



STAFF REPORT ACTION REQUIRED

Proposed 2018-2027 TTC Capital Budget

Date:	September 26, 2017
To:	TTC Budget Committee
From:	Chief Executive Officer

Summary

The proposed 2018-2027 Capital Budget and Plan has been prepared consistent with the Commission's Five Year Corporate Plan, with specific focus on the following:

- Effective, efficient management of assets that delivers reliable services in a state of good repair.
- An affordable expansion program that matches capacity to demand.
- A well-run, transparent business that delivers value for money in a financially viable way.

Highlights of the proposed 2018-2027 Capital Budget and Plan include:

- A proposed 2018 Capital Budget with \$1.581 billion in cash flow that is fully funded within 2018 affordability limits.
- \$9.240 billion in forecasted overall base capital requirements during the ten year planning period from 2018 to 2027, which is \$2.790 billion greater than the current capital funding capacity.
 - The proposed 10-Year Plan is currently \$97 million above the City's debt affordability target, subject to further review of additional funding opportunities.
 - In 2018, the TTC's Unfunded List will require \$2.693 billion in funding to proceed, comprised of capacity- to- spend reductions of \$420 million and unfunded projects totalling \$2.273 billion.
- Continued use of \$557 million (\$279 million Federal share) in remaining funding available as part of the Federal Public Transit Infrastructure Fund (PTIF) program.
 - Under PTIF, total funding of up to \$1.712 billion gross (\$856 million Federal share) is available to the City of Toronto/TTC for transit upgrades and improvements.
 - Capital projects commenced after April 1, 2016 and completed by March 31, 2019 may receive up to 50% funding of eligible costs.
- The proposed capital budget includes \$113 million in cash flows for the property acquisition

required for the New Subway Maintenance and Storages Facility.

- \$200.4 million in proposed 2018 funding for costs related to the completion of construction on the Toronto-York Spadina Subway Extension (TYSSE).
- Proposed funding of \$113.3 million in 2018 and \$3.307 billion from 2019 to 2027 for the construction of the Scarborough Subway Extension (SSE) (including \$101 million for the SRT life extension and \$123 million for SRT Decommissioning and Demolition).
- The proposed 2018 – 2027 Capital Budget and Plan does not include any increase in funding or estimated final costs for either the TYSSE or SSE projects.

Recommendations

It is recommended that the Budget Committee:

1. Receive and endorse the proposed 2018-2027 TTC Capital Budget and Plan (including the Toronto-York Spadina Subway Extension and Scarborough Subway Extension) as outlined in this report for submission to the TTC Board for consideration as part of the 2018 Budget Process and that any further changes be submitted directly to the Board.
2. Direct the TTC’s Chief Financial Officer to consult with the Toronto City Manager and Toronto Deputy City Manager & Chief Financial Officer on the development of a financing strategy to address the remaining unfunded base capital requirements for consideration as part of the 2019 Budget process.

Financial Summary

The following table highlights the 2018 to 2027 TTC Capital Budget and Plan funding Summary:

2018 - 2027 Capital Budget and Plan Request											
(\$Millions)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	10-Year Total
2018 - 2027 Proposed Capital Plan Request	1,581	1,157	1,140	938	963	715	623	744	741	638	9,240
Funding Sources											
Provincial Funding	165	138	149	75	75	75	75	75	75	75	979
Federal Funding (Including PTIF)	390	224	167	167	167	167	167	167	167	167	1,953
Debt Funding	596	491	420	235	65	105	78	84	126	200	2,400
2017 Carry Forward Funding	184										184
Capital Financing Reserve	70	157	38								264
TTC Internal (Depreciation)	29	18	12	13	10	12	9	11	19	18	152
Development Charges	131	63	64	63	63	41	27	28	7	10	499
TTC Other	4	2	2	2	2	2	2	2	2	2	19
Total Funding Sources	1,570	1,093	851	556	382	402	359	367	397	473	6,450
Funding Shortfall											
	11	65	289	382	581	313	265	376	344	165	2,790
Reductions to address shortfall:											
Capacity to Spend (CTS) Reduction	26	30	43	49	46	43	41	43	48	50	420
Existing Unfunded Projects	50	0	227	182	294	279	228	348	329	225	2,161
Unfunded Projects - New BD Resignalling	0				18	17	18	19	19	20	112
Total CTS Reductions and Unfunded Projects	76	30	270	231	358	339	288	410	396	296	2,693
Final Net Funding Shortfall	-64	35	18	151	224	-26	-23	-33	-53	-132	97

As reflected in the above table, the TTC's base capital needs require \$9.240 billion in funding over the ten year planning period.

Traditional sources will fund \$6.450 billion in capital expenditures over the 10-Year Plan, resulting in a funding shortfall of \$2.790 billion. This funding shortfall is comprised of the following:

- \$420 million in reductions to align annual cash flows with the TTC's historical capacity to spend.
- \$2.273 billion in unfunded capital projects reflecting base capital requirements that will need to be addressed in future Budget processes. Unfunded projects are detailed in Appendix C of this report.
- \$97 million in a remaining funding shortfall that is not included in the list of unfunded projects. This reflects a portion of the costs associated with the property acquisition for the New Subway Maintenance & Storage Facility that could not be accommodated within current available funding.
 - TTC staff are continuing to work with City Finance staff to identify additional funding capacity to support this capital need. Opportunities currently being reviewed include:
 - ✓ Reduce 2018 cash flows based on any additional 2017 carry forward funding above current projections.
 - ✓ Maximize development charge funding based on project eligibility and funding availability.
 - ✓ Application of recoverable debt provided the capital investment will yield future operating savings that can support debt servicing costs.
 - ✓ Review of added City funding capacity (Capital Financing Reserve and/or Debt)
- These above figures do not include additional funding required for a confidential claim provision on an existing project. Provisional funding requirements are currently being discussed with City staff.

In addition to the Base Program, approximately \$0.2 billion will be required over this period for final costs arising from completion of the Toronto-York Spadina Subway Extension. Also, approximately \$3.4 billion is required over the next ten years for the Scarborough Subway Extension project.

The Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DISCUSSION

As reflected in Exhibit 1 on the following page, ten year capital funding requirements for capital refurbishment, replacement and enhancement needs to maintain the system in a state-of-good-

repair have been relatively consistent over the last four years.

Aside from an increase in PTIF funding during the 2017 Budget process, there has not been a significant change in available funding over that period. As a result, there have been no advancements on the list of unfunded projects.

A long term funding strategy needs to be developed with the City by 2020 to avoid potential service impact associated with not proceeding with these required capital investments.

Exhibit 1

10 - Year Capital Budget Comparison				
Base Program				
(\$Billions)				
	2015 - 2024	2016 - 2025	2017 - 2026	2018 - 2027
	<u>Approved</u>	<u>Approved</u>	<u>Approved</u>	<u>Request</u>
Budget/Request	9.268	9.316	9.440	9.240 ***
Funding Available	<u>6.901</u>	<u>6.637</u>	<u>7.005</u>	<u>6.450</u>
Shortfall	<u>2.367</u>	<u>2.679</u>	<u>2.435</u> *	<u>2.790</u> **
Note:				
* After applying the capacity to spend reduction of \$482M the net shortfall is \$1.954B				
** After applying the capacity to spend reduction of \$420M the net shortfall is \$2.370B				
*** Does not include additional confidential claim on existing project				

Traditional funding sources incorporated into the 10-Year Capital Budget and Plan for the TTC is summarized in Appendix B, with a comparison against the TTC’s base capital needs that are required to keep the existing system in a state-of-good-repair.

Appendix C provides a preliminary list of remaining unfunded projects totaling \$2.693 billion.

Accessibility/Equity Matters

Under this 10-Year Capital Program, all required capital expenditures needed to make the TTC fully compliant with AODA requirements and to meet all of the TTC equity goals have been fully provided for with the exception of investments in Warden and Islington Stations. These two stations will be considered as part of future budget processes once capital requirements are fully defined.

2018-2027 CAPITAL BUDGET AND PLAN

The cash flow for each program or project element included in the proposed 2018-2027 Base Capital Budget and Plan is summarized in Appendix A (note: Expansion Initiatives, including the Toronto-York Spadina Subway Extension and the Scarborough Subway Extension, are not included in the base capital program).

Key elements of the \$1.581 billion (gross request) in the base capital budget for 2018 are shown below in Exhibit 2.

Exhibit 2

<u>TTC 2018 BASE CAPITAL BUDGET</u>		(\$Millions)
<u>Vehicles:</u>		
Purchase of Low Floor 40' Diesel Buses - SOGR	212	} \$732 46%
Purchase of 99 LF 40' Diesel Buses - Service Improvements	17	
Purchase of 360 Future Wheel Trans Buses	10	
Purchase of remaining TR Subway Cars	27	
Purchase of 204 (\$285M) & 60 (\$50M) LRV Cars	335	
Vehicle Overhaul Programs (Bus, WT, Subway, Streetcar)	104	
Other (Non-Revenue Vehicle Purchase & Overhaul)	27	
<u>Infrastructure Projects:</u>		
Track Programs	79	} \$849 54%
Electrical Systems	63	
Signal Systems (Incl. Line 1 (YUS \$65M) and Line 2 (BD \$0.2M))	84	
Finishes	20	
Equipment	25	
Yards & Roads	13	
Bridges & Tunnels	34	
Building & Structures:		
- New Subway Maintenance & Storage Facility	120	
- Fire Ventilation Upgrade	16	
- Easier Access Phase III	45	
- TR/T1 Rail Yard Accommodation	34	
- Surface Way Bldg. Replacement	19	
- McNicoll Bus Garage	30	
- Leslie Barns	17	
- Wheel-Trans 10 Yr Transformation Program	11	
- Duncan Shop Ventilation Upgrade	10	
- Stations Transformation	11	
- Other Building & Structure Projects	<u>49</u>	
Environmental Projects	8	
Information Technology	105	
Other Projects	56	
Total - Base Program Request	<u><u>\$1,581</u></u>	

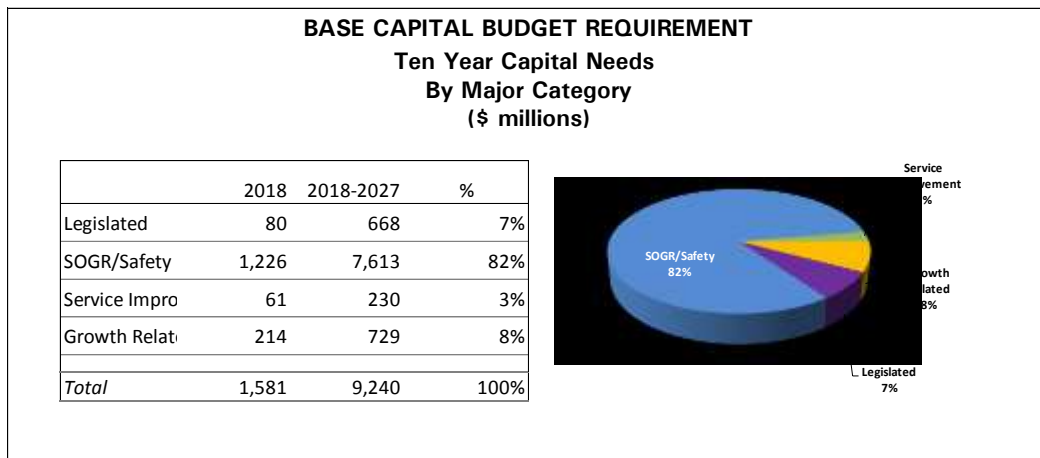
Nearly half (\$732 million or 46%) of the 2018 Capital Budget will fund vehicles or vehicle overhaul programs which will result in increased operating efficiencies through greater vehicle

reliability and reduced fuel consumption.

In 2018, \$849 million in funding will invest in maintaining infrastructure in a state of good repair as well as support TTC growth initiatives such as the McNicoll Bus Garage and the property acquisition for the New Subway Maintenance & Storage Facility.

Expenditures for the next 10 years from 2018 to 2027 for the base capital program are in the order of \$9.240 billion as shown in Exhibit 3.

Exhibit 3



As noted above, over \$8.3 billion or about 90% of the base capital budget for the ten years is committed to State-of-Good-Repair/Safety and Legislated 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 base capital program over the next ten years include:

Vehicle acquisitions (\$4.171B):

- ✓ Purchase of 372 T1 Subway Car Replacements (\$1,416 million)
- ✓ Purchase of Low Floor Buses (\$805 million)
- ✓ Vehicle Overhaul Programs: Bus, Subway and Streetcar (\$796 million)
- ✓ 204 LRVs (\$502 million)
- ✓ 60 LRVs to address ridership growth (\$361 million)
- ✓ 360 Future Wheel Trans Buses (\$81 million)
- ✓ Purchase of Subway Cars – Ridership Growth for YUS & BD (\$74 million)
- ✓ Balance of the 360 Toronto Rocket Subway car order (\$22 million)
- ✓ Other Projects (\$114 million)

Building and Infrastructure Projects (\$5.069B):

- ✓ Track replacement (\$751 million)
- ✓ Easier Access Phase III (\$473 million)

- ✓ Electrical Systems Programs (\$433 million)
- ✓ Various bridge and tunnel infrastructure rehabilitation (\$421 million)
- ✓ Roofing rehabilitation and structural paving programs (\$340 million)
- ✓ Upgrades to information technology assets (\$324 million)
- ✓ Installation of automatic train control and re-signalling on the Line 2 (BD subway line) (\$300 million)
- ✓ TR/T1 Rail Yard Accommodation (\$277 million)
- ✓ Upgrading of fire ventilation equipment and second exits in the subway (\$274 million)
- ✓ Purchase of Equipment (\$220 million)
- ✓ Installation of automatic train control and re-signalling on the Line 1 (YUS subway line) (\$180 million)
- ✓ McNicoll Bus Garage (\$157 million)
- ✓ Streetcar overhead system rebuild (\$56 million)
- ✓ Streetcar network upgrades for new LRVs (\$33 million)
- ✓ TTC Presto and fare and revenue collection and infrastructure needs (\$21 million)
- ✓ Other projects (\$8 million)

Management continues to refine project details and cash flows and these will be reflected in the final 2018-2027 Capital Budget and Plan to be brought forward to the Board during consideration of the 10-Year Capital Budget and Plan.

In addition to the base capital budget:

- The Toronto-York Spadina Subway Extension (TYSSE) is projected to incur additional \$200 million in expenditures in 2018 and the new line is scheduled to open for revenue service on December 17, 2017.
- The Scarborough Subway Extension (SSE) project is currently estimated to require \$3.420 billion in funding over the next ten years. This project will extend the Bloor-Danforth subway line approximately 7.6 kilometres from Kennedy Station to Sheppard Avenue and McCowan Road. The 10-Year funding requirements include \$101 million to extend the life of the SRT until the SSE commences operation and a further \$123 million to decommission and demolish the SRT.

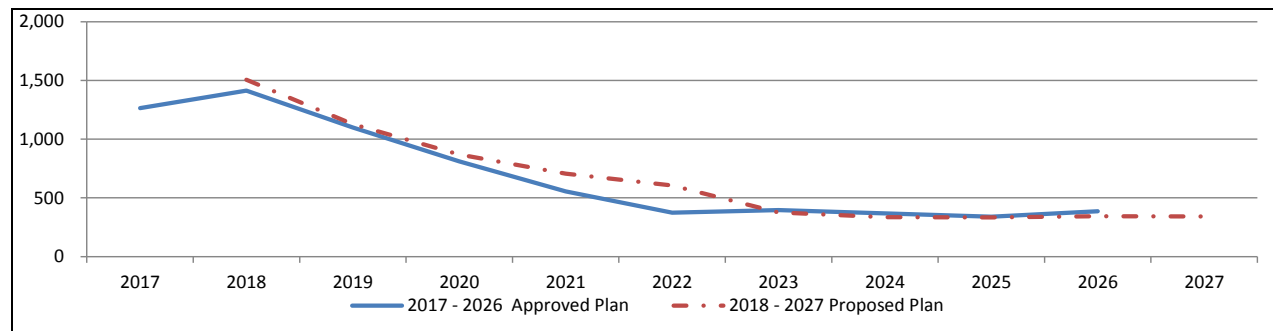
CHANGES FROM THE COUNCIL APPROVED 2017 – 2026 CAPITAL PLAN

Exhibit 4 shows the changes requested in the base Capital Budget and Plan (excluding capacity to spend reductions and unfunded projects) from that approved by City of Toronto Council on February 15, 2017.

The 2018 – 2027 Proposed Capital Budget and Plan reflects a decrease of \$457 million in capital funding from the 2017 - 2026 Approved Capital Plan.

The chart and table below provide a breakdown of the \$457 million or 6.5% decrease in the Capital Program on an annual basis from 2017 to 2027.

Exhibit 4



Changes to the 2017 - 2026 Approved Capital Plan												
(\$Millions)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	10-Year Total
2017 - 2026 Approved Plan	1,264	1,413	1,099	812	556	374	396	367	339	385		7,005
2018 - 2027 Proposed Plan		1,506	1,128	870	707	606	376	336	334	344	341	6,548
Change	-1,264	93	29	58	151	232	-20	-31	-5	-41	341	-457

Change over Nine Common Years		93	29	58	151	232	-20	-31	-5	-41		466
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The \$457 million decrease in the Capital Program is primarily attributed to the significant difference in funding between the year 2017 with a cash flow of \$1.264 billion and the year 2027 with a proposed cash flow of \$341 million.

This change in funding is not reflective of a decreased capital need but rather the product of:

- a) Increased cash flow of \$615 million for PTIF funded projects in 2017 that does not continue into future years.
- b) Reduced 2027 cash flow as a result of \$296 million of identified capital needs currently unfunded.

Changes over the Nine Common Years (2018 – 2026)

While overall funding has decreased as compared to the 2017 10-Year Plan, funding over the nine years common to both plans (2018 to 2026) has increased by \$466 million.

- This increase in funding is attributed to a combination of \$194 million in unspent 2017 funding carried forward into 2018 and \$270 million in increased funding for existing

capital requirements; net of capacity to spend reductions and unfunded projects (\$2.693 billion). See Exhibit 5 below.

Exhibit 5

2018-2027 Capital Budget - Key Project Changes (Excluding New)	
For TTC Budget Committee on September 26, 2017 (\$Millions)	
	<u>Net Increase/(Decrease)</u>
Vehicle Related Programs:	
Purchase of Buses	-9.3
Purchase of WT Buses	-44.6
Purchase of Subway Cars	171.5
Bus Overhaul	-8.0
Streetcar Overhaul	35.3
Subway Car Overhaul	17.3
Other Vehicle Projects	-4.9
Sub-Total Vehicle Related Programs	<u>157.4</u>
Infrastructure Related Programs:	
Subway Track	-9.5
Surface Track	21.3
Traction Power	35.4
Power Distribution	6.6
Communications	5.4
Signal System (Incl ATC)	-93.5
Finishes	6.6
Yards & Roads	7.3
Bridges & Tunnels	12.3
Fire Ventilation	26.7
TR/T1 Rail Yard Accommodation	-6.8
Other Buildings & Structures	107.3
Major projects included are:	
- New Subway Maint. & Storage Facility	113.0
- Retrofit of Carhouse Facility and Shop	6.8
- Bus Maintenance Facility	4.0
- Backflow Preventors	-4.4
- Revenue Operations Facility	-24.8
Shop Equipment	6.6
Revenue and Fare Handling	11.8
Other Maintenance Equipment	-2.4
Fare System	3.3
Environmental Program	2.9
Information Technology	-20.1
Sub-Total Infrastructure Related Programs	<u>121.3</u>
Sub Total - Key Project Changes	<u>278.7</u>
Other Projects	-8.3
Total Changes to Existing	<u>270.4</u>

- At the time of writing, the 2017 Budget is estimated to be under-spent by \$194 million. These funds will be carried forward to 2018 in order to continue work on previously approved capital projects. Key projects included in \$194 million are:
 - ✓ Purchase of 204 LRVs (\$31 million)
 - ✓ Purchase of Subway Cars (\$23 million)
 - ✓ Leslie Barns (\$18 million)
 - ✓ Platform Modification to Accommodate Artic Buses (\$14 million)
 - ✓ Vision Program (\$13 million)
 - ✓ Opportunities to Improve Transit Service (\$13 million)

- ✓ Other projects (\$82 million)

UNFUNDED TTC CAPITAL PROJECTS

The 2018-2026 Capital Budget and Plan of \$9.240 billion requires additional funding of \$2.790 billion over the established funding available, resulting in \$2.693 billion in projects to be considered unfunded until funding can be secured.

- \$97 million is currently reflected as above the City’s debt affordability target pending further reviews that are occurring to identify increased funding capacity.

The TTC’s \$2.693 billion in unfunded projects are detailed below in Exhibit 6:

Exhibit 6 2018-2027 Unfunded Projects

Unfunded Projects											
(\$Millions)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	10-Year Total
Capacity to Spend (CTS) Reduction (Various Projects)	26	30	43	49	46	43	41	43	48	50	420
ATC Resignalling (Line 2)					18	17	18	19	19	20	112
Fire Ventilation Upgrades				2	50	47	29	21	13	0	162
Purchase of Buses			5	90	94	60	29	8	26	11	323
Purchase of 372 New Subway Cars					149	172	170	319	290	144	1,245
Ridership Growth for YUS and BD										70	70
Purchase of Streetcars	50		222	89							361
Total CTS Reduction and Unfunded Projects	76	30	270	231	358	339	288	410	396	296	2,693

The unfunded list is comprised of \$2.273 billion in unfunded programs/projects and \$420 million in capacity to spend reductions.

- Capacity to spend reductions 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 reductions 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
- The 2017 to 2026 Capital Budget included reductions of 15% for the years 2017 to 2020 and 10% for the years 2021 to 2026 as a result of capacity to spend analysis.
- During the 2018 to 2027 Capital Budget process, a detailed analysis was undertaken and capacity-to-spend reductions were applied based on project performance and prior year spending rates, resulting in the following cash flow changes:

Capacity to Spend Reductions (\$420 M)

- Track Replacements Programs (\$88 million)
- Electrical Systems Programs (\$69 million)
- Buildings & Structures Programs (\$135 million)
- Bus Overhaul (\$63 million)
- Automotive/Rail Non-Revenue Programs (\$11 million)

- Tools, Machinery and Equipment (\$17 million)
- Information Technology System (\$26 million)
- Transit Priority Project (\$7 million)
- Environmental Programs (\$4 million)

It is recommended that TTC staff continue to consult with City staff on the development of a financing strategy to address the remaining \$2.693 billion in unfunded base capital requirements for consideration as part of the 2019 Budget process to avoid potential service impact associated with not proceeding with required unfunded capital investments.

DEFERRED CONSIDERATION OF NEW CAPITAL PROJECTS

In addition to \$2.693 billion in unfunded capital priority projects, consideration of new capital requirements of \$1.050 billion and scope change to existing projects of \$128 million has been deferred until funding can be secured for the following projects:

New Capital Budget Requirements (\$1.050 billion):

- Purchase of 549 Low Floor Buses (\$612 million)
- Facility Upgrade & Fuelling Station (\$97 million)
- Davenport Garage Renewal (\$93 million)
- Warden Redevelopment (\$71 million)
- Greenwood Shop End of Life Replacement (\$52 million)
- New Bus Technologies (\$25 million)
- EAM Implementation Program (\$23 million)
- Subway Bus Platform Ventilation Equipment Replacement (\$20 million)
- Purchase of 60 Future Wheel-Trans Buses (\$18 million)
- Station Tactile Wayfinding Upgrade (\$15 million)
- Welding Ventilation Upgrades at all Garages (\$8 million)
- SharePoint SOGR (\$5 million)
- Hillcrest Track Replacement Expansion (\$4 million)
- Enterprise Data SOGR (\$2 million)
- Other Initiatives (\$5 million)

Scope Change to Existing Projects (\$128 million):

- Fire Ventilation Upgrade (\$60 million)
- Escalator Replacement Program (\$22 million)
- LRV Carhouse Facility Renewal Program (\$15 million)
- Subway Station Fire Alarm Modification (\$7 million)
- Skylights Replacement Project (\$6 million)
- Yonge Bloor Capacity Improvements (\$4 million)
- Station Finish Renewal Program (\$3 million)
- Elevator Overhaul (\$3 million)
- Building Facility Renewal Program (\$2 million)

- Bus Garage/Shops Facility Renewal Program (\$2 million)
- Wheel Trans Facility Renewal Program (\$1 million)
- Replacement Lighting for Buildings/Garages/Shops/Carhouses (\$1 million)
- Subway Pump Replacement Program (\$1 million)
- Industrial Facility Requirements (\$1 million)

Contact

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September 26, 2017

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Attachments

Appendix A - 2018-2027 Capital Program Summary

Appendix B - 2018-2027 Capital Program Funding Summary

Appendix C – 2018-2027 Proposed Unfunded Projects

**TORONTO TRANSIT COMMISSION
2018-2027 CAPITAL BUDGET SUMMARY**

Appendix A

\$Millions

Programs	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018 to 2027
Infrastructure Related Programs:											
Tracks:	79,175	72,773	73,096	88,772	69,126	70,548	66,878	71,648	78,576	80,147	750,739
1.1 Subway Track	38,671	34,885	42,771	51,858	37,488	38,118	38,855	39,592	40,269	41,074	403,581
1.2 Surface Track	40,504	37,888	30,325	36,914	31,638	32,430	28,023	32,056	38,307	39,073	347,158
Signals, Electrical, Communications:	146,981	132,638	111,263	84,323	71,907	82,918	84,626	85,921	93,375	103,748	997,700
2.1 Traction Power	23,159	21,830	20,910	18,744	18,525	19,445	20,654	21,514	22,924	27,224	214,929
2.2 Power Distribution	8,477	7,703	12,172	7,511	7,925	7,118	7,068	7,086	7,977	8,501	81,538
2.3 Communications	31,211	15,518	14,070	14,369	10,123	10,002	7,725	7,983	11,002	14,083	136,086
2.4 Signal Systems	18,760	16,277	15,291	14,691	4,494	4,071	3,913	2,577	2,724	2,705	85,503
2.4 YUS/BD Resignalling	65,374	71,310	48,820	29,008	30,840	42,282	45,266	46,761	48,748	51,235	479,644
Buildings and Structures:	455,016	404,832	444,969	402,817	298,272	217,692	174,471	150,595	109,832	102,115	2,760,611
3.1 Finishes	20,203	21,083	14,744	18,955	24,979	12,653	8,841	7,652	9,325	8,063	146,498
3.2 Equipment	25,169	28,965	37,283	29,080	17,141	16,438	14,032	13,486	13,128	25,310	220,032
3.3 Yards & Roads	13,131	20,199	29,595	29,213	19,714	12,794	12,404	12,572	13,147	13,006	175,775
3.4 Bridges & Tunnels	34,158	38,395	39,515	40,064	40,567	43,188	43,784	46,439	47,128	47,832	421,070
3.9 Fire Ventilation Upgrade	15,760	18,110	33,221	47,037	50,191	46,840	29,129	20,897	13,140	-	274,325
3.9 Easier Access Phase III	44,824	56,114	62,164	71,822	71,263	66,151	54,960	39,637	6,000	-	472,935
3.9 Leslie Barns	16,829	7,048	-	-	-	-	-	-	-	-	23,877
3.9 Toronto Rocket Yard & Storage Track Accommodation	33,851	49,480	75,497	69,273	43,890	4,425	125	-	-	-	276,541
3.9 McNicoll Bus Garage	30,000	45,000	52,974	28,807	-	-	-	-	-	-	156,781
3.9 Other Buildings & Structures	221,091	120,438	99,976	68,566	30,527	15,203	11,196	9,912	7,964	7,904	592,777
Tooling, Machinery and Equipment	30,170	9,210	4,314	8,199	4,043	3,383	3,445	3,529	3,757	4,027	74,077
5.1 Shop Equipment	7,015	4,300	2,936	6,820	2,605	2,000	2,010	1,947	2,151	2,385	34,169
5.2 Revenue & Fare Handling Equipment	12,457	175	250	250	250	250	300	300	300	300	14,832
5.3 Other Maintenance Equipment	5,005	4,610	1,128	1,129	1,188	1,133	1,135	1,282	1,306	1,342	19,258
5.4 Fare System	5,693	125	-	-	-	-	-	-	-	-	5,818
Environmental Issues	8,178	9,417	8,377	10,741	4,590	4,195	4,000	4,100	4,200	4,300	62,098
6.1 Environmental Program	8,178	9,417	8,377	10,741	4,590	4,195	4,000	4,100	4,200	4,300	62,098
Computer Equipment & Software	104,939	54,564	42,395	12,303	9,448	14,783	11,219	13,508	31,180	30,056	324,395
7.1 & 7.2 IT Systems/Infrastructure	104,939	54,564	42,395	12,303	9,448	14,783	11,219	13,508	31,180	30,056	324,395
Other:	25,053	26,719	23,602	8,710	3,362	2,527	2,270	2,543	2,296	2,284	99,366
9.1 Furniture & Office Equipment	360	262	683	425	237	492	235	508	261	249	3,712
9.2 Service Planning	24,693	26,457	22,919	8,285	3,125	2,035	2,035	2,035	2,035	2,035	95,654
Subtotal - Infrastructure Related Programs	849,512	710,153	708,016	615,865	460,748	396,046	346,909	331,844	323,216	326,677	5,068,986
Vehicle Related Programs:											
4.11 Purchase of Buses	239,805	144,927	115,886	136,767	105,974	69,420	29,180	7,668	25,344	11,271	886,242
4.12 Purchase of Subway Cars	26,949	524	584	1,523	317,612	171,722	170,147	319,361	290,246	214,063	1,512,731
4.13 Bus Overhaul	45,885	39,869	38,564	49,315	49,896	50,505	50,402	51,015	58,043	55,296	488,790
4.15 Streetcar Overhaul	12,473	2,864	1,866	1,704	617	3,424	5,019	12,647	24,224	18,602	83,440
4.16 Subway Car Overhaul	45,560	30,057	22,133	24,913	19,103	18,142	19,058	18,390	17,153	9,015	223,524
4.18 Purchase of Streetcars	334,543	204,553	234,176	89,244	-	-	-	-	-	-	862,516
4.21 Purchase Non Revenue Vehicles	6,187	4,200	3,611	3,100	3,300	3,400	2,100	2,100	2,100	2,100	32,198
4.22 Rail Non-Revenue Vehicle Overhauls	4,485	3,330	3,417	5,585	1,328	523	534	550	355	590	20,697
4.23 Purchase Rail Non-Revenue Vehicle	15,993	16,834	11,692	9,543	4,830	1,992	-	-	-	-	60,884
Subtotal - Vehicle Related Programs	731,880	447,158	431,929	321,694	502,660	319,128	276,440	411,731	417,465	310,937	4,171,022
BASE PROGRAM - TOTAL	1,581,392	1,157,311	1,139,945	937,559	963,408	715,174	623,349	743,575	740,681	637,614	9,240,008
Toronto York Spadina Subway Extension (TYSSE)	200,394										200,394
Scarborough Subway Extension (SSE)	113,251	119,768	179,602	252,844	471,830	1,022,350	633,625	301,910	140,900	183,670	3,419,750
TOTAL - BASE, TYSSE & SSE Programs	1,895,037	1,277,079	1,319,547	1,190,403	1,435,238	1,737,524	1,256,974	1,045,485	881,581	821,284	12,860,152

2018-2027 Capital Budget Funding Summary *
For TTC BC Meeting - September 26, 2017

Appendix B

\$Millions

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
2017 to 2026 Council Approved Budget	1,413	1,099	812	556	374	396	367	339	385		5,741
Carry Forward	194										194
Change to Existing Projects	-26	58	328	381	589	319	257	405	356	638	3,305
New Projects	23	44	68	62	116	101	151	242	146	97	1,050
Net Change to 2018 to 2027 CB (from 2017 to 2026 CB)	191	102	396	444	705	419	408	647	501	735	4,549
2018-2027 Proposed Budget Request (Gross Ask)	1,605	1,201	1,208	1,000	1,079	816	775	986	886	735	10,290
Funding Sources											
Provincial Gas Tax	75	75	75	75	75	75	75	75	75	75	752
Canada Strategic Infrastructure Fund (CSIF) - Interest			16								16
Capital Reserve (Metrolinx)			58								58
204 LRV Funding	90	63									153
Total Provincial Funding	165	138	149	75	75	75	75	75	75	75	979
Base Federal Gas Tax - 5 cent (population)	167	167	167	167	167	167	167	167	167	167	1,674
Canada Strategic Infrastructure Fund (CSIF)											0
Public Transit Infrastructure Fund (PTIF) - Fed 50% **	222	56									279
Total Federal Funding	390	224	167	167	167	167	167	167	167	167	1,953
TTC Internal (depreciation)	29	18	12	13	10	12	9	11	19	18	152
Other Funding (LRV LDs)	2										2
Other Reserves / Funding Partners	2	2	2	2	2	2	2	2	2	2	18
Development Charges	131	63	64	63	63	41	27	28	7	10	499
Total Other Funding	164	83	78	79	74	55	38	40	28	30	670
City Debt Request (including City PTIF)	596	491	420	235	65	105	78	84	126	200	2,400
City Carryforward - Deferred Debt Issued	184										184
Other Funding (LRV LDs)											0
City Funding - Reserve Funds (Capital Financing Strategy)	70	157	38								264
Total City / Other Funding	1,015	731	535	313	139	160	116	125	154	230	3,518
Total Funding	1,570	1,093	851	556	382	402	359	367	397	473	6,450
Funding Shortfall/(Surplus)	35	109	357	444	697	413	416	619	490	262	3,840
Capacity to Spend Reduction - Appendix C	26	30	43	49	46	43	41	43	48	50	420
Existing Unfunded Projects - Appendix C	50	0	227	182	294	279	228	348	329	225	2,161
Unfunded Projects - New BD Line					18	17	18	19	19	20	112
Net Funding Shortfall/(Surplus)	-41	79	87	213	339	75	128	209	93	-35	1,147
New Projects	23	44	68	62	116	101	151	242	146	97	1,050
Net Funding Shortfall/(Surplus)	-64	35	18	151	224	-26	-23	-33	-53	-132	97

* This funding summary is undergoing review with City staff and is subject to change

**2018 to 2027 Capital Budget
Proposed Capacity-to-Spend Reductions and Unfunded Capital Projects
(\$000's)**

Appendix C

Project Description	Proposed Reductions											2017 to 2026	Variance (Dec.)/Inc.	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018 to 2027			
<i>Capacity to Spend Reduction Projects</i>														
Subway Track	-	-	6,401	7,779	5,623	5,718	5,828	5,939	6,040	6,161	49,489	50,662	(1,173)	
Surface Track	-	-	3,743	4,306	4,746	4,865	4,203	4,808	5,746	5,861	38,278	49,582	(11,304)	
Traction power	2,115	2,823	2,817	2,812	2,779	2,917	3,098	3,227	3,439	4,084	30,110	27,972	2,138	
Power Dist./Electric Systems	1,110	953	957	968	980	1,068	1,060	1,063	1,197	1,275	10,630	10,801	(171)	
Communications	3,827	1,799	2,021	2,200	2,046	2,033	1,887	1,996	2,381	2,959	23,148	11,908	11,240	
Signal Systems	626	533	469	537	485	489	501	515	545	541	5,242	4,422	820	
ATC Resignalling (Line 2 - BD)	-	-	-	-	-	-	-	-	-	-	-	43,304	(43,304)	
Finishes	-	-	2,137	2,798	3,702	1,898	1,326	1,148	1,399	1,209	15,617	20,986	(5,369)	
Equipment	914	1,387	1,925	1,893	1,629	2,028	2,003	2,023	1,849	2,897	18,548	19,298	(750)	
On-Grade Paving Rehabilitation	-	-	2,204	3,093	2,927	1,875	1,827	1,854	1,882	1,910	17,573	22,149	(4,576)	
Transit Shelters & Loops	51	70	70	56	40	59	45	42	53	54	540	465	75	
Bridges and Tunnels	3,703	5,226	5,927	6,010	6,085	6,478	6,568	6,966	7,069	7,175	61,207	63,249	(2,042)	
Fire Ventilation Upgrade	-	-	-	-	-	-	-	-	-	-	-	23,652	(23,652)	
Other Bldgs & Structures Projects	1,743	3,435	4,166	3,572	3,463	1,268	1,157	1,063	778	831	21,474	33,099	(11,625)	
Replacement of Wheel-Trans Vehicles	-	-	-	-	-	-	-	-	-	-	-	10,185	(10,185)	
Bus Overhaul	-	4,006	5,333	7,153	7,292	7,410	7,530	7,652	8,706	8,294	63,376	62,524	852	
Automotive Non-Revenue Vehicles	1,856	1,260	1,083	930	990	1,020	630	630	630	630	9,659	5,175	4,484	
Rail Non-Revenue Vehicle Overhaul	70	55	198	200	128	131	134	138	89	148	1,290	814	476	
Tools and Shop Equipment	2,105	1,290	881	2,046	782	600	603	584	645	716	10,251	4,203	6,048	
Other Maintenance Equipment	1,752	1,614	395	395	416	397	397	449	457	470	6,740	3,518	3,222	
Environmental Programs	340	350	360	370	380	390	400	410	420	430	3,850	6,295	(2,445)	
Information Technology System	4,148	2,277	1,617	1,644	1,417	2,217	1,683	2,026	4,677	4,508	26,216	2,354	23,862	
Furniture & Office Equipment	72	52	137	85	47	98	47	102	52	50	742	683	59	
Transit Priorities Project	1,724	2,564	275	275	275	275	275	275	275	275	6,488	4,231	2,257	
Sub-Total Capacity-to-Spend Reductions	26,155	29,694	43,113	49,122	46,233	43,233	41,202	42,909	48,329	50,477	420,467	481,531	(61,064)	
<i>Unfunded Projects</i>														
ATC Resignalling (Line 2 - BD)	-	-	-	-	17,898	16,913	18,106	18,704	19,499	20,494	111,614	-	111,614	
Fire Ventilation Upgrade	-	-	-	1,945	50,191	46,840	29,129	20,897	13,140	-	162,142	162,742	(600)	
Purchase of Buses	-	-	5,100	90,356	94,348	60,120	29,180	7,668	25,344	11,271	323,387	244,576	78,811	
Purchase 372 New Subway Cars	-	-	-	-	149,000	171,722	170,147	319,361	290,246	144,279	1,244,755	1,185,221	59,534	
Ridership Growth for YUS and BD	-	-	-	-	-	-	-	-	-	69,784	69,784	-	69,784	
Purchase of Streetcars	49,582	-	222,059	89,244	-	-	-	-	-	-	360,885	360,885	-	
Sub- Unfunded Projects	49,582	-	227,159	181,545	311,437	295,595	246,562	366,630	348,229	245,828	2,272,567	1,953,424	319,143	
Total Cap. To Spend Reductions & Unfunded Projects	75,737	29,694	270,272	230,667	357,670	338,828	287,764	409,539	396,558	296,305	2,693,034	2,434,955	258,079	