is becoming part of a much more flexible, on-demand system of integrated mobility, which includes accessible buses, streetcars and subways, as part of the TTC Family of Services initiative. This includes a new scheduling and dispatch system that will provide the most efficient trip solution for customers utilizing the TTC Family of Services, allowing them to book a trip on demand.

## Wheel-Trans

# Investment Summary

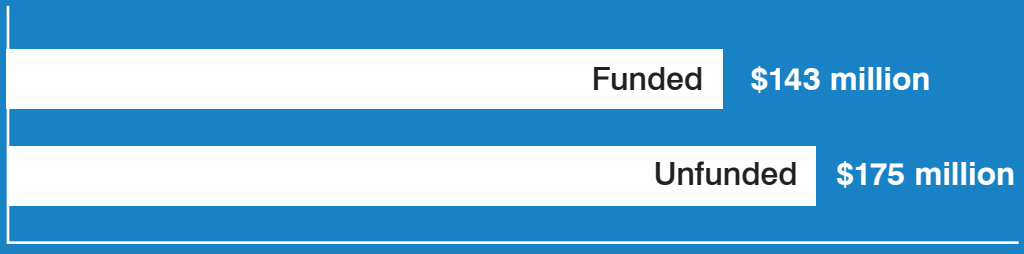
## Required Investment Outlook 2019–2033




## Key Investments

**829**
new Wheel-Trans buses

**Transformation**
to enable passengers to use the entire TTC Family of Services




For funding details, see the Appendix.

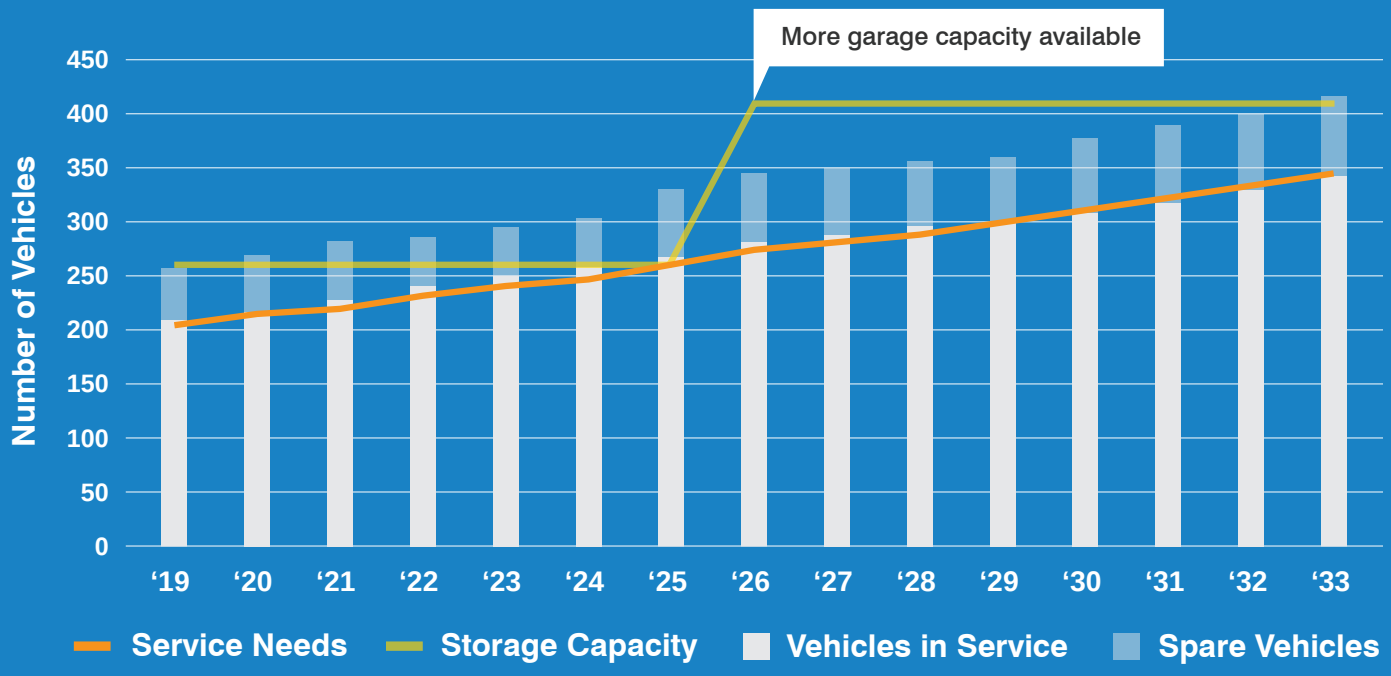

# 829 Wheel-Trans buses to keep up with demand

**To meet an expected increase in demand of nearly 75 per cent over the next 15 years, Wheel-Trans requires a larger fleet.**

+ Purchase 829 Wheel-Trans buses, to both replace buses at the end of their useful life and grow the operating fleet by nearly 60 per cent.

+ Increased fleet will use the maintenance capacity freed up elsewhere when the ninth bus garage opens.

+ Wheel-Trans transformation includes a suite of investments required to make our system AODA-compliant and enable an accessible TTC Family of Services. This includes Access Hubs: clean, dry, well-lit points where Wheel-Trans customers can transfer to conventional buses and streetcars.




## Benefits of investing

+ Sufficient Wheel-Trans service to provide responsive, on-demand service to all registrants as part of the TTC Family of Services

+ Integration with the conventional transit system

+ Improved reliability of new fleet

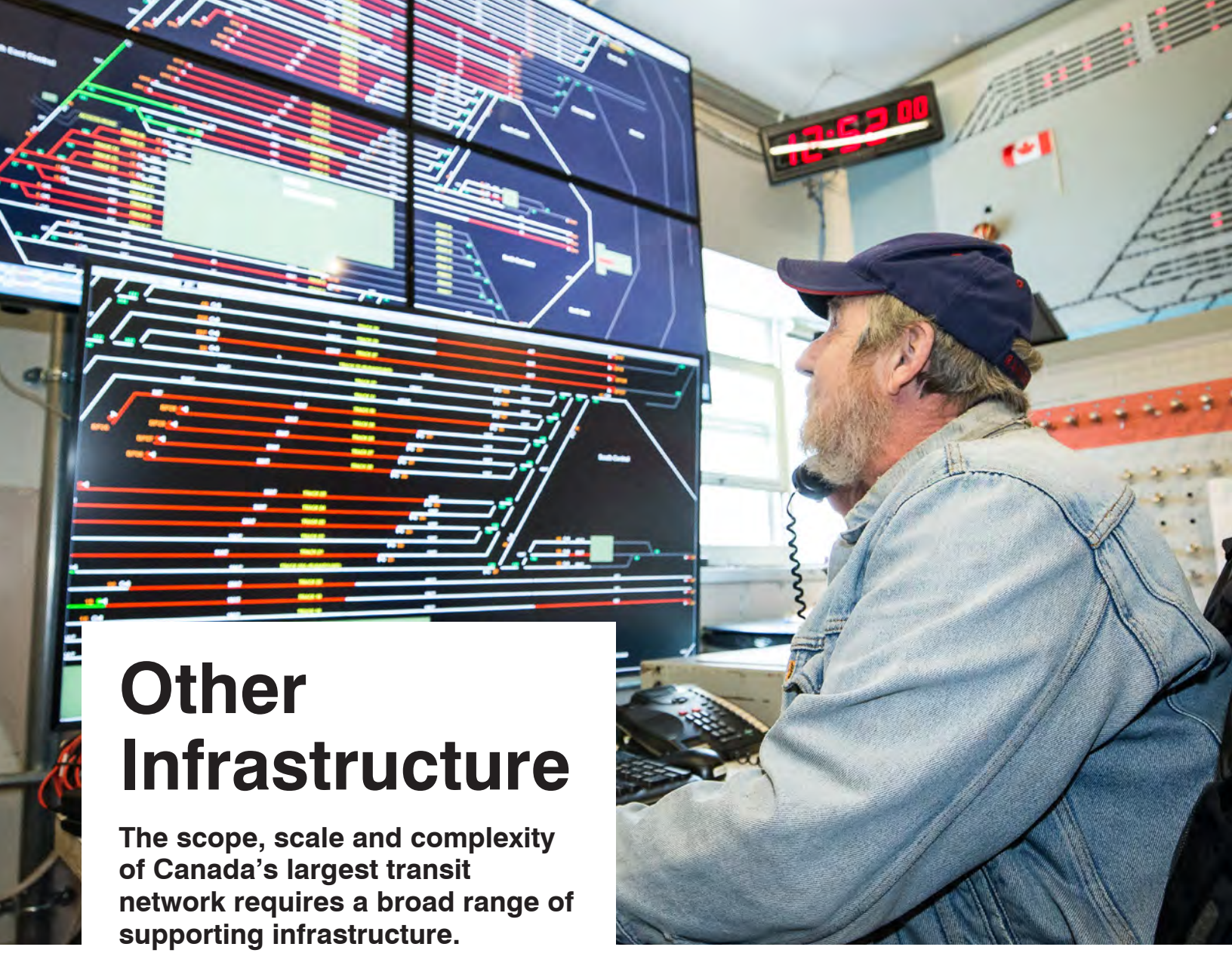
## Risks of failing to invest

+ Not enough Wheel-Trans service to meet demand; inability to provide on-demand service to those who need it

+ Failure to deliver the first and last mile of the TTC Family of Services for those with disabilities

+ Failing reliability as fleet ages beyond its useful life

+ Increased use of contract taxis and sedan companies



# Other Infrastructure

**The scope, scale and complexity of Canada's largest transit network requires a broad range of supporting infrastructure.**

## New Transit Control Centre

A new Transit Control Centre will make the entire system more resilient and enhance system security, ensuring service can keep running despite major unplanned events or disruptions.

## Modern IT systems and infrastructure

Replacing outmoded legacy processes with new core management systems will make the TTC more efficient, while real-time data on the location and status of vehicles enables improved service.

## Consolidated offices

Bringing together staff who are currently scattered across leased locations throughout Toronto will save money, increase efficiency and improve collaboration.

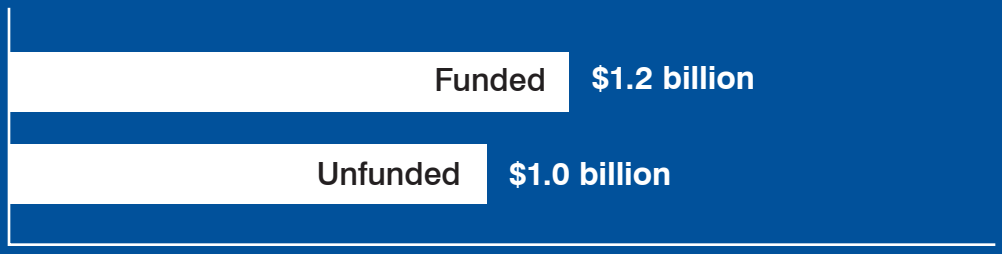
## Legislated health & safety

Investments like standby generators, hazardous waste storage rooms and storage tank replacement in line with current regulations make the system safer for customers and employees.

## Other Infrastructure

# Investment Summary

### Required Investment Outlook 2019–2033


For funding details, see the Appendix.

SPOTLIGHT ON

# Planned Expansion

**New rapid transit lines (that are proposed or under construction) will relieve crowding, build stronger regional connections and support the GTA's growth. But their success depends on base capital investments to strengthen and enhance the capacity of the current system.**

## Line 2 East Extension

This easterly extension of Line 2, currently being planned and designed by the TTC and City, will provide a direct connection between Kennedy Station and Scarborough Centre Station.

## Line 3 Relief Line

This new subway line is currently being planned by the TTC, City and Metrolinx. The approved southerly portion, which is undergoing preliminary design, will connect Line 2 at Pape Station with Line 1 at Queen and Osgoode Stations. A future northerly portion will extend north from Line 2 at Pape Station to connect with Line 5 Eglinton and beyond.

## SmartTrack Stations*

Building on existing heavy rail infrastructure and leveraging the province's investment in GO expansion, SmartTrack will include six new GO stations on the Stouffville, Lakeshore East and Kitchener GO corridors.

## Yonge Subway Extension

This northerly extension of Line 1, currently being planned by the TTC, City, York Region and Metrolinx, will extend from Finch Station to Highway 7 in Richmond Hill, with connections to York Region Transit and GO Transit.

## Waterfront Transit

Several coordinated streetcar projects are in planning or design to improve and expand surface transit along the waterfront. These include new lines on Cherry Street, Broadview Avenue, the East Bayfront and the Portlands; improved connections to Line 1 at Union Station; a new connection through Exhibition Place; a future Humber Bay line and various operational improvements at key locations.

## Line 5 Eglinton*

This new light rail transit line will run across Eglinton Avenue from Mount Dennis to Kennedy Station, including a 10 km underground section through the middle of the city.

## Line 5 Eglinton East and West Extensions

These extensions of the Line 5 Eglinton light rail transit line will connect to Pearson Airport in the west and Malvern Town Centre in the east.

## Line 6 Finch West*

This light rail transit line will run along Finch Avenue West, linking Finch West Station on Line 1 with Humber College.

## Line 7 Sheppard East*

This planned light rail transit line will run along Sheppard Avenue East, linking Don Mills Station on Line 4 with Morningside Avenue.

***Being built by Metrolinx**


This map reflects the planning priorities of the City of Toronto, as presented to City Council on March 31st, 2016, and is a vision of what future rapid transit in Toronto could look like. The map does not reflect the level of funding commitment or analysis undertaken to date. The map includes both TTC and Metrolinx transit lines, which form a new, integrated transit network within the City of Toronto. Ownership of the transit lines is not depicted in the map.

*Future line names, route alignments and station/stop names are subject to change.


# Funding the Future

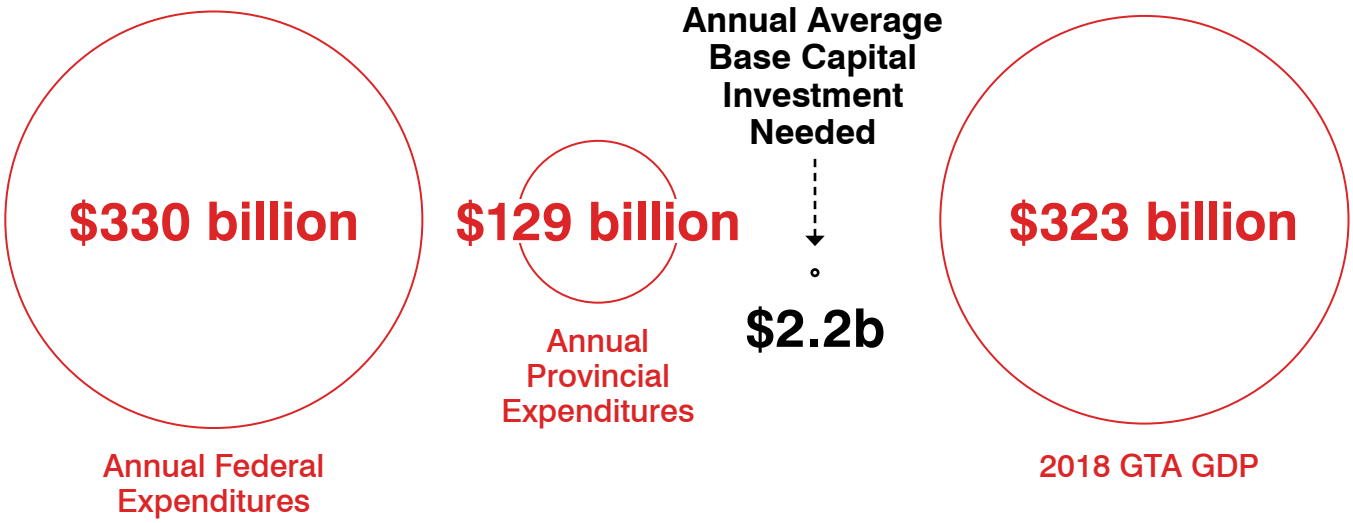
# Investments to keep transit moving are investments in ensuring our region remains vibrant, keeps growing and continues to be among the most attractive places to live in the world.

If we fail to invest, we will see very real consequences. Our buses could start breaking down more often as they operate beyond the end of their useful life; trains could start regularly bypassing Bloor-Yonge Station due to crowding; congestion across the GTA will worsen. Both productivity and the quality of life in the GTA will suffer, and we will have failed to meet the challenges of population growth, climate change and true regional mobility.

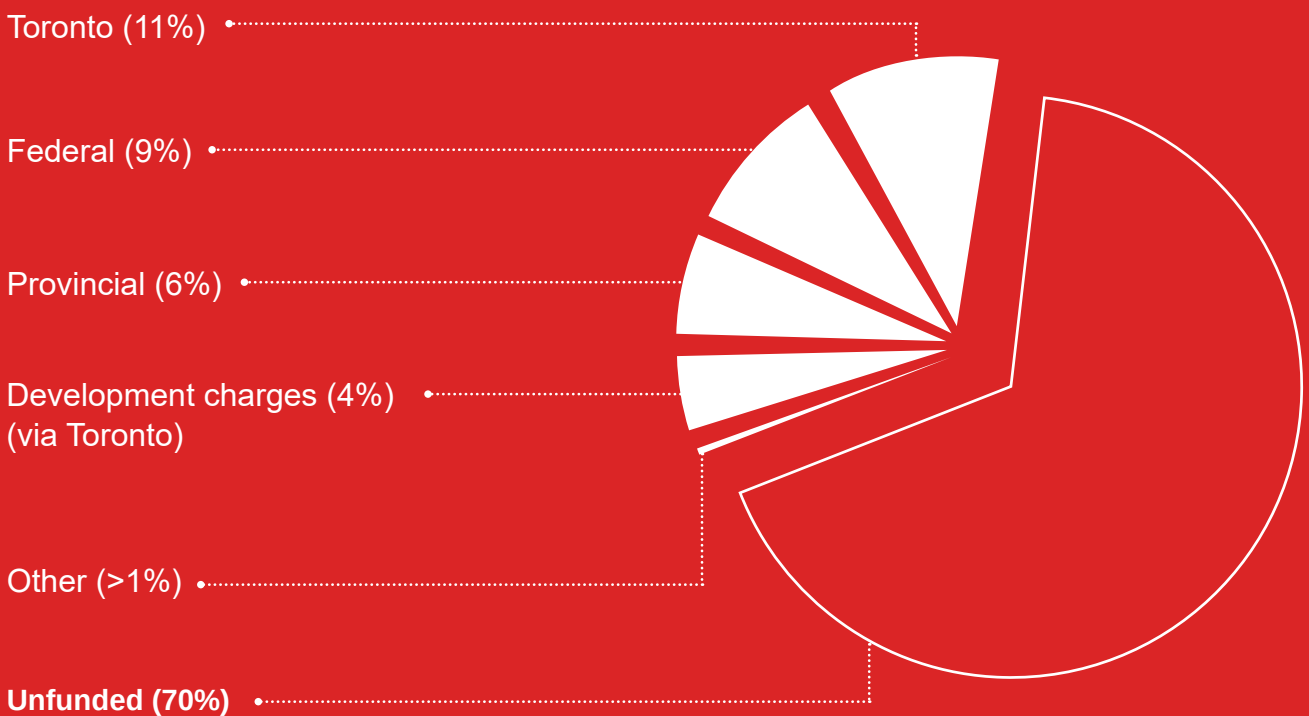
Prior to 1998, the City and the Province equally subsidized a portion of TTC direct operating costs. Since then, the City has been responsible for a steadily increasing share, rising to 85 per cent today. As a result, operating the TTC has accounted for one third of the growth in the City's net expenditures over the past 10 years and even more when property tax-supported debt service costs are included.

Now, with approximately 70 per cent of our base capital needs in the next 15 years currently without funding, it's clear that a new approach to funding is needed: one that more fully engages all levels of government to deliver predictable and sustainable funding.

## Relative Size of Investment Needed



# Current Sources of TTC Capital Funding




### Federal Government

Includes funding from the federal gas tax and programs such as the Public Transit Infrastructure Fund (PTIF)

### Provincial Government

Includes funding from the provincial gas tax and participation in funding programs like the Light Rail Vehicle (LRV) funding program

### City of Toronto

Includes debt funding in which the principal and interest is paid through property taxes

### Development Charges

Includes fees collected from private developers by the City to help pay for the cost of infrastructure and services that the new development benefits from

SPOTLIGHT ON

# Different Models of Funding Transit


## Public Transit Infrastructure Fund (PTIF)

**PTIF is a good example of what's possible when different levels of government work together. A Government of Canada program delivered by Infrastructure Canada to provide dedicated and reliable funding for new capital programs, it provides federal funding that must be matched by other levels of government.**

Toronto benefited from PTIF Phase 1. Building on that success, PTIF Phase 2 is unlocking nearly $8.9 billion in federal and provincial funding to support projects such as the Line 2 East Extension, the planning and design of the Relief Line South and the Waterfront Transit Network Plan. This is being complemented by additional municipal funding.

# How are other regions rising to the challenge?

**Boston** is paid by utility companies, like telecommunications companies laying fibre optic cables, for leveraging their tunnels and other infrastructure. With the rollout of the 5G network in Canada, transit organizations could lease real estate to allow the installation of cell towers for a recurring fee.

**Chicago** charges a 15-cent tax on each trip with a company like Uber or Lyft.

**London** uses a congestion charge that applies to all drivers entering central London between 7 am and 6 pm.

**Los Angeles** levies a half-cent sales tax that funds transit.

**Montreal** is using a hybrid public-private partnership model.

**Portland** recently used land value capture, increasing taxes in areas where there is likely to be an increase in property values due to transit investment, to fund a new streetcar line.

**Sydney** is selling air rights, which means allowing private developers to build around and above new stations. In fact, this model is being used to fund GO Transit's Mimico Station.

**Vancouver** taxes parking and is adding an annual increase of five to 10 cents to fares to pay for capital investment.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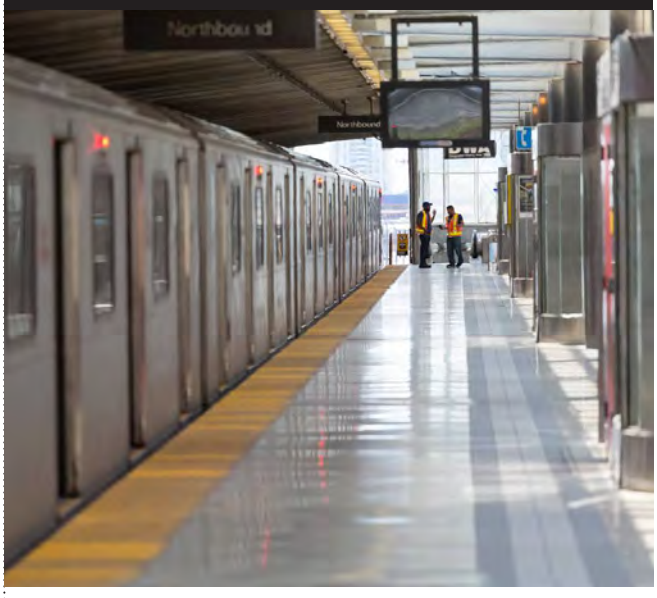
# Let’s make headway to keep transit moving.

Investing to maintain our system and increase its capacity will keep our city and our region vibrant, growing and healthy. That will require new approaches to funding transit that are predictable and sustainable and that see new cooperation, creativity and commitment among all levels of government.

We look forward to continuing the conversation.

# 15 year OUTLOOK

## 2019–2023



## Base Capital Investments

**Completion of the initial delivery of low-floor streetcars**

**McNicoll bus garage opens**

**Completion of Automatic Train Control on Line 1**

## Planned Transit Expansion

**Line 5 Eglinton opens**

**Line 6 Finch West opens**

# 2024–2028

**Zero emissions for all new buses**

**Ninth bus garage opens**

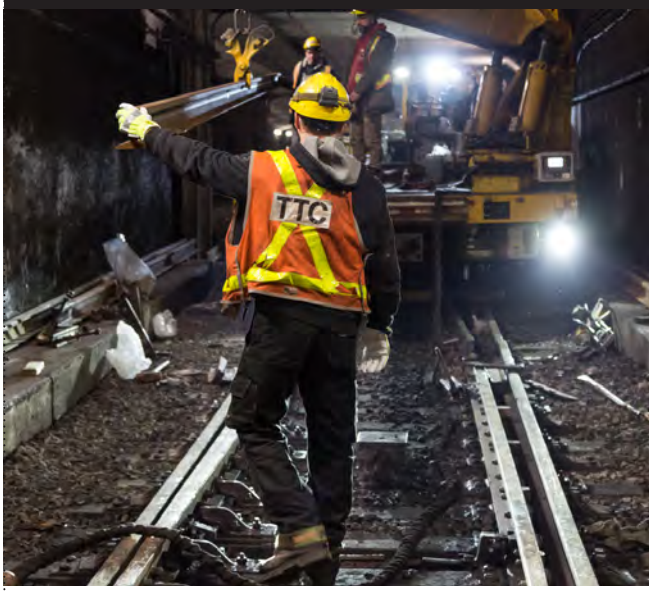
**AODA compliance for accessible stations & system**

**Line 2 East Extension to Scarborough opens**

**SmartTrack stations open**

**Line 5 Eglinton Extensions open**

# 2029–2033




**Line 1 capacity enhancements complete**

**Line 2 capacity enhancements complete**

**Western subway yard opens**

**Northern subway yard opens**

**Relief Line South opens**

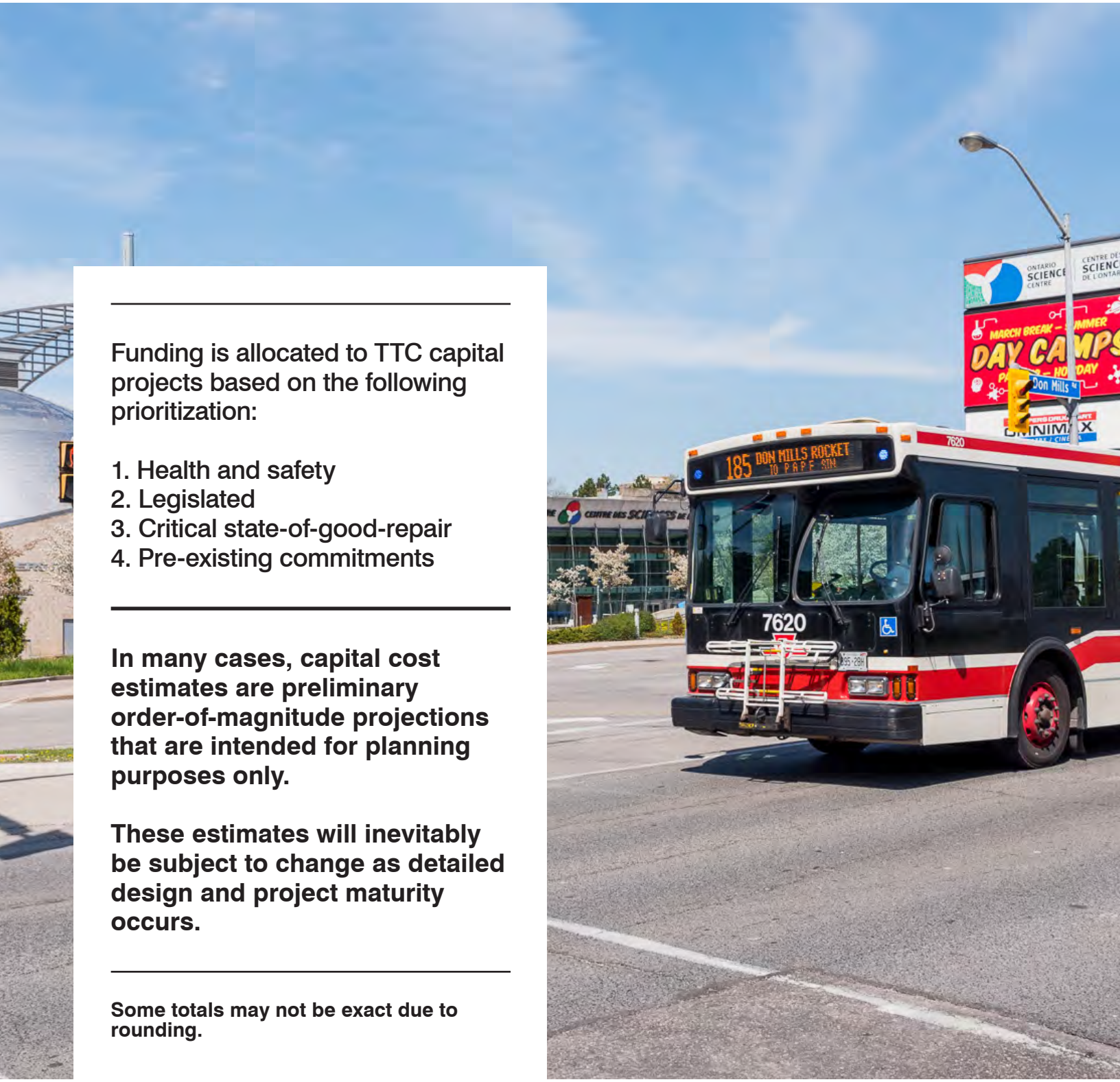
**Line 7 Sheppard East Line opens**

**Line 1 Yonge Subway Extension opens**

**Waterfront Transit network complete**

APPENDIX

# Base Capital Requirements




Funding is allocated to TTC capital projects based on the following prioritization:

1. Health and safety
2. Legislated
3. Critical state-of-good-repair
4. Pre-existing commitments

**In many cases, capital cost estimates are preliminary order-of-magnitude projections that are intended for planning purposes only.**

**These estimates will inevitably be subject to change as detailed design and project maturity occurs.**

**Some totals may not be exact due to rounding.**

| | | $ Billions | | |
|---|---|---|---|---|
| **Project** | **Description** | **Estimated Cost** | **Funded** | **Unfunded** |
| **Subways** | | | | |
| **Line 1** | | | | |
| **Line 1 Capacity Enhancement** | Increasing capacity through purchase of new trains, new northern yard and other station infrastructure enhancements | $5.50 | $0.00 | $5.50 |
| **Automatic Train Control (ATC) Resignalling – Line 1** | Increasing capacity by reducing headway, providing more reliable service | $0.22 | $0.22 | $0.00 |
| **Subway Track** | Subway track and turnout rehabilitation, rail grinding, rail vehicle-based inspection system | $0.33 | $0.29 | $0.04 |
| **Traction Power** | Replacement of electrical systems that power the subway, including substation electrical and cable rebuilds | $0.10 | $0.04 | $0.06 |
| **Subway Infrastructure** | Maintenance of bridges and tunnels, communications, signal systems | $0.49 | $0.28 | $0.21 |
| **Fire Ventilation Upgrade** | Increasing the capacity of the subway fire ventilation system and constructing second exits | $0.91 | $0.85 | $0.06 |
| **Toronto Rocket / T1 Rail Yard Accommodation** | Increasing subway train storage capacity at Wilson and Davisville Yards | $0.48 | $0.12 | $0.35 |
| **Purchase of Subway Trains — Ridership Growth and ATC — post 2028** | Purchase of new subway trains to meet ATC requirements and ridership growth forecasts | $0.43 | $0.01 | $0.41 |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Subway Train Overhaul** | Overhaul of the subway fleet to maintain state-of-good-repair | $0.22 | $0.16 | $0.06 |
| **Other Subway** | Work car purchase and overhaul, subway asbestos removal, pump and lighting replacement | $0.17 | $0.12 | $0.05 |
| **Line 1 Total** | | **$8.85** | **$2.10** | **$6.75** |
| **Line 2** | | | | |
| **Line 2 Capacity Enhancement** | Increasing capacity through purchase of new trains, traction power upgrades and other station infrastructure enhancements | $2.50 | $0.00 | $2.50 |
| **Automatic Train Control (ATC) Resignalling — Line 2** | Increasing capacity by reducing headway, providing more reliable service | $0.43 | $0.01 | $0.42 |
| **Subway Track** | Subway track and turnout rehabilitation, rail grinding, rail vehicle based inspection system | $0.33 | $0.29 | $0.04 |
| **Traction Power** | Replacement of electrical systems that power the subway, including substation electrical and cable rebuilds | $0.10 | $0.04 | $0.06 |
| **Subway Infrastructure** | Maintenance of bridges and tunnels, communications, signal systems | $0.49 | $0.28 | $0.21 |
| **Fire Ventilation Upgrade** | Increasing the capacity of the subway fire ventilation system and constructing second exits | $0.91 | $0.85 | $0.06 |
| **Toronto Rocket / T1 Rail Yard Accommodation** | Increasing subway train storage capacity at Greenwood, Keele Yard and Kipling tail tracks | $0.24 | $0.12 | $0.12 |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Purchase of Subway Trains (T1 replacement)** | Initial payment for the end-of-life replacement of the existing subway train fleet. This project will continue beyond the 15 year horizon. | $0.68 | $0.00 | $0.68 |
| **Subway Train Overhaul** | Overhaul of T1 subway trains every 5 years to maintain a state-of-good-repair | $0.22 | $0.16 | $0.06 |
| **Other Subway** | Work car purchase and overhaul, subway asbestos removal, pump and lighting replacement | $0.17 | $0.12 | $0.05 |
| **T1 Life Extension Overhaul** | 25 year overhaul of T1 subway trains starting in 2022 and ending in 2027 to extend their useful life | $0.72 | $0.38 | $0.33 |
| **Western Yard** | Purchase of land, construction of maintenance and storage facility and connection to the main line to meet growth | $2.27 | $0.04 | $2.23 |
| **Line 2 Total** | | **$9.07** | **$2.30** | **$6.77** |
| **Line 4** | | | | |
| **Maintaining State-of-Good-Repair** | **General maintenance to ensure a state-of-good repair on Line 4** | **$0.10** | **$0.10** | **$0.00** |
| **Subways Total** | | **$18.1** | **$4.5** | **$13.5** |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Bus** | | | | |
| **Bus Procurement Program** | Purchase of diesel, low-floor, low/zero emissions buses | $3.70 | $0.55 | $3.15 |
| **Ninth Bus Garage** | Construct a double garage that will allow for several years of growth | $0.53 | $0.20 | $0.33 |
| **Purchase of Automotive Non-Revenue Vehicles** | Purchase of vehicles used by TTC staff for transit enforcement, plant maintenance, etc. | $0.11 | $0.04 | $0.07 |
| **Bus Overhaul Program** | Mid-life rebuild of Orion and Nova bus fleets, including engine, transmission and suspension | $0.81 | $0.61 | $0.20 |
| **Bus Garages** | McNicoll bus garage completion, construction of collision centre and heavy-overhaul bus facility, garage upgrades | $0.78 | $0.19 | $0.59 |
| **Other Bus** | Transit signal priority measures, bus stop improvements, autonomous vehicle program | $0.13 | $0.07 | $0.06 |
| **Bus Total** | | **$6.06** | **$1.65** | **$4.41** |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Stations** | | | | |
| **Bloor-Yonge Capacity Improvements** | Construction of additional platforms, escalators and elevators to improve vertical circulation | $1.07 | $0.01 | $1.06 |
| **Station Rehabilitation** | Roofing rehabilitation on subway, rapid transit stations and station finish renewal | $0.30 | $0.24 | $0.06 |
| **Elevator and Escalator Overhaul and Replacement** | Replacement, modifications and upgrades to escalators and elevators to extend their useful life | $0.23 | $0.14 | $0.09 |
| **Easier Access Phase III (AODA) and Enhanced Station Access** | Installing elevators to make all stations accessible by 2025 and additional future elevator installations | $0.94 | $0.84 | $0.10 |
| **Platform Edge Doors** | Installation of doors on subway platforms to prevent passengers accessing subway tracks | $1.26 | $0.00 | $1.26 |
| **Other Stations** | Station transformation, subway station fire alarms, bus platform ventilation | $0.14 | $0.03 | $0.11 |
| **Stations Total** | | **$3.94** | **$1.26** | **$2.68** |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Streetcar** | | | | |
| **Purchase of 204 Streetcars** | Purchase of 204 accessible articulated low-floor streetcars | $0.37 | $0.37 | $0.00 |
| **Purchase of 60 Streetcars for Ridership Growth (in 2026 or 2027)** | Purchase of 60 accessible articulated low-floor streetcars for growth | $0.36 | $0.00 | $0.36 |
| **Purchase of Streetcars for Ridership Growth (2027–2031)** | Purchase of additional streetcars to meet ridership growth forecast from 2027–2031 | $0.15 | $0.00 | $0.15 |
| **Streetcar Overhaul Program** | Comprehensive overhaul program to ensure the state-of-good-repair of the new streetcar fleet | $0.13 | $0.13 | $0.00 |
| **New Streetcar Maintenance and Storage Facility** | Consideration of the conversion of the Hillcrest complex to streetcar-only with additional track and upgrading the Harvey Shop | $0.90 | $0.00 | $0.90 |
| **Surface Track and Traction Power** | Ongoing surface track replacement and traction power upgrades | $0.73 | $0.51 | $0.22 |
| **Streetcar Facility Upgrades** | Enhancements to streetcar facilities | $0.35 | $0.05 | $0.30 |
| **Streetcar Total** | | **$3.00** | **$1.06** | **$1.94** |

| Project | Description | Estimated Cost | Funded | Unfunded |
|---|---|---|---|---|
| **Wheel-Trans** | | | | |
| **Purchase of Future Wheel-Trans Buses / Transformation** | **Replacement of "Friendly" bus fleet and additional facilities based on the Family of Service model** | **$0.32** | **$0.14** | **$0.17** |
| **Other Infrastructure** | | | | |
| **Facilities** | Renewal projects for facilities, furniture, office equipment, paving and new industrial space | $0.68 | $0.44 | $0.24 |
| **Information Systems** | New Transit Control and ITS Centre, implementation of SAP, VISION, Enterprise Asset Management | $0.84 | $0.42 | $0.42 |
| **Office Consolidation** | Start of consolidation of office space to increase efficiency and reduce occupancy costs | $0.21 | $0.00 | $0.21 |
| **Health, Safety and Security Infrastructure** | Storage tank replacement, backflow preventors, standby generator procurement | $0.18 | $0.14 | $0.03 |
| **Other Infrastructure** | Shop equipment, culvert rehabilitation, service planning and completing the implementation of the PRESTO farecard program | $0.27 | $0.15 | $0.11 |
| **Other Infrastructure Total** | | **$2.17** | **$1.16** | **$1.01** |
| **TOTAL** | | **$33.50** | **$9.77** | **$23.73** |

Of the $33.5 billion total, $23.9 billion is expected in the 10-year planning period reflected in the 2019–2028 Capital Budget and Plan.

**TORONTO TRANSIT COMMISSION**
**2019-2028 CAPITAL BUDGET AND PLAN**
**For TTC Board Meeting on January 24, 2019**

| Project $Millions | Funding Status | 2017 LTD and 2018 Probables | 2019-2028 RECOMMENDED CAPITAL BUDGET AND PLAN | | | | | | | | | | | | Post 2028 | * EFC - Estimated Final Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2019 | 2020 | 2021 | 2022 | 2023 | 5-Year Total | 2024 | 2025 | 2026 | 2027 | 2028 | 10-Year Total | | |
| 1.1 Subway Track | Funded | 191.1 | 18.8 | 39.2 | 45.2 | 37.6 | 38.2 | 179.0 | 33.6 | 34.1 | 34.1 | 35.8 | 32.9 | 349.5 | 232.2 | 772.8 |
| | Capacity to Spend Reduction | 0.0 | 2.1 | 7.8 | 9.6 | 7.8 | 8.0 | 35.3 | 9.1 | 9.3 | 9.4 | 10.0 | 9.0 | 82.1 | 0.0 | 82.1 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 |
| | **Total Requirement** | **191.1** | **20.9** | **47.0** | **54.8** | **45.4** | **46.2** | **214.3** | **42.7** | **43.4** | **43.5** | **45.7** | **41.9** | **431.5** | **232.5** | **855.1** |
| 1.2 Surface Track | Funded | 256.5 | 38.8 | 34.1 | 24.5 | 21.6 | 21.9 | 140.8 | 15.6 | 19.3 | 25.4 | 20.9 | 23.8 | 245.7 | 97.7 | 600.0 |
| | Capacity to Spend Reduction | 0.0 | 4.1 | 13.2 | 12.5 | 10.1 | 10.6 | 50.4 | 12.5 | 12.7 | 12.9 | 13.5 | 12.8 | 114.8 | 0.0 | 114.8 |
| | Unfunded | 0.0 | 1.8 | 34.1 | 2.8 | 3.7 | 3.7 | 46.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 46.0 | 59.5 | 105.5 |
| | **Total Requirement** | **256.5** | **44.7** | **81.4** | **39.7** | **35.3** | **36.1** | **237.2** | **28.0** | **32.1** | **38.3** | **34.4** | **36.6** | **406.6** | **157.2** | **820.3** |
| 2.1 Traction Power | Funded | 262.8 | 17.3 | 17.8 | 15.9 | 15.7 | 16.5 | 83.2 | 16.5 | 17.4 | 18.6 | 20.9 | 21.0 | 177.5 | 55.1 | 495.4 |
| | Capacity to Spend Reduction | 0.0 | 2.8 | 2.8 | 2.8 | 2.8 | 3.0 | 14.2 | 4.2 | 4.4 | 4.6 | 5.2 | 5.2 | 37.8 | 0.0 | 37.8 |
| | Unfunded | 0.0 | 0.1 | 1.6 | 3.4 | 1.7 | 2.0 | 8.8 | 2.1 | 1.9 | 1.9 | 2.0 | 2.0 | 18.6 | 73.2 | 91.7 |
| | **Total Requirement** | **262.8** | **20.2** | **22.2** | **22.1** | **20.2** | **21.5** | **106.2** | **22.7** | **23.6** | **25.1** | **28.1** | **28.3** | **233.9** | **128.2** | **625.0** |
| 2.2 Power Distribution/Electric Systems | Funded | 112.5 | 7.3 | 9.3 | 7.6 | 8.4 | 6.2 | 38.9 | 5.9 | 5.9 | 6.5 | 7.0 | 6.7 | 70.9 | 18.4 | 201.8 |
| | Capacity to Spend Reduction | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 5.1 | 1.4 | 1.4 | 1.6 | 1.7 | 1.6 | 12.9 | 0.0 | 12.9 |
| | Unfunded | 0.0 | 0.0 | 0.3 | 0.9 | 3.9 | 6.2 | 11.4 | 8.8 | 10.6 | 16.8 | 24.1 | 0.0 | 71.6 | 24.7 | 96.3 |
| | **Total Requirement** | **112.5** | **8.4** | **10.6** | **9.5** | **13.4** | **13.5** | **55.4** | **16.1** | **17.9** | **24.9** | **32.7** | **8.3** | **155.3** | **43.2** | **311.0** |
| 2.3 Communications | Funded | 107.4 | 14.7 | 11.5 | 11.8 | 7.3 | 7.6 | 52.8 | 5.5 | 5.6 | 6.6 | 8.0 | 10.8 | 89.3 | 49.0 | 245.6 |
| | Capacity to Spend Reduction | 0.0 | 3.3 | 2.6 | 2.6 | 2.8 | 2.4 | 13.7 | 2.5 | 2.3 | 2.7 | 3.4 | 4.6 | 29.4 | 0.0 | 29.4 |
| | Unfunded | 0.0 | 3.2 | 7.4 | 6.8 | 11.4 | 3.3 | 32.1 | 3.6 | 3.0 | 3.0 | 3.0 | 3.0 | 47.6 | 34.5 | 82.2 |
| | **Total Requirement** | **107.4** | **21.2** | **21.5** | **21.2** | **21.5** | **13.3** | **98.6** | **11.6** | **10.9** | **12.3** | **14.4** | **18.5** | **166.3** | **83.5** | **357.2** |
| 2.4 ATC Line 1 (YUS) | Funded | 445.9 | 65.0 | 65.0 | 65.0 | 20.0 | 0.0 | 215.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 215.0 | 0.0 | 660.9 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **445.9** | **65.0** | **65.0** | **65.0** | **20.0** | **0.0** | **215.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **215.0** | **0.0** | **660.9** |
| 2.4 ATC Line 2 (BD) | Funded | 1.0 | 0.2 | 0.2 | 7.6 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 | 9.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 10.5 | 13.5 | 24.0 | 45.0 | 51.3 | 53.0 | 55.8 | 62.6 | 291.7 | 130.8 | 422.5 |
| | **Total Requirement** | **1.0** | **0.2** | **0.2** | **7.6** | **10.5** | **13.5** | **31.9** | **45.0** | **51.3** | **53.0** | **55.8** | **62.6** | **299.6** | **130.8** | **431.5** |
| 2.4 Signal Systems | Funded | 139.8 | 12.3 | 17.6 | 14.3 | 9.1 | 3.3 | 56.5 | 3.1 | 1.7 | 1.7 | 1.8 | 1.9 | 66.7 | 40.8 | 247.3 |
| | Capacity to Spend Reduction | 0.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 4.4 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 9.1 | 0.0 | 9.1 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **139.8** | **13.2** | **18.5** | **15.2** | **10.0** | **4.1** | **60.9** | **4.0** | **2.6** | **2.7** | **2.7** | **2.9** | **75.8** | **40.8** | **256.4** |
| 2.4 Signal Systems **(TOTAL)** | Funded | 586.8 | 77.5 | 82.8 | 86.9 | 29.1 | 3.3 | 279.5 | 3.1 | 1.7 | 1.7 | 1.8 | 1.9 | 289.7 | 40.8 | 917.2 |
| | Capacity to Spend Reduction | 0.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 4.4 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 9.1 | 0.0 | 9.1 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 10.5 | 13.5 | 24.0 | 45.0 | 51.3 | 53.0 | 55.8 | 62.6 | 291.7 | 130.8 | 422.5 |
| | **Total Requirement** | **586.8** | **78.4** | **83.7** | **87.7** | **40.5** | **17.6** | **307.8** | **49.0** | **53.9** | **55.7** | **58.6** | **65.4** | **590.4** | **171.6** | **1,348.8** |
| 3.1 Finishes | Funded | 182.8 | 19.2 | 26.5 | 19.9 | 21.2 | 12.8 | 99.6 | 7.9 | 6.5 | 7.9 | 6.9 | 7.0 | 135.8 | 103.4 | 421.9 |
| | Capacity to Spend Reduction | 0.0 | 2.2 | 3.4 | 2.8 | 3.7 | 1.9 | 14.0 | 1.4 | 1.1 | 1.4 | 1.2 | 1.3 | 20.4 | 0.0 | 20.4 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 5.7 | 6.2 | 6.7 | 18.6 | 6.7 | 4.6 | 2.0 | 2.0 | 2.0 | 36.0 | 0.3 | 36.3 |
| | **Total Requirement** | **182.8** | **21.4** | **29.9** | **28.3** | **31.1** | **21.4** | **132.2** | **16.0** | **12.2** | **11.4** | **10.1** | **10.3** | **192.2** | **103.7** | **478.7** |
| 3.2 Equipment | Funded | 226.7 | 26.6 | 34.5 | 29.4 | 14.9 | 14.0 | 119.4 | 11.7 | 10.2 | 11.4 | 16.1 | 18.0 | 186.7 | 116.0 | 529.4 |
| | Capacity to Spend Reduction | 0.0 | 2.4 | 2.8 | 2.7 | 2.3 | 2.4 | 12.5 | 3.3 | 3.3 | 3.0 | 3.9 | 4.8 | 31.0 | 0.0 | 31.0 |
| | Unfunded | 0.0 | 1.2 | 5.8 | 8.6 | 7.9 | 0.7 | 24.1 | 2.9 | 4.0 | 1.6 | 0.0 | 1.2 | 33.9 | 25.1 | 59.0 |
| | **Total Requirement** | **226.7** | **30.1** | **43.1** | **40.7** | **25.1** | **17.1** | **156.0** | **17.9** | **17.5** | **16.0** | **20.0** | **24.1** | **251.6** | **141.1** | **619.4** |
| 3.3 Yards & Roads - On-Grade Paving Rehabilitation Program | Funded | 84.7 | 6.6 | 14.1 | 16.3 | 17.0 | 10.6 | 64.7 | 9.7 | 9.9 | 10.0 | 10.2 | 10.3 | 114.9 | 99.2 | 298.8 |
| | Capacity to Spend Reduction | 0.0 | 1.2 | 2.5 | 3.1 | 3.0 | 1.9 | 11.6 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 24.2 | 0.9 | 25.1 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **84.7** | **7.7** | **16.6** | **19.4** | **20.1** | **12.5** | **76.3** | **12.2** | **12.4** | **12.5** | **12.7** | **12.9** | **139.1** | **100.1** | **323.9** |
| 3.3 Yards & Roads - Streetcar Network Upgrades for Streetcars | Funded | 44.8 | 1.1 | 5.8 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 51.7 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 13.9 | 10.5 | 0.0 | 24.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.3 | 0.0 | 24.3 |
| | **Total Requirement** | **44.8** | **1.1** | **5.8** | **13.9** | **10.5** | **0.0** | **31.3** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **31.3** | **0.0** | **76.1** |
| 3.3 Yards & Roads - Bus Rapid Transit (BRT) - Spadina Subway to York University/Steeles Avenue | Funded | 35.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35.3 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 10.0 |
| | **Total Requirement** | **35.3** | **0.0** | **10.0** | **0.0** | **0.0** | **0.0** | **10.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **10.0** | **0.0** | **45.3** |
| 3.3 Yards & Roads - TTC Streetcar Shelter Reconstruction | Funded | 4.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 2.1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 4.4 | 0.0 | 8.5 |
| | Capacity to Spend Reduction | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 0.0 | 0.8 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **4.2** | **0.4** | **0.5** | **0.5** | **0.5** | **0.5** | **2.5** | **0.5** | **0.5** | **0.5** | **0.5** | **0.5** | **5.2** | **0.0** | **9.3** |
| 3.3 Yards & Roads - Bicycle Parking at Stations | Funded | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.9** | **0.3** | **0.0** | **0.0** | **0.0** | **0.0** | **0.3** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.3** | **0.0** | **1.2** |
| 3.3 Transit Shelters & Loops | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.2 | 1.0 | 7.5 | 15.0 | 13.1 | 36.8 | 1.6 | 0.8 | 0.8 | 0.9 | 0.9 | 41.8 | 0.0 | 41.8 |
| | **Total Requirement** | **0.0** | **0.2** | **1.0** | **7.5** | **15.0** | **13.1** | **36.8** | **1.6** | **0.8** | **0.8** | **0.9** | **0.9** | **41.8** | **0.0** | **41.8** |
| 3.3 Commuter Parking Expansion RGS - Kipling and Islington Parking | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 1.2 | 3.5 | 5.3 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 10.0 |
| | **Total Requirement** | **0.0** | **1.2** | **3.5** | **5.3** | **0.0** | **0.0** | **10.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **10.0** | **0.0** | **10.0** |
| 3.3 Bus Rapid Transit (BRT) - Yonge Street from Finch Station to Steeles Avenue | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.1 | 0.1 | 3.3 | 11.2 | 14.1 | 28.8 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 31.0 | 0.0 | 31.0 |
| | **Total Requirement** | **0.0** | **0.1** | **0.1** | **3.3** | **11.2** | **14.1** | **28.8** | **2.2** | **0.0** | **0.0** | **0.0** | **0.0** | **31.0** | **0.0** | **31.0** |

*Please note, the EFC incorporates spending in the prior years and may go beyond 15 years and as such, will not equal the Capital Investment Plan

**TORONTO TRANSIT COMMISSION**
**2019-2028 CAPITAL BUDGET AND PLAN**
**For TTC Board Meeting on January 24, 2019**

| Project $Millions | Funding Status | 2017 LTD and 2018 Probables | 2019 | 2020 | 2021 | 2022 | 2023 | 5-Year Total | 2024 | 2025 | 2026 | 2027 | 2028 | 10-Year Total | Post 2028 | * EFC - Estimated Final Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **2019-2028 RECOMMENDED CAPITAL BUDGET AND PLAN** | | | | | | | | | | | | | |
| 3.3 Yards & Roads **(TOTAL)** | Funded | 169.9 | 8.3 | 20.3 | 16.7 | 17.5 | 11.1 | 73.9 | 10.2 | 10.4 | 10.5 | 10.7 | 10.8 | 126.5 | 99.2 | 395.5 |
| | Capacity to Spend Reduction | 0.0 | 1.2 | 2.6 | 3.2 | 3.1 | 2.0 | 12.0 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 25.0 | 0.9 | 25.8 |
| | Unfunded | 0.0 | 1.5 | 14.7 | 29.9 | 36.7 | 27.2 | 110.0 | 3.7 | 0.8 | 0.8 | 0.9 | 0.9 | 117.1 | 0.0 | 117.1 |
| | **Total Requirement** | **169.9** | **11.1** | **37.5** | **49.9** | **57.3** | **40.2** | **196.0** | **16.5** | **13.7** | **13.9** | **14.1** | **14.4** | **268.6** | **100.1** | **538.5** |
| 3.4 Bridges & Tunnels | Funded | 425.1 | 31.9 | 35.7 | 42.3 | 32.7 | 37.0 | 179.6 | 35.3 | 37.2 | 37.7 | 38.3 | 33.5 | 361.6 | 13.3 | 799.9 |
| | Capacity to Spend Reduction | 0.0 | 5.2 | 6.5 | 6.3 | 6.1 | 6.6 | 30.7 | 9.0 | 9.3 | 9.4 | 9.6 | 9.7 | 77.7 | 0.0 | 77.7 |
| | Unfunded | 0.0 | 0.0 | 2.9 | 10.0 | 9.0 | 0.6 | 22.5 | 0.6 | 0.0 | 0.0 | 0.0 | 5.3 | 28.3 | 209.5 | 237.8 |
| | **Total Requirement** | **425.1** | **37.2** | **45.1** | **58.6** | **47.8** | **44.2** | **232.8** | **44.9** | **46.4** | **47.1** | **47.8** | **48.5** | **467.6** | **222.8** | **1,115.4** |
| 3.9 Buildings and Structures Projects - Fire Ventilation Upgrade | Funded | 276.9 | 17.8 | 33.9 | 53.2 | 60.9 | 52.0 | 217.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 217.7 | 1,490.6 | 1,985.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.4 | 27.2 | 19.6 | 9.1 | 9.1 | 104.4 | 9.4 | 113.8 |
| | **Total Requirement** | **276.9** | **17.8** | **33.9** | **53.2** | **60.9** | **52.0** | **217.7** | **39.4** | **27.2** | **19.6** | **9.1** | **9.1** | **322.1** | **1,500.0** | **2,099.0** |
| 3.9 Buildings and Structures Projects - Easier Access | Funded | 239.6 | 58.4 | 70.6 | 82.4 | 96.5 | 93.5 | 401.4 | 83.2 | 69.7 | 35.6 | 0.0 | 0.0 | 590.0 | 250.0 | 1,079.6 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **239.6** | **58.4** | **70.6** | **82.4** | **96.5** | **93.5** | **401.4** | **83.2** | **69.7** | **35.6** | **0.0** | **0.0** | **590.0** | **250.0** | **1,079.6** |
| 3.9 Buildings and Structures Projects - Line 4 | Funded | 965.2 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 0.0 | 968.9 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **965.2** | **3.7** | **0.0** | **0.0** | **0.0** | **0.0** | **3.7** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **3.7** | **0.0** | **968.9** |
| 3.9 Buildings and Structures Projects - Leslie Barns | Funded | 518.6 | 3.6 | 1.4 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 523.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **518.6** | **3.6** | **1.4** | **0.0** | **0.0** | **0.0** | **4.9** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **4.9** | **0.0** | **523.5** |
| 3.9 Buildings and Structures Projects - McNicoll Bus Garage | Funded | 59.3 | 46.0 | 52.8 | 22.9 | 0.0 | 0.0 | 121.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 121.7 | 0.0 | 181.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **59.3** | **46.0** | **52.8** | **22.9** | **0.0** | **0.0** | **121.7** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **121.7** | **0.0** | **181.0** |
| 3.9 Buildings and Structures Projects - Toronto Rocket / T1 (Subway Car) Rail Yard Accommodation | Funded | 251.3 | 34.6 | 75.5 | 69.3 | 46.6 | 12.5 | 238.4 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 244.1 | 0.0 | 495.4 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 470.9 | 470.9 |
| | **Total Requirement** | **251.3** | **34.6** | **75.5** | **69.3** | **46.6** | **12.5** | **238.4** | **5.7** | **0.0** | **0.0** | **0.0** | **0.0** | **244.1** | **470.9** | **966.3** |
| 3.9 Buildings and Structures Projects - Streetcar Carhouse Facility Renewal Program | Funded | 53.7 | 11.2 | 16.5 | 16.8 | 1.6 | 0.5 | 46.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 50.0 | 0.0 | 103.7 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **53.7** | **11.2** | **16.5** | **16.8** | **1.6** | **0.5** | **46.5** | **0.5** | **0.5** | **0.5** | **1.0** | **1.0** | **50.0** | **0.0** | **103.7** |
| 3.9 Buildings and Structures Projects - New Transit Control - ITS Centre | Funded | 4.2 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 14.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 41.5 | 39.0 | 36.0 | 8.0 | 124.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 124.5 | 0.0 | 124.5 |
| | **Total Requirement** | **4.2** | **10.0** | **41.5** | **39.0** | **36.0** | **8.0** | **134.5** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **134.5** | **0.0** | **138.7** |
| 3.9 Buildings and Structures Projects - New Subway Maint. And Storage Facility (Western) | Funded | 129.0 | 41.0 | 0.0 | 0.0 | 0.0 | 0.0 | 41.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 41.0 | 0.0 | 170.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 26.1 | 68.0 | 113.0 | 170.0 | 377.1 | 501.0 | 471.0 | 409.0 | 305.0 | 140.0 | 2,203.1 | 30.0 | 2,233.1 |
| | **Total Requirement** | **129.0** | **41.0** | **26.1** | **68.0** | **113.0** | **170.0** | **418.1** | **501.0** | **471.0** | **409.0** | **305.0** | **140.0** | **2,244.1** | **30.0** | **2,403.1** |
| 3.9 Buildings and Structures Projects - Bloor-Yonge Capacity Improvements Conceptual Design & Alignment | Funded | 4.4 | 3.0 | 4.1 | 2.5 | 0.0 | 0.0 | 9.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 0.0 | 14.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **4.4** | **3.0** | **4.1** | **2.5** | **0.0** | **0.0** | **9.6** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **9.6** | **0.0** | **14.0** |
| 3.9 Bloor-Yonge Capacity Improvements | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 18.6 | 137.4 | 223.7 | 299.9 | 679.6 | 264.9 | 112.8 | 0.0 | 0.0 | 0.0 | 1,057.3 | 0.0 | 1,057.3 |
| | **Total Requirement** | **0.0** | **0.0** | **18.6** | **137.4** | **223.7** | **299.9** | **679.6** | **264.9** | **112.8** | **0.0** | **0.0** | **0.0** | **1,057.3** | **0.0** | **1,057.3** |
| 3.9 Buildings and Structures Projects - Wheel-Trans 10- Yr Transformation Program | Funded | 12.5 | 10.6 | 12.0 | 14.6 | 0.0 | 0.0 | 37.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.2 | 0.0 | 49.8 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **12.5** | **10.6** | **12.0** | **14.6** | **0.0** | **0.0** | **37.2** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **37.2** | **0.0** | **49.8** |
| 3.9 Buildings and Structures Projects - Stations Transformations | Funded | 10.1 | 12.2 | 6.4 | 6.5 | 4.1 | 4.2 | 33.5 | 7.3 | 0.0 | 0.0 | 0.0 | 0.0 | 40.7 | 0.0 | 50.8 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **10.1** | **12.2** | **6.4** | **6.5** | **4.1** | **4.2** | **33.5** | **7.3** | **0.0** | **0.0** | **0.0** | **0.0** | **40.7** | **0.0** | **50.8** |
| 3.9 Buildings and Structures Projects - Eglinton Bus Terminal | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 0.0 | 25.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **25.0** | **0.0** | **0.0** | **0.0** | **0.0** | **25.0** | **0.0** | **25.0** |
| 3.9 Buildings and Structures Projects - Enhanced Station Access | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 100.0 | 0.0 | 100.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **50.0** | **50.0** | **100.0** | **0.0** | **100.0** |
| 3.9 Buildings and Structures Projects - Streetcar Facility Upgrade | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 30.0 | 30.0 | 30.0 | 90.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 240.0 | 60.0 | 300.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **30.0** | **30.0** | **30.0** | **90.0** | **30.0** | **30.0** | **30.0** | **30.0** | **30.0** | **240.0** | **60.0** | **300.0** |
| 3.9 Buildings and Structures Projects - Ninth Bus Garage | Funded | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 200.0 | 0.0 | 200.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 11.4 | 4.2 | 37.4 | 91.1 | 144.1 | 91.1 | 94.7 | 0.0 | 0.0 | 0.0 | 329.9 | 0.0 | 329.9 |
| | **Total Requirement** | **0.0** | **0.0** | **211.4** | **4.2** | **37.4** | **91.1** | **344.1** | **91.1** | **94.7** | **0.0** | **0.0** | **0.0** | **529.9** | **0.0** | **529.9** |

*Please note, the EFC incorporates spending in the prior years and may go beyond 15 years and as such, will not equal the Capital Investment Plan

**TORONTO TRANSIT COMMISSION**
**2019-2028 CAPITAL BUDGET AND PLAN**
**For TTC Board Meeting on January 24, 2019**

| Project $Millions | Funding Status | 2017 LTD and 2018 Probables | 2019 | 2020 | 2021 | 2022 | 2023 | 5-Year Total | 2024 | 2025 | 2026 | 2027 | 2028 | 10-Year Total | Post 2028 | * EFC - Estimated Final Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **2019-2028 RECOMMENDED CAPITAL BUDGET AND PLAN** | | | | | | | | | | | | | |
| 3.9 Buildings and Structures Projects - Greenwood Shop End of Life Replacement | Funded | 0.0 | 1.0 | 5.0 | 12.0 | 8.5 | 11.0 | 37.5 | 11.0 | 5.0 | 0.0 | 0.0 | 0.0 | 53.5 | 0.0 | 53.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.0** | **1.0** | **5.0** | **12.0** | **8.5** | **11.0** | **37.5** | **11.0** | **5.0** | **0.0** | **0.0** | **0.0** | **53.5** | **0.0** | **53.5** |
| 3.9 Buildings and Structures Projects - Standby Generators Replacement | Funded | 0.0 | 0.7 | 2.3 | 3.3 | 3.8 | 6.8 | 16.9 | 8.5 | 0.0 | 0.0 | 0.0 | 0.0 | 25.4 | 0.0 | 25.4 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.0** | **0.7** | **2.3** | **3.3** | **3.8** | **6.8** | **16.9** | **8.5** | **0.0** | **0.0** | **0.0** | **0.0** | **25.4** | **0.0** | **25.4** |
| 3.9 Buildings and Structures Projects - Subway Bus Platform Ventilation Equipment Replacement | Funded | 0.0 | 0.1 | 0.3 | 2.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 2.4 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 15.0 | 21.5 | 15.6 | 10.3 | 0.0 | 0.0 | 0.0 | 47.3 | 0.0 | 47.3 |
| | **Total Requirement** | **0.0** | **0.1** | **0.3** | **2.0** | **6.5** | **15.0** | **23.9** | **15.6** | **10.3** | **0.0** | **0.0** | **0.0** | **49.7** | **0.0** | **49.7** |
| 3.9 Buildings and Structures Projects - Line 1 Capacity Enhancement | Funded | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 2.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 57.0 | 168.0 | 279.0 | 420.0 | 1,235.0 | 2,159.0 | 1,161.0 | 1,007.0 | 752.0 | 346.0 | 73.0 | 5,498.0 | 0.0 | 5,498.0 |
| | **Total Requirement** | **0.0** | **59.0** | **168.0** | **279.0** | **420.0** | **1,235.0** | **2,161.0** | **1,161.0** | **1,007.0** | **752.0** | **346.0** | **73.0** | **5,500.0** | **0.0** | **5,500.0** |
| 3.9 Buildings and Structures Projects - Line 2 Capacity Enhancement | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 76.0 | 127.0 | 191.0 | 561.0 | 982.0 | 1,518.0 | 2,500.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **27.0** | **76.0** | **127.0** | **191.0** | **561.0** | **982.0** | **1,518.0** | **2,500.0** |
| 3.9 New Streetcar Maintenance and Storage Facility (Hillcrest Complex) | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.5 | 61.0 | 15.0 | 28.0 | 29.1 | 133.6 | 230.0 | 271.5 | 145.8 | 85.9 | 33.2 | 900.0 | 0.0 | 900.0 |
| | **Total Requirement** | **0.0** | **0.5** | **61.0** | **15.0** | **28.0** | **29.1** | **133.6** | **230.0** | **271.5** | **145.8** | **85.9** | **33.2** | **900.0** | **0.0** | **900.0** |
| 3.9 Platform Edge Doors | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.7 | 5.9 | 11.7 | 5.0 | 46.4 | 69.7 | 61.8 | 62.8 | 64.2 | 4.3 | 94.4 | 357.1 | 904.7 | 1,261.8 |
| | **Total Requirement** | **0.0** | **0.7** | **5.9** | **11.7** | **5.0** | **46.4** | **69.7** | **61.8** | **62.8** | **64.2** | **4.3** | **94.4** | **357.1** | **904.7** | **1,261.8** |
| 3.9 Davenport Garage Renewal | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.5 | 1.2 | 0.5 | 0.6 | 90.6 | 0.0 | 0.0 | 93.0 | 0.0 | 93.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.1** | **0.3** | **0.3** | **0.5** | **1.2** | **0.5** | **0.6** | **90.6** | **0.0** | **0.0** | **93.0** | **0.0** | **93.0** |
| 3.9 Office Consolidation | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 15.0 | 44.0 | 74.0 | 92.0 | 0.0 | 0.0 | 210.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 210.0 | 0.0 | 225.0 |
| | **Total Requirement** | **15.0** | **44.0** | **74.0** | **92.0** | **0.0** | **0.0** | **210.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **210.0** | **0.0** | **225.0** |
| 3.9 Bus Heavy Overhaul Facility | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 60.0 | 60.0 | 60.0 | 10.0 | 250.0 | 0.0 | 250.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **60.0** | **60.0** | **60.0** | **60.0** | **10.0** | **250.0** | **0.0** | **250.0** |
| 3.9 Buildings and Structures Projects (Other) | Funded | 382.0 | 59.3 | 61.6 | 21.3 | 12.9 | 5.9 | 160.9 | 1.7 | 4.9 | 2.9 | 3.4 | 3.2 | 177.0 | 14.6 | 573.5 |
| | Capacity to Spend Reduction | 0.0 | 3.4 | 8.0 | 6.7 | 8.1 | 2.1 | 28.4 | 1.8 | 1.7 | 1.0 | 2.2 | 1.3 | 36.4 | 0.0 | 36.4 |
| | Unfunded | 0.0 | 0.0 | 31.5 | 36.8 | 17.8 | 7.3 | 93.4 | 66.7 | 62.5 | 62.5 | 62.5 | 0.0 | 347.6 | 0.0 | 347.6 |
| | **Total Requirement** | **382.0** | **62.7** | **101.1** | **64.8** | **38.8** | **15.3** | **282.7** | **70.2** | **69.0** | **66.4** | **68.2** | **4.5** | **560.9** | **14.6** | **957.5** |
| 3.9 Buildings and Structures (**TOTAL**) | Funded | 2,906.7 | 315.1 | 542.4 | 306.8 | 234.9 | 186.3 | 1,585.5 | 142.8 | 80.1 | 39.1 | 4.4 | 4.2 | 1,856.0 | 1,755.1 | 6,517.8 |
| | Capacity to Spend Reduction | 0.0 | 3.4 | 8.0 | 6.7 | 8.1 | 2.1 | 28.4 | 1.8 | 1.7 | 1.0 | 2.2 | 1.3 | 36.4 | 0.0 | 36.4 |
| | Unfunded | 15.0 | 102.2 | 438.0 | 713.5 | 917.7 | 1,932.3 | 4,103.7 | 2,549.0 | 2,286.4 | 1,760.7 | 1,143.7 | 1,000.7 | 12,844.2 | 2,993.0 | 15,852.2 |
| | **Total Requirement** | **2,921.7** | **420.8** | **988.5** | **1,027.0** | **1,160.6** | **2,120.8** | **5,717.6** | **2,693.6** | **2,368.2** | **1,800.7** | **1,150.4** | **1,006.2** | **14,736.6** | **4,748.2** | **22,406.5** |
| 4.11 Purchase of Buses | Funded | 517.9 | 321.3 | 86.6 | 52.5 | 86.2 | 0.0 | 546.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 546.6 | 0.0 | 1,064.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 174.7 | 177.1 | 196.5 | 548.3 | 265.7 | 224.8 | 293.6 | 200.2 | 270.1 | 1,802.6 | 1,350.0 | 3,152.6 |
| | **Total Requirement** | **517.9** | **321.3** | **86.6** | **227.2** | **263.3** | **196.5** | **1,094.9** | **265.7** | **224.8** | **293.6** | **200.2** | **270.1** | **2,349.2** | **1,350.0** | **4,217.2** |
| 4.11 Purchase of Buses - Autonomous Vehicle Program | Funded | 0.0 | 0.5 | 0.6 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 1.1 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 1.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 4.9 | 0.0 | 4.9 |
| | **Total Requirement** | **0.0** | **0.5** | **0.6** | **0.6** | **0.6** | **0.6** | **2.9** | **0.6** | **0.6** | **0.6** | **0.6** | **0.6** | **6.0** | **0.0** | **6.0** |
| 4.11 Purchase of Buses - Purchase of Future Wheel-Trans Buses | Funded | 13.9 | 7.6 | 2.0 | 0.0 | 0.0 | 0.0 | 9.6 | 12.1 | 12.5 | 4.8 | 26.8 | 4.8 | 70.8 | 35.0 | 119.7 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 1.4 | 22.0 | 14.7 | 16.1 | 19.3 | 73.6 | 8.2 | 1.4 | 7.8 | 8.5 | 38.0 | 137.6 | 37.3 | 174.9 |
| | **Total Requirement** | **13.9** | **9.1** | **24.0** | **14.7** | **16.1** | **19.3** | **83.2** | **20.4** | **14.0** | **12.7** | **35.3** | **42.9** | **208.4** | **72.3** | **294.5** |
| 4.11 Purchase of Buses **(TOTAL)** | Funded | 531.8 | 329.4 | 89.2 | 52.5 | 86.2 | 0.0 | 557.3 | 12.1 | 12.5 | 4.8 | 26.8 | 4.8 | 618.5 | 35.0 | 1,185.3 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 1.4 | 22.0 | 190.0 | 193.9 | 216.5 | 623.8 | 274.5 | 226.8 | 302.0 | 209.2 | 308.7 | 1,945.1 | 1,387.3 | 3,332.4 |
| | **Total Requirement** | **531.8** | **330.9** | **111.1** | **242.6** | **280.1** | **216.5** | **1,181.1** | **286.7** | **239.3** | **306.9** | **236.1** | **313.5** | **2,563.6** | **1,422.3** | **4,517.7** |
| 4.12 Purchase of Subway Cars | Funded | 1,148.0 | 2.4 | 7.4 | 3.8 | 0.0 | 0.0 | 13.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.7 | 0.0 | 1,161.7 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,681.7 | 2,681.7 |
| | **Total Requirement** | **1,148.0** | **2.4** | **7.4** | **3.8** | **0.0** | **0.0** | **13.7** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **13.7** | **2,681.7** | **3,843.4** |
| 4.13 Bus Overhaul | Funded | 294.4 | 40.1 | 45.1 | 31.6 | 11.2 | 11.2 | 139.2 | 41.4 | 42.0 | 42.6 | 43.2 | 43.8 | 352.3 | 256.5 | 903.2 |
| | Capacity to Spend Reduction | 0.0 | 6.6 | 13.9 | 12.2 | 11.7 | 11.9 | 56.3 | 11.8 | 12.0 | 12.2 | 12.4 | 12.6 | 117.4 | 0.0 | 117.4 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 15.0 | 15.0 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.0 | 50.4 | 80.4 |
| | **Total Requirement** | **294.4** | **46.8** | **59.0** | **43.8** | **37.9** | **38.1** | **225.5** | **53.2** | **54.0** | **54.8** | **55.6** | **56.5** | **499.7** | **306.9** | **1,101.0** |

*Please note, the EFC incorporates spending in the prior years and may go beyond 15 years and as such, will not equal the Capital Investment Plan

**TORONTO TRANSIT COMMISSION**
**2019-2028 CAPITAL BUDGET AND PLAN**
**For TTC Board Meeting on January 24, 2019**

| Project $Millions | Funding Status | 2017 LTD and 2018 Probables | 2019 | 2020 | 2021 | 2022 | 2023 | 5-Year Total | 2024 | 2025 | 2026 | 2027 | 2028 | 10-Year Total | Post 2028 | * EFC - Estimated Final Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **2019-2028 RECOMMENDED CAPITAL BUDGET AND PLAN** | | | | | | | | | | | | | |
| 4.15 Streetcar Overhaul | Funded | 39.3 | 3.7 | 3.0 | 5.0 | 9.2 | 9.3 | 30.1 | 9.4 | 9.6 | 13.1 | 9.9 | 10.1 | 82.2 | 50.0 | 171.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **39.3** | **3.7** | **3.0** | **5.0** | **9.2** | **9.3** | **30.1** | **9.4** | **9.6** | **13.1** | **9.9** | **10.1** | **82.2** | **50.0** | **171.5** |
| 4.16 Subway Car Overhaul | Funded | 196.6 | 33.0 | 23.0 | 18.9 | 14.8 | 9.8 | 99.5 | 9.6 | 10.2 | 9.9 | 18.1 | 26.3 | 173.6 | 149.5 | 519.8 |
| | Capacity to Spend Reduction | 0.0 | 4.8 | 7.2 | 7.7 | 6.3 | 4.2 | 30.2 | 4.1 | 4.4 | 4.3 | 7.8 | 11.3 | 62.0 | 0.0 | 62.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.7 | 57.7 |
| | **Total Requirement** | **196.6** | **37.9** | **30.2** | **26.6** | **21.1** | **13.9** | **129.7** | **13.7** | **14.6** | **14.2** | **25.8** | **37.5** | **235.5** | **207.3** | **639.4** |
| 4.16 Subway Car Overhaul - T1 (Subway Car) Life Extension Overhaul | Funded | 0.0 | 0.8 | 3.3 | 3.5 | (0.0) | (0.0) | 7.6 | 36.5 | 36.5 | 100.0 | 100.0 | 102.7 | 383.2 | 0.0 | 383.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 66.1 | 138.9 | 205.0 | 63.5 | 63.5 | 0.0 | 0.0 | 0.0 | 332.0 | 0.0 | 332.0 |
| | **Total Requirement** | **0.0** | **0.8** | **3.3** | **3.5** | **66.1** | **138.9** | **212.6** | **100.0** | **100.0** | **100.0** | **100.0** | **102.7** | **715.2** | **0.0** | **715.2** |
| 4.16 Subway Car Overhaul **(TOTAL)** | Funded | 196.6 | 33.8 | 26.3 | 22.4 | 14.7 | 9.8 | 107.0 | 46.1 | 46.7 | 109.9 | 118.1 | 128.9 | 556.8 | 149.5 | 903.0 |
| | Capacity to Spend Reduction | 0.0 | 4.8 | 7.2 | 7.7 | 6.3 | 4.2 | 30.2 | 4.1 | 4.4 | 4.3 | 7.8 | 11.3 | 62.0 | 0.0 | 62.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 66.1 | 138.9 | 205.0 | 63.5 | 63.5 | 0.0 | 0.0 | 0.0 | 332.0 | 57.7 | 389.7 |
| | **Total Requirement** | **196.6** | **38.7** | **33.5** | **30.1** | **87.2** | **152.8** | **342.2** | **113.7** | **114.6** | **114.2** | **125.8** | **140.2** | **950.8** | **207.3** | **1,354.7** |
| 4.18 Purchase of Streetcars | Funded | 819.6 | 331.7 | 35.3 | 0.0 | 0.0 | 0.0 | 366.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 366.9 | 0.0 | 1,186.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **819.6** | **331.7** | **35.3** | **0.0** | **0.0** | **0.0** | **366.9** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **366.9** | **0.0** | **1,186.5** |
| 4.18 Purchase of Streetcars - Purchase of 60 Streetcars for Ridership Growth | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45.9 | 151.7 | 149.3 | 14.0 | 0.0 | 360.9 | 0.0 | 360.9 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **45.9** | **151.7** | **149.3** | **14.0** | **0.0** | **360.9** | **0.0** | **360.9** |
| 4.18 Purchase of Streetcars for Ridership Growth | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.2 | 2.3 | 19.8 | 126.4 | 1.3 | 0.0 | 0.0 | 149.8 | 0.0 | 149.8 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **0.2** | **2.2** | **2.3** | **19.8** | **126.4** | **1.3** | **0.0** | **0.0** | **149.8** | **0.0** | **149.8** |
| 4.18 Purchase of Streetcars **(TOTAL)** | Funded | 819.6 | 331.7 | 35.3 | 0.0 | 0.0 | 0.0 | 366.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 366.9 | 0.0 | 1,186.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.2 | 2.3 | 65.7 | 278.0 | 150.6 | 14.0 | 0.0 | 510.7 | 0.0 | 510.7 |
| | **Total Requirement** | **819.6** | **331.7** | **35.3** | **0.0** | **0.2** | **2.2** | **369.2** | **65.7** | **278.0** | **150.6** | **14.0** | **0.0** | **877.6** | **0.0** | **1,697.2** |
| 4.21 Purchase Automotive Non-Revenue Vehicles | Funded | 21.7 | 2.4 | 2.5 | 1.5 | 2.3 | 2.4 | 11.1 | 0.8 | 0.9 | 1.4 | 1.5 | 0.8 | 16.6 | 15.8 | 54.0 |
| | Capacity to Spend Reduction | 0.0 | 1.8 | 1.1 | 1.6 | 1.0 | 1.0 | 6.5 | 1.3 | 1.2 | 0.7 | 0.6 | 0.7 | 11.0 | 0.0 | 11.0 |
| | Unfunded | 0.0 | 7.7 | 2.3 | 7.6 | 3.0 | 2.9 | 23.5 | 6.6 | 5.8 | 2.4 | 1.8 | 2.9 | 43.1 | 22.3 | 65.4 |
| | **Total Requirement** | **21.7** | **11.9** | **5.9** | **10.7** | **6.3** | **6.3** | **41.1** | **8.7** | **7.9** | **4.5** | **3.9** | **4.4** | **70.6** | **38.0** | **130.3** |
| 4.22 Rail Non-Revenue Vehicle Overhaul | Funded | 8.2 | 3.1 | 4.3 | 7.7 | 3.2 | 1.3 | 19.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 22.6 | 5.0 | 35.8 |
| | Capacity to Spend Reduction | 0.0 | 0.1 | 0.5 | 1.2 | 0.9 | 0.3 | 3.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 4.6 | 0.0 | 4.6 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **8.2** | **3.3** | **4.8** | **8.9** | **4.1** | **1.6** | **22.7** | **0.9** | **0.9** | **0.9** | **0.9** | **0.9** | **27.2** | **5.0** | **40.4** |
| 4.23 Purchase Rail Non-Revenue Vehicles | Funded | 28.7 | 17.5 | 9.6 | 9.1 | 8.1 | 1.2 | 45.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45.6 | 0.0 | 74.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **28.7** | **17.5** | **9.6** | **9.1** | **8.1** | **1.2** | **45.6** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **45.6** | **0.0** | **74.2** |
| 5.1 Shop Equipment | Funded | 22.8 | 5.0 | 2.0 | 2.0 | 1.8 | 1.4 | 12.2 | 1.4 | 1.4 | 1.3 | 1.7 | 0.9 | 18.9 | 25.8 | 67.5 |
| | Capacity to Spend Reduction | 0.0 | 1.9 | 1.2 | 2.0 | 0.8 | 0.6 | 6.5 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 10.0 | 0.0 | 10.0 |
| | Unfunded | 0.0 | 5.7 | 4.6 | 3.7 | 0.8 | 0.8 | 15.5 | 0.1 | 1.6 | 0.0 | 0.5 | 1.4 | 19.1 | 0.1 | 19.1 |
| | **Total Requirement** | **22.8** | **12.6** | **7.7** | **7.7** | **3.4** | **2.8** | **34.2** | **2.1** | **3.7** | **2.0** | **2.9** | **3.1** | **47.9** | **25.8** | **96.6** |
| 5.2 Revenue & Fare Handling Equipment | Funded | 65.0 | 1.2 | 0.4 | 0.4 | 0.4 | 0.4 | 2.6 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3 | 5.5 | 2.9 | 73.4 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **65.0** | **1.2** | **0.4** | **0.4** | **0.4** | **0.4** | **2.6** | **0.4** | **0.4** | **0.4** | **0.4** | **1.3** | **5.5** | **2.9** | **73.4** |
| 5.3 Other Maintenance Equipment | Funded | 8.4 | 3.1 | 1.7 | 1.1 | 0.8 | 0.8 | 7.5 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 11.3 | 0.2 | 19.9 |
| | Capacity to Spend Reduction | 0.0 | 1.7 | 0.9 | 0.6 | 0.4 | 0.4 | 4.1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 6.6 | 0.0 | 6.6 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.4 | 9.4 |
| | **Total Requirement** | **8.4** | **4.8** | **2.6** | **1.7** | **1.2** | **1.2** | **11.6** | **1.2** | **1.2** | **1.2** | **1.3** | **1.3** | **17.8** | **9.6** | **35.8** |
| 5.4 FARE SYSTEM | Funded | 65.3 | 17.4 | 2.4 | 0.0 | 0.0 | 0.0 | 19.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.8 | 0.0 | 85.1 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 47.0 | 0.0 | 0.0 | 0.0 | 47.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.0 | 0.0 | 47.0 |
| | **Total Requirement** | **65.3** | **17.4** | **49.4** | **0.0** | **0.0** | **0.0** | **66.8** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **66.8** | **0.0** | **132.1** |
| 6.1 Environmental Programs | Funded | 96.3 | 8.6 | 8.0 | 10.5 | 4.2 | 3.8 | 35.1 | 3.6 | 3.7 | 3.8 | 3.9 | 3.9 | 53.9 | 18.5 | 168.8 |
| | Capacity to Spend Reduction | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 4.0 | 0.0 | 4.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 3.5 | 6.0 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 23.5 | 10.1 | 33.6 |
| | **Total Requirement** | **96.3** | **8.9** | **8.4** | **10.8** | **7.1** | **7.7** | **42.9** | **7.5** | **7.6** | **7.7** | **7.8** | **7.9** | **81.4** | **28.6** | **206.4** |
| 6.1 Environmental Programs - Safety and Reliability | Funded | 0.0 | 10.0 | 20.0 | 20.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.0** | **10.0** | **20.0** | **20.0** | **0.0** | **0.0** | **50.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **50.0** | **0.0** | **50.0** |
| 6.1 Environmental Programs **(TOTAL)** | Funded | 96.3 | 18.6 | 28.0 | 30.5 | 4.2 | 3.8 | 85.1 | 3.6 | 3.7 | 3.8 | 3.9 | 3.9 | 103.9 | 18.5 | 218.8 |
| | Capacity to Spend Reduction | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 4.0 | 0.0 | 4.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 3.5 | 6.0 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 23.5 | 10.1 | 33.6 |
| | **Total Requirement** | **96.3** | **18.9** | **28.4** | **30.8** | **7.1** | **7.7** | **92.9** | **7.5** | **7.6** | **7.7** | **7.8** | **7.9** | **131.4** | **28.6** | **256.4** |

*Please note, the EFC incorporates spending in the prior years and may go beyond 15 years and as such, will not equal the Capital Investment Plan

**TORONTO TRANSIT COMMISSION**
**2019-2028 CAPITAL BUDGET AND PLAN**
**For TTC Board Meeting on January 24, 2019**

| Project $Millions | Funding Status | 2017 LTD and 2018 Probables | 2019 | 2020 | 2021 | 2022 | 2023 | 5-Year Total | 2024 | 2025 | 2026 | 2027 | 2028 | 10-Year Total | Post 2028 | * EFC - Estimated Final Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **2019-2028 RECOMMENDED CAPITAL BUDGET AND PLAN** | | | | | | | | | | | | | |
| 7.1 IT Systems / Infrastructure - SAP | Funded | 63.2 | 15.0 | 15.0 | 0.0 | 0.0 | 0.0 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.0 | 11.5 | 104.8 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 15.0 | 15.0 | 15.0 | 45.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 70.0 | 15.4 | 85.4 |
| | **Total Requirement** | **63.2** | **15.0** | **15.0** | **15.0** | **15.0** | **15.0** | **75.0** | **5.0** | **5.0** | **5.0** | **5.0** | **5.0** | **100.0** | **26.9** | **190.2** |
| 7.1 IT Systems / Infrastructure - CAD/AVL System | Funded | 53.8 | 37.3 | 26.1 | 0.0 | 0.0 | 0.0 | 63.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.3 | 0.0 | 117.2 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **53.8** | **37.3** | **26.1** | **0.0** | **0.0** | **0.0** | **63.3** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **63.3** | **0.0** | **117.2** |
| 7.1 IT Systems / Infrastructure - EAM Information Systems | Funded | 3.3 | 7.8 | 13.2 | 10.7 | 2.0 | 0.4 | 34.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 34.3 | 0.0 | 37.6 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **3.3** | **7.8** | **13.2** | **10.7** | **2.0** | **0.4** | **34.1** | **0.2** | **0.0** | **0.0** | **0.0** | **0.0** | **34.3** | **0.0** | **37.6** |
| 7.1 IT Systems / Infrastructure - Cybersecurity | Funded | 0.2 | 3.0 | 4.0 | 2.5 | 0.2 | 0.0 | 9.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | 0.0 | 10.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total Requirement** | **0.2** | **3.0** | **4.0** | **2.5** | **0.2** | **0.0** | **9.8** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **9.8** | **0.0** | **10.0** |
| 7.1 IT Systems / Infrastructure - Enterprise Data/ BI Enablement | Funded | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.5 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 2.5 | 1.0 | 1.0 | 1.0 | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.0 | 5.5 |
| | **Total Requirement** | **0.0** | **1.5** | **2.5** | **1.0** | **1.0** | **1.0** | **7.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **7.0** | **0.0** | **7.0** |
| 7.1 IT Systems / Infrastructure -TRAPEZE | Funded | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 4.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 14.0 | 7.0 | 0.0 | 0.0 | 21.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.0 | 0.0 | 21.0 |
| | **Total Requirement** | **0.0** | **4.0** | **14.0** | **7.0** | **0.0** | **0.0** | **25.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **25.0** | **0.0** | **25.0** |
| 7.1 IT Systems / Infrastructure - End User Devices | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 4.5 | 4.0 | 6.7 | 8.9 | 8.1 | 32.2 | 6.1 | 6.1 | 7.0 | 8.7 | 8.9 | 69.0 | 41.9 | 110.9 |
| | **Total Requirement** | **0.0** | **4.5** | **4.0** | **6.7** | **8.9** | **8.1** | **32.2** | **6.1** | **6.1** | **7.0** | **8.7** | **8.9** | **69.0** | **41.9** | **110.9** |
| 7.1 IT Systems / Infrastructure (Other) | Funded | 132.0 | 25.5 | 10.3 | 6.3 | 6.1 | 9.4 | 57.6 | 6.6 | 7.9 | 17.0 | 16.3 | 11.3 | 116.7 | 143.6 | 392.3 |
| | Capacity to Spend Reduction | 0.0 | 0.9 | 4.5 | 4.5 | 3.7 | 5.3 | 18.9 | 4.6 | 5.2 | 11.3 | 10.9 | 7.6 | 58.5 | 0.0 | 58.5 |
| | Unfunded | 0.0 | 6.5 | 0.3 | 2.7 | 2.9 | 0.7 | 13.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 13.4 | 0.0 | 13.4 |
| | **Total Requirement** | **132.0** | **32.9** | **15.1** | **13.5** | **12.7** | **15.4** | **89.6** | **11.4** | **13.1** | **28.3** | **27.1** | **18.9** | **188.5** | **143.6** | **464.1** |
| 7.1 IT Systems / Infrastructure **(TOTAL)** | Funded | 252.6 | 94.1 | 68.6 | 19.5 | 8.4 | 9.9 | 200.4 | 6.8 | 7.9 | 17.0 | 16.3 | 11.3 | 259.6 | 155.1 | 667.3 |
| | Capacity to Spend Reduction | 0.0 | 0.9 | 4.5 | 4.5 | 3.7 | 5.3 | 18.9 | 4.6 | 5.2 | 11.3 | 10.9 | 7.6 | 58.5 | 0.0 | 58.5 |
| | Unfunded | 0.0 | 10.9 | 20.8 | 32.4 | 27.7 | 24.9 | 116.8 | 11.3 | 11.1 | 12.0 | 13.7 | 13.9 | 178.8 | 57.3 | 236.1 |
| | **Total Requirement** | **252.6** | **105.9** | **93.9** | **56.4** | **39.8** | **40.0** | **336.1** | **22.7** | **24.2** | **40.3** | **40.8** | **32.8** | **496.9** | **212.4** | **961.9** |
| 9.1 Furniture & Office Equipment | Funded | 3.5 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 1.4 | 0.1 | 0.3 | 0.2 | 0.1 | 0.3 | 2.4 | 1.2 | 7.2 |
| | Capacity to Spend Reduction | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.7 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 1.4 | 0.0 | 1.4 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 |
| | **Total Requirement** | **3.5** | **0.3** | **0.7** | **0.4** | **0.2** | **0.5** | **2.1** | **0.2** | **0.5** | **0.3** | **0.2** | **0.5** | **3.9** | **2.1** | **9.5** |
| 9.2 Service Planning | Funded | 36.5 | 10.7 | 19.1 | 10.9 | 7.4 | 5.1 | 53.2 | 4.6 | 4.6 | 1.8 | 1.8 | 1.8 | 67.7 | 13.7 | 117.8 |
| | Capacity to Spend Reduction | 0.0 | 0.8 | 0.3 | 0.3 | 0.3 | 0.3 | 1.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 3.3 | 0.0 | 3.3 |
| | Unfunded | 0.0 | 0.0 | 1.2 | 5.6 | 6.3 | 6.0 | 19.0 | 6.6 | 6.6 | 3.8 | 3.8 | 3.8 | 43.5 | 8.0 | 51.5 |
| | **Total Requirement** | **36.5** | **11.5** | **20.5** | **16.7** | **14.0** | **11.5** | **74.2** | **11.5** | **11.5** | **5.8** | **5.8** | **5.8** | **114.4** | **21.7** | **172.6** |
| 9.2 Service Planning - Facilities Hazadous Waste Storage Rooms | Funded | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Capacity to Spend Reduction | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Unfunded | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 6.0 | 12.0 | 6.0 | 6.0 | 6.0 | 0.0 | 0.0 | 30.0 | 0.0 | 30.0 |
| | **Total Requirement** | **0.0** | **0.0** | **0.0** | **0.0** | **6.0** | **6.0** | **12.0** | **6.0** | **6.0** | **6.0** | **0.0** | **0.0** | **30.0** | **0.0** | **30.0** |
| 9.2 Service Planning **(TOTAL)** | Funded | 36.5 | 10.7 | 19.1 | 10.9 | 7.4 | 5.1 | 53.2 | 4.6 | 4.6 | 1.8 | 1.8 | 1.8 | 67.7 | 13.7 | 117.8 |
| | Capacity to Spend Reduction | 0.0 | 0.8 | 0.3 | 0.3 | 0.3 | 0.3 | 1.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 3.3 | 0.0 | 3.3 |
| | Unfunded | 0.0 | 0.0 | 1.2 | 5.6 | 12.3 | 12.0 | 31.0 | 12.6 | 12.6 | 9.8 | 3.8 | 3.8 | 73.5 | 8.0 | 81.5 |
| | **Total Requirement** | **36.5** | **11.5** | **20.5** | **16.7** | **20.0** | **17.5** | **86.2** | **17.5** | **17.5** | **11.8** | **5.8** | **5.8** | **144.4** | **21.7** | **202.6** |
| **TTC TOTAL 10-YEAR BASE CAPITAL PLAN (including Fully Unfunded Projects)** | Total Funded | 9,066.9 | 1,490.0 | 1,199.2 | 805.1 | 599.1 | 411.5 | 4,504.9 | 416.1 | 359.6 | 397.0 | 395.6 | 380.1 | 6,453.2 | 3,309.5 | 18,829.7 |
| | **Total Capacity to Spend Reduction** | **0.0** | **47.8** | **81.7** | **81.7** | **74.0** | **65.5** | **350.7** | **72.6** | **74.3** | **80.4** | **88.3** | **88.8** | **755.1** | **0.9** | **755.9** |
| | **Total Unfunded** | **15.0** | **135.8** | **602.6** | **1,020.9** | **1,330.0** | **2,412.8** | **5,502.1** | **3,060.2** | **2,965.4** | **2,320.2** | **1,478.0** | **1,411.9** | **16,737.8** | **7,836.0** | **24,588.8** |
| | **Total Requirement** | **9,081.9** | **1,673.6** | **1,883.5** | **1,907.7** | **2,003.2** | **2,889.7** | **10,357.7** | **3,548.8** | **3,399.3** | **2,797.6** | **1,962.0** | **1,880.7** | **23,946.1** | **11,146.4** | **44,174.4** |
| Toronto York Spadina Subway Extension (TYSSE) | Total Funded | 3,124.2 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 0.0 | 3,184.2 |
| Line 2 East Extension | Total Funded | 197.4 | 117.1 | 243.9 | 387.8 | 551.0 | 487.5 | 1,787.2 | 608.1 | 459.3 | 227.5 | 225.9 | 51.7 | 3,359.7 | 2.8 | 3,560.0 |
| Relief Line South | Total Funded | 40.0 | 135.0 | 250.1 | 0.0 | 0.0 | 0.0 | 385.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 385.0 | 0.0 | 425.1 |
| Waterfront Toronto | Total Funded | 0.7 | 0.3 | 2.6 | 24.2 | 0.0 | 0.0 | 27.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.1 | 0.0 | 27.8 |
| **TTC TOTAL 10-YEAR TRANSIT EXPANSION CAPITAL PLAN** | Total Funded | 3,362.3 | 312.4 | 496.5 | 412.0 | 551.0 | 487.5 | 2,259.3 | 608.1 | 459.3 | 227.5 | 225.9 | 51.7 | 3,831.8 | 2.8 | 7,197.0 |
| **TTC TOTAL 10-YEAR BASE & EXPANSION CAPITAL PLAN (including Fully Unfunded Projects)** | Total Funded | 12,429.2 | 1,802.4 | 1,695.7 | 1,217.1 | 1,150.1 | 899.0 | 6,764.2 | 1,024.2 | 818.8 | 624.5 | 621.5 | 431.8 | 10,285.1 | 3,312.4 | 26,026.7 |
| | **Total Capacity to Spend Reduction** | **0.0** | **47.8** | **81.7** | **81.7** | **74.0** | **65.5** | **350.7** | **72.6** | **74.3** | **80.4** | **88.3** | **88.8** | **755.1** | **0.9** | **755.9** |
| | **Total Unfunded** | **15.0** | **135.8** | **602.6** | **1,020.9** | **1,330.0** | **2,412.8** | **5,502.1** | **3,060.2** | **2,965.4** | **2,320.2** | **1,478.0** | **1,411.9** | **16,737.8** | **7,836.0** | **24,588.8** |
| | **Total Requirement** | **12,444.2** | **1,985.9** | **2,380.0** | **2,319.7** | **2,554.2** | **3,377.2** | **12,617.1** | **4,157.0** | **3,858.5** | **3,025.1** | **2,187.8** | **1,932.5** | **27,777.9** | **11,149.3** | **51,371.4** |

*Please note, the EFC incorporates spending in the prior years and may go beyond 15 years and as such, will not equal the Capital Investment Plan