

- The Program's 2018 Preliminary Capital Budget and 2019 - 2027 Preliminary Capital Plan is over the debt target over the 10 years as follows.

(\$000s)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
2018 - 2027 Preliminary Capital Plan	6,138	9,573	2,816	2,530	431	8,269	9,302	4,703	3,800	2,150	49,712
Debt Funding Required	1,494	3,340	838	150	150	1,846	2,914	1,615	1,600	1,750	15,697
Program Debt Target	1,220	1,350	150	150	150	1,846	2,914	1,615	1,600	1,600	12,595
Over/(Under) Debt Target	274	1,990	688							150	3,102

- As a result of the review of cash flows funding estimates based on the project's readiness to proceed, \$0.600 million in expenditures and associated debt for two state of good repair projects has been shifted from 2018 to 2019.
 - The East/West Burn-House Technology replacement (\$0.200 million) and Existing East Training Building Extended Bays (\$0.400 million).
 - The Helmet Replacement project for lifecycle replacement will require \$1.000 million in 2027 pushing the program over its debt target by \$0.150 million in 2027.
 - In addition, a total of \$7.947 million was deferred to 2019 for the Station A-Woodbine and Station B-Downsview projects.
- As a result of City-wide review of unmet capital priorities and the debt room created from the deferrals noted above, three new projects totalling \$3.468 million gross and \$2.952 million debt, were added to the 10-year Capital Plan.
 - Operational BI Data Architecture Modernization (\$2.010 million gross and debt).
 - Fire Prevention Technology Integration (\$0.770 million gross and debt).
 - HUSAR Federal Public Safety Canada Funding (\$0.688 million gross and \$0.172 million debt).

Issues Impacting the 10-Year Capital Plan

Unmet Needs

- The "Unmet Capital Needs" identified by Toronto Fire Services, are noted in the table below and will require additional debt funding to proceed.

Unmet Needs – Projects Excluded due to Funding Constraints (In \$000s)

Project Description (In \$000s)	Total Project Expenditure	Non-Debt Funding	Debt Required	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Fire Prevention - Office Space Accomodation (3 Dohme) Business Continuity Improvement	4,500.0		4,500.0	1,000.0	3,500.0								
Video Project	600.0		600.0	300.0	300.0								
Battery Powered Auto-Extrication Tools	350.0		350.0	150.0	200.0								
Replacement of Fire Boat	580.0		580.0	580.0									
Total	15,000.0		15,000.0								1,500.0	13,500.0	

- Fire Prevention – South District Consolidation (3 Dohme) project requires \$4.500 million to renovate current space located at 3 Dohme Ave. to accommodate the consolidated and expanded South District Fire Prevention office. This is a critical need as existing workspace is not meeting the needs of Fire Services staff. In February 2016, this City-owned property was transferred to Toronto Fire Services for this purpose, avoiding the need to build new space and to acquire new property. The renovation will provide office space to accommodate the recent addition of fire prevention and public education staff to TFS; and to support the consolidation of an existing fire prevention office, thereby enhancing overall efficiency.

- The expanded office space will include: 1) a new multi-purpose classroom, 2) expanded kitchen and lunchroom, 3) new secured storage area, 4) expanded gender-appropriate and AODA compliant washroom facilities, and 5) the creation of a fire prevention hands-on training lab. The renovations will also provide: 2 fire prevention offices (14 staff), 1 public education office (7 staff), and a professional standards and training office (6 staff).
- *Business Continuity Improvement project* requires \$0.600 million to implement hardware, system software and network upgrades to improve the capacity of systems used in daily operations. These upgrades will significantly reduce or eliminate the magnitude of disruptive events, equipment failures, network outages or maintenance cycles required for service delivery and business continuity.
- *The Video Project* requires \$0.350 million to modernize the program's video display capability, including large scale video display, and switching technology and interfaces to display content from several sources. Operational benefits will result in improved situational awareness and incident management capabilities of the communications centres. In addition, the rollout of this project will result in improvements for call processing times for highway incidents, provide greater visibility of Dynamic Staging, and enhance traffic monitoring or system/operator display
- *Battery Powered Auto-Extrication Tools project* requires \$0.580 million to provide funding to purchase 19 rechargeable battery powered auto extrication tools. The addition of battery-powered auto extrication tools will improve the safety and speed of vehicle and industrial rescues, subway rescues and confined space rescues as they will be able to be accomplished without the weight, noise, fuel concerns and emissions associated with gas powered units.
- *The Fireboat Replacement project* at a cost of \$15.000 million will support the replacement of the current vessel, which was built in 1964, and refurbished in 2004. The current fireboat is expected to be in service until 2025. The fireboat is available 24/7 and provides critical emergency services within Toronto Harbour, the adjacent waters of Lake Ontario and waterfront areas of Toronto. Throughout the winter the fireboat is engaged in regular ice breaking services required to prevent ice build-up on ferry routes and the dock areas, as well as keeping lanes open to strategic points on the island.
- The "Unmet Capital Needs" identified above cannot be accommodated within the City's current debt targets given the limitations on debt servicing costs and therefore not included in the 2018 - 2027 preliminary Capital Plan for Toronto Fire Services. These projects will be included on the list of unfunded "Capital Priorities" considered for future funding in future budget process.

TFS Portfolio Optimization Strategy

- TFS has a portfolio of 91 facilities, including 83 fire stations and 3 training facilities totaling 836,000 square feet and a current estimated building replacement value (on existing lands) of \$401.912 million.
- In partnership with the FREEE and Toronto Real Estate Agency building conditions audits have been completed for all TFS facilities. These audits have been used to apply the Facilities Condition Index (FCI) evaluation matrix and a comprehensive FCI assessment of all TFS facilities has been produced.
 - The FCI assessments indicate that the current TFS facility SOGR backlog of approximately \$10.4 million is expected to rise to \$105.4 million, or 26.2% of TFS's asset value by 2027 and will require \$27.2 million in maintenance costs over the 10-year planning horizon. In the event that essential repairs are not completed, further physical damage and deterioration of property will occur.
 - The evaluation also indicates that 13 TFS facilities are in "poor" condition and may be beyond the point of cost-viable repair or renovation.

- The logistics and practical delivery of the repairs and renovations are complex, with a number of variables affecting the maintenance needs of the TFS facilities aside from additional funding requirements. Other issues associated with the viability of implementing major maintenance upgrades include:
 - Consideration of potentially building new stations, to replace existing fire stations deemed not worth renovating or repairing based upon the FCI, with new fire stations in optimized locations, resulting in enhanced fire protection service levels;
 - Standardization of fire station design and layout to improve turnout times and crew response;
 - Identification of potential "storefront" fire station sites in developing community locations that would enable TFS to better meet the needs of growing and expanding communities; and
 - Identification of community hub and multi-purpose design opportunities that would enable future fire stations to be integrated into various community hub and residential development proposals as opposed to maintaining the traditional stand-alone fire station model.
- In addition to the compounding state of good repair backlog, the 2015-2019 Toronto Fire Services Master Fire Plan also identified densification and congestion in the City as major issues requiring innovative solutions that support the program's ongoing efforts to achieve its strategic objective of keeping communities safe, empowering people, strengthening partnerships and improving performance.
- The TFS Portfolio Optimization Strategy project, in collaboration with FREEE and Toronto Real Estate Agency is underway. This will identify and evaluate opportunities to rationalize the portfolio through potential Public-Private partnership options for future fire station models and to undertake a comprehensive review of fire station placement in consideration of facility condition indexing of existing facilities.
 - The project's objectives are based on the following criteria:
 - Ensuring that the TFS facilities portfolio maintains optimal fire station locations;
 - Improving TFS response times;
 - Identifying and pursuing potential co-location synergies;
 - Identifying operational efficiencies; and
 - Unlocking land value opportunities in an effort to create a viable, non-tax based revenue source to address the TFS SOGR back log issues.
 - TFS is evaluating opportunities for fire station location optimization for the 13 TFS facilities that have been assessed as being in "poor" condition through the FCI process.
 - This evaluation will inform the process of identifying opportunities for portfolio development in conjunction with other city building priorities, planned developments and the city real estate rationalization strategy.
 - TFS is exploring colocation opportunities with other emergency services.

The outcomes from the TFS Portfolio Optimization Strategy project will inform the capital planning needs for TFS, FREEE and TRA in future years.

It is recommended that Toronto Fire Services, in collaboration with Facilities, Real Estate, Environment & Energy and Toronto Real Estate Agency, provide an update to the Chief Financial Officer on the Fire Station Optimization Plan with Fire Services' 2019 Capital Budget Submission



Appendices

Appendix 1

2017 Performance

2017 Key Accomplishments

In 2017, Toronto Fire Services made significant progress and/or accomplished the following:

- ✓ Completed *Computer Aided Dispatch* project that upgraded the current TFS CAD system from version 9.1 to version 9.3 and transitioned from an Oracle database to an SQL database format.
- ✓ Completed *Bunker Suit Lifecycle Replacement* project.
- ✓ Completed *Emergency Communication System Enhancement* project that will increase the functionality of mobile applications of frontline apparatus that require additional bandwidth.
- ✓ *High Rise Response Trucks* project is 95% completed with expected delivery in early January 2018.
- ✓ Developed the Business Cases for the newly approved IT projects.

2017 Financial Performance

2017 Budget Variance Analysis (in \$000's)

2017 Budget	As of Sept. 30, 2017		Projected Actuals at Year-End		Unspent Balance	
	\$	% Spent	\$	% Spent	\$ Unspent	% Unspent
17,981	749	4.2%	3,710	20.6%	14,271	79.4%

Three major projects are significantly underspent and underspent funding will be carried forward into 2018 from 2017. These projects include: *Station A-Woodbine* for \$2.192 million; *Station B-Downsview* for \$0.720 million and the *Replacement of Portable Radios* for \$5.000 million. The 2 new fire stations have been deferred primarily due to delays in the site plan approval and in the land title transfer. The RFQ for the *Replacement of Portable Radios* has been delayed due to the complexity of establishing user requirements within a Toronto Police Service's lead procurement process.

For additional information regarding the 2017 Q3 capital variances and year-end projections for Toronto Fire Services, please refer to the attached link for the report entitled "*Capital Variance Report for the Nine-Month Period Ended September 30, 2017*" considered by City Council at its meeting on November 27, 2017.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.BU37.1>

Impact of the 2017 Capital Variance on the 2018 Preliminary Capital Budget

- As a result of the delays in the capital projects described in the 2017 Q3 Capital Variance Report, funding of \$9.593 million is being carried forward from 2017 for inclusion in the 2018 Preliminary Capital Budget to continue the capital work.
- In addition, \$4.165 million in cash flow funding for *Station A-Woodbine* and *Station B-Downsview* is being carried forward from 2016 and requires Council to reaffirm its commitment, consistent with the treatment of funding being carried forward 2 or more years.
- The 2018-2027 Preliminary Capital Budget and Plan includes revised cash flows for the construction projects. By delaying the cash flows for the projects requiring carry forward funding, the Program has realigned cash flow estimates in 2018 to match the revised spending projections.

Appendix 2

2018 Preliminary Capital Budget;
2019 - 2027 Capital Plan Including Carry Forward Funding (\$000s)

Project	Total Project Cost	Prior Year Carry Forward	2018	2019	2020	2021	2022	2018 - 2022	2023	2024	2025	2026	2027	2018 - 2027 Total
Health & Safety:														
Replacement of Portable Radios-2017	5,000	5,000						5,000						5,000
Replacement of Portable Radios-2024	5,050									5,050				5,050
Personal Protection Equipment Replacement-2024 - 2027	4,600									100	1,900	2,200	400	4,600
Personal Protection Equipment Replacement-2019-2022	4,500			100	1,900	2,300	200	4,500						4,500
Defibrillators Lifecycle Replacement	1,000		1,000					1,000						1,000
Mobile Radios Lifecycle Replacement -2023	2,700								2,700					2,700
Purchase of Gas Meters for Fire Investigators	100												100	100
Thermal Imaging Cameras	1,450											1,450		1,450
Replacement of CBRNE Equipment	510	29	170					199						199
Lifecycle Replacement of CBRNE Equipment	500												500	500
Helmet Replacement -2024 -2027	1,000												1,000	1,000
Helmet Replacement 2017-2019	800	300	300	200				800						800
Breathing Air Compressor Replacement-2018	75		75					75						75
Breathing Air Compressor Replacement-Future Years	569			77	78	80	81	316	83	84	86			569
Sub-Total	27,854	5,329	1,545	377	1,978	2,380	281	11,890	2,783	5,234	1,986	3,650	2,000	27,543
Legislated:														
Replacement of HUSAR Equipment 2018	50		50					50						50
Replacement of HUSAR Equipment-Future Years	450			50	50	50	50	200	50	50	50	50	50	450
HUSAR Federal Public Safety Canada Funding	688		688					688						688
Sub-Total	1,188		738	50	50	50	50	938	50	50	50	50	50	1,188
State of Good Repair:														
Emergency Fire Communication Workstation Console Replacement	600	545						545						545
Fire Prevention Office Space Accommodation	450	400						400						400
Training Simulators & Facilities Rehab 2017	100	100						100						100
Training Simulators & Facilities Rehab 2018	100		100					100						100
Training Simulators & Facilities Rehab Future Years	900			100	100	100	100	400	100	100	100	100	100	900
Existing East Training Bldg Extended bays	400			400				400						400
The East/West Burn-House Technology Replacement	200			200				200						200
The East/West Burn-House Wall Flame Protection	250	225						225						225
Sub-Total	3,000	1,270	100	700	100	100	100	2,370	100	100	100	100	100	2,870
Service Improvements:														
Fire Prevention Technology Integration	2,010		202	1,140	668			2,010						2,010
Operational BI Data Architecture Modernization	770		500	250	20			770						770
Sub-Total	2,780		702	1,390	688			2,780						2,780
Growth Related:														
Station B (Stn 144) Keele St (Downsview)	9,885	720	1,530	3,147				5,397						5,397
Station G Sunnybrook	11,821							-	5,336	3,918	2,567			11,821
Station A (Stn 414) - Woodbine	8,342	2,192	1,523	2,909				6,624						6,624
Specialized Trucks & Equipment	3,350	82						82						82
East Training - New Building on the Ground Floor	1,000			1,000				1,000						1,000
Sub-Total	34,398	2,994	3,053	7,056				13,103	5,336	3,918	2,567			24,924
Total	69,220	9,593	6,138	9,573	2,816	2,530	431	31,081	8,269	9,302	4,703	3,800	2,150	59,305

CITY OF TORONTO

Gross Expenditures (\$000's)

Fire Services						Current and Future Year Cash Flow Commitments							Current and Future Year Cash Flow Commitments Financed By											
						2018	2019	2020	2021	2022	Total 2018-2022	Total 2023-2027	Total 2018-2027	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserves	Reserve Funds	Capital from Current	Other 1	Other2	Debt - Recoverable Debt	Total Financing	
Sub- Priority	Project No. SubProj No.	Project Name Sub-project Name	Ward	Stat.	Cat.																			
<u>FIR908043 Thermal Imaging Cameras</u>																								
0	2	Thermal Imaging Cameras-Lifecycle Replacement	CW	S6	01	0	0	0	0	0	0	1,450	1,450	0	0	0	0	0	0	0	0	1,450	0	1,450
		Sub-total				0	0	0	0	0	0	1,450	1,450	0	0	0	0	0	0	0	0	1,450	0	1,450
<u>FIR908157 Replacement of CBRNE Equipment</u>																								
0	1	Replacement of CBRNE Equipment	CW	S2	01	199	0	0	0	0	199	0	199	0	0	0	0	0	0	0	0	199	0	199
0	2	Lifecycle Replacement of CBRNE Equipment-2027	CW	S6	01	0	0	0	0	0	0	500	500	0	0	0	0	0	0	0	0	500	0	500
		Sub-total				199	0	0	0	0	199	500	699	0	0	0	0	0	0	0	0	699	0	699
<u>FIR908301 Helmet Replacement</u>																								
1	1	Helmet Replacement-2017-2019	CW	S2	01	600	200	0	0	0	800	0	800	0	0	0	0	0	0	0	0	800	0	800
0	2	Helmet Replacement-2024-2027	CW	S6	01	0	0	0	0	0	0	1,000	1,000	0	0	0	0	0	0	0	0	1,000	0	1,000
		Sub-total				600	200	0	0	0	800	1,000	1,800	0	0	0	0	0	0	0	0	1,800	0	1,800
<u>FIR908302 Fire Prevention Office Space Accommodation</u>																								
2	1	Fire Prevention Office Space Accommodation	CW	S2	03	400	0	0	0	0	400	0	400	0	0	0	0	0	0	400	0	0	0	400
		Sub-total				400	0	0	0	0	400	0	400	0	0	0	0	0	400	0	0	0	0	400
<u>FIR908453 HUSAR Federal Public Safety Canada Funding</u>																								
1	1	Toronto HUSAR Federal Public Safety Canada Funding	CW	S4	02	688	0	0	0	0	688	0	688	0	516	0	0	0	0	0	0	172	0	688
		Sub-total				688	0	0	0	0	688	0	688	0	516	0	0	0	0	0	0	172	0	688
<u>FIR908455 Breathing Air Compressor Replacement</u>																								
4	1	Breathing Air Compressor Replacement	CW	S4	01	75	0	0	0	0	75	0	75	0	0	0	75	0	0	0	0	0	0	75
0	2	Breathing Air Compressors Replacement-Future years	CW	S6	01	0	77	78	80	81	316	253	569	0	0	0	569	0	0	0	0	0	0	569
		Sub-total				75	77	78	80	81	391	253	644	0	0	0	644	0	0	0	0	0	0	644
<u>FIR908456 Fire Prevention Technology Integration</u>																								
2	1	Fire Prevention Technology Integration	CW	S4	04	202	1,140	668	0	0	2,010	0	2,010	0	0	0	0	0	0	0	0	2,010	0	2,010
		Sub-total				202	1,140	668	0	0	2,010	0	2,010	0	0	0	0	0	0	0	0	2,010	0	2,010
<u>FIR908457 Operational BI Data Architecture Modernization</u>																								

