

# budget

—2019—



## Information & Technology

### What We Do

The Information & Technology (I&T) division provides city-wide leadership in modernizing City services through the strategic investment, development and management of the City's Information Technology (IT) systems including:

- Driving City business transformation and innovation to improve the service experience associated with the delivery of City programs and services to residents, businesses and visitors including critical business systems delivery and support.
- Improving the City's business processes and systems with a focus on opportunities to streamline, integrate and deliver business value to clients and employee productivity solutions that drive service excellence.
- Ensuring a secure, reliable and high performing technology environment that is modernized and well-positioned to respond to growing business needs and resident demands.

I&T Division has oversight for about 66% of the overall City IT budget (Operating and Capital) and delivers services in partnership with technology teams across City Divisions and select Agencies. Our services include:

- Business I&T Solutions
- Computer & Communications Technology Infrastructure
- Enterprise I&T Planning & Client Services

### Why We Do It

Changes are driving public expectation for services anytime, anywhere, on any channel and any device. Opportunities exist for the City to use data to improve efficiency and effectiveness across a broad range of government programs and a need to modernize systems to improve cost effectiveness, service performance and usability. With tremendous expectations on City government, the City is working to improve how it deploys new capabilities and solutions.

#### Our Experience & Success

- Improved customer experience by increasing online self-service while reducing costs
- Drove government transparency with 292 datasets published in Open Data and launch of new Open Data Portal
- Transformed the digital employee work experience by providing capabilities such as 'access anywhere' and Wi-Fi at City buildings
- Delivered several City modernization initiatives
- Administrative Penalty System (APS) to transform parking dispute processing
- 'Making it Better' Campaign to improve Recreation Program Registration experience
- My Child Care Account making it simpler for clients using childcare through online access replacing manual processes

#### Key Challenges

- Ability to sustain business solutions due to growing demand for IT
- Growing Cyber Security complexity and threat landscape environment with emphasis on digital government
- Need to ensure an agile and accelerated IT delivery model
- Organizational capacity, business readiness and change management to support City-wide transformation capacity
- Sustainability of the City-wide IT reserve for IT lifecycle asset management currently only positioned to sustain 85% of City-wide requirements
- Ability to realize City-wide benefits planned for IT capital projects

#### Priority Actions

- Focus on integrated Service Delivery and Digital Enablement
- Enhancing IT Cyber-Security Program to respond to security demands
- Ensuring effective Program and Project delivery for the City's 130+ IT projects and modernization initiatives
- Optimizing the IT Service and Operating model across the City to realize efficiencies and improve service effectiveness
- Delivering support for the City's 29,000 users, 850+ applications and maintaining the City's technology infrastructure
- Focussing on the development of a Smart City Strategic Framework and Plan
- Advancing outcomes associated with modernization, housing, mobility and long-term fiscal sustainability

## Budget At A Glance

STAFF RECOMMENDED OPERATING BUDGET			
\$Million	2019	2020	2021
Gross Expenditures	\$133.7	\$136.3	\$137.7
Revenues	\$54.6	\$53.5	\$53.7
Net Expenditures	\$79.1	\$82.8	\$84.0
Approved Positions	860.0	857.0	857.0

STAFF RECOMMENDED 10-YEAR CAPITAL PLAN			
\$Million	2019	2020-2028	Total
Gross Expenditures	\$67.2	\$361.5	\$428.6
Debt	\$42.8	\$165.2	\$208.0

*Note: Excluding 2018 carry forward funding to 2019*

## Our Key Service Levels



Customer Satisfaction for IT Services is **77%\***



Customer Satisfaction for Business Applications is **73%\***



Customer Satisfaction for IT Service Desk is **81%\***



City's Computing Infrastructure Service is available **99.99%** of the time



City's Telecommunication Network is available **99.96%** of the time

Source of images: [www.icons8.com](http://www.icons8.com)

\* New baseline levels are consistent with Municipal comparators

## Key Service Deliverables

- Support **850+** business solutions & resolved **+33,000 (-4000 from 2017)** business application service requests
- Support **29,000+** users and **187,000 (+1400 from 2017)** service desk calls, emails and self-serve requests
- Support **24,200 (+ 100 from 2017)** desktops & notebook computers and **2,700+ (-1300 from 2017)** multi-function printers
- Support **136,000+ (-17,000 from 2017)** phones, wireless devices, switches, routers, wireless access points & ports
- Support **3** data centres **2,400 +(-300 from 2017)** servers 7x24x365
- Support **26 Million+ (+10 Million from 2017)** visits to the City Website

## Who We Serve

### Business IT Solutions

- City & Agency Staff

#### Beneficiaries

- Businesses
- Residents
- Visitors

### Computer & Communications Technology Infrastructure

- City & Agency Staff

#### Beneficiaries

- Businesses
- Residents
- Visitors

### Enterprise IT Planning & Client Services

- City & Agency Staff

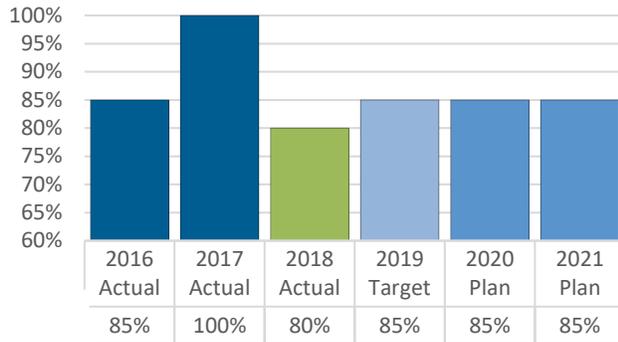
#### Beneficiaries

- Businesses
- Residents
- Visitors

## How Well We Are Doing

### Performance Measures

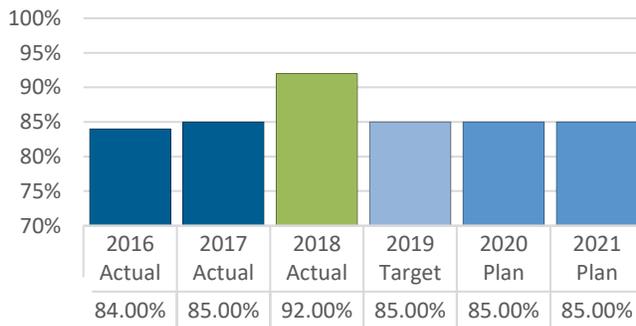
**% Projects Planned to Complete vs. Actual Completed**



### Behind the Numbers

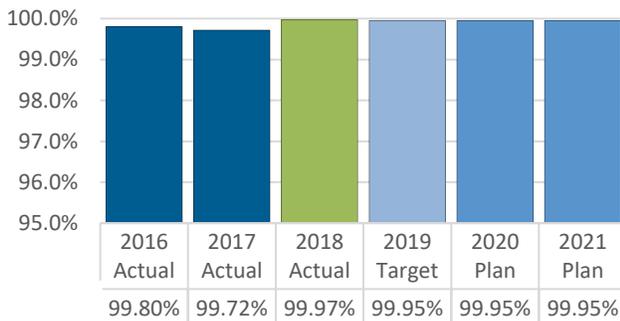
- This measure helps gauge performance in completing projects as well as capacity to take on new projects
- As the ratio of plan-to-complete projects increases, benefits are realized, and resources are able to take new project demands
- Year-over-year project completion rates have been improving and 2018 has been impacted because of a significant number of change requests linked to legislated changes and a municipal election year
- Aligned with Industry average as per Gartner Research: 2018 – 62%

**Project Timelines Met on schedule Vs. Planned**



- This measure reflects projects that have progressed as planned (i.e. their schedules are seeing less than 20% variance from their baseline plan)
- This measure demonstrated effective project planning/governance which is realizing more planned commitments
- Aligned with industry average as per Gartner Research: 2018 – 20% schedule variance

**% Availability of Business Applications**



- This measures the availability of all business applications
- The availability of business applications has improved in 2018 as a result of better planning and fewer incidents

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## RECOMMENDATIONS

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5. Summary of 2019 Recommended New & Enhanced Service Priorities
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7. 2019 Capital Budget; 2020 - 2028 Capital Plan
8. 2019 Cash Flow & Future Year Commitments
9. 2019 Capital Budget with Financing Detail
10. Reserve and Reserve Fund Review

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## RECOMMENDATIONS

## RECOMMENDATIONS

The City Manager and Chief Financial Officer & Treasurer recommend that:

1. City Council approve the 2019 Staff Recommended Operating Budget for Information & Technology of \$133.709 million gross, \$79.140 million net for the following services:

Service:	Gross (\$000s)	Net (\$000s)
Business I&T Solutions	60,415.0	24,227.3
Computer & Communications Technology Infrastructure	45,308.7	31,833.5
Enterprise I&T Planning & Client Services	27,984.8	23,079.2
<b>Total Program Budget</b>	<b>133,708.5</b>	<b>79,140.0</b>

2. City Council approve the 2019 service levels for Information & Technology as outlined in Appendix 3 of this report, and associated staff complement of 860.0 positions, comprising of 218.0 capital positions and 642.0 operating positions.

3. City Council direct the information contained in Confidential Attachment, remain confidential until the outcome of City Council's decision has been communicated to Unions and affected staff.

4. City Council approve the 2019 Staff Recommended Capital Budget for Information & Technology with a total project cost of \$54.814 million, and 2019 cash flow of \$91.280 million and future year commitments of \$55.139 million comprised of the following:

a. New Cash Flow Funds for:

1. 39 new / change in scope sub-projects with a 2019 total project cost of \$54.814 million that requires cash flow of \$37.129 million in 2019 and future year cash flow commitments of \$10.413 million for 2020; \$3.006 million for 2021; \$1.897 million for 2022; \$1.510 million for 2023; \$1.085 million for 2024; and \$0.226 million reduction for 2025;

2. 46 previously approved sub-projects with a 2019 cash flow of \$25.861 million; and future year cash flow commitments of \$18.476 million for 2020; \$16.010 million for 2021; \$2.062 million for 2022; \$0.340 million for 2023; \$0.340 million for 2024; and \$0.226 million for 2025;

3. 15 previously approved sub-projects with carry forward funding from 2017 and prior years requiring 2019 cash flow of \$4.182 million and 2021 cash flow of \$1.028 that requires Council to reaffirm its commitment; and

b. 2018 approved cash flow for 46 previously approved sub-projects with carry forward funding from 2018 into 2019 totalling \$24.108 million.

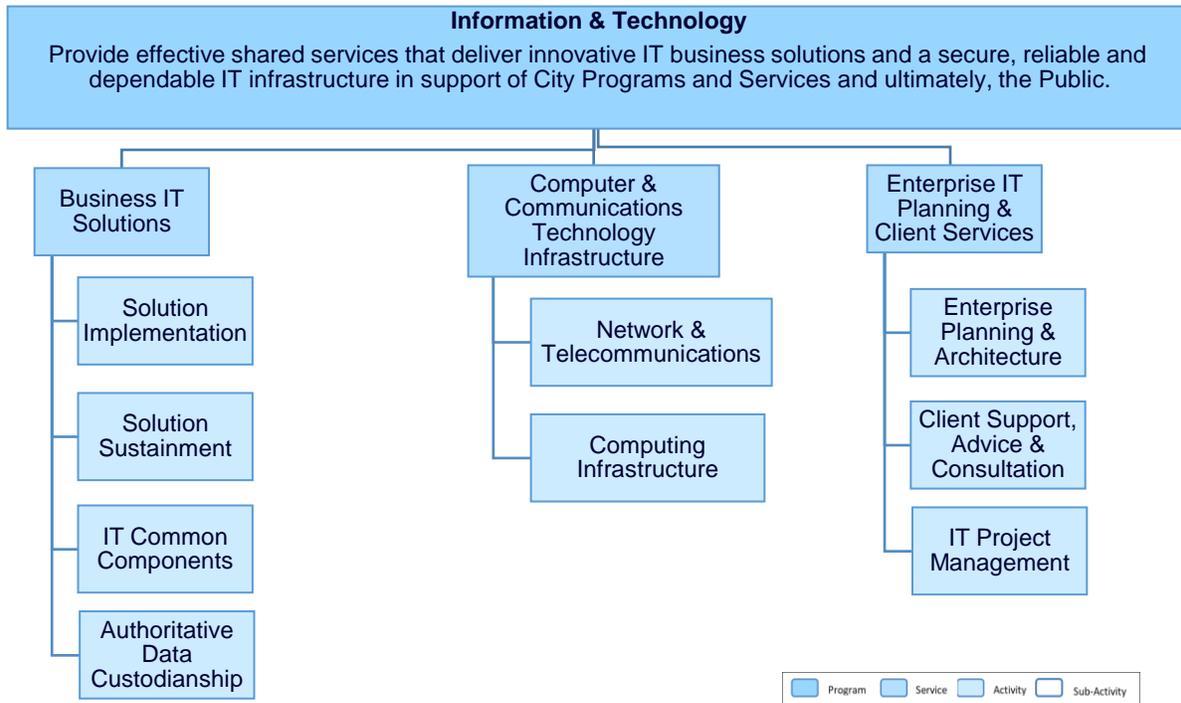
5. City Council approve the 2020 - 2028 Staff Recommended Capital Plan for Information & Technology totalling \$305.304 million in project estimates, comprised of \$34.805 million for 2020; \$18.552 million for 2021; \$28.862 million for 2022; \$36.469 million for 2023; \$32.714 million for 2024; \$45.983 million for 2025; \$35.745 million for 2026; \$35.098 million for 2027, and \$39.476 million for 2028.

6. City Council consider the operating costs of \$0.221 million net in 2019; \$0.112 million net in 2020; and \$0.034 million net in 2021 resulting from the approval of the 2019 Capital Budget for inclusion in the 2019 and future year operating budgets.



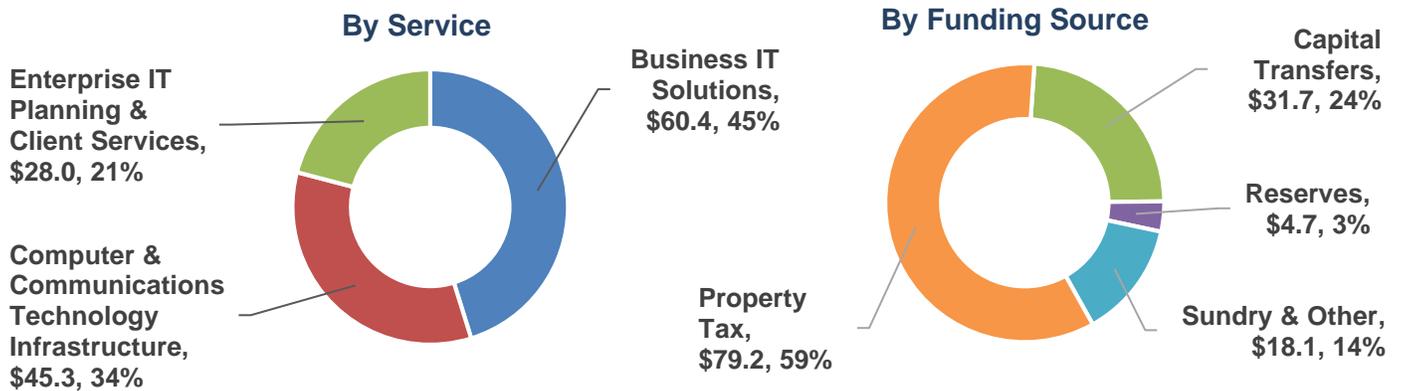
# 2019 STAFF RECOMMENDED OPERATING BUDGET

**PROGRAM MAP**



**2019 OPERATING BUDGET HIGHLIGHTS**

**2019 Staff Recommended Operating Budget \$133.7M**



- ▼ **3.0%** Budget increase over the 2018 Approved Net Operating Budget to meet additional service demands and fulfil prior year Council approved financial commitments.
- \$2.135M** Efficiency savings in rationalization and optimization of I&T assets and costs. This includes \$1.3M to be achieved through synergies and savings from consolidating city-wide information technologies.
- \$0.539M** New/enhanced funding to improve cyber security measures within the City of Toronto.
- 2020/2021** Increases primarily for known inflationary adjustments for salaries, benefits and contracts, operating impacts from capital and phased funding for capital positions approved by Council in 2013.

**2019 OPERATING BUDGET OVERVIEW**

**Table 1: 2019 Staff Recommended Operating Budget and Plan by Service**

(In \$000s)	2018		2019			Changes		Incremental Change	
	Budget	Projected Actual*	Base	New / Enhanced	Total Staff Recommended Budget			2020 Plan	2021 Plan
By Service	\$	\$	\$	\$	\$	\$	%	\$	\$
<b>Business IT Solutions</b>									
Gross Expenditures	59,258.4		60,415.0		60,415.0	1,156.6	2.0%	1,125.5	680.7
Revenue	33,793.8		36,187.7		36,187.7	2,393.9	7.1%	(8.4)	251.6
<b>Net Expenditures</b>	<b>25,464.6</b>		<b>24,227.3</b>		<b>24,227.3</b>	<b>(1,237.3)</b>	<b>(4.9%)</b>	<b>1,133.9</b>	<b>429.1</b>
<b>Computer &amp; Communications Technology Infrastructure</b>									
Gross Expenditures	44,598.9		45,308.7		45,308.7	709.8	1.6%	595.7	189.0
Revenue	13,708.4		13,475.2		13,475.2	(233.2)	(1.7%)	175.5	(24.5)
<b>Net Expenditures</b>	<b>30,890.6</b>		<b>31,833.5</b>		<b>31,833.5</b>	<b>942.9</b>	<b>3.1%</b>	<b>420.2</b>	<b>213.5</b>
<b>Enterprise IT Planning &amp; Client Services</b>									
Gross Expenditures	27,091.5		27,445.3	539.5	27,984.8	893.3	3.3%	896.0	471.7
Revenue	6,621.2		4,905.6		4,905.6	(1,715.6)	(25.9%)	(1,256.9)	(12.1)
<b>Net Expenditures</b>	<b>20,470.2</b>		<b>22,539.6</b>	<b>539.5</b>	<b>23,079.2</b>	<b>2,608.9</b>	<b>12.7%</b>	<b>2,153.0</b>	<b>483.7</b>
<b>Total</b>									
Gross Expenditures	130,948.8		133,169.0	539.5	133,708.5	2,759.7	2.1%	2,617.3	1,341.4
Revenue	54,123.4		54,568.5		54,568.5	445.2	0.8%	(1,089.8)	215.0
<b>Total Net Expenditures</b>	<b>76,825.4</b>		<b>78,600.4</b>	<b>539.5</b>	<b>79,140.0</b>	<b>2,314.5</b>	<b>3.0%</b>	<b>3,707.1</b>	<b>1,126.4</b>
<b>Approved Positions</b>	<b>849.0</b>	<b>0.0</b>	<b>857.0</b>	<b>3.0</b>	<b>860.0</b>	<b>11.0</b>	<b>1.3%</b>	<b>(3.0)</b>	<b>(0.0)</b>

\* Year-End Projection Based on Q3 2018 Variance Report

Base Changes	New/Enhanced Service Priorities	Future Year Plan
<p><b>Base Changes</b> (\$1.775M Net)</p> <ul style="list-style-type: none"> <li>• Third phase of tax based funding for positions approved by Council in 2013 to support capital work city-wide</li> <li>• Salary &amp; benefit increases</li> <li>• Operating Impacts for sustainment of completed technology applications and systems</li> <li>• Growth in hardware, software licenses and maintenance costs driven by an increase in users, technology systems and infrastructure</li> <li>• Above pressures partially offset by service efficiency savings through synergies and savings from consolidating city-wide information technologies</li> </ul>	<p><b>New/Enhanced Service Priorities</b> (\$0.539M Gross and Net)</p> <ul style="list-style-type: none"> <li>• \$0.309 million to advance cyber security awareness training for City staff</li> <li>• \$0.230 million for 2 positions to assist with the increasing growth into more complex service delivery models with cloud services and adopting new technologies that involve the collection of personally identifiable information (PII)</li> </ul>	<p><b>Future Year Plan</b></p> <ul style="list-style-type: none"> <li>• Inflationary increases in salaries and benefits.</li> <li>• Final (fourth) phase of tax based funding for positions originally approved by Council in 2013 to support capital work city-wide</li> </ul>

**EQUITY IMPACTS**

**Improving access to information for persons with disabilities:** Information & Technology's Preliminary Operating Budget includes \$32K savings by decommissioning the City's legacy Web Content Management (WCM) system and replacing it with a free, open-source based WCM system that will be in compliance with the Accessibility for Ontarians with Disabilities Act (AODA). This new system will improve online access for persons with disabilities and the general public so that they can better connect with City information, services and events.

## 2019 Staff Recommended Operating Budget Changes by Service

The 2019 Staff Recommended Operating Budget for Information & Technology is \$2.315 million net or 3.0% higher than the 2018 Council Approved Operating Budget. Table 2 below summarizes the key cost drivers to maintain current service levels, recommended service changes to achieve budget target as well as recommended new and enhanced service priorities to meet outcomes.

**Table 2: 2019 Staff Recommended Operating Budget Changes by Service**

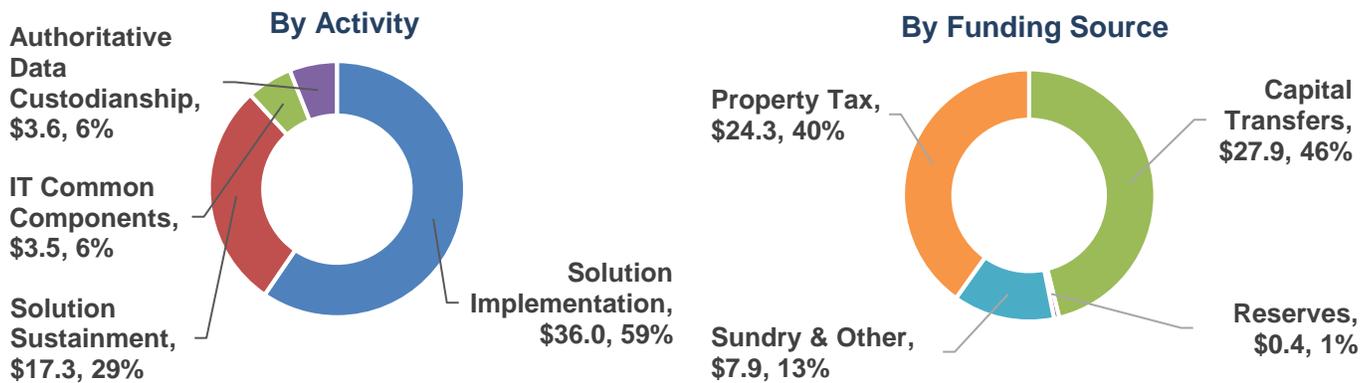
(In \$000s)	Services			Total	
	Business IT Solutions	Computer & Communications Technology Infrastructure	Enterprise IT Planning & Client Services	\$	Positions
	\$	\$	\$	\$	
<b>2018 Council Approved Operating Budget (Net)</b>	25,464.6	30,890.6	20,470.2	76,825.4	849.0
<b>Base Expenditure Changes</b>					
<b>Prior Year Impacts</b>					
Realignment of operational positions between services	(190.0)	(30.5)	288.0	67.5	
Phase 3 Funding of Positions Approved in 2013	346.0	1,147.9	281.1	1,775.0	
Reversal Non Union Cost of Living Allowance	(104.4)	(107.1)	(190.7)	(402.2)	
<b>Operating Impacts of Capital</b>					
Licensing and Maintenance of Completed Capital Projects	108.5	205.9	(93.2)	221.2	11.0
<b>Economic Factors</b>					
Inflationary Increase in Contract Costs for Managed Services	4.3	139.3	2.1	145.8	
<b>Salaries &amp; Benefits</b>					
Inflationary Increases in Salaries & Benefits	1,006.3	(3.7)	1,897.5	2,900.1	
<b>Other Base Expenditure Changes</b>					
Growth in City's Hardware & Software Footprint and Service Demands	794.9	907.2	(442.8)	1,259.3	(3.0)
Support and Maintenance Costs Recovered from Divisions	(1,431.7)	(752.8)	2,052.3	(132.2)	
Adjust Approved Gapping from 5.5% to 6.4% to Meet Target	(213.2)	(227.8)	(254.3)	(695.3)	
<b>Sub-Total Base Expenditure Changes</b>	<b>320.7</b>	<b>1,278.5</b>	<b>3,540.1</b>	<b>5,139.3</b>	<b>8.0</b>
<b>Base Revenue Changes</b>					
Inflationary Increase to User Fees	80.0			80.0	
Recovery of Salary Cost for Capital Positions	(1,163.7)		(146.0)	(1,309.7)	
<b>Sub-Total Base Revenue Changes</b>	<b>(1,083.7)</b>		<b>(146.0)</b>	<b>(1,229.7)</b>	
<b>Service Changes</b>					
<b>Base Expenditure Changes</b>					
Physical Server Consolidation using Virtual Servers		(36.9)		(36.9)	
Optimize & Rationalize App Development in City Divisions			(1,324.7)	(1,324.7)	
<b>Service Efficiencies</b>					
Decommissioning Older Technology	(474.3)	(298.6)		(773.0)	
<b>Sub-Total Service Changes<sup>1</sup></b>	<b>(474.3)</b>	<b>(335.5)</b>	<b>(1,324.7)</b>	<b>(2,134.6)</b>	
<b>Total Base Changes</b>	<b>(1,237.3)</b>	<b>942.9</b>	<b>2,069.4</b>	<b>1,775.0</b>	<b>8.0</b>
<b>New &amp; Enhanced Services</b>					
<b>Enhanced Service Priorities</b>					
Cyber Security Awareness (AG)			309.2	309.2	1.0
Risk Management Cyber Security & Compliance			230.3	230.3	2.0
<b>Sub-Total New &amp; Enhanced Services<sup>1</sup></b>			<b>539.5</b>	<b>539.5</b>	<b>3.0</b>

### Note:

- For additional information, refer to [Appendix 4](#) (page 53) for a more detailed listing and descriptions of the 2019 Staff Recommended Service Changes and [Appendix 5](#) (page 54) for the 2019 Staff Recommended New and Enhanced Service Priorities, respectively.

**Business I&T Solutions** delivers Information Technology Solutions to enable the business capabilities required by the City to deliver services through solution and component acquisition, configuration, development, sustainment and implementation of applications and solutions, as well as ongoing client support.

**2019 Staff Recommended Operating Budget \$60.4M**



Refer to [Appendix 2](#) (page 46) for the 2019 Staff Recommended Operating Budget by Service.

**Key Service Levels**



% Requests for Change Completed was **95.4%** in 2018



Support services provided during core business hours



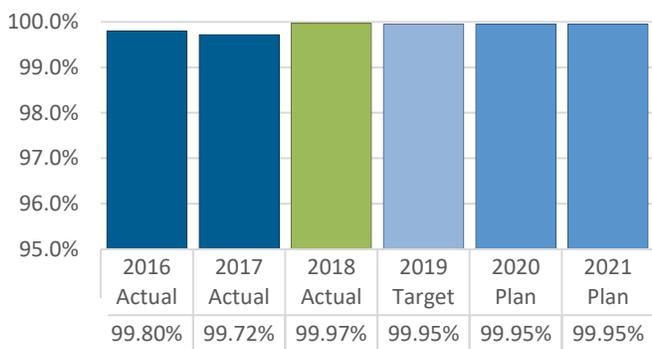
Standard incident management targets or consultation per agreed work plan

Source of images: [www.icons8.com](http://www.icons8.com)

Refer to [Appendix 3](#) (page 48) for a complete list of the 2019 Staff Recommended Service Levels for this Service.

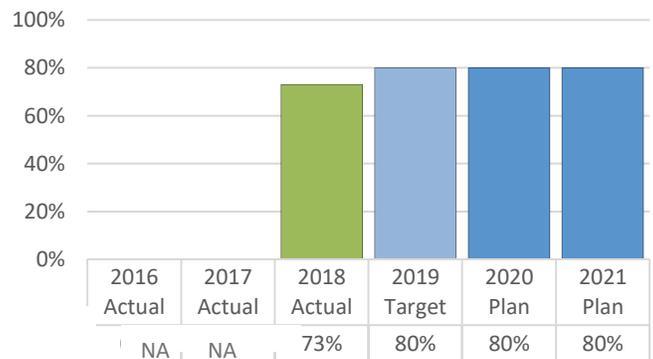
**Service Performance Measures**

**% Time Business Applications are Available**



- Availability is expected to remain constant at the 99.95% levels due to pro-active planning, testing, and sustainment activities.

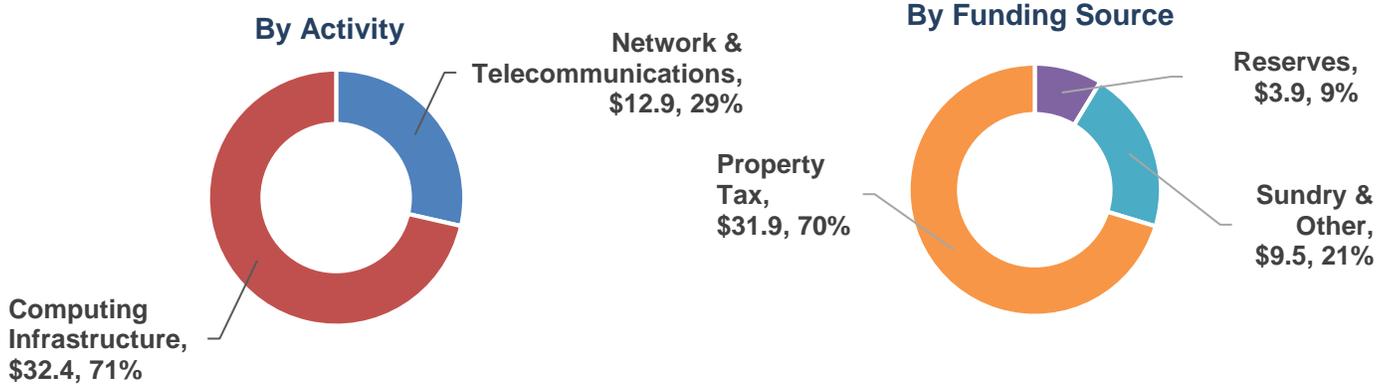
**Customer Satisfaction with Business IT Solutions Performance**



- Client satisfaction with IT Solutions is forecasted to remain at a minimum of 80% over the next 3 years with an emphasis on customer service improvements, enhanced IT technology, greater automation of manual processes and more channel choices/user friendly applications for clients. 2016 and 2017 are not comparable based on new 2018 survey scoring method.

**Computer & Communications Technology Infrastructure** manages the City's computing infrastructure, including: desktop and mobile devices, printers and other peripheral devices, data centre services, storage equipment, application and database development platforms, security products and services, and voice and data communications networks..

**2019 Staff Recommended Operating Budget \$45.3M**



Refer to [Appendix 2](#) (page 46) for the 2019 Staff Recommended Operating Budget by Service.

**Key Service Levels**



Wired Network is **99.99%** available between 9:00am – 5:00pm on business days.



Enterprise Printing & Peripherals is **99%** available 24/7/365.



Server Computing Hardware is **99.50%** available 24/7/365

Source of images: [www.icons8.com](http://www.icons8.com)

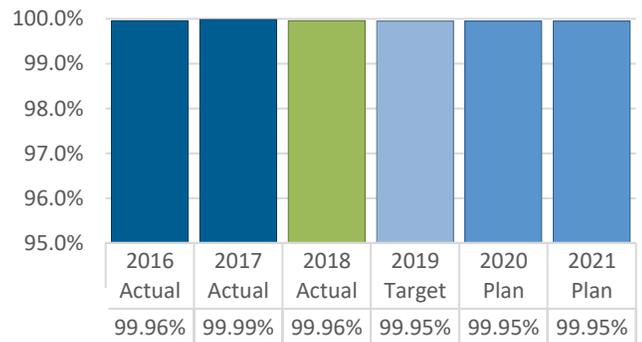
Refer to [Appendix 3](#) (page 48) for a complete list of the 2019 Staff Recommended Service Levels for this Service.

**Service Performance Measures**

**Percent Availability of City's IT Network Infrastructure Service**



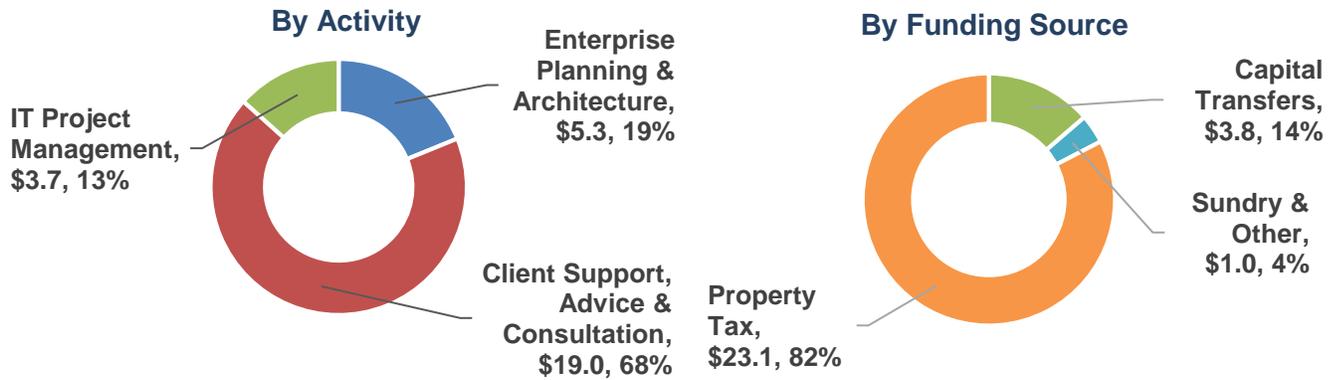
**Percent Availability of Telecom Infrastructure**



- Service level performance remains steady and within acceptable variance. Availability is expected to remain constant levels or better due to pro-active planning, testing, and sustainment activities.

**Enterprise I&T Planning & Client Services** provides services to support enterprise strategic planning, enterprise architecture blueprint, portfolio planning and optimization and lifecycle management of I&T projects including client relationship management such as client consultation and advice, service desk and I&T training and education..

**2019 Staff Recommended Operating Budget \$28.0M**



Refer to [Appendix 2](#) (page 46) for the 2019 Staff Recommended Operating Budget by Service.

**Key Service Levels**



Service Desk Response Target: **100%** of E-Mails Responded within 48 hours



Service Desk Response Target: **100%** of Voice Mails Responded within 4 hours



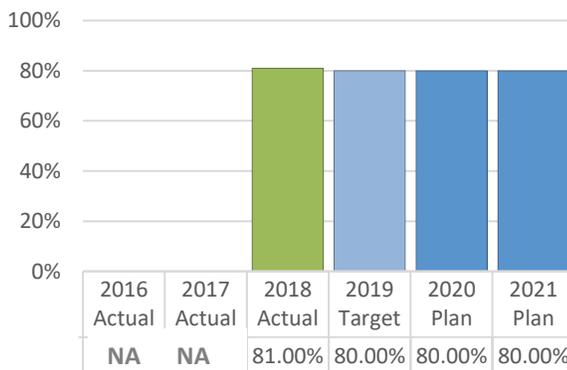
Service Desk Response Target: **80%** of Phone Calls Answered within 1 minute

Source of images: [www.icons8.com](http://www.icons8.com)

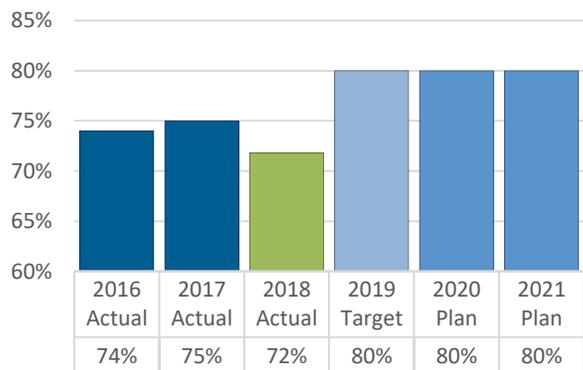
Refer to [Appendix 3](#) (page 48) for a complete list of the 2019 Staff Recommended Service Levels for this Service.

**Service Performance Measures**

**Client Satisfaction with IT Service Desk**



**Percentage of Calls Answered in 60 Seconds**



- Client Satisfaction is expected to remain at 80% level as the increased use of technology is addressed with pro-active planning and training of staff. 2016 and 2017 are not comparable based on new 2018 survey scoring method.
- The percentage of calls answered in 60 seconds by Service Desk has been steady since 2016 as service request volumes have increased.

## 2018 OPERATING PERFORMANCE

### 2018 Service Performance

#### Key Service Accomplishments:

- Implemented numerous City website [www.toronto.ca](http://www.toronto.ca) enhancements for over 26+ million visitors annually, improving public access to City services using modern, dynamic, and interactive web and mapping technologies.
- Established an Administrative Penalty System (APS) for parking by-law violations that enable the public to request dispute resolutions through the web; specifically, vehicle owners can now request for an online or in-person resolution process. The online option minimizes physical efforts for the vehicle owners, and the City avoids overcrowding in the intake centres.
- Supported processing of 700,000+ citizen recreation program registrations for 70,000+ courses with many customer experience improvements online which contributed to a significantly faster registration process for residents before and during priority registration periods.
- Implemented My Child Care Account which reduces barriers for families through self-serve functionality while improving the customer experience, replacing inefficient paper-intensive and in-person processes, with over 8000 client accounts created and 160,000 letters eliminated.
- Implemented Vision Zero online services to provide the public with useful road safety information using modern, dynamic, and interactive maps to support the City's mission to reduce traffic-related deaths and injuries to zero.
- Supported the processing of online tax bills for over 1.6 million clients which account for over \$6.9+ billion in City revenue generation.
- Supported the review of over 50,000 building permits, the completion of over 170,000 building inspections, and 5,000+ annual building investigations accounting for over \$60 million in revenue generation and \$1.1 million per year savings for Toronto building electronic services.
- Obtained Council-approval on the 5-year Open Data Master Plan developed in conjunction with the public which guides the City in leveraging open data to improve service delivery, address civic issues and increase data sharing between City divisions and the public.
- Supported processing of over 95,000+ business licenses and permits and 80,000+ dog and cat licenses accounting for \$27+ million in revenue generation.
- Supported the Permit Parking Renewal process for 53,000 citizens to renew over 105,000 permits annually, generating over \$9.000 million in revenue; in addition to processing 2.6 million parking tickets accounting to over \$100+ million in City revenue, and 296,000 temporary parking permits accounting for over \$5.500 million in revenue generation.
- Implemented an online Film Office Permitting System ("FilmPal") that enables production companies and the public to submit film permit applications online which helps attract approximately \$1.3 billion of film production investment within the City and establish Toronto as a global film industry leader.
- Implemented a new e-Survey Tool which has allowed City staff to create over 500+ online surveys to gain customer satisfaction insights regarding City service delivery resulting in \$0.020 million of savings per year in subscription fees.
- Addressed over 187,000 services desk items (calls, email and self-serve requests)
- Maintained and Resolved 33,000+ application service requests and 3,000+ changes for more than 600 City applications.
- Managed 3 Data Centres with 24/7/365 to ensure availability of key city applications and infrastructure in support of City Program delivery and services to the public.

## 2018 Financial Performance

Table 3: Budget vs. Actual by Category of Expenditures and Revenues

Category (In \$000s)	2017 Actual	2018 Budget	2018 Projected Actual *	2019 Total Staff Recommended Budget	2019 Change from 2018 Approved Budget	
	\$	\$	\$	\$	\$	%
Salaries and Benefits	85,450.5	101,843.0	86,486.1	103,524.4	1,681.4	1.7%
Materials & Supplies	42.0	49.3	56.9	47.3	(2.1)	(4.2%)
Equipment	1,240.0	831.1	973.4	858.1	27.0	3.2%
Service and Rent	25,995.4	27,609.6	28,111.0	28,654.1	1,044.4	3.8%
Contribution To Reserves/Reserve Funds	138.8	138.8	138.8	138.8		
Other Expenditures	0.9	0.4	0.9	0.4		
Inter-Divisional Charges	1,038.3	476.5	894.7	485.4	8.9	1.9%
<b>Total Gross Expenditures</b>	<b>113,905.9</b>	<b>130,948.8</b>	<b>116,661.8</b>	<b>133,708.5</b>	<b>2,759.7</b>	<b>2.1%</b>
Inter-Divisional Recoveries	14,326.2	16,218.2	15,588.9	17,581.1	1,362.8	8.4%
User Fees & Donations	230.7	223.5	140.7	143.5	(80.0)	(35.8%)
Transfers From Capital	21,310.9	32,264.6	21,227.2	31,733.3	(531.3)	(1.6%)
Contribution From Reserves/Reserve Funds	2,778.3	4,782.8	3,472.6	4,675.3	(107.5)	(2.2%)
Sundry and Other Revenues	446.8	634.3	321.2	435.4	(198.9)	(31.4%)
<b>Total Revenues</b>	<b>39,092.8</b>	<b>54,123.4</b>	<b>40,750.5</b>	<b>54,568.5</b>	<b>445.2</b>	<b>0.8%</b>
<b>Total Net Expenditures</b>	<b>74,813.1</b>	<b>76,825.4</b>	<b>75,911.3</b>	<b>79,140.0</b>	<b>2,314.5</b>	<b>3.0%</b>
<b>Approved Positions</b>		<b>849.0</b>		<b>860.0</b>	<b>11.0</b>	<b>1.3%</b>

\* Year-End Projection Based on Q3 2018 Variance Report

Information & Technology is projecting to be under spent by \$0.914 million at year-end, primarily due to operating position vacancies resulting from longer than normal hiring cycles and promotions within the division that do not reduce the level of net vacancies.

For additional information regarding the 2018 Q3 operating variances and year-end projections, please refer to the attached link for the report entitled "Operating Variance Report for the Nine-Month Period Ended September 30, 2018", adopted by City Council at its meeting on December 13, 2018.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.CC1.7>

## Impact of 2018 Operating Variance on the 2019 Staff Recommended Operating Budget

The projected savings in 2018 are primarily non-recurring due to delays in filling vacant positions. Therefore, the 2019 Staff Recommended Operating Budget includes a temporary increase in the budgeted gapping rate from 5.5% to 6.4% to achieve the budget target.

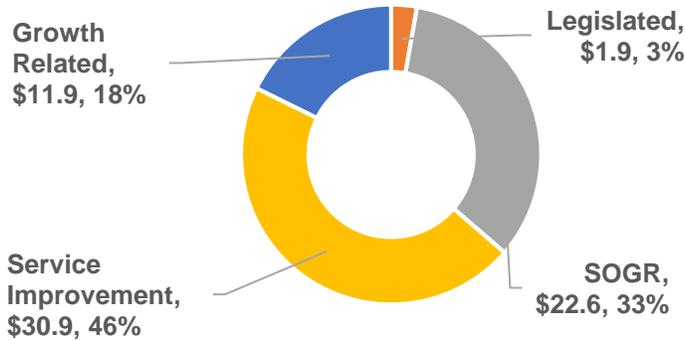


# 2019 – 2028 STAFF RECOMMENDED CAPITAL BUDGET AND PLAN

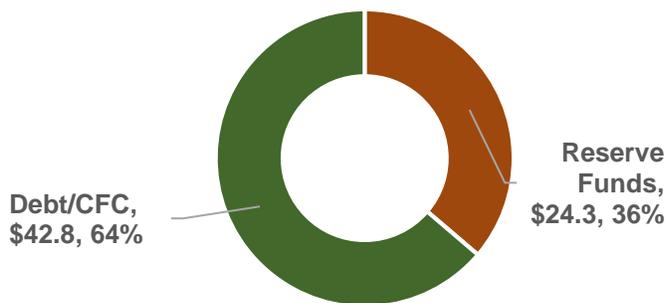
**10-YEAR CAPITAL PLAN HIGHLIGHTS**

**2019 Staff Recommended Capital Budget \$67.2M**

**By Project Category**

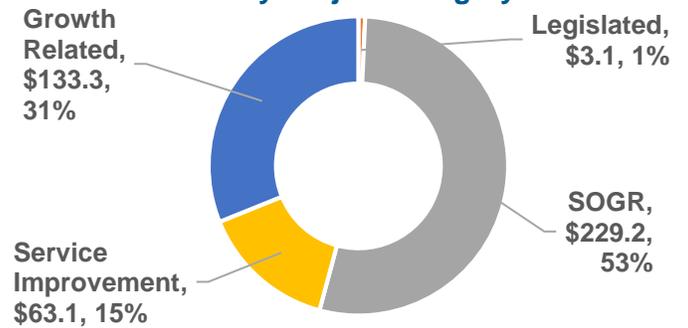


**By Funding Source**

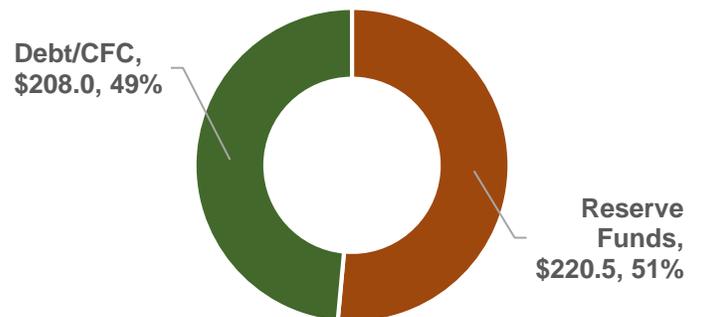


**2019-2028 Staff Recommended Capital Budget and Plan \$428.6M**

**By Project Category**



**By Funding Source**



**1 YEAR**

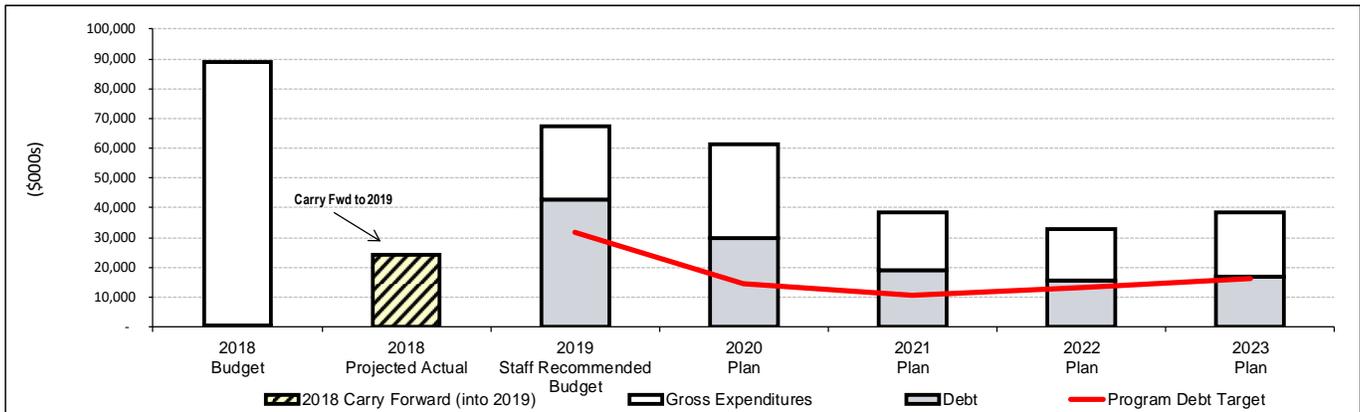
- **\$15.223M** For lifecycle replacement of corporate IT infrastructure, hardware and software.
- **\$5.334M** To transform specific HR and Payroll business processes that will support the city's complex needs shared between business owners and stakeholders.
- **\$4.034M** Will assess various recruitment & job application business processes against the current tool in use on behalf of the City's divisions.
- **\$3.534M** Continue funding the *Consolidated Data Centre* project that will eliminate the need to continue leasing space and provision for smaller City divisions to rationalize into a primary, more resilient site.

**10 YEARS**

- **\$229.117M** State of Good Repair to maintain the City's technology infrastructure including the network and application systems.
- **\$133.297M** Growth projects include expanding technology infrastructure and enterprise solution design and implementation as the City prepares for technological changes.
- **\$63.056M** Service Improvement projects include implementing I&T solutions that will modernize service delivery within the City.
- **\$3.113M** Legislated projects to ensure compliant with the Accessibility for Ontarians with Disabilities Act (AODA) and increased legislative requirements for workplace investigations into workplace harassment.

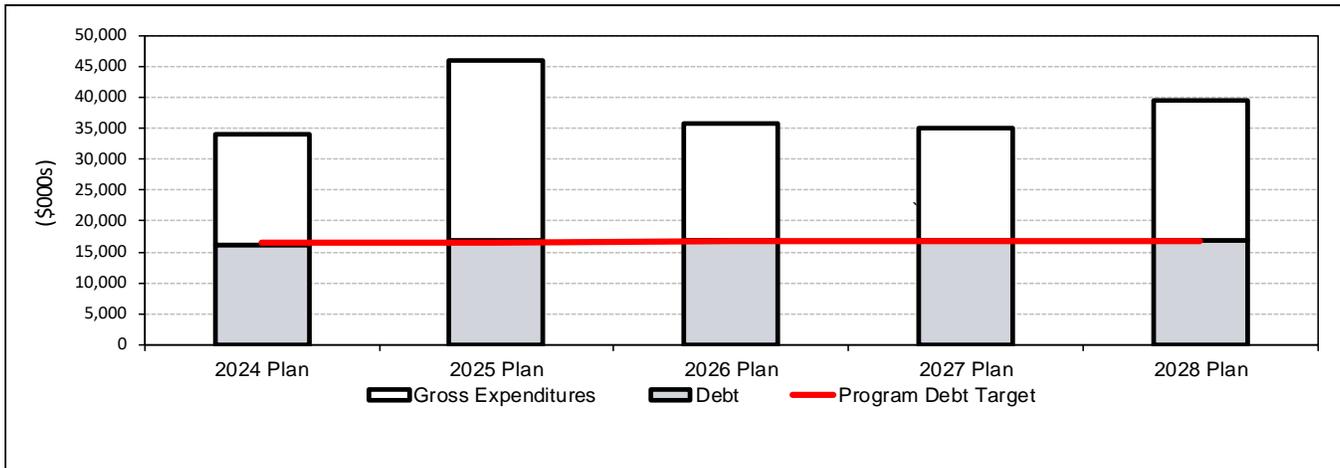
**2019 – 2028 CAPITAL BUDGET & PLAN OVERVIEW**

**Chart 1: 10-Year Capital Plan Overview**



	2019 Staff Recommended Capital Budget and 2020 - 2023 Capital Plan								
	2018		2019	2020	2021	2022	2023	2019 - 2023	5-Year Total Percent
	Budget	Projected Actual							
<b>Gross Expenditures by Project Category:</b>									
Health & Safety	-	-	-	-	-	-	-	-	-
Legislated	1,383	-	1,864	899	335	15	-	3,113	1.3%
SOGR	47,250	-	22,558	34,383	22,294	18,724	22,909	120,868	50.7%
Service Improvement	39,430	-	30,860	17,450	11,730	2,044	152	62,236	26.1%
Growth Related	777	-	11,890	8,562	4,237	12,038	15,258	51,985	21.8%
<b>Total by Project Category</b>	<b>88,841</b>	-	<b>67,172</b>	<b>61,294</b>	<b>38,596</b>	<b>32,821</b>	<b>38,319</b>	<b>238,202</b>	<b>100.0%</b>
<b>Program Debt Target</b>			<b>31,682</b>	<b>14,631</b>	<b>10,446</b>	<b>13,438</b>	<b>16,460</b>	<b>86,657</b>	
<b>Financing:</b>									
<b>Debt</b>	<b>404</b>	-	<b>42,822</b>	<b>30,025</b>	<b>19,145</b>	<b>15,747</b>	<b>16,860</b>	<b>124,599</b>	<b>52.3%</b>
Reserves/Reserve Funds	36,889	-	23,547	31,269	18,276	17,074	21,459	111,625	46.9%
Development Charges	-	-	-	-	-	-	-	-	-
Provincial/Federal	-	-	-	-	-	-	-	-	-
Debt Recoverable	-	-	-	-	-	-	-	-	-
Other Revenue	51,547	-	803	-	1,175	-	-	1,978	0.8%
<b>Total Financing</b>	<b>88,841</b>	-	<b>67,172</b>	<b>61,294</b>	<b>38,596</b>	<b>32,821</b>	<b>38,319</b>	<b>238,202</b>	<b>100.0%</b>
<b>By Status:</b>									
2018 Capital Budget & Approved Future Year (FY) Commitments	88,841	-	34,358	16,507	6,063	2,062	340	59,330	24.9%
Changes to Approved FY Commitments	-	-	(8,497)	1,969	9,947	-	-	3,419	1.4%
2019 New/Change in Scope & FY Commitments	-	-	37,129	10,413	3,006	1,897	1,510	53,955	22.7%
2020 - 2023 Capital Plan Estimates	-	-	-	32,405	18,552	28,862	36,469	116,288	48.8%
2-Year Carry Forward for Reapproval	-	-	-	4,182	1,028	-	-	5,210	2.2%
1-Year Carry Forward to 2019	-	24,108	-	-	-	-	-	-	-
<b>Total Gross Annual Expenditures &amp; Plan</b>	<b>88,841</b>	-	<b>67,172</b>	<b>61,294</b>	<b>38,596</b>	<b>32,821</b>	<b>38,319</b>	<b>238,202</b>	<b>100.0%</b>
<b>Asset Value (\$) at year-end</b>									
Yearly SOGR Backlog Estimate (not addressed by current plan)	-	-	-	-	-	-	-	-	-
Accumulated Backlog Estimate (end of year)	-	-	-	-	-	-	-	-	-
<b>Backlog: Percentage of Asset Value (%)</b>									
Debt Service Costs	-	-	1,691	5,104	3,761	2,344	2,104	15,005	
Operating Impact on Program Costs	-	-	221	112	34	-	-	367	
New Positions	-	-	1	1	-	-	-	2	

Chart 2: 10-Year Capital Plan Overview (Continued)



	2024 - 2028 Staff Recommended Capital Plan							10-Year Total Percent
	2024	2025	2026	2027	2028	2019 - 2028		
<b>Gross Expenditures by Project Category:</b>								
Health & Safety	-	-	-	-	-	-	-	
Legislated	-	-	-	-	-	-	3,113	0.7%
SOGR	19,207	29,183	18,945	18,298	22,676	229,177		53.5%
Service Improvement	152	167	167	167	167	63,056		14.7%
Growth Related	14,780	16,633	16,633	16,633	16,633	133,297		31.1%
<b>Total by Project Category</b>	<b>34,139</b>	<b>45,983</b>	<b>35,745</b>	<b>35,098</b>	<b>39,476</b>	<b>428,643</b>		<b>100.0%</b>
<b>Program Debt Target</b>	<b>16,460</b>	<b>16,574</b>	<b>16,800</b>	<b>16,800</b>	<b>16,800</b>	<b>170,091</b>		
<b>Financing:</b>								
<b>Debt</b>	<b>16,234</b>	<b>16,800</b>	<b>16,800</b>	<b>16,800</b>	<b>16,800</b>	<b>208,033</b>		48.5%
Reserves/Reserve Funds	17,905	29,183	18,945	18,298	22,676	218,632		51.0%
Development Charges	-	-	-	-	-	-		
Provincial/Federal	-	-	-	-	-	-		
Debt Recoverable	-	-	-	-	-	-		
Other Revenue	-	-	-	-	-	1,978		0.5%
<b>Total Financing</b>	<b>34,139</b>	<b>45,983</b>	<b>35,745</b>	<b>35,098</b>	<b>39,476</b>	<b>428,643</b>		<b>100.0%</b>
<b>By Status:</b>								
2018 Capital Budget & Approved Future Year (FY) Commitments	340	226	-	-	-	59,896		14.0%
Changes to Approved FY Commitments	-	-	-	-	-	3,419		0.8%
2019 New/Change in Scope & FY Commitments	1,085	(226)	-	-	-	54,814		12.8%
2024 - 2028 Capital Plan Estimates	32,714	45,983	35,745	35,098	39,476	305,304		71.2%
2-Year Carry Forward for Reapproval	-	-	-	-	-	5,210		1.2%
<b>Total Gross Annual Expenditures &amp; Plan</b>	<b>34,139</b>	<b>45,983</b>	<b>35,745</b>	<b>35,098</b>	<b>39,476</b>	<b>428,643</b>		<b>100.0%</b>
<b>Asset Value(\$)</b> at year-end	-	-	-	-	-	-		
Yearly SOGR Backlog Estimate (not addressed by current plan)	-	-	-	-	-	-		
Accumulated Backlog Estimate (end of year)	-	-	-	-	-	-		
<b>Backlog: Percentage of Asset Value (%)</b>								
Debt Service Costs	2,171	2,143	2,191	2,191	2,191	25,893		
Operating Impact on Program Costs	-	-	-	-	-	367		
New Positions	-	-	-	-	-	2		

Staff Recommended 10-Year Capital Plan by Project Category

Table 4: Summary of Capital Projects by Project Category

(In \$000s)	Total App'd Cash Flows to Date*	2019 Budget	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2019 - 2028 Total	Total Project Cost
<b>Total Expenditures by Category</b>													
<b>Legislated</b>													
AODA Compliance for City Applications	1,383	1,564	884	320	-	-	-	-	-	-	-	2,768	3,173
EDHR - Complaints Management System		300	15	15	15	-	-	-	-	-	-	345	345
<b>Sub-Total</b>	<b>1,383</b>	<b>1,864</b>	<b>899</b>	<b>335</b>	<b>15</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,113</b>	<b>3,518</b>
<b>State of Good Repair</b>													
Business Applications Service Monitoring		120	150	280	-	-	-	-	-	-	-	550	550
Business Continuity		140	140	140	-	-	-	-	-	-	-	420	420
Capital Portfolio Resource Requirement		144	-	-	-	-	-	-	-	-	-	144	144
Capital Portfolio Resource Requirements		2,749	-	-	-	-	-	-	-	-	-	2,749	2,749
Desktop Hardware Replacement		4,820	4,747	8,732	9,099	12,647	8,020	5,267	9,833	10,205	14,006	87,376	87,376
Desktop Software Replacement		1,367	14,016	363	201	203	1,322	15,408	390	211	213	33,694	33,694
Directory Services - Implementation	523	680	706	924	-	-	-	-	-	-	-	2,310	2,833
Disaster Recovery	37,960	646	1,050	1,050	1,050	1,050	1,302	-	-	-	-	6,148	37,960
Disaster Recovery Pgm. (Prev. BCP)		282	-	-	-	-	-	-	-	-	-	282	716
Domino Decommissioning Strat & Implementation	3,668	226	-	-	-	-	-	-	-	-	-	226	3,668
Enterprise Server Replacement		2,309	2,269	2,229	2,189	2,350	2,350	2,350	2,350	2,350	2,350	23,096	23,096
Enterprise Software Replacement		1,037	637	637	687	1,087	1,187	1,187	1,187	1,187	1,187	10,020	10,020
Enterprise Storage Replacement		1,000	1,800	950	1,000	950	1,300	1,200	1,000	975	975	11,150	11,150
File Services Migration	455	131	170	549	-	-	-	-	-	-	-	850	1,305
Geospatial Tool Enhancements	250	113	82	100	-	-	-	-	-	-	-	295	435
IBMS Review & Transformation	3,300	454	2,087	1,701	-	-	-	-	-	-	-	4,242	5,686
Integrated Business Mgmt System - Review and Trans		-	379	-	-	-	-	-	-	-	-	379	379
IT Risk Mgmt Framework	5,189	660	-	-	-	-	-	-	-	-	-	660	5,189
Network Asset Replacement		4,330	3,880	3,050	3,410	3,630	3,330	2,730	3,280	2,910	3,330	33,880	33,880
Network Security Replacement		360	870	964	488	592	396	1,041	905	460	615	6,691	6,691
Project Portfolio Management System (SOGR)		465	900	400	400	400	-	-	-	-	-	2,565	2,565
Quality Assurance Testing Software Upgrade	2,069	75	500	225	200	-	-	-	-	-	-	1,000	2,144
Tems Replacement-Design	150	450	-	-	-	-	-	-	-	-	-	450	450
<b>Sub-Total</b>	<b>53,564</b>	<b>22,558</b>	<b>34,383</b>	<b>22,294</b>	<b>18,724</b>	<b>22,909</b>	<b>19,207</b>	<b>29,183</b>	<b>18,945</b>	<b>18,298</b>	<b>22,676</b>	<b>229,177</b>	<b>63,330</b>
<b>Service Improvement</b>													
Application Portfolio Tools & Rationalization	1,387	-	-	118	-	-	-	-	-	-	-	118	1,387
Artificial Intelligence (AI) for SSHA and TPH		500	2,500	-	-	-	-	-	-	-	-	3,000	3,000
Business Sys Improvements - ECS Phase 2	300	230	-	-	-	-	-	-	-	-	-	230	455
CloudBasedHumanResourcesInformationSystem (CHRIS)		5,334	562	-	-	-	-	-	-	-	-	5,896	5,896
Corporate Geospatial Strategy Roadmap Implementati		309	1,125	826	730	-	-	-	-	-	-	2,990	2,990
ECS Cloud Deployment-Construction Project and DMS		568	785	2,151	1,164	-	-	-	-	-	-	4,668	4,668
Electronic Service Delivery Portal-Bldg Permits	3,708	690	-	-	-	-	-	-	-	-	-	690	3,708
Employee Performance Management (e		-	546	762	-	-	-	-	-	-	-	1,308	1,308
Ent Doc & Record Mgmt Solution (Ed-Change In Scope		750	-	-	-	-	-	-	-	-	-	750	750
Ent Portfolio & Project Mgmt Upgrade 2021		-	-	-	150	152	152	167	167	167	167	1,122	1,122
Enterprise Business Intelligence Implementation	1,698	1,715	1,585	-	-	-	-	-	-	-	-	3,300	3,387
Enterprise Collaboration Foundation	2,419	3,650	-	-	-	-	-	-	-	-	-	3,650	3,650
Enterprise Documents and Records Management Phase2		1,375	-	-	-	-	-	-	-	-	-	1,375	1,375
Enterprise eLearning Initiative (ELI) Agreement		277	-	-	-	-	-	-	-	-	-	277	277
eRecruitment	5,208	4,034	563	-	-	-	-	-	-	-	-	4,597	8,670
eTime Enterprise Rollout	1,623	1,441	-	-	-	-	-	-	-	-	-	1,441	1,623
eTime Scheduling Enterprise Rollout	14,950	1,970	-	-	-	-	-	-	-	-	-	1,970	16,920
HR Electronic Skills Ass. Solution	654	86	-	-	-	-	-	-	-	-	-	86	654
HR Labour Relations Information System (LRIS)		505	-	-	-	-	-	-	-	-	-	505	505
Internal Private Cloud Services		1,533	1,777	-	-	-	-	-	-	-	-	3,310	3,310
IT Audit Project Health Check Framework		130	-	-	-	-	-	-	-	-	-	130	130
MLS Centralized Datamart	4,597	600	1,800	-	-	-	-	-	-	-	-	2,400	6,997
MLS Modernization-Phase 2	4,675	-	2,489	5,804	-	-	-	-	-	-	-	8,293	10,793
Occ Health & Safety App 2016-2019	1,753	516	762	429	-	-	-	-	-	-	-	1,707	1,908
OnLine Portal Services for City Planning	1,195	450	480	-	-	-	-	-	-	-	-	930	1,274
Open Data Master Plan Implementation	713	878	1,036	158	-	-	-	-	-	-	-	2,072	2,072
PTP Enhancements		390	-	-	-	-	-	-	-	-	-	390	390
Publicly Accessible Wi-Fi for City Facilities		287	650	282	-	-	-	-	-	-	-	1,219	1,219
SDFA - Online Grant Management System	230	-	50	-	-	-	-	-	-	-	-	50	234
TOP - Online Donation Application	389	-	201	-	-	-	-	-	-	-	-	201	510
Toronto Building Electronic Service Delivery		49	-	-	-	-	-	-	-	-	-	49	49
Toronto Building-CRM-Enhanced Complaint Management	347	236	539	-	-	-	-	-	-	-	-	775	967
Web Information Portal on Dvlpmnt Applications	626	7	-	-	-	-	-	-	-	-	-	7	626
Work Mgmt Solution-Transportation		2,350	-	1,200	-	-	-	-	-	-	-	3,550	3,550
<b>Sub-Total</b>	<b>46,472</b>	<b>30,860</b>	<b>17,450</b>	<b>11,730</b>	<b>2,044</b>	<b>152</b>	<b>152</b>	<b>167</b>	<b>167</b>	<b>167</b>	<b>167</b>	<b>63,056</b>	<b>91,702</b>
<b>Growth Related</b>													
Application Portfolio T&R Scope Change		(650)	-	-	-	-	-	-	-	-	-	(650)	(650)
Application Portfolio Tools & Rationalization		937	-	-	-	-	-	-	-	-	-	937	937
CLASS Replacement Planning		75	75	-	-	-	-	-	-	-	-	150	150
Consolidated Data Centre	13,600	3,534	1,600	-	-	-	-	-	-	-	-	5,134	15,200
Data Center Scope Change		2,548	-	-	-	-	-	-	-	-	-	2,548	2,548
Data Centre Zones Implementation		200	1,066	-	-	-	-	-	-	-	-	1,266	1,266
eCity Program Renewal		-	479	148	-	-	-	-	-	-	-	627	627
Enterprise Architecture		500	500	500	500	500	500	500	500	500	547	5,047	5,047
Enterprise Information Security Pgm		3,562	2,400	2,400	400	400	123	-	-	-	-	9,285	9,285
Enterprise Solutions Design & Implementation		-	-	-	4,400	5,556	5,001	6,099	6,099	6,099	6,081	39,335	39,335
IT Planning & Mgmt Transformation Tools		-	-	-	2,000	1,787	1,790	1,962	1,962	1,962	1,956	13,419	13,419
IT Service Process Improvement Program		58	878	880	-	-	-	-	-	-	-	1,816	1,816
Major Cap Infrastructure Project Coord. (TOINView)	902	-	116	309	-	-	-	-	-	-	-	425	902
System Enhancements for Licensing Services - MLS		24	-	-	-	-	-	-	-	-	-	24	24
Technology Infrastructure Growth		-	-	-	4,738	7,015	7,366	8,072	8,072	8,072	8,049	51,384	51,384
WAN High Speed Fibre Data Services	2,008	82	-	-	-	-	-	-	-	-	-	82	2,008
Workforce Business Intel. Requirements		1,020	1,448	-	-	-	-	-	-	-	-	2,468	2,468
<b>Sub-Total</b>	<b>16,510</b>	<b>11,890</b>	<b>8,562</b>	<b>4,237</b>	<b>12,038</b>	<b>15,258</b>	<b>14,780</b>	<b>16,633</b>	<b>16,633</b>	<b>16,633</b>	<b>16,633</b>	<b>133,297</b>	<b>23,810</b>
<b>Total Expenditures by Category (excluding carry forward from 2018)</b>													
		<b>67,172</b>	<b>61,294</b>	<b>38,596</b>	<b>32,821</b>	<b>38,319</b>	<b>34,139</b>	<b>45,983</b>	<b>35,745</b>	<b>35,098</b>	<b>39,476</b>	<b>428,643</b>	

## 2019 - 2028 Key Capital Projects

Capital projects funded in the 10-Year Staff Recommended Capital Plan support Information & Technology's objectives to provide and develop City-wide enterprise and divisional business I&T applications, along with an integrated and secure I&T infrastructure, in support of dependable services to City Programs and the Public.

Maintaining the City's technology network, application systems and technology infrastructure in a state of good repair and delivering key multi-year initiatives such as the Consolidated Data Centre, Business Continuity and Disaster Recovery, Enterprise Business Intelligence Implementation, Open Data Master Plan Implementation and the Enterprise Document and Records Management System drive City business transformation and modernization initiatives to meet City business objectives, gain service efficiencies and improve customer experience associated with the delivery City Programs and Services.

### Legislated

- Legislated projects total \$3.113 million or 1.3% of the total 10-Year Staff Recommended Capital Plan's expenditures.
  - *AODA Compliance for City Applications* project (\$2.768 million) is required to ensure City applications are compliant with the Accessibility for Ontarians with Disabilities Act (AODA) which requires that public facing websites, content, and applications are compliant by 2021.
  - *EDHR Complaints Management System* project (\$0.345 million) will provide an electronic complaints, consultation, intervention and investigation case management solution for the Human Rights Office.

### State of Good Repair (SOGR)

- SOGR projects account for \$229.177 million or 53.5% of the total 10-Year Staff Recommended Capital Plan's planned spending. The 10-Year Capital Plan incorporates new investment dedicated to various SOGR project groupings that focus on required capital maintenance, including:
  - *Asset Lifecycle Management* (\$205.907 million) for I&T to upgrade/replace I&T infrastructure components to maintain state of good repair and to ensure compatibility with City applications and enterprise software. This will confirm all software is in line with corporate standards and includes licensing requirements of in-scope infrastructure requirements. Included in this group are Desktop Hardware and Software, Enterprise Server/Software and Storage, and Network Asset and Security replacement projects.
  - The *Disaster Recovery* project (\$6.148 million) required for maintenance and support costs related to the additional I&T infrastructure put in place in the Disaster Recovery Data Centre. The project is part of a business risk mitigation strategy to develop and maintain a harmonized Disaster Recovery and Business Continuity program for the City that ensures continuity of operations and service delivery to the public in the event of an unexpected outage of either business processes or associated information technology.
  - *Integrated Business Management System (IBMS) Review and Transformation* (\$4.242 million) required to assess and plan the upgrade or replacement of the current system which is at end-of-life and vendor support ended. Additional costs will be identified once business requirements are determined.
  - *Project Portfolio Management System (SOGR)* project (\$2.565 million) to replace the existing Project Portfolio Management (PPM) system used by I&T that is no longer supported. Scope includes performing a current and future state assessment, fit-gap analysis, procurement of solution and implementation..

### Service Improvement

- Service Improvement projects amount to \$63.056 million or 14.7% of the total 10-Year Staff Recommended Capital Plan's expenditures for projects that are aligned with corporate strategic priorities, gain service efficiencies and improve the customer experience associated with the delivery of City Programs and Services:
  - The *Artificial Intelligence (AI) for SSHA and TPH* project (\$3.000 million). \$0.500 million will pilot a technology solution that will drive appropriate decision-making that will enable both SSHA & TPH establish predictive models and correlation between less than optimal social housing and mental health. This work should also inform and verify the favourable conditions that support positive mental health and wellness.

Of the total cost projection, \$0.500 million is being committed as a pilot study. The remaining \$2.500 million is a planned increase in existing funding for total costs to complete the project implementation and will be committed once the pilot is complete, subject to initial results.

- The *Cloud-Based Human Resources Information System (CHRIS)* project (\$5.896 million) will implement Employment Central, a foundational module within the SAP SuccessFactors platform, and will transform specific HR and Payroll business processes in the areas of personnel actions, positions, jobs, organizational data management and security. This will be achieved by:
  - Implementing a new Human Capital Management (HCM) system to optimize organizational management and personnel administration processes across the city
  - Enhancing the related existing security framework by incorporating leading industry practices; and
  - Enabling user-friendly intuitive workflows that will support the city's complex and needs shared between business owners and stakeholders.
- *Corporate Geospatial Strategy Roadmap Implementation* (\$2.990 million) will transform geospatial capabilities across the organization, through implementing a foundational geo-enablement infrastructure within the corporate repository, increasing workforce capabilities and working with divisions, including Transportation Services. The Corporate Geospatial Strategy and Roadmap was a 10 month initiative that included input from over 150 stakeholders, 15 Divisions, Agencies, Boards and Commissions and international Cities. This documented strategy is completed as of July 2018 and includes a roadmap that describes a series of work packages along with objectives, measures and timelines. The implementation will occur over a 4 year period and will build and strengthen geospatial information as a vital asset.
- *ECS Cloud Deployment - Construction Project and Document Management System* (\$4.668 million). The cloud based Construction Project and Document Management system will implement a modern, automated, digital technology solution to enable the business to manage its construction project delivery lifecycle & related drawings & documents effectively and efficiently. Scope will include procuring a vendor, development of business requirements and TO BE processes, HR implementation plan, Stakeholder engagement plan, Change Management Plan, migration of data from legacy to new systems; integration with City infrastructure, integration with partner infrastructure or services as needed, build/configure, testing, training and transition to operations in a staged approach.
- The *Enterprise Documents and Records Management Phase 2* project (\$2.125 million) is phase 2 of the EDRMS, piloting the solution with four business units. Phase 3 will migrate data governing 9 million files and boxes of physical records relating to City divisions and a number of agencies. Once data migration is completed, Livelink Records Server will be decommissioned.
- *Enterprise eLearning Initiative (ELI) Agreement Renewal Analysis and Options Exploration* (\$0.277 million) will deliver a validated set of requirements to select an enterprise Learning Management System to further improve operating and system efficiency, continue to reduce complexity, reduce interfaces, and be the system of record for Learning.
- A change in scope to the existing budget for the *eRecruitment* project (\$4.597 million) to complete the need to modernize & address inefficiencies currently experienced with the existing system for various recruitment and job application business processes on behalf of the City's divisions. The scope of the project includes determining the current needs of the city with regards to recruitment and job application business process, assessing these needs against the current tool in existence, performing a fit-gap analysis and possibly explore the implementation of a new solution to meet the needs.
- The *eTime Scheduling Enterprise Rollout* project (\$3.411 million) builds on the pilot rollout for Parks, Forestry & Recreation (PF&R) and Toronto Paramedic Services (TPS) by implementing scheduling solutions for six additional divisions: Corporate Security, Fleet Services, Toronto Public Health, Long Term Care, Children's Services and ML&S.
- *HR Labour Relations Information System (LRIS)* (\$0.505 million) will assess the needs of Labour Relations through the current and desired future state analysis, business process mapping and requirements towards an integrated solution. It will assess these needs against opportunities to leverage a City readily available

system, solutions in the marketplace, and a comparable effort for an in-house developed option, and recommendations to move forward. The primary deliverable at the completion of the project will be a report on the seed initiative outcomes, including analysis and best recommendations for a new Labour Relations solution including new business case submission and cost benefit analysis. Phase 2 funding will be required to complete the optimal solution.

- The *Internal Private Cloud Services* project (\$3.310 million) will plan, build and implement a new I&T foundation technology platform by introducing an Internal Private Cloud Services in the City as part of a Hybrid Cloud model of the Cloud Strategy. The new service would modernize technology, enable agile, flexible and scalable IT services to enhance workforce capabilities and improve service response time and operations requirements as well as meet AGO's recommendations to support Cloud Services.
  - Other objectives include an online, self-serve portal to request server infrastructure and platform as a service, and request of configuration change, subscription based services with defined and agreed upon operating costing model, automation of service provisioning within the planned scope, and reporting and monitoring of subscribed and actual usage.
- The *MLS Centralized DataMart* project (\$2.400 million) continues the implementation of a consolidated data repository to provide one stop shop for business reporting and dashboard. The BI solution will extract data from 3 operation systems (Progress, IBMS and Chameleon) based on standardized data format & pre-defined business rules. In combination with a data dictionary and comprehensive master data will provide the business an authoritative single source for management reporting.
- The *Project Tracking Portal (PTP) Expansion & Enhancement* (\$0.390 million) project will deliver short-term enhancements to the Project Tracking Portal that are required in advance of Engineering Construction Services' (ECS) implementation of a Construction Management System, including improved reporting and analytics, improved access to data and expanded access and functionality to support transit projects.
- *Publicly Accessible Wi-Fi for City Facilities* (\$1.219 million) will launch the TOConnect Wi-Fi Program, a new service supporting the technology modernization of city owned facilities by providing publicly accessible Wi-Fi amenity as a means of increasing digital accessibility to the public. This project will build a team to oversee the research, analysis, procurement, pilot implementation and lifecycle management process development prior to transitioning to I&T operations sustainment.

### *Growth Related*

- Growth Related projects total \$133.297 million or 31.1% of the total 10-Year Staff Recommended Capital Plan's allocated funding. Growth related projects are associated with adding enhancements or capabilities to divisional or enterprise applications and the growing adoption of technology systems to support City Programs and Services and include:
  - *CLASS Replacement Planning* (\$0.150 million) for seed funding to assess Parks, Forests and Recreation's remaining use of CLASS and the associated business requirements against the new Recreation Management system and other corporate solutions to develop a plan for their migration to a replacement solution and the retirement of the CLASS business system.
  - The *IT Planning & Management Transformation Tools* project (\$13.419 million) provides funding to sustain growth and keep pace with the rapidly changing demands and expectations for information and services, City of Toronto needs to develop new solutions and provide new technologies and migrate from slower and outdated systems.
  - The *Enterprise Information Security Program* (\$9.285 million) project will develop an Information Security program through governance and risk management that supports the ability of management to innovate while controlling risks. The program will be based on various industry frameworks/standards (such as ISO27002, COBIT) to implement security components in a balanced, risk-based approach among organization, people, process and technology.
  - *Enterprise Solution Design & Implementation* project funding (\$39.335 million) will enable future enhancements and developments to the City's business application systems to meet growing demand from City Programs and Services. This project will also include the development of an enterprise solutions

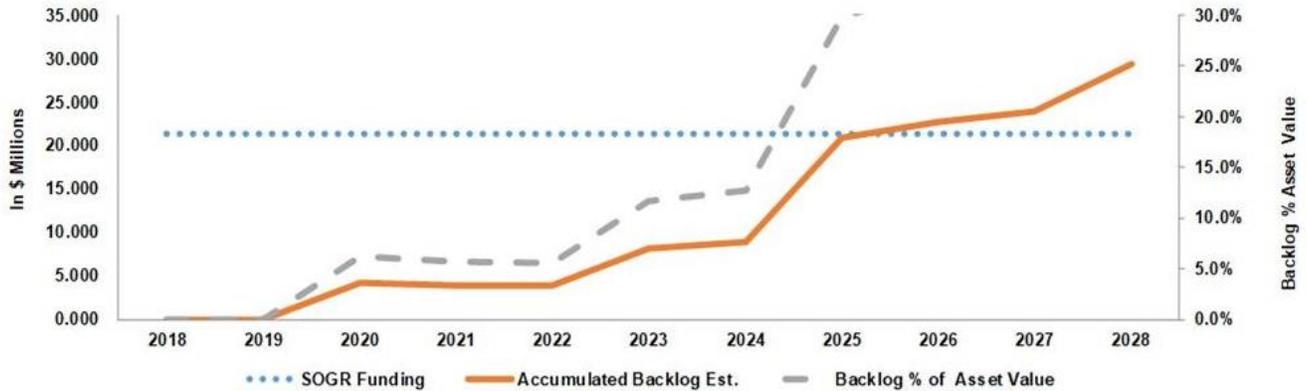
delivery management framework that will provide guidelines, policies, standards, methodology and processes to ensure the effective sustainment and operation of the City's business systems.

- *Technology Infrastructure Growth* (\$51.384 million) for changing technology, improving and taking advantage of new capabilities to keep current with industry standards. Other key sub-projects include replacement of legacy file management services and implementing new security design for the data centre IT infrastructure.
- *Workforce Business Intelligence Requirements* (\$2.468 million). The original Workforce Information (WIN) project delivered a dashboard with 7 of the originally planned 14 workforce topics in June of 2018 at a cost of \$1.698 million. Phase 2 will focus on adding the remaining 7 workforce topics to complete the City's first Workforce Dashboard. This in turn fulfills the project goal of providing business leaders with direct, desktop access to strategic workforce data that aims to support their workforce planning / management through evidence based decisions and by providing key insights. The final deliverable will be an enhanced WIN Dashboard that delivers the complete spectrum of workforce data to all City leaders (a strategic goal of the Talent Blueprint) and enables them to better monitor their workforce planning and management progress by leveraging new functionality such as more topics, historic view and industry benchmarks for comparison.

**State of Good Repair (SOGR) Funding & Backlog**

The City has established a well-defined Lifecycle Management plan for I&T assets, prioritized for program needs to replace equipment before end of life. Funding in the 10-Year Capital Plan addresses State of Good Repair based on planned lifecycle and ensures business continuity of the City's technology. Based on this plan, it is forecasted that there will be a backlog starting in 2020 in the amount of \$4.148 million and will increase to an anticipated \$29.381 million by 2028. Included in the SOGR funding is \$29.020 million for enterprise email and productivity software upgrades

**Chart 3: Total SOGR Funding & Backlog**



In \$ Millions	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>SOGR Funding</b>	21.297	21.297	21.297	21.297	21.297	21.297	21.297	21.297	21.297	21.297	21.297
<b>Accumulated Backlog Est.</b>	0.000	0.000	4.148	3.919	3.839	8.144	8.895	20.924	22.715	23.859	29.381
<b>Backlog % of Asset Value</b>	0.0%	0.0%	6.2%	5.7%	5.5%	11.6%	12.7%	29.9%	32.5%	34.1%	42.0%
<b>Total Asset Value</b>	64.633	65.925	67.244	68.589	69.961	70.000	70.000	70.000	70.000	70.000	70.000

**Operating Impact of Completed Capital Projects**

**Table 5: Net Operating Impact Summary**

Projects	2019 Budget		2020 Plan		2021 Plan		2022 Plan		2023 Plan		2019 - 2023		2019 - 2028	
	\$000s	Positions	\$000s	Positions	\$000s	Positions	\$000s	Positions	\$000s	Positions	\$000s	Positions	\$000s	Positions
<b>Previously Approved</b>														
Enterprise Solution Delivery Management Fr	36	-	-	-	-	-	-	-	-	-	36	-	36	-
Intranet Refresh (Phase 1 ITWeb)	14	-	-	-	-	-	-	-	-	-	14	-	14	-
Web Bus. Cont. Refresh & Redesign	50	-	-	-	-	-	-	-	-	-	50	-	50	-
<b>Sub-Total: Previously Approved</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>100</b>	<b>-</b>
<b>New Projects - 2019</b>														
Enterprise Architecture	121	1.0	112	1.0	34	-	-	-	-	-	267	2.0	267	2.0
<b>Sub-Total: New Projects - 2019</b>	<b>121</b>	<b>1.0</b>	<b>112</b>	<b>1.0</b>	<b>34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>267</b>	<b>2.0</b>	<b>267</b>	<b>2.0</b>
<b>Total (Net)</b>	<b>221</b>	<b>1.0</b>	<b>112</b>	<b>1.0</b>	<b>34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>367</b>	<b>2.0</b>	<b>367</b>	<b>2.0</b>

The Staff Recommended 10-Year Capital Plan will increase future year Operating Budgets by \$0.367 million net over the 2019 - 2028 period.

Several impacts will be funded by clients, including the *System Enhancements for Licensing Services MLS* project. Excluding the client-funded projects, the net operating impact for I&T is 1 FTE and \$0.221 million in 2019.

## 2018 CAPITAL PERFORMANCE

### 2018 Project Delivery

During 2018, Information & Technology accomplished the following capital projects and activities:

- Enabled the City of Toronto to successfully conduct the *2018 Municipal Election* for the fourth largest municipality in North America which fulfilled the City's commitments to legislative compliance, democratic principles, and the equitable treatment of all candidates and electors using modern technologies to allow for greater openness and transparency. Managing a voting list of 1,880,371 and processed 769,044 votes across 1700 voting locations on Election night that were available at election close 8:00 pm and delivered to the public by 8:15 pm.
- Achieved Payment Card Industry's (PCI) Data Security Standards Level 1 Merchant Certification, enabling the continuity of revenue generating payment processing, and ensuring citizen trust that credit card data would not be retained in our records. This resulted in avoidance of \$5K in monthly non-compliance penalties. The City is also the only municipality in Canada to achieve Level 1 Merchant certification.
- Implemented the *Toronto Public Health (TPH) Infectious Disease Control Information System (IDCIS)* – an application that helps Toronto reduce the spread of communicable diseases that can lead to death. By supporting stronger links to health care providers, the public, TPH, and the Ministry of Health and Long Term Care, there is more accurate and timely information available during major health incidents. This implementation also enabled TPH to deliver services that meet the health needs of Toronto's diverse communities through improved tracking of immunization services and vaccine inventory.
- Expansion of the City's Tiffind Road Data Centre is in progress, scheduled for completion in Q4 – 2019, preparing this facility to deliver improved resiliency, security, and the services needed to deliver internal private cloud services and co-location. This positions the City to offer Data Centre Services to Agencies in the future.
- Enhanced the City's website ([www.toronto.ca](http://www.toronto.ca)), which is accessed by over 26+ million visitors annually, complying with accessibility legislation (AODA), providing public access to City services using modern, dynamic, interactive web and mapping technologies and supporting greater delivery of secure, online services.
- Implemented the Equity Lens tool that helps identify and address barriers that may be experienced by equity-seeking communities and Indigenous Peoples accessing City services. This application helps staff when planning, developing and evaluating policies, programs, services or budget proposals and it also generates Equity Impact statements that are required for all significant policy and strategic staff reports.
- Implemented online Animal Services capability that modernized the manual licensing process by enabling email pet license renewal notifications.
- Completed the delivery of Enterprise eForms foundation that provides divisions with the capability of reducing paper based forms, improving service delivery response time, and minimize IT resource dependency by providing a user-friendly capability for self-serve, electronic form creation.

### Status Update on Council Approved New Capital Projects in the 2018 Capital Budget

During the 2018 Budget process, City Council approved new capital projects totalling \$25.750 million in the 2018 Capital Budget for Information & Technology. The implementation status is detailed below:

- *AODA Compliance for City Applications* – Funding of \$4.151 million was approved to ensure City applications are compliant with the Accessibility for Ontarians with Disabilities Act (AODA) which requires that public facing websites, content, and applications are compliant by 2021. The project is projecting to spend 70% of planned expenditure. The Staff Recommended 10-Year Capital Plan includes \$0.405 million approved in 2018 to be carried forward into 2019 to complete this work.
- *Business Applications Service Monitoring* – Funding of \$0.700 million was approved to enhance the current set of tools for systems level monitoring of business to include monitoring the services/applications layer to provide timely awareness to business clients on health, performance and availability. The project is on track, projecting

to spend 80% of its 2018 approved cash flow. The Staff Recommended 10-Year Capital Plan includes \$0.030 million approved in 2018 to be carried forward into 2019 to complete this work.

- *DLAN Cloud Services Implementation* – Funding of \$0.165 million was approved to migrate the Office of Emergency Management's web-based incident management system to the Cloud based solution provided by the same Vendor. The benefits include lower operating costs, lower operating risk and better accessibility over the Cloud. The project has experienced procurement delays. The Staff Recommended 10-Year Capital Plan includes \$0.165 million approved in 2018 to be carried forward into 2019 to complete this work.
- *Enterprise Business Intelligence(BI) Implementation* – Funding of \$4.998 million was approved to enable all Divisions to integrate their data into a single authoritative source and allow self-serve access using industry standard BI tools. To date, project spending is on track with a projected 95% spend rate in 2018. The Staff Recommended 10-Year Capital Plan includes \$0.087 million approved in 2018 to be carried forward into 2019 to complete this work.
- *eTime Enterprise Rollout* – Funding of \$2.882 million was approved to rollout *eTime* self-time reporting to divisions who were ready and willing to do so. The project has been delayed with post go-live stabilization issues (user / divisional adoption and transition to sustainment / operations). The Staff Recommended 10-Year Capital Plan includes an additional request for \$1.970 million in 2019 to continue rollout to other divisions. To date, the following divisions have been onboarded:
  - I&T
  - PPF&A
  - City Clerk's
  - City Manager's Office
  - HR
  - Toronto Water
  - ICS Business Management
  - PPEB
  - Facilities Management
  - SWMS
  - Environment and Energy
  - Real Estate Services
  - SSHA
  - Office of Emergency Management

It is recommended that the project team report back the benefits received to date during the 2020 budget process.

- *Geospatial Tool Enhancements* – Funding of \$0.545 million was approved for State of Good Repair work on the City's key application used to maintain and manage core geospatial data consisting of addresses and street centrelines. The project started later than planned and projects that it will spend 44% of its 2018 planned cash flow. The Staff Recommended 10-Year Capital Plan includes \$0.140 million approved in 2018 to be carried forward into 2019 to complete this work.
- *IBMS Review & Transformation* – Funding of \$7.088 million was approved to drive the transformation of the services supported through the Integrated Business Management System. The project has experienced delays due to contractor and staff resourcing issues. The Staff Recommended 10-Year Capital Plan includes \$1.878 million approved in 2018 to be carried forward into 2019 to complete this work.
- *Open Data Master Plan Implementation* – Funding of \$2.779 million was approved to implement the City's Open Data Master Plan and 4-year roadmap which will enable 24 x 7 real-time access to the City's open data, allow City Divisions to more broadly leverage internal City data to accomplish work and reduce duplication of effort, and help solve civic issues which will have high public benefit and impact. The project will also aim to accomplish increase the quality of open datasets, speed and efficiency of open data production for internal teams. The project is projecting spending of 100% of its 2018 approved cash flow.
- *SDFA- Online Grant Management System* – Funding of \$0.280 million was approved to implement a user-friendly Software as a Service (SaaS) solution for Online Grants Management to strengthen operational effectiveness of 2,000 clients and City staff through data management enhancements, improved process management, and improved client relationship management. The project has been delayed while obtaining buy-in from Divisions to adopt and fund the sustainment of the solution. The Staff Recommended 10-Year Capital Plan includes \$0.184 million approved in 2018 to be carried forward into 2019 to complete this work.

- *Online Donation Application* – Funding of \$0.590 million was approved to continue the work done in Phase 1, that implemented a centralized Donation Management System for one City Division, to develop an on-boarding processes, further support donation management as a business, and onboard additional divisions to Donation Management System. The project is delayed due to insufficient project resourcing. As a result, the Staff Recommended 10-Year Capital Plan includes \$0.309 million approved in 2018 to be carried forward into 2019 to complete this work.
- *Toronto Building-CRM-Enhanced Complaint Management* – Funding of \$1.122 million was approved to implement a Customer Relationship Management solution to enable an enhanced, customer-focused complaint tracking process in Toronto Building. The solution will improve the division's ability to respond to over 7200 customer complaints annually, improve complaint tracking. The solution will also be integrated with other Divisions and 311 to enable collaboration and promote consistency between Divisions by providing Toronto Building and other Divisions a common view into issues relating to construction activity. The project has been delayed due to insufficient resources. The Staff Recommended 10-Year Capital Plan includes \$0.192 million approved in 2018 to be carried forward into 2019 to complete this work.
- *Wellbeing Toronto* – Total funding of \$0.450 million was approved to upgrade Wellbeing Toronto ([www.toronto.ca/wellbeing](http://www.toronto.ca/wellbeing)), a web mapping/data visualization tool that presents 400+ indicators of well-being about Toronto's neighbourhoods. The project is currently on hold while the project team assesses the alignment of the project among the current project portfolio, as many of the functional requirements for this project (web mapping app with indicators) overlap with other similar projects within the City. The Staff Recommended 10-Year Capital Plan includes \$0.450 million approved in 2018 to be carried forward into 2019 to complete this work.

## 2018 Financial Performance

**Table 6: Budget vs. Actual by Project Category**

Project Category (In \$ Millions)	2017			2018			2019	
	Budget	Actual	Spending Rate %	Budget	Projected Actual *	Spending Rate %	Staff Recommended Capital Budget (excl. 1 Yr Carry Forward)	Staff Recommended Capital Budget (incl. 1 Yr Carry Forward)
Health & Safety	-	-		-	-		-	-
Legislated	-	-		1.383	0.978	<b>70.7%</b>	1.864	2.269
SOG	40.859	27.001	<b>66.1%</b>	46.727	30.728	<b>65.8%</b>	22.558	33.642
Service Improvement	47.021	24.385	<b>51.9%</b>	39.430	25.026	<b>63.5%</b>	30.860	37.703
Growth Related	0.900	0.273	<b>30.3%</b>	1.300	1.100	<b>84.6%</b>	11.890	17.666
<b>Total</b>	<b>88.780</b>	<b>51.659</b>	<b>58.2%</b>	<b>88.840</b>	<b>57.832</b>	<b>65.1%</b>	<b>67.172</b>	<b>91.280</b>

Note - 2018 projection based on the Q3 capital variance submission

As illustrated in the table above, the year-end expenditures are projected to result in a 65.1% spend rate for 2018. Many of the projects included in the Staff Recommended 10-Year Capital Plan are transformational in nature, involving staff resources within I&T and from other City Programs and often involve significant changes to current business processes that require time to implement successfully. These factors make it difficult to accurately estimate the duration needed to deliver projects. The I&T Division is currently implementing a number of initiatives and priority actions to improve capital spending rates in 2019. These actions include:

- Leveraging the Integrated IT Portfolio Integrated Plan process in which projects are reviewed for readiness, dependencies, capacity to deliver and historical spending. Cash flow funding is adjusted for many projects, including some being deferred or cancelled, to better align with expected delivery of projects
- Growing the Project Management Office, including recruitment of staff with the required skill set, to improve planning, procurement and overall coordination of capital project delivery across the IT Capital portfolio.

For additional information regarding the 2018 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, 2018" adopted by City Council at its meeting on December 13, 2018.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.CC1.8>

**Impact of the 2018 Capital Variance on the 2019 Staff Recommended Capital Budget**

- As a result of the delays in the capital projects described in the 2018 Q3 Capital Variance Report, funding of \$24.108 million is being carried forward from 2018 for inclusion in the 2019 Staff Recommended Capital Budget to continue the capital work.
- In addition, \$5.210 million in cash flow funding is being carried forward from 2017 and requires Council to reaffirm its commitment, consistent with the treatment of funding being carried forward 2 or more years.
- The 2019 - 2028 Staff Recommended Capital Budget and Plan includes revised cash flow funding estimates. The Program has realigned cash flow estimates in 2019 based on the revised project timeline and activities.



## ISSUES FOR DISCUSSION

## ISSUES IMPACTING THE 2019 BUDGET

### 2019 Budget Overview

#### 2019 Operating Budget:

- The Information & Technology division provides city-wide leadership in modernizing City services through the strategic investment, development and management of the City's Information Technology (IT) systems including:
  - Critical Business Systems delivery and support for City Programs and service delivery to residents, businesses and visitors.
  - IT foundation infrastructure capacity that is adaptable to sustain and meet growing demand for City Program business needs.
  - Employee Productivity Solutions that drive service excellence
- For 2019, the Staff Recommended Operating Budget of \$133.709 million gross and \$79.140 million net represents a 3.0% increase from the 2018 Approved Net Operating Budget. Increases to the base operating budget are mainly driven by:
  - Salary and benefit increases relating to progression pay and step increases across all services within I&T.
  - The third phase of tax-funding of \$1.775 million for capital positions originally approved by Council in 2013 for the delivery of IT capital projects. In 2018, a bridging strategy was used to defer Phase 3 of the plan approved in 2013 to transfer funding of permanent positions for ongoing capital delivery to the base operating budget over 4 years. The deferral is being realized as a pressure in I&T's 2019 operating budget. The fourth (last) phase of tax-funding of \$1.775 million will take place in 2020.
  - Base Expenditure drivers include \$1.259 million in hardware, software licenses and maintenance costs to support City's operations and business modernization initiatives and driven by an increase in users, information and technology systems, and infrastructure.
- The following actions contribute to reducing the base pressures and therefore are recommended for 2019:
  - Optimize & Rationalize Application Development in City Divisions
    - In 2018, I&T completed a City-wide IT Industry Benchmark study, conducted by Gartner Inc., to examine City-wide budget and staffing levels across industry standard IT functions and in comparison to public and private sector peer organizations.
    - The study identified that City-wide IT was generally in alignment to IT budget and staffing allocations in comparison to peer organizations, however one area identified for further review was the allocation of budget and staffing to IT applications development and support functions, which was slightly higher than industry average/comparisons.
    - There are currently over 350 IT positions in divisions other than I&T providing a variety of IT functions with ~220 positions providing application development and support functions.
    - Utilizing the IT Benchmark study, I&T has identified an opportunity to consolidate City-wide application development and support to achieve synergy and savings, representing a 4.2% reduction in the budget allocated to divisional IT application development and support functions.
    - In order to realize these savings of \$1.325 million, I&T is undertaking an overall City-wide IT Operating Model review in 2019. This will include a review of IT functions and positions City-wide (including I&T Division and Divisions with IT positions/functions) with an intent to optimize the organizational operating model and where appropriate standardize and centralize IT functions and processes, including but not limited to application development and support.

- In parallel, the I&T division will be undertaking an application roadmap review which in future will determine potential opportunities to further rationalize/optimize IT assets. The costs to develop the application roadmap and review of real savings, are yet to be determined.
- Detailed Vacancy Review
  - A review of vacant positions was conducted, focusing on positions vacant for more than 2 years. As a result of the review, I&T has adjusted its Council Approved gapping rate from 5.5% to 6.4%, or \$0.695 million, on a one-time basis. This is possible due to a recent trend of longer than normal hiring cycles within I&T. The I&T gapping rate will be reviewed during the 2020 Budget process.
- Service Efficiencies
  - \$0.256 million in savings will be realized in 2019 following a review of systems with surplus licenses, consolidating internet circuits, switching to internally signed digital certificates and migrating systems to more cost efficient infrastructure;
  - \$0.485 million from decommissioning older assets that are near or at the end of useful life, or no longer in use including the Domino Application, geospatial mapping services, Blackberry Enterprise Server, and reducing phone audio conference usage
  - \$0.037 million can be saved by reducing the number of servers via virtualization, where multiple physical servers are consolidated in a single physical server, but still operate independently, and
  - \$0.032 million in efficiencies can be realized by transitioning from OpenText to OpenSource Wordpress for toronto.ca Website Development which offers additional features for persons with disabilities.
- I&T's 2019 Staff Recommended Operating Budget of \$133.709 million gross and \$79.140 million net includes \$0.539 million gross and net for the following:
  - *Cyber Security Awareness (AG Recommended)* – \$0.309 million for on-line subscriptions services and one permanent Senior Cyber Security Specialist position to advance cyber security awareness training for City staff.
    - The on-line subscription services would include the supply and implementation of a security education and awareness training program that will follow the City's Cyber Security Awareness framework and be delivered through the Enterprise eLearning Initiative (ELI).
    - The Senior Cyber Security Specialist is required to manage the training program including governance and compliance, course customization, data analytics and reporting.
  - *Risk Management Cyber Security & Compliance* – \$0.230 million to add two permanent Senior Privacy Specialist positions to assist with the increasing volume of projects and work where Personally Identifiable Information (PII) is being stored or shared.
    - The collection of personal information is legislated, and by adding Privacy Specialists, I&T will be in a better position to address this key area in an effective manner.
    - The annual demand is approximately 35 Privacy Impact Assessment (PIAS), 10 funded through capital projects. Each resource can address approximately 3-4 PIAs per year for complex initiatives. Resources are also involved in Privacy consultations. Privacy Impact Assessments address risk to ensure privacy requirements (MFIPPA) are met and mitigated as solutions/enhancements are deployed.
    - By adding Privacy Specialists, I&T will be in a better position to manage risk and address this key requirement in projects and initiatives effectively and ensure legislative compliance

## 10-Year Capital Plan:

- The Staff Recommended 2019 - 2028 Capital Plan provides investments of \$428.643 million to provide and develop City-wide enterprise and divisional business I&T applications, along with an integrated and secure I&T infrastructure, in support of dependable services to City Programs and the Public, detailed as follows:
  - Legislated projects account for \$3.113 million, ending in 2022, primarily to ensure City applications are compliant with the *Accessibility for Ontarians with Disabilities Act (AODA)*.
  - 53.5% or \$229.177 million in funding has been dedicated to State of Good Repair (SOGR) projects of which funding of \$205.907 million is for the *Asset Lifecycle Management* to maintain the City's technology infrastructure including the network and application systems.
  - Service Improvement projects account for \$63.056 million and included the Enterprise Collaboration Foundation project, the roll out of the *Enterprise Electronic Time Sheet System*, and the change in scope funding for *eRecruitment* and the *Cloud-Based HR Information System (CHRIS)* projects.
  - Growth Related projects account for 31.1% or \$133.297 million and include the *Consolidated Data Centre* project, the *Major Capital Infrastructure Project Co-ordination (TOINView)*, and the *Enterprise Information Security Program*.
- This Staff Recommended 10-Year Capital Plan reflects an increase of \$7.666 million or 1.8% in capital funding when compared to the 2018 - 2027 Approved Capital Plan. Key changes are summarized as follows:
  - A review of capital requirements based on the reprioritization of capital needs and a review of the Program's spending capacity, its average annual spending rate over the past five years, and the readiness to proceed of planned projects resulted in realignment of cash flows to better reflect actual spending trends for major capital projects and meet revised project timelines. The result created debt room that helped add new critical I&T projects that enable the City to advance on its modernization and transformation agenda.
  - 17 New or Change in Scope projects were added to the I&T capital plan as recommended by the Business Executive Committee through the I&T Portfolio Integrated Plan.

In summary, Information & Technology faces many service challenges and budget pressures in 2019. Both the Staff Recommended 2019 Operating Budget and 2019 – 2028 Capital Budget and Plan will continue to support and implement I&T's strategic plan to modernize City services through the strategic investment, development and management of the City's Information Technology (IT) systems.

## OTHER ISSUES IMPACTING THE 2019 BUDGET

### Increasing Cyber-Security Complexity

- The demands to ensure a secure and protected City I&T infrastructure and availability of City systems to ensure City Program and service delivery for citizens, businesses and visitors, requires an effective approach to address ever increasing cyber threats. The increase in cybercrime and impacts on business and government is a global issue.
- Toronto, as Canada's largest City, is subject to ongoing cyber threats and annually the City addresses over 50 million cyber security events, from malware and viruses to attacks on our network and technology environment. The City needs to continue to be proactive and vigilant to monitor and address security vulnerabilities within this ever increasing complex cyber-security environment. Protection from incidents and prevention mean impacts and outages are avoided and costs from down-time saved.
- The 2019 Staff Recommended Operating Budget and 2019 – 2028 Capital Budget and Plan invests in effective cyber-security measures with a balanced approach to also drive openness in government as well and allow for innovative and new technology solutions to be adopted. This will also require continued corporate efforts in business continuity planning and readiness as well.

## ISSUES REFERRED TO THE 2019 BUDGET PROCESS

There are no issues that were referred to the 2019 Budget Process.

### Requested Report Backs

The following Council Recommendations require report backs in 2019 which have potential future financial implications:

#### **IT Infrastructure and IT Asset Management Review: Phase 1: Establishing an Information Technology Roadmap to Guide the Way Forward for Infrastructure and Asset Management**

- On March 26, 2018, City Council adopted recommendations based on a report from the Auditor General (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.AU11.3>) requesting the City centralize IT governance and develop a Strategic Technology Roadmap to guide the acquisition and deployment of technology. The report includes recommendations to enable progress in creating and executing the roadmap to be completed in 2019.
- The Program has drafted the Technology Roadmap for the City as of Q4 2018 and is currently working on the request and anticipates providing a status update to the Audit Committee as per Auditor General Office reporting requirements in 2019.

#### **Supporting Equity Goals with Disaggregated Data**

- On May 22, 2018, City Council adopted recommendations based on a report from the Executive Director, Social Development, Finance and Administration and the Director, Equity, Diversity and Human Rights on Supporting Equity Goals with Disaggregated Data (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EX34.10>) including the Chief Information Officer, the Chief Transformation Officer, the Executive Director, Social Development, Finance and Administration and the Director, Equity, Diversity and Human Rights, in consultation with the City Clerk's Office, Corporate Information Management Services Section to report to City Council in 2019 with a detailed City of Toronto Disaggregated Data Strategy that identifies the specific processes and resources required by City divisions to incorporate disaggregated data collection, analysis and reporting to ensure equitable program planning and service delivery for Toronto residents that is also in accordance with the City of Toronto Open Data Master Plan

- The Program is currently working on the lead divisions on the request and anticipates supporting a report back during 2019

### **Increasing Accessibility of Online Content and Materials for Public Consultations**

- On May 22, 2018, City Council requested the Chief Information Officer, in collaboration with the Interim Director, Strategic Communications, to explore options to identify and eliminate accessibility barriers for online platforms and video materials used to share and enhance public consultations held by the City and report back to Council in the first quarter of 2019 this includes ensuring online content, that is streamed and stored online, is available to users on at least one accessible platform (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.MM44.85>).
- The Program is currently working on the request and anticipates providing a report back during Q3 2019

### **Request for a report on a strategy to re-purpose City computers and IT equipment**

- On March 26, 2018, City Council directed the Chief Information Officer and the Chief Purchasing Officer to prepare a report on a digital inclusion and digital equity approach to re-purpose City computers and other appropriate IT equipment; such approach should be developed and implemented in consultation with other City Divisions and charitable social enterprise organizations that refurbish computer equipment, and to report back to City Council through the Government Management Committee in the first quarter of 2019 (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.MM38.17>).
- The Program is currently working on the request and anticipates providing a report back during Q3 2019

## ISSUES IMPACTING FUTURE YEARS

### Funding Model for Cloud Solutions

- The delivery of I&T solutions is steadily moving to new enterprise-wide Cloud based solutions through subscriptions vs. traditional on premise licensing models. These cloud solutions require lower capital investment but result in higher operating costs.
- The sustainment costs for these investments (licenses, maintenance and support costs) have primarily flowed through the I&T Operating Budget while the benefits derived are primarily being realized by the City Programs. These factors are eroding I&T's sustainment capacity and ability to absorb incremental and growing costs of technology implementation.
- As the costs associated with cloud based solutions will be funded by the Operating Budget, the City needs to establish a new funding model for cloud services.
  - The Business Executive Committee, comprised of the City Manager, Chief Financial Officer & Treasurer, Deputy City Manager, Chief Information Officer and Executive Director of Financial Planning, approved a framework that utilizes a Non-Program budget during an initial period of the subscription services to allow time for City Programs to realize benefits. Once the benefits start to become fully realized after the second year of implementation, the Programs operating budget will be adjusted accordingly, on an equitable basis.
- The funding model is wholly dependent on the articulation of all costs and benefits of business process changes to be itemized, monitored, reported, and captured. In order to do so, all business cases are required to identify benefits prior to formal approval of technology implementation.
- The funding model focuses on supporting corporate strategic modernization objectives and helps address Program's budget constraints during the benefit realization period.
- The Cloud funding framework will produce the following results:
  - Reduced financial pressure on Capital funds;
  - Opportunity to leverage Cloud-based technology for renewal roadmap and meet current/future business needs across the corporation;
  - Enable City to achieve strategic goals; and
  - Require quantification of business benefits in business case development, project plan and project implementation and forces a framework to capture, realize and report the benefits.
- In February 2018, Senior Management approved Cloud Services Governance made up of the following committees:
  - **Cloud Steering Committee** – The Cloud Steering Committee is responsible to the CIO and provides strategic direction and accountability for the City's cloud initiatives. It provides advice for decision making purposes, resolving issues, clearing roadblocks at Executive Level, and championing cloud services for Software as a Service, Platform as a Service, and Infrastructure as a Service.
  - **Cloud Architecture Review Board** – The Cloud Architecture Review Board (CARB) is the main operational component of Cloud Services Governance. It is a single integrated governance committee responsible for: Architecture, Assessing Cloud Proposals, Cloud Policies, Cloud Roadmap, Cloud Service Catalog, Cloud Strategy (Hybrid, Private, Public), Escalating strategy & policy issues, Governance (compliance, risk, standards), Resource Management, and Sustainability (financial, technological). It ensures the consistent enforcement of policies and guidelines to place limits on how, when, why, and for what purpose a cloud resource (such as data, processes, Application Programming Interfaces, storage, networks or compute) is used. CARB receives and assesses initial proposals for cloud initiatives to decide if they have merit to proceed to full development of a business case.
  - **Benefits Realization** – Identification, monitoring and reporting through the annual budget process.

## Adequacy of the I&T Sustainment Equipment Reserve

- The I&T Sustainment Equipment Reserve is continually being drawn on for a growing inventory of items being added to the City technology inventory and therefore requires lifecycle replacement (computers, multi-function printing devices, tablets, core city infrastructure in network/servers, telephony, etc.).
- The 2019 budgeted contribution for the reserve is \$21.297 million.
- Based on the current forecast, the reserve will be depleted in 2020. Although created in 2004, the annual contribution to the reserve remained constant until 2018 when it was increased by \$2.0 million to address the growth in demand for technology over the past ten years resulting in an ever-expanding portfolio of assets. Citywide IT assets increased by 31% from 52,023 units in 2008 to 68,286 in 2017. Business demand for service efficiencies and public expectation for online services impacts infrastructure capacity and sustainment.
- The IT Equipment Reserve will require an increase in the budgeted annual contribution from 2020 onwards to support the increase in technology sustainment costs due to usage growth and license model changes (cloud subscription).
- Of note are major investments are currently planned in 2020 and 2025 that relate to upgrades to software installed on all City desktops and laptops.
- Information & Technology Division will work with the Financial Planning Division to explore options to address this shortfall including changes to standards and funding contributions from City Programs for added inventory associated with new hires in time for the 2020 budget process. I&T will also continue to work with City Divisions to assess and rationalize applications to optimize I&T technology investments and work through the I&T governance process.

INFORMATION & TECHNOLOGY DIVISION											
IT EQUIPMENT RESERVE - XQ1508											
Continuity Schedule											
As at October 10, 2018											
In \$000s	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Opening Balance:</b>	<b>\$15,564</b>	<b>\$12,166</b>	<b>\$6,917</b>	<b>(\$4,148)</b>	<b>(\$3,919)</b>	<b>(\$3,839)</b>	<b>(\$8,144)</b>	<b>(\$8,895)</b>	<b>(\$20,924)</b>	<b>(\$22,715)</b>	<b>(\$23,859)</b>
<b>Total Contribution</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>	<b>21,297</b>
<b>Total Outflows</b>											
Technology Assets Lifecycle Management	24,695	23,797	18,543	21,068	21,217	25,602	22,048	18,125	23,088	22,441	26,819
Resource to Deliver IT Capital Projects	0	2,749									
<b>Total Outflows before Office Pro Plus and Exchange Upgrade:</b>	<b>24,695</b>	<b>26,546</b>	<b>18,543</b>	<b>21,068</b>	<b>21,217</b>	<b>25,602</b>	<b>22,048</b>	<b>18,125</b>	<b>23,088</b>	<b>22,441</b>	<b>26,819</b>
<b>Closing Balance before Office Pro Plus and Exchange Upgrade:</b>	<b>12,166</b>	<b>6,917</b>	<b>9,671</b>	<b>9,900</b>	<b>9,980</b>	<b>5,675</b>	<b>4,924</b>	<b>8,096</b>	<b>6,305</b>	<b>5,161</b>	<b>(\$361)</b>
- Exchange User CAL - user upgrade <sup>2</sup>			3,035					3,338			
- Office Pro Plus - user upgrade <sup>2</sup>			10,784					11,863			
<b>Total Outflows after Office Pro Plus and Exchange Upgrade:</b>	<b>24,695</b>	<b>26,546</b>	<b>32,362</b>	<b>21,068</b>	<b>21,217</b>	<b>25,602</b>	<b>22,048</b>	<b>33,326</b>	<b>23,088</b>	<b>22,441</b>	<b>26,819</b>
<b>Closing Balance after Office Pro Plus and Exchange Upgrade:</b>	<b>12,166</b>	<b>6,917</b>	<b>(\$4,148)</b>	<b>(\$3,919)</b>	<b>(\$3,839)</b>	<b>(\$8,144)</b>	<b>(\$8,895)</b>	<b>(\$20,924)</b>	<b>(\$22,715)</b>	<b>(\$23,859)</b>	<b>(\$29,381)</b>
<b>Annual Net Change in Reserve Balance: Increase/(Decrease)</b>	<b>(\$3,398)</b>	<b>(\$5,249)</b>	<b>(\$11,065)</b>	<b>\$229</b>	<b>\$80</b>	<b>(\$4,305)</b>	<b>(\$751)</b>	<b>(\$12,029)</b>	<b>(\$1,791)</b>	<b>(\$1,144)</b>	<b>(\$5,522)</b>

## REPORTING ON MAJOR CAPITAL PROJECTS: STATUS UPDATE

In compliance with the Auditor General's recommendations to strengthen accountability, additional status reporting on all major capital projects is required. The following projects have been reported on a quarterly basis during 2018:

### Consolidated Data Centre

#### Project Overview and Deliverables

- The *Consolidated Data Centre* Project is a corporate project that was initiated to address the growing demand for new technologies, eliminate the dependency on leased data centre space, and improve the resiliency of the City's current infrastructure.
- The Data Centre project will define and implement a data centre strategy to migrate and consolidate these multiple data centres that currently exist in the City and are at full capacity together with other City Agencies and Corporations.

#### Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Consolidated Data Centre	2014	13,600	5,038	6,284	3,681	3,534	1,600	13,853	On Track	Dec-19	Dec-19	Ⓢ	Ⓢ

\* 2018 year-end projection based on the Q3 capital variance

On Budget		On Time	
> 70% of Approved Project Cost	Ⓢ	On/Ahead of Schedule	Ⓢ
Between 50% and 70%	Ⓜ	Minor Delay < 6 months	Ⓜ
< 50% or >100% of Approved Project Cost	Ⓡ	Significant Delay > 6 months	Ⓡ

#### Project Status

- Construction commenced in late June after funding was secured with contributions from FREEE and Toronto Water. The Toronto Hydro substation was installed in September to upgrade electrical capacity and resiliency.
- The next phase is to build the Toronto Water data hall and modernize their office space.

#### 2019 Plan

- Substantial completion and commissioning of the whole data centre is targeted for the end of 2019.

#### Key Project Challenges

- The project had experienced early delays and budget pressures due to additional costs identified during the detailed engineering reviews as well as IT Shared Services considerations which resulted in additional time and effort needed to consider additional requirements to incorporate improved redundancy and automation which led to lower expenditures in 2017 and deferred spending to 2018. Detailed architectural, mechanical and engineering design have since been completed and the project is progressing to plan.

### Enterprise Work Management System

#### Project Overview and Deliverables

- The *Enterprise Work Management Program* is a multi-year program to implement a City-wide Work Management System to improve the maintenance and service delivery operations for 4 major divisions: Transportation Services, Toronto Water, Solid Waste Management and Parks, Forestry & Recreation.

#### Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Enterprise Work Management System	2013	8,130	2,167	3,093	2,009	2,305	0	7,681	Significant Delay	Feb-25	Oct-25	Ⓢ	Ⓢ

\* 2018 year-end projection based on the Q3 capital variance

On Budget		On Time	
> 70% of Approved Project Cost	Ⓢ	On/Ahead of Schedule	Ⓢ
Between 50% and 70%	Ⓢ	Minor Delay < 6 months	Ⓢ
< 50% or >100% of Approved Project Cost	Ⓢ	Significant Delay > 6 months	Ⓢ

#### Project Status

- The vendor is currently engaged and solution design and implementation planning is well underway. As the implementation is across multiple divisions, the program has been split in three phases. The first go live release for phase 1 is targeted for 2019 and phase 3 is targeted for completion in 2025. The road map is as such to minimize implementation risk, allow for comprehensive sustainment planning and maximize benefit realization..

#### 2019 Plan

- 2019 will see the first go live release for phase.

#### Key Project Challenges

- The project experienced significant delays during the procurement stage due to renegotiation of vendor scope and City responsibilities. This consequently delayed selection and scoring.
- The Work Management Solution project was later re-forecasted based on renegotiations with the vendor on scope and City responsibilities

**Enterprise Documents and Records Management**

Project Overview and Deliverables

- The *Enterprise Documents and Records Management* is a foundational and transformation initiative to manage the City's information through incremental procurement and implementation of appropriate components to establish an enterprise technology solution. The solution will manage digital records from creation to destruction. After the pilot project, as an enterprise tool, EDRMS will provide a consolidated repository of City information in all formats across all divisions.

Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Enterprise Documents and Records Management	2014	4,070	1,789	1,473	824	2,100	0	4,713	Significant Delay	Dec-17	Jun-19	Ⓢ	Ⓢ

\* 2018 year-end projection based on the Q3 capital variance

<b>On Budget</b>	<b>On Time</b>
> 70% of Approved Project Cost	ⓐ On/Ahead of Schedule
Between 50% and 70%	Ⓨ Minor Delay < 6 months
< 50% or >100% of Approved Project Cost	Ⓢ Significant Delay > 6 months

Project Status

- The City has signed agreements with the vendor to implement the solution and the work is in progress. The Solution has been designed and implementation and is expected to be completed in Q1 2019 to start the electronic pilot. A sample of physical records will also be migrated to provide final validation of system functionality, estimated February 2019.
- The Solution has been designed and implementation and is expected to be completed in Q1 2019 to start the electronic pilot. A sample of physical records will also be migrated to provide final validation of system functionality.

2019 Plan

- The Staff Recommended Capital Plan includes \$2.125 million in 2019 for phase 2 of the EDRMS, migrating data governing 9 million files and boxes of physical records relating to City divisions and a number of agencies. Once data migration is completed, Livelink Records Server will be decommissioned

Key Project Challenges

- The project experienced significant delays during the requirements stage due to diversity and complexity of requirements across City divisions. In response, the project team has developed a phased approach that will provide sufficient time to implement a comprehensive change management program to ensure a successful corporate transformation and adoption.

**Web Revitalization: Web Refresh Phase 2**

Project Overview and Deliverables

- The *Web Revitalization: Web Refresh Phase 2* will revitalize the look and feel to enable client-centric accessible information and services to improve customer service and overall public user experience in accessing their City. Phase 2 included a re-assessment of the platform, tools and architecture used to host the site in addition to reconstruction of services to deliver a modern, citizen and service oriented website.

Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Web Revitalization: Web Refresh Phase 2	2014	7,780	6,878	900	878	0	0	7,756	Significant Delay	Apr-18	Apr-18	ⓐ	ⓐ

\* 2018 year-end projection based on the Q3 capital variance

<b>On Budget</b>	<b>On Time</b>
> 70% of Approved Project Cost	ⓐ On/Ahead of Schedule
Between 50% and 70%	Ⓨ Minor Delay < 6 months
< 50% or >100% of Approved Project Cost	Ⓡ Significant Delay > 6 months

Project Status

- The Project is complete with the new Web Content Management application and search tool, analytics tool and final service themes and website all delivered. Administrative project closeout activities underway.

**Disaster Recovery Project**

Project Overview and Deliverables

- The *Disaster Recovery Project* is part of a business risk mitigation strategy to develop and maintain a harmonized Disaster Recovery and Business Continuity program for the City that ensures continuity of operations and service delivery to the public in the event of an unexpected outage of either business processes or associated information technology.

Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Disaster Recovery Program	2013	37,960	16,537	1,750	1,086	928	1,050	24,053	Significant Delay	Dec-24	Dec-24	Ⓜ	Ⓢ

\* 2018 year-end projection based on the Q3 capital variance

<b>On Budget</b>	<b>On Time</b>
> 70% of Approved Project Cost	Ⓢ On/Ahead of Schedule
Between 50% and 70%	Ⓜ Minor Delay < 6 months
< 50% or >100% of Approved Project Cost	Ⓡ Significant Delay > 6 months

Project Status

- In 2017, the project was reassessed to include establishing a governance framework, reviewing the DR strategy, and developing a 3 year work plan. In 2018 the project was being re-aligned to be more integrated with the Consolidated Data Centre project.
- To date, I&T Business Continuity/Disaster Recovery Governance Committee established and implemented recovery requirements collected from the business divisions during the business impact analysis (BIA) workshops which will be used to evaluate disaster recovery strategies

2019 Plan

- The Staff Recommended Capital Plan includes funds of \$0.928 million in 2019 for disaster recovery planning and design that will be aligned with the construction activities occurring on the Consolidated Date Centre project.

Key Project Challenges

- The project has experienced minor delays due to resource constraints that are currently being addressed.

**Enterprise Time Attendance & Schedule Management Solution**

Project Overview and Deliverables

- The *Enterprise Time, Attendance & Scheduling Management Solution* Project is an enterprise-wide time, attendance and scheduling system that addresses the City's complex business rules and collective agreement requirements, and replaces current outdated and inefficient application. The solution will provide a single point of integration with the enterprise attendance management system.

Financial Update

Project name (In \$000s)	Initial Approval Date	Approved Project Cost	Life to Date Expenditures as at Dec 31, 2017	2018		2019	2020	Projection To End of Project	Status	End Date		On Budget	On Time
				Budget	Year-End Projection *	Budget	Plan			Planned	Revised		
Enterprise Time, Attendance & Scheduling Management Solution	2014	14,950	14,217	259	0	3,411		17,628	On Track	Dec-17	Dec-18	Ⓡ	Ⓡ

\* 2018 year-end projection based on the Q3 capital variance

<b>On Budget</b>	<b>On Time</b>
> 70% of Approved Project Cost	Ⓢ On/Ahead of Schedule
Between 50% and 70%	Ⓢ Minor Delay < 6 months
< 50% or >100% of Approved Project Cost	Ⓢ Significant Delay > 6 months

Project Status

- The project was implemented for PF&R in 2016 and TPS in 2017. Post-implementation stabilization and change management issues are being addressed to mitigate user and operational impacts. The project team are currently working with the client to address critical issues as they arise.

2019 Plan

- The Staff Recommended Capital Plan includes a request of an additional \$1.970 to continue the roll out of the solution.

Key Project Challenges

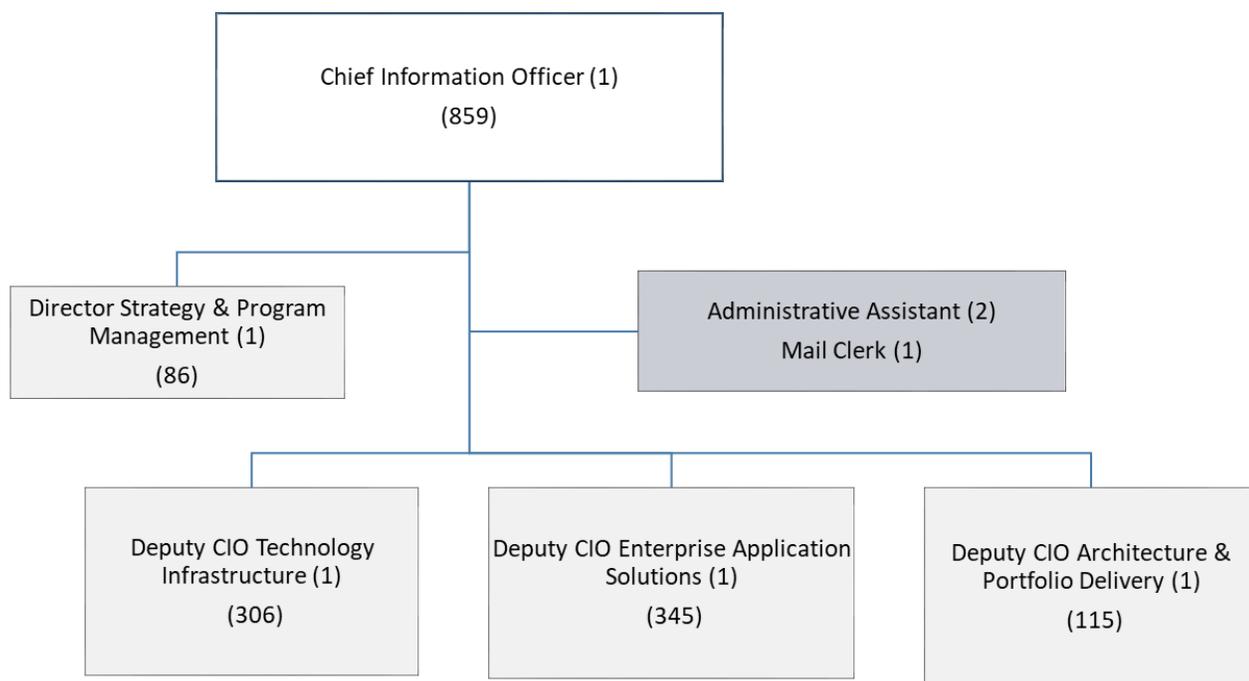
- The project has experienced delays due post go-live stabilization issues with Toronto Paramedic Services (TPS).



# APPENDICES

## Appendix 1

### 2019 Organization Chart



The 2019 total staff complement includes the Chief Information Officer and staff for a total of 860.0 positions, comprising 218.0 capital positions and 642.0 operating positions as summarized in the table below.

### 2019 Total Complement

	Category	Senior Management	Management with Direct Reports	Management without Direct Reports/Exempt Professional & Clerical	Union	Total
Operating	Permanent	5.0	136.0	104.0	393.0	638.0
	Temporary			1.0	3.0	4.0
	<b>Total Operating</b>	5.0	136.0	105.0	396.0	642.0
Capital	Permanent		2.0	-	16.0	18.0
	Temporary		11.0	109.0	80.0	200.0
	<b>Total Capital</b>	-	13.0	109.0	96.0	218.0
<b>Grand Total</b>		<b>5.0</b>	<b>149.0</b>	<b>214.0</b>	<b>492.0</b>	<b>860.0</b>

## Appendix 2

## 2019 Operating Budget by Service

## Business I&amp;T Solutions

(In \$000s)	2018	2019			Changes		Incremental Change	
	Approved Budget	Base	New / Enhanced	Total Staff Recommended Budget			2020 Plan	2021 Plan
By Service	\$	\$	\$	\$	\$	%	\$	\$
<b>Solution Implementation</b>								
Gross Expenditures	35,373.4	35,975.7	0.0	35,975.7	602.3	1.7%	757.9	542.0
Revenue	28,746.8	27,893.9	0.0	27,893.9	(852.9)	(3.0%)	(237.4)	23.4
<b>Net Expenditures</b>	<b>6,626.6</b>	<b>8,081.8</b>	<b>0.0</b>	<b>8,081.8</b>	<b>1,455.2</b>	<b>22.0%</b>	<b>995.2</b>	<b>518.6</b>
<b>Solution Sustainment</b>								
Gross Expenditures	17,630.1	17,309.0	0.0	17,309.0	(321.1)	(1.8%)	164.7	86.4
Revenue	2,763.6	7,604.4	0.0	7,604.4	4,840.7	175.2%	246.8	224.3
<b>Net Expenditures</b>	<b>14,866.5</b>	<b>9,704.7</b>	<b>0.0</b>	<b>9,704.7</b>	<b>(5,161.8)</b>	<b>(34.7%)</b>	<b>(82.1)</b>	<b>(138.0)</b>
<b>IT Common Components</b>								
Gross Expenditures	2,931.7	3,501.6	0.0	3,501.6	569.9	19.4%	85.0	22.7
Revenue	721.1	168.9	0.0	168.9	(552.2)	(76.6%)	(9.1)	1.2
<b>Net Expenditures</b>	<b>2,210.6</b>	<b>3,332.7</b>	<b>0.0</b>	<b>3,332.7</b>	<b>1,122.1</b>	<b>50.8%</b>	<b>94.2</b>	<b>21.6</b>
<b>Authoritative Data Custodianship</b>								
Gross Expenditures	3,323.2	3,628.7	0.0	3,628.7	305.5	9.2%	117.9	29.6
Revenue	1,562.3	520.6	0.0	520.6	(1,041.7)	(66.7%)	(8.6)	2.7
<b>Net Expenditures</b>	<b>1,760.9</b>	<b>3,108.1</b>	<b>0.0</b>	<b>3,108.1</b>	<b>1,347.2</b>	<b>76.5%</b>	<b>126.6</b>	<b>26.9</b>
<b>Total</b>								
Gross Expenditures	59,258.4	60,415.0	0.0	60,415.0	1,156.6	2.0%	1,125.5	680.7
Revenue	33,793.8	36,187.7	0.0	36,187.7	2,393.9	7.1%	(8.4)	251.6
<b>Total Net Expenditures</b>	<b>25,464.6</b>	<b>24,227.3</b>	<b>0.0</b>	<b>24,227.3</b>	<b>(1,237.3)</b>	<b>(4.9%)</b>	<b>1,133.9</b>	<b>429.1</b>
<b>Approved Positions</b>	<b>421.4</b>	<b>429.0</b>	<b>0.0</b>	<b>429.0</b>	<b>7.6</b>	<b>1.8%</b>	<b>(2.0)</b>	<b>0.0</b>

## Computer &amp; Communications Technology Infrastructure

(In \$000s)	2018	2019			Changes		Incremental Change	
	Approved Budget	Base	New / Enhanced	Total Staff Recommended Budget			2020 Plan	2021 Plan
By Service	\$	\$	\$	\$	\$	%	\$	\$
<b>Network &amp; Telecommunications</b>								
Gross Expenditures	13,998.0	12,939.9	0.0	12,939.9	(1,058.0)	(7.6%)	99.2	62.9
Revenue	5,604.9	5,887.3	0.0	5,887.3	282.4	5.0%	78.6	(9.0)
<b>Net Expenditures</b>	<b>8,393.1</b>	<b>7,052.6</b>	<b>0.0</b>	<b>7,052.6</b>	<b>(1,340.4)</b>	<b>(16.0%)</b>	<b>20.6</b>	<b>71.9</b>
<b>Computing Infrastructure</b>								
Gross Expenditures	30,601.0	32,368.7	0.0	32,368.7	1,767.8	5.8%	496.5	126.1
Revenue	8,103.5	7,587.8	0.0	7,587.8	(515.6)	(6.4%)	96.9	(15.5)
<b>Net Expenditures</b>	<b>22,497.5</b>	<b>24,780.9</b>	<b>0.0</b>	<b>24,780.9</b>	<b>2,283.4</b>	<b>10.1%</b>	<b>399.6</b>	<b>141.6</b>
<b>Total</b>								
Gross Expenditures	44,598.9	45,308.7	0.0	45,308.7	709.8	1.6%	595.7	189.0
Revenue	13,708.4	13,475.2	0.0	13,475.2	(233.2)	(1.7%)	175.5	(24.5)
<b>Total Net Expenditures</b>	<b>30,890.6</b>	<b>31,833.5</b>	<b>0.0</b>	<b>31,833.5</b>	<b>942.9</b>	<b>3.1%</b>	<b>420.2</b>	<b>213.5</b>
<b>Approved Positions</b>	<b>217.5</b>	<b>214.5</b>	<b>0.0</b>	<b>214.5</b>	<b>(3.0)</b>	<b>(1.4%)</b>	<b>(1.0)</b>	<b>(0.0)</b>

## Enterprise IT Planning &amp; Client Services

(In \$000s)	2018	2019			Changes		Incremental Change	
	Approved Budget	Base	New / Enhanced	Total Staff Recommended Budget			2020 Plan	2021 Plan
By Service	\$	\$	\$	\$	\$	%	\$	\$
<b>Enterprise Planning &amp; Architecture</b>								
Gross Expenditures	9,165.2	4,914.0	356.8	5,270.8	(3,894.5)	(42.5%)	279.8	111.9
Revenue	2,017.2	787.7	0.0	787.7	(1,229.6)	(61.0%)	(308.4)	(16.1)
<b>Net Expenditures</b>	<b>7,148.0</b>	<b>4,126.3</b>	<b>356.8</b>	<b>4,483.1</b>	<b>(2,664.9)</b>	<b>(37.3%)</b>	<b>588.1</b>	<b>127.9</b>
<b>Client Support, Advice &amp; Consultation</b>								
Gross Expenditures	15,208.9	18,796.4	182.8	18,979.2	3,770.3	24.8%	468.3	278.0
Revenue	2,652.0	3,746.5	0.0	3,746.5	1,094.5	41.3%	(948.6)	4.0
<b>Net Expenditures</b>	<b>12,556.9</b>	<b>15,049.9</b>	<b>182.8</b>	<b>15,232.7</b>	<b>2,675.8</b>	<b>21.3%</b>	<b>1,416.9</b>	<b>274.0</b>
<b>IT Project Management</b>								
Gross Expenditures	2,717.3	3,734.8	0.0	3,734.8	1,017.5	37.4%	147.9	81.8
Revenue	1,952.0	371.4	0.0	371.4	(1,580.5)	(81.0%)	0.0	0.0
<b>Net Expenditures</b>	<b>765.3</b>	<b>3,363.4</b>	<b>0.0</b>	<b>3,363.4</b>	<b>2,598.0</b>	<b>339.5%</b>	<b>147.9</b>	<b>81.8</b>
<b>Total</b>								
Gross Expenditures	27,091.5	27,445.3	539.5	27,984.8	893.3	3.3%	896.0	471.7
Revenue	6,621.2	4,905.6	0.0	4,905.6	(1,715.6)	(25.9%)	(1,256.9)	(12.1)
<b>Total Net Expenditures</b>	<b>20,470.2</b>	<b>22,539.6</b>	<b>539.5</b>	<b>23,079.2</b>	<b>2,608.9</b>	<b>12.7%</b>	<b>2,153.0</b>	<b>483.7</b>
<b>Approved Positions</b>	<b>210.1</b>	<b>213.5</b>	<b>3.0</b>	<b>216.5</b>	<b>6.3</b>	<b>3.0%</b>	<b>(0.0)</b>	<b>0.0</b>

### Appendix 3

## 2019 Service Levels

### Business I&T Solution

Activity	Type	Service Level Description	Status	2016	2017	2018	2019
Solutions Implementation	<ul style="list-style-type: none"> <li>• Program and Service Management Solutions Development</li> <li>• Process Management Solutions Development</li> <li>• Enterprise Asset Management Solutions Development</li> <li>• Financial Management Solutions Development</li> <li>• Supply and Inventory Management Solutions Development</li> <li>• Rules Management Solutions Development</li> <li>• Property Stewardship Solutions Development</li> <li>• Risk Management Solutions Development</li> <li>• Customer Relationship Management Solutions Development</li> <li>• Service Delivery Solutions Development</li> <li>• Human Resource Management Solutions Development</li> <li>• Information Management Solutions Development</li> </ul>	Support services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time		
Solutions Sustainment	<ul style="list-style-type: none"> <li>• Program and Service Management Solutions Sustainment</li> <li>• Process Management Solutions Sustainment</li> <li>• Enterprise Asset Management Solutions Sustainment</li> <li>• Financial Management Solutions Sustainment</li> <li>• Supply and Inventory Management Solutions Sustainment</li> <li>• Rules Management Solutions Sustainment</li> <li>• Property Stewardship Solutions Sustainment</li> <li>• Risk Management Solutions Sustainment</li> <li>• Customer Relationship Management Solutions Sustainment</li> <li>• Service Delivery Solutions Sustainment</li> <li>• Human Resource Management Solutions Sustainment</li> <li>• Information Management Solutions Sustainment</li> </ul>	Support services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time		
IT Common Components	<ul style="list-style-type: none"> <li>• Business solution/application development</li> <li>• Geospatial</li> </ul>	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time		
Authoritative Data Custodianship	<ul style="list-style-type: none"> <li>• Geographic Information dataset/map</li> <li>• Geospatial/Location Data</li> </ul>	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	100%	
		Email Response within 2 business days 90 % of the time  Standard incident management targets or consultation per agreed work plan.	Actual	Email Response within 2 business days 90 % of the time  Standard incident management targets or consultation per agreed work plan.	Email Response within 2 business days 90 % of the time  Standard incident management targets or consultation per agreed work plan.		

A Service Standard Review is being undertaken but will not be completed for the 2019 Budget. It is anticipated that the review will be completed during the 2020 Budget process.

### Computer & Communications Technology Infrastructure

Activity	Type	Service Level Description	Status	2016	2017	2018	2019	
Enterprise Planning & Architecture	• Telephone • Wireless Telecommunication & Devices	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	100%	99.50%	
			Actual	Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases	Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases	99.996%		
		• Internet • Wireless Network	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets Service Availability 24/7/365 with 99% up time	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	100%	99.50%
				Actual	Standard incident management targets Service Availability 24/7/365 with 99% up time	Standard incident management targets Service Availability 24/7/365 with 99% up time	99.50%	
	Wired Network	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets. Service availability is 24/7/365 excluding scheduled maintenance and releases 99.99% Availability between 9:00am – 5:00pm on business days. *Availability time excludes scheduled maintenance.	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets. Service availability is 24/7/365 excluding scheduled maintenance and releases	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets. Service availability is 24/7/365 excluding scheduled maintenance and releases	100%	99.50%	
			Actual	99.99% Availability between 9:00am – 5:00pm on business days. *Availability time excludes scheduled maintenance.	99.99% Availability between 9:00am – 5:00pm on business days. *Availability time excludes scheduled maintenance.	99.50%		
		• Email • Enterprise Fax	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time Standard incident management targets Service availability 24/7/365 with 98% up time (excluding scheduled maintenance)	Approved	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays). Email Response within 2 business days 90% of the time	100%	99.95%
				Actual	Standard incident management targets Service availability 24/7/365 with 98% up time (excluding scheduled maintenance)	Standard incident management targets Service availability 24/7/365 with 98% up time (excluding scheduled maintenance)	99.999%	

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**Computer & Communications Technology Infrastructure (Continued)**

Activity	Type	Service Level Description	Status	2016	2017	2018	2019
Computing Infrastructure	Application Platforms	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	
		Email Response within 2 business days 90% of the time Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases	Actual	Email Response within 2 business days 90% of the time Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases	Email Response within 2 business days 90% of the time Standard incident management targets Service availability is 24/7/365 excluding scheduled maintenance and releases		
	Server Computing Hardware	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	
		Email Response within 1 business day 90% of the time Standard incident management targets Service Availability 24/7/365 with 99.50% up time (excluding scheduled maintenance) On-site support 7:00am - 5:00pm on business days, with on-call support for off-hours.	Actual	Email Response within 1 business day 90% of the time Standard incident management targets Service Availability 24/7/365 with 99.50% up time (excluding scheduled maintenance) On-site support 7:00am - 5:00pm on business days, with on-call support for off-hours.	Email Response within 1 business day 90% of the time Standard incident management targets Service Availability 24/7/365 with 99.50% up time (excluding scheduled maintenance) On-site support 7:00am - 5:00pm on business days, with on-call support for off-hours.		
	Data Storage Platform	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	
		Email Response within 2 business days 90% of the time Standard incident management targets Service availability 24/7/365 with 99.50% up time	Actual	Email Response within 2 business days 90% of the time Standard incident management targets Service availability 24/7/365 with 99.50% up time.	Email Response within 2 business days 90% of the time Standard incident management targets Service availability 24/7/365 with 99.50% up time.		
	Enterprise Printing & Peripherals	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	
		Email Response within 2 business days 90% of the time Standard incident management targets. Service Availability 24/7/365 with 99% up time	Actual	Email Response within 2 business days 90% of the time Standard incident management targets. Service Availability 24/7/365 with 99% up time	Email Response within 2 business days 90% of the time Standard incident management targets. Service Availability 24/7/365 with 99% up time		
	Client Computing Hardware	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	
		Email Response within 2 business days 90% of the time Standard incident management targets	Actual	Email Response within 2 business days 90% of the time Standard incident management targets	Email Response within 2 business days 90% of the time Standard incident management targets		

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Enterprise IT Planning & Client Services

Activity	Type	Service Level Description	Status	2016	2017	2018	2019
Enterprise Planning & Architecture	<ul style="list-style-type: none"> <li>Enterprise Architecture – Blueprint</li> <li>Portfolio Investment Management</li> <li>Enterprise wide IT strategic plan - IT Strategic Planning</li> <li>I&amp;T Division Business Strategy/Plan - IT Strategic Planning</li> <li>Business Continuity Planning</li> <li>Risk Assessments</li> <li>IT Policies, Standards &amp; Research</li> </ul>	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	100%	100%
		Email Response within 2 business days 90% of the time.	Actual	Email Response within 2 business days 90% of the time.	Email Response within 2 business days 90% of the time.	100%	
		Consultation or per agreed work plan / In support of I&T services		Consultation or per agreed work plan / In support of I&T services	Consultation or per agreed work plan / In support of I&T services		
Client Support, Advice & Consultation	Service Desk	Support is available from the Service Desk Mon-Fri 7:00a.m to 5:00 p.m. All other hours (evenings/overnight) and weekend/holidays, limited support is available. Response Targets: - Phone: 80% of Calls Answered within 1 minute - Voicemail: Response within 4 hours - E-Mail: Response within 48 hours	Approved	Support is available from the Service Desk Mon-Fri 7:00a.m to 5:00 p.m. All other hours (evenings/overnight) and weekend/holidays, limited support is available. Response Targets: - Phone: 80% of Calls Answered within 1 minute - Voicemail: Response within 4 hours - E-Mail: Response within 48 hours	Support is available from the Service Desk Mon-Fri 7:00a.m to 5:00 p.m. All other hours (evenings/overnight) and weekend/holidays, limited support is available. Response Targets: - Phone: 80% of Calls Answered within 1 minute - Voicemail: Response within 4 hours - E-Mail: Response within 48 hours	100%	80%
		Desktop Management (Workstations, Peripherals, Software) Support available Mon-Fri 8:30 a.m. to 4:30 p.m. (excluding statutory holidays).	Actual	Desktop Management (Workstations, Peripherals, Software) Support available Mon-Fri 8:30 a.m. to 4:30 p.m. (excluding statutory holidays).	Desktop Management (Workstations, Peripherals, Software) Support available Mon-Fri 8:30 a.m. to 4:30 p.m. (excluding statutory holidays).	72.37%	
		Both Service Desk and Desktop Management incidents are prioritized and resolved in accordance with standard Incident Management (IM) Targets. Standard Incident Management Resolution Targets: Priority 1: 2 business hours Priority 2: 8 business hours (1 day) Priority 3: 24 business hours (3 days) Priority 4: 48 business hours (6 days)		Both Service Desk and Desktop Management incidents are prioritized and resolved in accordance with standard Incident Management (IM) Targets. Standard Incident Management Resolution Targets: Priority 1: 2 business hours Priority 2: 8 business hours (1 day) Priority 3: 24 business hours (3 days) Priority 4: 48 business hours (6 days)	Both Service Desk and Desktop Management incidents are prioritized and resolved in accordance with standard Incident Management (IM) Targets. Standard Incident Management Resolution Targets: Priority 1: 2 business hours Priority 2: 8 business hours (1 day) Priority 3: 24 business hours (3 days) Priority 4: 48 business hours (6 days)		
	Business Process Analysis and Design	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays).	100%	100%
		Email Response within 2 business days 90% of the time.	Actual	Email Response within 2 business days 90% of the time.	Email Response within 2 business days 90% of the time.	100%	
		Consultation or per agreed work plan		Consultation or per agreed work plan	Consultation or per agreed work plan		
Client Relationship Management		Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	100%
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time	100%	
		Escalations within 1 business day 90% of the time		Escalations within 1 business day 90% of the time	Escalations within 1 business day 90% of the time		
		Consultation or per agreed work plan		Consultation or per agreed work plan	Consultation or per agreed work plan		
	<ul style="list-style-type: none"> <li>Business Requirement Analysis</li> <li>Business Case Co-ordination</li> <li>IT Consultation &amp; Facilitation</li> </ul>	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	100%
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time	100%	

A Service Standard Review is being undertaken but will not be completed for the 2019 Budget. It is anticipated that the review will be completed during the 2020 Budget process.

**Enterprise IT Planning & Client Services (Continued)**

Activity	Type	Service Level Description	Status	2016	2017	2018	2019
Client Support, Advice & Consultation	Service Level Management	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays)	100%	100%
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time	100%	
	IT Contract Management	Support Services provided during core business hours, Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Approved	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	Core business hours are Monday to Friday 8:30am – 4:30pm (excluding statutory holidays).	100%	100%
		Email Response within 2 business days 90% of the time.	Actual	Email Response within 2 business days 90% of the time.	Email Response within 2 business days 90% of the time.	98%	
	IT Training & Education	Core business hours: Monday – Friday 8:30am – 4:30pm (excluding weekends and holidays)	Approved	Core business hours: Monday – Friday 8:30am – 4:30pm (excluding weekends and holidays)	Core business hours: Monday – Friday 8:30am – 4:30pm (excluding weekends and holidays)	100%	100%
		Email Response within 2 business days 90% of the time Per agreed work plan / schedule 99.00% Availability between 8:30am - 4:30pm	Actual	Email Response within 2 business days 90% of the time Per agreed work plan / schedule 99.00% Availability between 8:30am - 4:30pm	Email Response within 2 business days 90% of the time Per agreed work plan / schedule 99.00% Availability between 8:30am - 4:30pm	100%	
IT Project Management	<ul style="list-style-type: none"> <li>IT Project Management Services</li> <li>IT Project Management Expertise &amp; Support</li> <li>IT Project Management Methodologies and Tools</li> </ul>	Support Services provided during core business hours, Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Approved	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	Core business hours are Monday to Friday 9:00am – 5:00pm (excluding statutory holidays)	100%	
		Email Response within 2 business days 90% of the time	Actual	Email Response within 2 business days 90% of the time	Email Response within 2 business days 90% of the time		

A Service Standard Review is being undertaken but will not be completed for the 2019 Budget. It is anticipated that the review will be completed during the 2020 Budget process.

## Appendix 4

### Summary of 2019 Service Changes

Description (\$000s)	Service Changes						Total Service Changes			Incremental Change			
	Business IT Solutions		Computer & Communications		Enterprise IT Planning & Client		\$	\$	#	2020 Plan		2021 Plan	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Pos.	Net	Pos.	Net	Pos.
<b>Base Changes:</b>													
<b>Base Expenditure Changes</b>													
Physical Server Consolidation using Virtual Environments			(36.9)	(36.9)			(36.9)	(36.9)					
Optimize & Rationalize App Development in City Divisions					(1,324.7)	(1,324.7)	(1,324.7)	(1,324.7)					
<b>Sub-Total</b>			(36.9)	(36.9)	(1,324.7)	(1,324.7)	(1,361.6)	(1,361.6)					
<b>Service Efficiencies</b>													
Savings from Decommissioning Older Technology/Sourcing Internal Service Delivery	(474.3)	(474.3)	(298.6)	(298.6)			(773.0)	(773.0)					
<b>Sub-Total</b>	(474.3)	(474.3)	(298.6)	(298.6)			(773.0)	(773.0)					
<b>Total 2019 Service Changes</b>	(474.3)	(474.3)	(335.5)	(335.5)	(1,324.7)	(1,324.7)	(2,134.6)	(2,134.6)					

## 2019 Operating Budget - Staff Recommended Service Changes Summary by Service (\$000's)

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		<b>2019 Staff Recommended Base Budget Before Service Changes:</b>	135,303.6	54,568.5	80,735.0	857.00	3,586.4	1,104.7

17206	Reduction - OpenText Web Content Management - Equity Impact
-------	---

51	Positive
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**Description:**

OpenText WCM for Website Development (toronto.ca) has been decommissioned and replaced by Wordpress (OpenSource) for free Web Content Management Solution (WCM) / toronto.ca / WordPress + All Front-End Applications. Transition from OpenText to WordPress Open Source eliminates need to pay software maintenance on the WCM platform

**Service Level Impact:**

N/A

**Equity Statement:**

The City of Toronto launched the new toronto.ca website in December 2017, migrating from Open Text to WordPress, and the associated budget reduction proposal's equity impact is medium positive. As a result, Persons with Disabilities' access to information about City of Toronto programs, services, initiatives and events will be positively impacted. By using the WordPress platform, the City is able to support an "Accessible by Design" approach to publishing web content that conforms to the Web Content Accessibility Guidelines (WCAG) 2.0 Level AA. This allows the public, regardless of ability, to have the opportunity to more easily connect and engage with the City and its services. A post-launch survey of the public, including people from a variety of equity-seeking groups and abilities, confirmed a ninety-eight (98) percent (%) satisfaction rate.

**Service:** Business IT Solutions

Total Staff Recommended Changes:	(31.8)	0.0	(31.8)	0.00	0.0	0.0
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<b>Staff Recommended Service Changes:</b>	<b>(31.8)</b>	<b>0.0</b>	<b>(31.8)</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>
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17115	Reduction - Realized through sourcing /internal delivery
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51	No Impact
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**Description:**

Reviewing licenses and hardware for efficiency savings. Currently, there are applications that have excess licenses based on existing usage loads. In addition, savings are possible by migrating and/or consolidating software to lower cost hardware/infrastructure.

**Service Level Impact:**

N/A

## 2019 Operating Budget - Staff Recommended Service Changes Summary by Service (\$000's)

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		<b>Equity Statement:</b>						
		The proposal is unlikely to have an equity impact.						
		<b>Service: Business IT Solutions</b>						
		Total Staff Recommended Changes:	(164.5)	0.0	(164.5)	0.00	0.0	0.0
		<b>Service: Computer &amp; Communications Technology Infrastructure</b>						
		Total Staff Recommended Changes:	(91.9)	0.0	(91.9)	0.00	0.0	0.0
		<b>Staff Recommended Service Changes:</b>	<b>(256.3)</b>	<b>0.0</b>	<b>(256.3)</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>

17116	Reduction - Realized By Decommissioning Older (EOL) Tech							
51	No Impact	<b>Description:</b>						
		Decommissioning of old software and hardware as well as services that are no longer required. Currently, I&T incur costs for licenses, maintenance and paid services to support the City's technology users. After completing an internal review, I&T have found several applications, infrastructure and services that are no longer required. The result is a savings of costs arising from the ongoing use, support and maintenance of these items.						
		<b>Service Level Impact:</b>						
		None.						
		<b>Equity Statement:</b>						
		The proposal is unlikely to have an equity impact.						
		<b>Service: Business IT Solutions</b>						
		Total Staff Recommended Changes:	(278.1)	0.0	(278.1)	0.00	0.0	0.0
		<b>Service: Computer &amp; Communications Technology Infrastructure</b>						
		Total Staff Recommended Changes:	(206.8)	0.0	(206.8)	0.00	0.0	0.0
		<b>Staff Recommended Service Changes:</b>	<b>(484.9)</b>	<b>0.0</b>	<b>(484.9)</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>

## 2019 Operating Budget - Staff Recommended Service Changes Summary by Service (\$000's)

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change														
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions																
17117		Reduction - Server Consolidation Through Virtualization																				
51	No Impact	<b>Description:</b>																				
<p>I&amp;T has adopted a virtual first strategy since 2010 for server provisioning to reduce the number of physical servers by virtualization where each virtual server acts like a unique physical device, capable of running its own operating system. Typical virtual servers are only option provided for net new or replacement servers unless there are technical or business reasons not supporting virtualization. Server consolidation through virtualization have generally become more cost effective than traditional physical servers, but there are exceptions. Incremental savings due to server consolidation and virtualization, where applicable, have been included in the operating budget submission in past years. The plan is continue to target remaining physical servers to be replaced with virtual servers and increase the virtualization ratio.</p> <p><b>Service Level Impact:</b></p> <p>N/A</p> <p><b>Equity Statement:</b></p> <p>The proposal is unlikely to have an equity impact.</p> <p><b>Service:</b> Computer &amp; Communications Technology Infrastructure</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Total Staff Recommended Changes:</td> <td style="text-align: right;">(36.9)</td> <td style="text-align: right;">0.0</td> <td style="text-align: right;">(36.9)</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.0</td> <td style="text-align: right;">0.0</td> </tr> <tr> <td><b>Staff Recommended Service Changes:</b></td> <td style="text-align: right;"><b>(36.9)</b></td> <td style="text-align: right;"><b>0.0</b></td> <td style="text-align: right;"><b>(36.9)</b></td> <td style="text-align: right;"><b>0.00</b></td> <td style="text-align: right;"><b>0.0</b></td> <td style="text-align: right;"><b>0.0</b></td> </tr> </table>									Total Staff Recommended Changes:	(36.9)	0.0	(36.9)	0.00	0.0	0.0	<b>Staff Recommended Service Changes:</b>	<b>(36.9)</b>	<b>0.0</b>	<b>(36.9)</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>
Total Staff Recommended Changes:	(36.9)	0.0	(36.9)	0.00	0.0	0.0																
<b>Staff Recommended Service Changes:</b>	<b>(36.9)</b>	<b>0.0</b>	<b>(36.9)</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>																

17169		Optimize&Rationalize App/Development in CityDivisions							
51	No Impact	<b>Description:</b>							
<p>In 2018, I&amp;T completed a City-wide IT Industry Benchmark study, conducted by Gartner Inc., to examine City-wide budget and staffing levels across industry standard IT functions and in comparison to public and private sector peer organizations. The study identified that City-wide IT was generally in alignment to IT budget and staffing allocations in comparison to peer organizations; however the allocation of budget and staffing to IT application development and support functions was identified for further review having been found slightly higher than industry average/comparisons. Utilizing the IT Benchmark study, I&amp;T has identified an opportunity to consolidate City-wide application development and support to achieve synergy and savings, representing a 4.2% reduction in the budget allocated to divisional IT application development and support functions. In order to realize these savings of \$1.325 million, I&amp;T is undertaking an overall City-wide IT Operating Model review in 2019. In parallel, the I&amp;T division will be undertaking an application roadmap review which in future will determine potential opportunities to further rationalize/optimize IT assets.</p> <p><b>Service Level Impact:</b></p> <p>To be assessed</p>									

**2019 Operating Budget - Staff Recommended Service Changes  
Summary by Service (\$000's)**

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		<b>Equity Statement:</b>						
		To be assessed						
		<b>Service:</b> Enterprise IT Planning & Client Services						
		Total Staff Recommended Changes:	(1,324.7)	0.0	(1,324.7)	0.00	0.0	
		<b>Staff Recommended Service Changes:</b>	<b>(1,324.7)</b>	<b>0.0</b>	<b>(1,324.7)</b>	<b>0.00</b>	<b>0.0</b>	
		<b>Summary:</b>						
		<b>Staff Recommended Service Changes:</b>	<b>(2,134.6)</b>	<b>0.0</b>	<b>(2,134.6)</b>	<b>0.00</b>	<b>0.0</b>	
		<b>Staff Recommended Base Budget:</b>	<b>133,169.0</b>	<b>54,568.5</b>	<b>78,600.4</b>	<b>857.00</b>	<b>3,586.4</b>	
							<b>1,104.7</b>	

## Appendix 5

### Summary of 2019 New / Enhanced Service Priorities

New / Enhanced Service Description (in \$000s)	New and Enhanced Services Priorities						Total			Incremental Change			
	Business IT Solutions		Computer & Communications Technology		Enterprise IT Planning & Client Services		\$		Position	2020 Plan		2021 Plan	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	#	Net	Pos.	Net	Pos.
<b>Enhanced Service Priorities</b>													
<b>Council Directed:</b>													
Risk Management Cyber Security & Compliance					230.3	230.3	230.3	230.3	2.0	82.2		8.0	
<b>Sub-Total Council Directed</b>					<b>230.3</b>	<b>230.3</b>	<b>230.3</b>	<b>230.3</b>	<b>2.0</b>	<b>82.2</b>		<b>8.0</b>	
<b>Staff Initiated:</b>													
Cyber Security Awareness (AG)					309.2	309.2	309.2	309.2	1.0	38.4		13.7	
<b>Sub-Total Staff Initiated</b>					<b>309.2</b>	<b>309.2</b>	<b>309.2</b>	<b>309.2</b>	<b>1.0</b>	<b>38.4</b>		<b>13.7</b>	
<b>Total Enhanced Services</b>					<b>539.5</b>	<b>539.5</b>	<b>539.5</b>	<b>539.5</b>	<b>3.0</b>	<b>120.7</b>		<b>21.7</b>	
<b>New Service Priorities</b>													
<b>Total 2019 New / Enhanced Services</b>					<b>539.5</b>	<b>539.5</b>	<b>539.5</b>	<b>539.5</b>	<b>3.0</b>	<b>120.7</b>		<b>21.7</b>	

## 2019 Operating Budget - Staff Recommended New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
16695		Cyber Security Awareness (AG)						
72	No Impact	<b>Description:</b> Response to Auditor General report titled Audit of Information Technology Vulnerability and Penetration Testing - Phase II: Internal Penetration Testing, Part 1 - Accessibility of Network and Servers  <b>Service Level Impact:</b> to be assessed  <b>Equity Statement:</b> None.  <b>Service:</b> Enterprise IT Planning & Client Services						
Total Staff Recommended Changes:			309.2	0.0	309.2	1.00	38.4	13.7
<b>Staff Recommended New/Enhanced Services:</b>			<b>309.2</b>	<b>0.0</b>	<b>309.2</b>	<b>1.00</b>	<b>38.4</b>	<b>13.7</b>

16697		Risk Management Cyber Security & Compliance
72	No Impact	<b>Description:</b>

**Category:**

71 - Operating Impact of New Capital Projects  
72 - Enhanced Services-Service Expansion

74 - New Services  
75 - New Revenues

## 2019 Operating Budget - Staff Recommended New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		

Since 2006, when the Personal Information Assessment (PIA) function was first established, the City has been getting into more complex service delivery models with cloud services and adopting new technologies that involve the collection of personally identifiable information (PII), or sharing PII with third parties in new ways or across divisional boundaries. The division needs to address this key area in an effective manner to meet our obligations to effectively support initiatives in managing legislated privacy. Below is a sample of major initiatives in 2018 & 2019 where privacy resources are required: a) City Clerk's business systems improvements (T-Recs / Open Text, Amanda 7 FOI tracking, Privacy Management); b) Human Services Integration (Children's Services, Employment & Social Services, Shelter Services & Housing Administration); c) Salesforce CRM (Corporate IT, 311 e-CRM); d) ML&S Digitization; e) TESS Paperless Office; f) Long Term Care Homes - Electronic Health Care Records; g) PF&R CLASS Replacement; h) PF&R Volunteer Management Solution; i) Chief Transformation Officer projects (Smart Cities initiative, Waterfront Secretariat - Sidewalk Labs); j) Governance and Risk Management in Cloud Services, Data Analytics and Data Sharing activities between program areas and external parties. The division needs to address this key area in an effective manner to meet our obligations to effectively support initiatives in managing legislated privacy requirements. The RMCSC unit in the corporate Information and Technology Division requires the addition of two (2.0 FTE) permanent Senior Privacy Specialist resources to assist with the volume of work being undertaken in corporate I&T and other divisions. In addition, this business case aligns to support operational processes including project governance, such as IT Project Review Team reviews of projects privacy compliance, Cloud Computing Framework reviews, and procurement processes such as RFP development, evaluations, and contract negotiations. Privacy resources provide expert advice at different stages of projects, for example at the planning and procurement stages, and during implementation.

**Service Level Impact:**

To manage significant demand for Privacy Impact Assessments – annual demand of approx. 35 assessments, 10 funded through capital projects. Each resource can address approximately 3-4 PIAs per year for complex initiatives – resources are also involved in Privacy consultations (not full PIA assessments). Privacy Impact Assessments address risk to ensure privacy requirements (MFIPPA) are addressed and mitigated as solutions/enhancements are deployed. When a PIA is done, staff identify where PII is in the business process and how it should be protected. They also educate the program area on what they need to keep secure and confidential, make recommendations on accountability for that information, and train staff on what needs to be protected. PIAs provide senior management with early warning if a project has a major privacy compliance issue and makes recommendations to avoid or mitigate privacy issues before a breach occurs and the public is affected, thus protecting the City's reputation. PIAs also ensure openness and transparency by ensuring that systems are designed with PII protected but all other information is open and available to the public.

**Equity Statement:**

N/A

**Service:** Enterprise IT Planning & Client Services

Total Staff Recommended Changes:	230.3	0.0	230.3	2.00	82.2	8.0
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**2019 Operating Budget - Staff Recommended New and Enhanced Services  
Summary by Service (\$000's)**

Form ID		Corporate Services  Program - Information & Technology	Adjustments				2020 Plan Net Change	2021 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
<b>Staff Recommended New/Enhanced Services:</b>			230.3	0.0	230.3	2.00	82.2	8.0

**Summary:**

<b>Staff Recommended New / Enhanced Services:</b>			539.5	0.0	539.5	3.00	120.7	21.7
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**Category:**

71 - Operating Impact of New Capital Projects  
72 - Enhanced Services-Service Expansion

74 - New Services  
75 - New Revenues

## Appendix 6

### 2019 User Fee Rate Changes

Table 6a

#### User Fees Adjusted for Inflation and Other

Rate Description	Service	Fee Category	Fee Basis	2018	2019		2020	2021
				Approved Rate	Inflationary Adjusted Rate	Budget Rate	Plan Rate	Plan Rate
Property data map (1:4,000)	Information & Technology	Full Cost Recovery	Per map	\$4.65	\$0.07	\$4.72	\$4.83	\$4.93
Paper index map illustrating the boundaries of the PDM maps	Information & Technology	Full Cost Recovery	Per map	\$28.99	\$0.43	\$29.42	\$30.10	\$30.76
Property data map (1:2,000)	Information & Technology	Full Cost Recovery	Per map	\$6.94	\$0.10	\$7.04	\$7.21	\$7.36
Municipal map book- 1:4,000	Information & Technology	Full Cost Recovery	Book	\$46.39	\$0.70	\$47.09	\$48.17	\$49.23
Municipal map book set - 1:4,000	Information & Technology	Full Cost Recovery	Per map	\$162.37	\$2.44	\$164.81	\$168.60	\$172.31
Set of four property data map district book - 1:2,000	Information & Technology	Full Cost Recovery	Per map	\$1,507.55	\$22.61	\$1,530.16	\$1,565.36	\$1,599.79
Electronic pdf municipal map book set	Information & Technology	Full Cost Recovery	Per map	\$162.37	\$2.44	\$164.81	\$168.60	\$172.31
Community council boundaries & electoral wards map - 11"x17"	Information & Technology	Full Cost Recovery	Per map	\$11.59	\$0.17	\$11.76	\$12.03	\$12.30
Community council boundaries & electoral wards maps - 24"x36"	Information & Technology	Full Cost Recovery	Per map	\$17.40	\$0.26	\$17.66	\$18.07	\$18.46
Community council boundaries & electoral wards map - 36"x70"	Information & Technology	Full Cost Recovery	Per map	\$28.99	\$0.43	\$29.42	\$30.10	\$30.76
36"x60" Paper or PDF map at 1:30,000 scale or provide non-ge	Information & Technology	Full Cost Recovery	Per map	\$28.99	\$0.43	\$29.42	\$30.10	\$30.76
Provide paper or electronic PDF Ward maps - 36"x26"	Information & Technology	Full Cost Recovery	Per map	\$6.94	\$0.10	\$7.04	\$7.21	\$7.36
Provide paper or electronic PDF Ward maps - 11"x17".	Information & Technology	Full Cost Recovery	Per map	\$5.79	\$0.09	\$5.88	\$6.01	\$6.14
Aerial photo enlargement (letter sized)	Information & Technology	Full Cost Recovery	Print	\$5.79	\$0.09	\$5.88	\$6.01	\$6.14
Aerial photo enlargement - 11"x17"	Information & Technology	Full Cost Recovery	Print	\$8.13	\$0.12	\$8.25	\$8.44	\$8.63
Electronic property data maps	Information & Technology	Full Cost Recovery	Per map	\$115.98	\$1.74	\$117.72	\$120.43	\$123.08
ESM topographic mapping ( electronic CAD).	Information & Technology	Full Cost Recovery	Sq Km.	\$347.89	\$5.22	\$353.11	\$361.23	\$369.18
Digital terrain model, full resolution electronic maps.	Information & Technology	Full Cost Recovery	Sq Km.	\$289.91	\$4.35	\$294.26	\$301.03	\$307.65

Rate Description	Service	Fee Category	Fee Basis	2018	2019		2020	2021
				Approved Rate	Inflationary Adjusted Rate	Budget Rate	Plan Rate	Plan Rate
Parcel mapping (electronic)	Information & Technology	Full Cost Recovery	Sq Km.	\$139.16	\$2.09	\$141.25	\$144.50	\$147.68
Orthoimage 0.075m resolution quad tiles (electronic)	Information & Technology	Full Cost Recovery	Image Tile	\$28.99	\$0.43	\$29.42	\$30.10	\$30.76
Orthoimages 0.30 resolution electronic maps.	Information & Technology	Full Cost Recovery	Image Tile	\$57.98	\$0.87	\$58.85	\$60.20	\$61.53
Electronic images of 2003 aerial photos (black & white 1:6,0	Information & Technology	Full Cost Recovery	Image Tile	\$17.40	\$0.26	\$17.66	\$18.07	\$18.46
Create enterprise stereoscopic electronic models DVP - 2003	Information & Technology	Full Cost Recovery	Per Transaction	\$57.98	\$0.87	\$58.85	\$60.20	\$61.53
Ravine Ward Map 11"x17" PDF or Paper drawing	Information & Technology	Full Cost Recovery	Per map	\$11.59	\$0.17	\$11.76	\$12.03	\$12.30
Ravine By-Law Maps 11"x17" PDF or Paper drawing	Information & Technology	Full Cost Recovery	Per map	\$4.64	\$0.07	\$4.71	\$4.82	\$4.92
Provides Digital or Paper drawing	Information & Technology	Full Cost Recovery	Case	\$75.37	\$1.13	\$76.50	\$78.26	\$79.98
Archival former Toronto topographic map, 1985 Electoral Ward Boundaries (Paper or PDF)	Information & Technology	Full Cost Recovery	Per map	\$6.94	\$0.10	\$7.04	\$7.21	\$7.36
File formats - ESRI Shape File, DGN, DWG, DXF (per dataset)	Information & Technology	Full Cost Recovery	Set	\$1,507.55	\$22.61	\$1,530.16	\$1,565.36	\$1,599.79
File formats - ESRI Shape File, DGN, DWG, DXF (per feature)	Information & Technology	Full Cost Recovery	Per Transaction	\$376.89	\$5.65	\$382.54	\$391.34	\$399.95
The District Maps cover one City of Toronto District Service	Information & Technology	Full Cost Recovery	Per map	\$17.40	\$0.26	\$17.66	\$18.07	\$18.46
PDM set, Street Centreline TCL, Terrain Model & Orthoimagery	Information & Technology	Full Cost Recovery	Package	\$2,319.29	\$34.79	\$2,354.08	\$2,408.22	\$2,461.20

## Appendix 7

### 2019 Capital Budget; 2020 - 2028 Capital Plan Including Carry Forward Funding

(In \$000s)	Total App'd Cash Flows to Date*	2019 Budget	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2019 - 2028 Total	Total Project Cost
<b>Total Expenditures by Category</b>													
<b>Legislated</b>													
AODA Compliance for City Applications	1,383	1,969	884	320	-	-	-	-	-	-	-	3,173	3,173
EDHR - Complaints Management System	-	300	15	15	15	-	-	-	-	-	-	345	345
<b>Sub-Total</b>	<b>1,383</b>	<b>2,269</b>	<b>899</b>	<b>335</b>	<b>15</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,518</b>	<b>3,518</b>
<b>State of Good Repair</b>													
Business Applications Service Monitoring	-	150	150	280	-	-	-	-	-	-	-	580	-
Business Continuity	-	585	140	140	-	-	-	-	-	-	-	865	-
Capital Portfolio Resource Requirement	-	144	-	-	-	-	-	-	-	-	-	144	-
Capital Portfolio Resource Requirements	-	2,749	-	-	-	-	-	-	-	-	-	2,749	-
Desktop Hardware Replacement	-	9,166	4,747	8,732	9,099	12,647	8,020	5,267	9,833	10,205	14,006	91,722	-
Desktop Software Replacement	-	1,367	14,016	363	201	203	1,322	15,408	390	211	213	33,694	-
DIRECTORY SERVICES - Implementation	523	1,203	706	924	-	-	-	-	-	-	-	2,833	2,833
Disaster Recovery	37,960	876	1,050	1,050	1,050	1,050	1,302	-	-	-	-	6,378	37,960
Disaster Recovery Pgm. (Prev. BCP)	-	716	-	-	-	-	-	-	-	-	-	716	716
DLAN Cloud Services Implementation	165	165	-	-	-	-	-	-	-	-	-	165	165
Domino Decommissioning Strat & Implementation	3,668	846	-	-	-	-	-	-	-	-	-	846	3,668
Enterprise Server Replacement	-	2,309	2,269	2,229	2,189	2,350	2,350	2,350	2,350	2,350	2,350	23,096	-
Enterprise Software Replacement	-	1,159	637	637	687	1,087	1,187	1,187	1,187	1,187	1,187	10,142	-
Enterprise Solution Delivery Management Framework	2,085	45	-	-	-	-	-	-	-	-	-	45	2,085
Enterprise Storage Replacement	-	1,083	1,800	950	1,000	950	1,300	1,200	1,000	975	975	11,233	-
File Services Migration	455	586	170	549	-	-	-	-	-	-	-	1,305	1,305
Geospatial Tool Enhancements	250	253	82	100	-	-	-	-	-	-	-	435	435
IBMS Review & Transformation	3,300	1,898	2,087	1,701	-	-	-	-	-	-	-	5,686	5,686
Integrated Business Mgmt System - Review and Trans	-	-	379	-	-	-	-	-	-	-	-	379	379
IT Risk Mgmt Framework	5,189	1,070	-	-	-	-	-	-	-	-	-	1,070	5,189
Network Asset Replacement	-	4,563	3,880	3,050	3,410	3,630	3,330	2,730	3,280	2,910	3,330	34,113	-
Network Security Replacement	-	505	870	964	488	592	396	1,041	905	460	615	6,836	-
Project Portfolio Management System (SOGR)	-	465	900	400	400	400	-	-	-	-	-	2,565	2,565
Quality Assurance Testing Software Supgrade	-	200	-	-	-	-	-	-	-	-	-	200	200
Quality Assurance Testing Software Upgrade	2,069	75	500	225	200	-	-	-	-	-	-	1,000	2,144
SAP Solution Manager v7.2 Upgrade (SOGR)	-	564	-	-	-	-	-	-	-	-	-	564	-
TEMS REPLACEMENT-Design	150	450	-	-	-	-	-	-	-	-	-	450	450
Wellbeing Toronto v3 2018	450	450	-	-	-	-	-	-	-	-	-	450	450
<b>Sub-Total</b>	<b>56,264</b>	<b>33,642</b>	<b>34,383</b>	<b>22,294</b>	<b>18,724</b>	<b>22,909</b>	<b>19,207</b>	<b>29,183</b>	<b>18,945</b>	<b>18,298</b>	<b>22,676</b>	<b>240,261</b>	<b>66,230</b>
<b>Service Improvement</b>													
Application Portfolio Tools & Rationalization	1,387	-	-	118	-	-	-	-	-	-	-	118	1,387
Artificial Intelligence (AI) for SSHA and TPH	-	500	2,500	-	-	-	-	-	-	-	-	3,000	3,000
Asset Management Solution - Transportation	1,395	835	-	-	-	-	-	-	-	-	-	835	1,395
Business Sys Improvements - ECS Phase 2	300	455	-	-	-	-	-	-	-	-	-	455	455
CAPITAL PROJECT PLANNING SYS ENHANCEMENTS	-	81	-	-	-	-	-	-	-	-	-	81	-
CloudBasedHumanResourcesInformationSystem (CHRIS)	-	5,334	562	-	-	-	-	-	-	-	-	5,896	5,896
Corporate Geospatial Strategy Roadmap Implementati	-	309	1,125	826	730	-	-	-	-	-	-	2,990	2,990
ECS Capital Project and Program Management Process	446	82	-	-	-	-	-	-	-	-	-	82	446
ECS Cloud Deployment-Construction Project and DMS	-	568	785	2,151	1,164	-	-	-	-	-	-	4,668	4,668
Electronic Service Delivery Portal-Bldg Permits	3,708	1,175	-	-	-	-	-	-	-	-	-	1,175	3,708
Employee Performance Management (e	-	-	546	762	-	-	-	-	-	-	-	1,308	1,308
Ent Doc & Record Mgmt Solution (ED-CHANGE IN SCOP)	-	750	-	-	-	-	-	-	-	-	-	750	750
Ent Portfolio & Project Mgmt Upgrade 2021	-	-	-	-	150	152	152	167	167	167	167	1,122	-
Enterprise Business Intelligence Implementation	1,698	1,802	1,585	-	-	-	-	-	-	-	-	3,387	3,387
Enterprise Collaboration Foundation	2,419	3,650	-	-	-	-	-	-	-	-	-	3,650	3,650
Enterprise Documents and Records Management Phase2	-	1,375	-	-	-	-	-	-	-	-	-	1,375	1,375
Enterprise eLearning HR	3,090	281	-	-	-	-	-	-	-	-	-	281	3,090
Enterprise eLearning Initiative (ELI) Agreement	-	277	-	-	-	-	-	-	-	-	-	277	277
eRecruitment	5,208	4,034	563	-	-	-	-	-	-	-	-	4,597	8,670
eTime Enterprise Rollout	1,623	1,441	-	-	-	-	-	-	-	-	-	1,441	1,623
eTime Scheduling Enterprise Rollout	14,950	1,970	-	-	-	-	-	-	-	-	-	1,970	16,920
HR ELECTRONIC SKILLS ASS. SOLUTION	654	86	-	-	-	-	-	-	-	-	-	86	654
Work Mgmt Solution-Transportation Scope Change	-	-	-	-	-	-	-	-	-	-	-	-	-
HR Labour Relations Information System (LRIS)	-	505	-	-	-	-	-	-	-	-	-	505	505
Internal Private Cloud Services	-	1,533	1,777	-	-	-	-	-	-	-	-	3,310	3,310
IT Audit Project Health Check Framework	-	130	-	-	-	-	-	-	-	-	-	130	130
MLS Centralized Datamart	4,597	1,376	1,800	-	-	-	-	-	-	-	-	3,176	6,997
MLS Modernization-Phase 2	4,675	2,500	2,489	5,804	-	-	-	-	-	-	-	10,793	10,793
OCC HEALTH & SAFETY APP 2016-2019	1,753	717	762	429	-	-	-	-	-	-	-	1,908	1,908
OnLine Portal Services for City Planning	1,195	794	480	-	-	-	-	-	-	-	-	1,274	1,274
Open Data Master Plan Implementation	713	878	1,036	158	-	-	-	-	-	-	-	2,072	2,072

(In \$000s)	Total App'd Cash Flows to Date*	2019 Budget	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2019 - 2028 Total	Total Project Cost
<i>PTP Enhancements</i>	-	390	-	-	-	-	-	-	-	-	-	390	390
<i>Publicly Accessible Wi-Fi for City Facilities</i>	-	287	650	282	-	-	-	-	-	-	-	1,219	1,219
<i>Review and Improve Document Management Capabilities</i>	420	181	-	-	-	-	-	-	-	-	-	181	420
<i>SDFA- Online Grant Management System</i>	230	184	50	-	-	-	-	-	-	-	-	234	234
<i>TOP - Online Donation Application</i>	389	309	201	-	-	-	-	-	-	-	-	510	510
<i>Toronto Building Electronic Service Delivery</i>	-	49	-	-	-	-	-	-	-	-	-	49	49
<i>Toronto Building-CRM-Enhanced Complaint Management</i>	347	428	539	-	-	-	-	-	-	-	-	967	967
<i>Web Bus. Cont. Refresh &amp; Redesign</i>	-	22	-	-	-	-	-	-	-	-	-	22	-
<i>Web Information Portal on Dvlpmnt Applications</i>	626	7	-	-	-	-	-	-	-	-	-	7	626
<i>Work Mgmt Solution-Transportation</i>	-	2,350	-	1,200	-	-	-	-	-	-	-	3,550	-
<i>WORKFLOW AUTOMATION &amp; TRACKING</i>	860	58	-	-	-	-	-	-	-	-	-	58	860
<b>Sub-Total</b>	<b>52,683</b>	<b>37,703</b>	<b>17,450</b>	<b>11,730</b>	<b>2,044</b>	<b>152</b>	<b>152</b>	<b>167</b>	<b>167</b>	<b>167</b>	<b>167</b>	<b>69,899</b>	<b>97,913</b>
<b>Growth Related</b>													
<i>Application Portfolio T&amp;R Scope Change</i>	-	(650)	-	-	-	-	-	-	-	-	-	(650)	-
<i>Application Portfolio Tools &amp; Rationalization</i>	-	1,437	-	-	-	-	-	-	-	-	-	1,437	-
<i>CLASS Replacement Planning</i>	-	75	75	-	-	-	-	-	-	-	-	150	150
<i>Consolidated Data Centre</i>	13,600	3,534	1,600	-	-	-	-	-	-	-	-	5,134	15,200
<i>Data Center Scope Change</i>	-	5,151	-	-	-	-	-	-	-	-	-	5,151	-
<i>Data Centre Zones Implementation</i>	-	200	1,066	-	-	-	-	-	-	-	-	1,266	1,266
<i>eCity Program Renewal</i>	-	259	479	148	-	-	-	-	-	-	-	886	-
<i>Enterprise Architecture</i>	-	983	500	500	500	500	500	500	500	500	547	5,530	-
<i>Enterprise Information Security Pgm</i>	-	4,467	2,400	2,400	400	400	123	-	-	-	-	10,190	-
<i>Enterprise Solutions Design &amp; Implementation</i>	-	-	-	-	4,400	5,556	5,001	6,099	6,099	6,099	6,081	39,335	-
<i>IT Planning &amp; Mgmt Transformation Tools</i>	-	-	-	-	2,000	1,787	1,790	1,962	1,962	1,962	1,956	13,419	-
<i>IT Service Process Improvement Program</i>	-	711	878	880	-	-	-	-	-	-	-	2,469	1,816
<i>Major Cap Infrastructure Project Coord. (TOINView)</i>	902	305	116	309	-	-	-	-	-	-	-	730	902
<i>System Enhancements for Licensing Services - MLS</i>	-	24	-	-	-	-	-	-	-	-	-	24	-
<i>Technology Infrastructure Growth</i>	-	-	-	-	4,738	7,015	7,366	8,072	8,072	8,072	8,049	51,384	-
<i>WAN High Speed Fibre Data Services</i>	2,008	150	-	-	-	-	-	-	-	-	-	150	2,008
<i>Workforce Business Intel. Requirements</i>	-	1,020	1,448	-	-	-	-	-	-	-	-	2,468	2,468
<b>Sub-Total</b>	<b>16,510</b>	<b>17,666</b>	<b>8,562</b>	<b>4,237</b>	<b>12,038</b>	<b>15,258</b>	<b>14,780</b>	<b>16,633</b>	<b>16,633</b>	<b>16,633</b>	<b>16,633</b>	<b>139,073</b>	<b>23,810</b>
<b>Total Expenditures by Category (including carry forward from 2018)</b>		<b>91,280</b>	<b>61,294</b>	<b>38,596</b>	<b>32,821</b>	<b>38,319</b>	<b>34,139</b>	<b>45,983</b>	<b>35,745</b>	<b>35,098</b>	<b>39,476</b>	<b>452,751</b>	

\*Life to Date approved cash flows are provided for multi-year capital projects with cash flow approvals prior to 2018, excluding ongoing capital projects (i.e. Civic Improvement projects)













**CITY OF TORONTO**

**Gross Expenditures (\$000's)**

Information & Technology						Current and Future Year Cash Flow Commitments and Estimates						Current and Future Year Cash Flow Commitments and Estimates Financed By											
						2019	2020	2021	2022	2023	Total 2019-2023	Total 2024-2028	Total 2019-2028	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserve 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.																		
Financed By:																							
		Provincial Grants & Subsidies				259	0	0	0	0	259	0	259	259	0	0	0	0	0	0	259		
		Reserves (Ind. "XQ" Ref.)				32,072	29,819	16,925	17,074	21,459	117,349	107,007	224,356	0	0	0	224,356	0	0	0	0	224,356	
		Reserve Funds (Ind."XR" Ref.)				1,526	1,450	1,351	0	0	4,327	0	4,327	0	0	0	4,327	0	0	0	0	4,327	
		Other1 (Internal)				4,461	0	1,175	0	0	5,636	0	5,636	0	0	0	0	0	5,636	0	0	5,636	
		Debt				52,962	30,025	19,145	15,747	16,860	134,739	83,434	218,173	0	0	0	0	0	0	0	218,173	218,173	
<b>Total Program Financing</b>						91,280	61,294	38,596	32,821	38,319	262,310	190,441	452,751	259	0	0	224,356	4,327	0	5,636	0	218,173	452,751

- Status Code Description**
- S2 S2 Prior Year (With 2019 and/or Future Year Cashflow)
  - S3 S3 Prior Year - Change of Scope 2019 and/or Future Year Cost(Cashflow)
  - S4 S4 New - Stand-Alone Project (Current Year Only)
  - S5 S5 New (On-going or Phased Projects)
  - S6 S6 New - Future Year (Commencing in 2020 & Beyond)

- Category Code Description**
- 01 Health and Safety C01
  - 02 Legislated C02
  - 03 State of Good Repair C03
  - 04 Service Improvement and Enhancement C04
  - 05 Growth Related C05
  - 06 Reserved Category 1 C06
  - 07 Reserved Category 2 C07

## Appendix 8

### 2019 Cash Flow and Future Year Commitments Including Carry Forward Funding

(In \$000s)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total 2019 Cash Flow & FY Commits
<b>Expenditures:</b>											
<b>Previously Approved</b>											
<i>AODA Compliance for City Applications</i>	1,969	884	320	-	-	-	-	-	-	-	3,173
<i>Application Portfolio T&amp;R Scope Change</i>	(650)	-	-	-	-	-	-	-	-	-	(650)
<i>Application Portfolio Tools &amp; Rationalization</i>	1,437	-	118	-	-	-	-	-	-	-	1,555
<i>Business Applications Service Monitoring</i>	150	150	280	-	-	-	-	-	-	-	580
<i>Business Continuity</i>	445	-	-	-	-	-	-	-	-	-	445
<i>Business Sys Improvements - ECS Phase 2</i>	455	-	-	-	-	-	-	-	-	-	455
<i>Capital Portfolio Resource Requirement</i>	144	-	-	-	-	-	-	-	-	-	144
<i>Capital Portfolio Resource Requirements</i>	2,749	-	-	-	-	-	-	-	-	-	2,749
<i>Consolidated Data Centre</i>	3,534	-	-	-	-	-	-	-	-	-	3,534
<i>Data Center Scope Change</i>	5,151	-	-	-	-	-	-	-	-	-	5,151
<i>Desktop Hardware Replacement</i>	4,346	-	-	-	-	-	-	-	-	-	4,346
<i>Desktop Software Replacement</i>	729	-	-	-	-	-	-	-	-	-	729
<i>DIRECTORY SERVICES - Implementation</i>	1,203	706	924	-	-	-	-	-	-	-	2,833
<i>Disaster Recovery</i>	230	-	-	-	-	-	-	-	-	-	230
<i>Disaster Recovery Pgm. (Prev. BCP)</i>	716	-	-	-	-	-	-	-	-	-	716
<i>Domino Decommissioning Strat &amp; Implementation</i>	846	-	-	-	-	-	-	-	-	-	846
<i>eCity Program Renewal</i>	259	479	148	-	-	-	-	-	-	-	886
<i>Electronic Service Delivery Portal-Bldg Permits</i>	1,175	-	-	-	-	-	-	-	-	-	1,175
<i>Enterprise Architecture</i>	483	-	-	-	-	-	-	-	-	-	483
<i>Enterprise Business Intelligence Implementation</i>	1,802	1,585	-	-	-	-	-	-	-	-	3,387
<i>Enterprise Collaboration Foundation</i>	2,001	1,147	523	-	-	-	-	-	-	-	3,671
<i>Enterprise Information Security Pgm</i>	905	-	-	-	-	-	-	-	-	-	905
<i>Enterprise Mobility Platform</i>	930	-	-	-	-	-	-	-	-	-	930
<i>Enterprise Software Replacement</i>	122	-	-	-	-	-	-	-	-	-	122
<i>Enterprise Storage Replacement</i>	83	-	-	-	-	-	-	-	-	-	83
<i>eRecruitment</i>	1,135	-	-	-	-	-	-	-	-	-	1,135
<i>eTime Enterprise Rollout</i>	1,441	-	-	-	-	-	-	-	-	-	1,441
<i>File Services Migration</i>	586	170	549	-	-	-	-	-	-	-	1,305
<i>Geospatial Tool Enhancements</i>	253	82	100	-	-	-	-	-	-	-	435
<i>HR ELECTRONIC SKILLS ASS. SOLUTION</i>	86	-	-	-	-	-	-	-	-	-	86
<i>I&amp;T PPM Solution (Cloud) Implementation</i>	500	-	1,156	-	-	-	-	-	-	-	1,656
<i>IBMS Review &amp; Transformation</i>	1,898	2,087	1,701	-	-	-	-	-	-	-	5,686
<i>IT Risk Mgmt Framework</i>	1,070	-	-	-	-	-	-	-	-	-	1,070
<i>IT Service Process Improvement Program</i>	1,209	678	225	-	-	-	-	-	-	-	2,112
<i>Major Cap Infrastructure Project Coord. (TOINView)</i>	305	116	309	-	-	-	-	-	-	-	730
<i>MLS Modernization-Phase 2</i>	2,500	2,489	5,804	-	-	-	-	-	-	-	10,793
<i>Network Asset Replacement</i>	233	-	-	-	-	-	-	-	-	-	233
<i>Network Security Replacement</i>	145	-	-	-	-	-	-	-	-	-	145
<i>OCC HEALTH &amp; SAFETY APP 2016-2019</i>	717	762	429	-	-	-	-	-	-	-	1,908
<i>OnLine Portal Services for City Planning</i>	794	480	-	-	-	-	-	-	-	-	1,274
<i>Open Data Master Plan Implementation</i>	878	1,036	158	-	-	-	-	-	-	-	2,072
<i>S DFA- Online Grant Management System</i>	184	50	-	-	-	-	-	-	-	-	234
<i>System Enhancements for Licensing Services - MLS</i>	24	-	-	-	-	-	-	-	-	-	24
<i>TEMS REPLACEMENT-Design</i>	450	-	-	-	-	-	-	-	-	-	450
<i>TOP - Online Donation Application</i>	309	201	-	-	-	-	-	-	-	-	510
<i>Toronto Building Electronic Service Delivery</i>	49	-	-	-	-	-	-	-	-	-	49
<i>Toronto Building-CRM-Enhanced Complaint Management</i>	428	539	-	-	-	-	-	-	-	-	967
<i>WAN High Speed Fibre Data Services</i>	150	-	-	-	-	-	-	-	-	-	150
<i>Web Information Portal on Dvlpmnt Applications</i>	7	-	-	-	-	-	-	-	-	-	7
<i>Work Mgmt Solution-Transportation</i>	2,350	-	1,200	-	-	-	-	-	-	-	3,550
<i>Work Mgmt Solution-Transportation Scope Change</i>	1,496	4,835	3,094	2,062	340	340	226	-	-	-	12,393

(In \$000s)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total 2019 Cash Flow & FY Commits
<b>WORKFLOW AUTOMATION &amp; TRACKING</b>	58	-	-	-	-	-	-	-	-	-	58
Asset Management Solution - Transportation	835	-	-	-	-	-	-	-	-	-	835
Enterprise Solution Delivery Management Framework	45	-	-	-	-	-	-	-	-	-	45
Web Bus. Cont. Refresh & Redesign	22	-	-	-	-	-	-	-	-	-	22
Enterprise eLearning HR	281	-	-	-	-	-	-	-	-	-	281
MLS Centralized Datamart	776	-	-	-	-	-	-	-	-	-	776
Reviewand Improve Document Management Capabilitie	181	-	-	-	-	-	-	-	-	-	181
Wellbeing Toronto v3 2018	450	-	-	-	-	-	-	-	-	-	450
ECS Capital Project and Program Management Process	82	-	-	-	-	-	-	-	-	-	82
Quality Assurance Testing Software Upgrade	200	-	-	-	-	-	-	-	-	-	200
SAP Solution Manager v7.2 Upgrade (SOGR)	564	-	-	-	-	-	-	-	-	-	564
DLAN Cloud Services Implementation	165	-	-	-	-	-	-	-	-	-	165
<b>CAPITAL PROJECT PLANNING SYS ENHANCEMENTS</b>	81	-	-	-	-	-	-	-	-	-	81
<b>Subtotal</b>	<b>54,151</b>	<b>18,476</b>	<b>17,038</b>	<b>2,062</b>	<b>340</b>	<b>340</b>	<b>226</b>	-	-	-	<b>92,633</b>
<b>Change in Scope</b>											
Consolidated Data Centre	-	1,600	-	-	-	-	-	-	-	-	1,600
Ent Doc & Record Mgmt Solution (ED-CHANGE IN SCOPE)	750	-	-	-	-	-	-	-	-	-	750
Enterprise Collaboration Foundation	1,649	(1,147)	(523)	-	-	-	-	-	-	-	(21)
Enterprise Mobility Platform	(930)	-	-	-	-	-	-	-	-	-	(930)
I&T PPM Solution (Cloud) Implementation	(500)	-	(1,156)	-	-	-	-	-	-	-	(1,656)
IT Service Process Improvement Program	(498)	200	655	-	-	-	-	-	-	-	357
Work Mgmt Solution-Transportation Scope Change	(1,496)	(4,835)	(3,094)	(2,062)	(340)	(340)	(226)	-	-	-	(12,393)
<b>Subtotal</b>	<b>(1,025)</b>	<b>(4,182)</b>	<b>(4,118)</b>	<b>(2,062)</b>	<b>(340)</b>	<b>(340)</b>	<b>(226)</b>	-	-	-	<b>(12,293)</b>
<b>New w/Future Year</b>											
Business Continuity	140	-	-	-	-	-	-	-	-	-	140
Data Centre Zones Implementation	200	1,066	-	-	-	-	-	-	-	-	1,266
Desktop Hardware Replacement	4,820	-	-	-	-	-	-	-	-	-	4,820
Desktop Software Replacement	638	-	-	-	-	-	-	-	-	-	638
Disaster Recovery	646	1,050	1,050	1,050	1,050	1,302	-	-	-	-	6,148
Employee Performance Management (e	-	-	-	-	-	-	-	-	-	-	-
Ent Portfolio & Project Mgmt Upgrade 2021	-	-	-	-	-	-	-	-	-	-	-
Enterprise Architecture	500	-	-	-	-	-	-	-	-	-	500
Enterprise Information Security Pgm	3,562	2,400	2,400	400	400	123	-	-	-	-	9,285
Enterprise Server Replacement	2,309	-	-	-	-	-	-	-	-	-	2,309
Enterprise Software Replacement	1,037	-	-	-	-	-	-	-	-	-	1,037
Enterprise Solutions Design & Implementation	-	-	-	-	-	-	-	-	-	-	-
Enterprise Storage Replacement	1,000	-	-	-	-	-	-	-	-	-	1,000
eRecruitment	2,899	563	-	-	-	-	-	-	-	-	3,462
Integrated Business Mgmt System - Reviewand Trans	-	379	-	-	-	-	-	-	-	-	379
IT Audit Project Health Check Framework	130	-	-	-	-	-	-	-	-	-	130
IT Planning & Mgmt Transformation Tools	-	-	-	-	-	-	-	-	-	-	-
Network Asset Replacement	4,330	-	-	-	-	-	-	-	-	-	4,330
Network Security Replacement	360	-	-	-	-	-	-	-	-	-	360
Quality Assurance Testing Software Upgrade	75	-	-	200	-	-	-	-	-	-	275
Technology Infrastructure Growth	-	-	-	-	-	-	-	-	-	-	-
MLS Centralized Datamart	600	1,800	-	-	-	-	-	-	-	-	2,400
Workforce Business Intel. Requirements	1,020	1,448	-	-	-	-	-	-	-	-	2,468
Internal Private Cloud Services	1,533	1,777	-	-	-	-	-	-	-	-	3,310
CLASS Replacement Planning	75	75	-	-	-	-	-	-	-	-	150
Publicly Accessible Wi-Fi for City Facilities	287	650	282	-	-	-	-	-	-	-	1,219
CloudBasedHumanResourcesInformationSystem (CHRIS)	5,334	562	-	-	-	-	-	-	-	-	5,896
Enterprise Documents and Records Management Phase2	1,375	-	-	-	-	-	-	-	-	-	1,375
Artificial Intelligence (AI) for SSHA and TPH	500	-	-	-	-	-	-	-	-	-	500
eTime Scheduling Enterprise Rollout	1,970	-	-	-	-	-	-	-	-	-	1,970
HR Labour Relations Information System (LRIS)	505	-	-	-	-	-	-	-	-	-	505
Enterprise eLearning Initiative (ELI) Agreement	277	-	-	-	-	-	-	-	-	-	277
PTP Enhancements	390	-	-	-	-	-	-	-	-	-	390
Project Portfolio Management System (SOGR)	465	900	400	400	400	-	-	-	-	-	2,565
Corporate Geospatial Strategy Roadmap Implementati	309	1,125	826	730	-	-	-	-	-	-	2,990
ECS Cloud Deployment-Construction Project and DMS	568	785	2,151	1,164	-	-	-	-	-	-	4,668
EDHR - Complaints Management System	300	15	15	15	-	-	-	-	-	-	345
<b>Subtotal</b>	<b>38,154</b>	<b>14,595</b>	<b>7,124</b>	<b>3,959</b>	<b>1,850</b>	<b>1,425</b>	-	-	-	-	<b>67,107</b>
<b>Total Expenditure (including carry forward from 2018)</b>	<b>91,280</b>	<b>28,889</b>	<b>20,044</b>	<b>3,959</b>	<b>1,850</b>	<b>1,425</b>	-	-	-	-	<b>147,447</b>
<b>Financing:</b>											
Debt/CFC	52,962	25,839	17,518	3,959	1,850	1,425	-	-	-	-	103,553
Debt Recoverable	-	-	-	-	-	-	-	-	-	-	-
Other	4,461	-	1,175	-	-	-	-	-	-	-	5,636
Reserves/Res Funds	33,598	3,050	1,351	-	-	-	-	-	-	-	37,999
Development Charges	-	-	-	-	-	-	-	-	-	-	-
Provincial/Federal	259	-	-	-	-	-	-	-	-	-	259
<b>Total Financing</b>	<b>91,280</b>	<b>28,889</b>	<b>20,044</b>	<b>3,959</b>	<b>1,850</b>	<b>1,425</b>	-	-	-	-	<b>147,447</b>











**CITY OF TORONTO**

**Gross Expenditures (\$000's)**

**Information & Technology**

Sub- Project No. Project Name PrioritySubProj No. Sub-project Name Ward Stat. Cat.						Current and Future Year Cash Flow Commitments						Current and Future Year Cash Flow Commitments Financed By												
						2019	2020	2021	2022	2023	Total 2019-2023	Total 2024-2028	Total 2019-2028	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserve Reserves	Reserve Funds	Capital from Current	Other 1	Other2	Debt - Recoverable Debt	Total Financing	
<b>WES907128 BUSINESS SUSTAINMENT SYSTEMS</b>																								
155	186	Integrated Business Mgmt System - Review and Trans	CW	S4	03	0	379	0	0	0	379	0	379	0	0	0	0	0	0	0	379	0	379	
0	188	MLS Centralized DataMart	CW	S4	04	600	1,800	0	0	0	2,400	0	2,400	0	0	0	0	0	0	0	2,400	0	2,400	
Sub-total						8,541	7,235	7,505	0	0	23,281	0	23,281	0	0	0	776	3,360	0	1,410	0	17,735	0	23,281
<b>Total Program Expenditure</b>						91,280	28,889	20,044	3,959	1,850	146,022	1,425	147,447	259	0	0	33,672	4,327	0	5,636	0	103,553	0	147,447

**CITY OF TORONTO**

**Gross Expenditures (\$000's)**

Information & Technology						Current and Future Year Cash Flow Commitments and Estimates						Current and Future Year Cash Flow Commitments and Estimates Financed By											
						2019	2020	2021	2022	2023	Total 2019-2023	Total 2024-2028	Total 2019-2028	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserve 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.																		
Financed By:																							
		Provincial Grants & Subsidies				259	0	0	0	0	259	0	259	259	0	0	0	0	0	0	0	259	
		Reserves (Ind. "XQ" Ref.)				32,072	1,600	0	0	0	33,672	0	33,672	0	0	0	0	0	0	0	0	33,672	
		Reserve Funds (Ind."XR" Ref.)				1,526	1,450	1,351	0	0	4,327	0	4,327	0	0	4,327	0	0	0	0	0	4,327	
		Other1 (Internal)				4,461	0	1,175	0	0	5,636	0	5,636	0	0	0	0	5,636	0	0	0	5,636	
		Debt				52,962	25,839	17,518	3,959	1,850	102,128	1,425	103,553	0	0	0	0	0	0	103,553	0	103,553	
<b>Total Program Financing</b>						<b>91,280</b>	<b>28,889</b>	<b>20,044</b>	<b>3,959</b>	<b>1,850</b>	<b>146,022</b>	<b>1,425</b>	<b>147,447</b>	<b>259</b>	<b>0</b>	<b>0</b>	<b>33,672</b>	<b>4,327</b>	<b>0</b>	<b>5,636</b>	<b>0</b>	<b>103,553</b>	<b>147,447</b>

**Status Code Description**  
 S2 S2 Prior Year (With 2019 and/or Future Year Cashflow)  
 S3 S3 Prior Year - Change of Scope 2019 and/or Future Year Cost(Cashflow)  
 S4 S4 New - Stand-Alone Project (Current Year Only)  
 S5 S5 New (On-going or Phased Projects)

**Category Code Description**  
 01 Health and Safety C01  
 02 Legislated C02  
 03 State of Good Repair C03  
 04 Service Improvement and Enhancement C04  
 05 Growth Related C05  
 06 Reserved Category 1 C06  
 07 Reserved Category 2 C07

## **Appendix 9**

### **2019 Capital Budget with Financing Detail**

(Phase 2) 30-Information & Technology

Sub-Project Category: 01,02,03,04,05,06,07

Type: B Sub-Project Status: S2

Type: C Sub-Project Status: S2,S3,S4,S5



**CITY OF TORONTO**

**Information & Technology  
Sub-Project Summary**

**Project/Financing**

**Priority Project Project Name**

Priority	Project	Project Name	Start Date	Completion Date	2019	Financing										
					Cash Flow	Provincial Grants Subsidies	Federal Subsidy	Developmt Charges	Reserves	Reserve Funds	Capital From Current	Other 1	Other 2	Debt	Debt - Recoverable	
<b>0 ITP000223 Network Upgrade</b>																
0	54	Disaster Recovery Pgm. (Prev. BCP)	01/01/2006	12/31/2023	716	0	0	0	716	0	0	0	0	0	0	0
57	60	Disaster Recovery	06/15/2016	06/15/2017	230	0	0	0	0	0	0	0	0	230	0	0
57	62	Disaster Recovery	06/05/2019	06/05/2028	646	0	0	0	0	0	0	0	0	646	0	0
58	61	Business Continuity	06/15/2017	06/15/2017	445	0	0	0	0	0	0	445	0	0	0	0
58	63	Business Continuity	01/13/2019	12/31/2021	140	0	0	0	0	0	0	0	0	140	0	0
<b>Project Sub-total:</b>					<b>2,177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>716</b>	<b>0</b>	<b>0</b>	<b>445</b>	<b>0</b>	<b>1,016</b>	<b>0</b>	<b>0</b>
<b>0 ITP906881 Application Systems</b>																
0	141	Domino Decommissioning Strat & Implementation	01/01/2015	12/31/2018	846	0	0	0	0	0	0	0	0	846	0	0
0	148	Enterprise Business Intelligence Implementation	06/19/2017	06/19/2017	1,802	0	0	0	0	0	0	87	0	1,715	0	0
0	149	AODA Compliance for City Applications	06/19/2017	06/19/2017	1,969	0	0	0	0	0	0	0	0	1,969	0	0
0	152	Open Data Master Plan Implementation	06/19/2017	06/19/2017	878	0	0	0	0	0	0	0	0	878	0	0
0	153	SAP Solution Manager v7.2 Upgrade (SOGR)	06/19/2017	06/19/2017	564	0	0	0	0	0	0	0	0	564	0	0
0	154	Geospatial Tool Enhancements	06/19/2017	06/19/2017	253	0	0	0	0	0	0	0	0	253	0	0
0	155	eTime Enterprise Rollout	09/27/2017	09/27/2017	1,441	0	0	0	0	0	0	0	0	1,441	0	0
0	158	Enterprise Documents and Records Management Phase2	01/04/2019	12/31/2019	1,375	0	0	0	0	0	0	0	0	1,375	0	0
0	159	CLASS Replacement Planning	01/01/2019	12/31/2019	75	0	0	0	0	0	0	0	0	75	0	0
0	160	eTime Scheduling Enterprise Rollout	01/01/2019	12/31/2023	1,970	0	0	0	0	0	0	0	0	1,970	0	0
0	162	Project Portfolio Management System (SOGR)	01/01/2019	12/31/2023	465	0	0	0	0	0	0	0	0	465	0	0
0	163	ECS Cloud Deployment-Construction Project and DMS	01/01/2019	12/31/2022	568	0	0	0	0	0	0	0	0	568	0	0
0	164	Ent Doc & Record Mgmt Solution (ED-CHANGE IN SCOPE	01/04/2019	12/31/2019	750	0	0	0	0	0	0	0	0	750	0	0
20	140	Enterprise Collaboration Foundation	01/01/2015	12/31/2018	2,001	0	0	0	0	0	0	0	0	2,001	0	0
20	156	Enterprise Collaboration Foundation	06/13/2019	12/31/2019	1,649	0	0	0	0	0	0	0	0	1,649	0	0
137	147	Enterprise Mobility Platform	06/15/2017	06/15/2017	930	0	0	0	0	0	0	0	0	930	0	0
137	157	Enterprise Mobility Platform	06/13/2018	06/13/2018	-930	0	0	0	0	0	0	0	0	-930	0	0
<b>Project Sub-total:</b>					<b>16,606</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>16,519</b>	<b>0</b>	<b>0</b>
<b>0 ITP906882 Corporate Planning &amp; Management</b>																
0	159	Artificial Intelligence (AI) for SSHA and TPH	01/04/2019	03/31/2021	500	0	0	0	0	0	0	0	0	500	0	0
0	160	IT Audit Project Health Check Framework	01/27/2019	12/27/2019	130	0	0	0	0	0	0	0	0	130	0	0
10	135	IT Service Process Improvement Program	01/01/2016	01/01/2020	1,209	0	0	0	0	0	0	0	0	1,209	0	0
10	158	IT Service Process Improvement Program	06/19/2019	06/19/2020	-498	0	0	0	0	0	0	0	0	-498	0	0
20	141	Application Portfolio Tools & Rationalization	02/01/2016	12/31/2019	1,437	0	0	0	0	0	0	287	0	1,150	0	0
20	147	Application Portfolio T&R Scope Change	06/12/2017	06/12/2017	-650	0	0	0	0	0	0	0	0	-650	0	0
46	144	Quality Assurance Testing Software Supgrade	01/01/2016	12/31/2018	200	0	0	0	0	0	0	0	0	200	0	0





**CITY OF TORONTO**

**Information & Technology  
Sub-Project Summary**

Project/Financing Priority Project	Project Name	Start Date	Completion Date	2019	Financing									
				Cash Flow	Provincial Grants Subsidies	Federal Subsidy	Developmt Charges	Reserves	Reserve Funds	Capital From Current	Other 1	Other 2	Debt	Debt - Recoverable
<b>0</b>	<b><u>ITP907747 Corporate Initiatives</u></b>													
0	114 Corporate Geospatial Strategy Roadmap Implementati	01/01/2019	12/31/2022	309	0	0	0	0	0	0	0	0	309	0
0	116 eRecruitment	01/01/2019	12/31/2019	2,899	0	0	0	0	0	0	0	0	2,899	0
0	117 CloudBasedHumanResourcesInformationSystem (CHRIS)	01/01/2019	12/31/2019	5,334	0	0	0	0	0	0	0	0	5,334	0
0	118 HR Labour Relations Information System (LRIS)	01/01/2019	12/31/2019	505	0	0	0	0	0	0	0	0	505	0
0	119 Enterprise eLearning Initiative (ELI) Agreement	01/01/2019	12/31/2019	277	0	0	0	0	0	0	0	0	277	0
0	120 EDHR - Complaints Management System	11/07/2018	11/07/2018	300	0	0	0	0	0	0	0	0	300	0
6	100 Enterprise eLearning HR	06/15/2017	06/15/2017	281	0	0	0	0	0	0	203	0	78	0
20	75 Work Mgmt Solution-Transportation	01/01/2016	12/31/2018	2,350	0	0	0	0	0	0	0	0	2,350	0
20	98 Work Mgmt Solution-Transportation Scope Change	06/12/2017	06/12/2017	1,496	0	0	0	0	0	0	0	0	1,496	0
20	110 Work Mgmt Solution-Transportation Scope Change	06/13/2019	06/13/2018	-1,496	0	0	0	0	0	0	0	0	-1,496	0
30	86 OCC HEALTH & SAFETY APP 2016-2019	01/01/2017	12/31/2019	516	0	0	0	0	0	0	516	0	0	0
30	102 OCC HEALTH & SAFETY APP 2016-2019	06/15/2017	06/15/2017	201	0	0	0	0	0	0	0	0	201	0
45	52 Web Bus. Cont. Refresh & Redesign	01/01/2015	12/31/2017	22	0	0	0	0	0	0	0	0	22	0
80	99 CAPITAL PROJECT PLANNING SYS ENHANCEMENTS	06/15/2017	06/15/2017	81	0	0	0	0	0	0	0	0	81	0
84	101 eRecruitment	06/15/2017	06/15/2017	1,135	0	0	0	0	0	0	0	0	1,135	0
	<b>Project Sub-total:</b>			17,605	0	0	0	0	428	0	1,692	0	15,485	0
<b>0</b>	<b><u>ITP907907 Resources to Deliver IT Capital Projects</u></b>													
0	1 Capital Portfolio Resource Requirements	01/01/2013	12/31/2017	2,749	0	0	0	2,749	0	0	0	0	0	0
0	3 Capital Portfolio Resource Requirement	01/01/2014	12/31/2018	144	0	0	0	144	0	0	0	0	0	0
	<b>Project Sub-total:</b>			2,893	0	0	0	2,893	0	0	0	0	0	0
<b>0</b>	<b><u>ITP907951 2012 Core Service Review - Service Efficiencies</u></b>													
0	7 Asset Management Solution - Transportation	02/01/2015	12/31/2019	835	0	0	0	0	0	0	0	0	835	0
	<b>Project Sub-total:</b>			835	0	0	0	0	0	0	0	0	835	0
<b>8</b>	<b><u>EOL906983 Asset Lifecycle Management</u></b>													
9	57 Network Security Replacement	06/14/2017	06/14/2018	145	0	0	0	145	0	0	0	0	0	0
9	58 Network Security Replacement	06/05/2019	06/05/2028	360	0	0	0	360	0	0	0	0	0	0
15	46 Desktop Hardware Replacement	01/01/2016	12/31/2018	4,346	0	0	0	4,346	0	0	0	0	0	0
15	52 Desktop Hardware Replacement	01/01/2019	12/31/2028	4,820	0	0	0	4,820	0	0	0	0	0	0
37	42 Enterprise Software Replacement	01/01/2016	12/31/2025	122	0	0	0	122	0	0	0	0	0	0
37	49 Enterprise Software Replacement	01/01/2019	12/31/2028	1,037	0	0	0	1,037	0	0	0	0	0	0
38	50 Enterprise Server Replacement	01/01/2019	12/31/2028	2,309	0	0	0	2,309	0	0	0	0	0	0
39	39 Enterprise Storage Replacement	01/01/2014	12/31/2023	83	0	0	0	83	0	0	0	0	0	0
39	44 Enterprise Storage Replacement	06/03/2015	06/03/2025	1,000	0	0	0	1,000	0	0	0	0	0	0

(Phase 2) 30-Information & Technology

Sub-Project Category: 01,02,03,04,05,06,07

Type: B Sub-Project Status: S2

Type: C Sub-Project Status: S2,S3,S4,S5



**CITY OF TORONTO**

**Information & Technology  
Sub-Project Summary**

**Project/Financing**

**Priority Project Project Name**

Priority	Project	Project Name	Start Date	Completion Date	2019	Financing									
					Cash Flow	Provincial Grants Subsidies	Federal Subsidy	Developmt Charges	Reserves	Reserve Funds	Capital From Current	Other 1	Other 2	Debt	Debt - Recoverable
<b>8 EOL906983 Asset Lifecycle Management</b>															
48	56	Network Asset Replacement	06/14/2017	06/14/2017	233	0	0	0	233	0	0	0	0	0	0
48	59	Network Asset Replacement	06/05/2019	06/05/2028	4,330	0	0	0	4,330	0	0	0	0	0	0
53	47	Desktop Software Replacement	01/01/2016	12/31/2025	362	0	0	0	362	0	0	0	0	0	0
53	53	Desktop Software Replacement	01/01/2017	12/31/2026	367	0	0	0	367	0	0	0	0	0	0
53	55	Desktop Software Replacement	01/01/2017	12/31/2026	638	0	0	0	638	0	0	0	0	0	0
<b>Project Sub-total:</b>					<b>20,152</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,152</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>107 WES90712E BUSINESS SUSTAINMENT SYSTEMS</b>															
0	132	Web Information Portal on Dvlpmnt Applications	01/01/2014	12/31/2017	7	0	0	0	0	0	0	0	0	7	0
0	138	Toronto Building Electronic Service Delivery	01/01/2014	12/31/2017	49	0	0	0	0	49	0	0	0	0	0
0	169	System Enhancements for Licensing Services - MLS	01/01/2014	12/31/2017	24	0	0	0	0	0	0	0	0	24	0
0	170	Electronic Service Delivery Portal-Bldg Permits	06/14/2016	03/30/2018	1,175	0	0	0	0	0	0	0	0	1,175	0
0	174	ECS Capital Project and Program Management Process	10/26/2016	10/26/2016	82	0	0	0	0	0	0	0	0	82	0
0	175	Review and Improve Document Management Capabilitie	10/26/2016	10/26/2016	181	0	0	0	0	0	0	0	0	181	0
0	181	MLS Modernization-Phase 2	06/15/2017	12/31/2020	2,500	0	0	0	0	0	0	0	0	2,500	0
0	188	MLS Centralized DataMart	01/01/2019	12/31/2020	600	0	0	0	0	0	0	0	0	600	0
142	153	MLS Centralized Datamart	01/01/2016	12/31/2018	776	0	0	0	776	0	0	0	0	0	0
155	185	IBMS Review & Transformation	06/15/2017	06/15/2017	1,898	0	0	0	0	1,049	0	0	0	849	0
160	167	OnLine Portal Services for City Planning	01/01/2016	12/31/2018	794	0	0	0	0	0	0	235	0	559	0
160	182	Business Sys Improvements - ECS Phase 2	06/15/2017	06/15/2017	455	0	0	0	0	0	0	0	0	455	0
<b>Project Sub-total:</b>					<b>8,541</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>776</b>	<b>1,098</b>	<b>0</b>	<b>235</b>	<b>0</b>	<b>6,432</b>	<b>0</b>
<b>Program Total:</b>					<b>91,280</b>	<b>259</b>	<b>0</b>	<b>0</b>	<b>32,072</b>	<b>1,526</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>52,962</b>	<b>0</b>

**Status Code Description**  
 S2 S2 Prior Year (With 2019 and/or Future Year Cashflow)  
 S3 S3 Prior Year - Change of Scope 2019 and/or Future Year Cost(Cashflow)  
 S4 S4 New - Stand-Alone Project (Current Year Only)  
 S5 S5 New (On-going or Phased Projects)

**Category Code Description**  
 01 Health and Safety C01  
 02 Legislated C02  
 03 State of Good Repair C03  
 04 Service Improvement and Enhancement C04  
 05 Growth Related C05  
 06 Reserved Category 1 C06  
 07 Reserved Category 2 C07

## Appendix 10

### Inflows and Outflows to/from Reserves and Reserve Funds 2019 Operating Budget

#### Corporate Reserve / Reserve Funds

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as of Dec. 31, 2018 *	Withdrawals (-) / Contributions (+)		
			2019	2020	2021
		\$	\$	\$	\$
<b>Beginning Balance</b>			17.8	28.0	38.2
Vehicle Reserve - IT Vehicles	XQ1509				
<i>Withdrawals (-)</i>					
<i>Transfers to Capital</i>					
<i>Contributions (+)</i>					
<i>Transfers from Operating</i>			10.2	10.2	10.2
<b>Total Reserve / Reserve Fund Draws / Contributions</b>		-	28.0	38.2	48.4
<b>Balance at Year-End</b>		17.8	28.0	38.2	48.4

\* Based on 9-month 2018 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as of Dec. 31, 2018 *	Withdrawals (-) / Contributions (+)		
			2019	2020	2021
		\$	\$	\$	\$
<b>Beginning Balance</b>			434,550.1	434,250.1	433,950.1
Capital Financing Reserve	XQ0011				
<i>Withdrawals (-)</i>					
<i>Transfers to Capital</i>			(300.0)	(300.0)	(300.0)
<i>Contributions (+)</i>					
<i>Transfers from Operating</i>					
<b>Other Program / Agency Net Withdrawals &amp; Contributions</b>					
<b>Balance at Year-End</b>		434,550.1	434,250.1	433,950.1	433,650.1

\* Based on 9-month 2018 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as of Dec. 31, 2018 *	Withdrawals (-) / Contributions (+)		
			2019	2020	2021
		\$	\$	\$	\$
<b>Beginning Balance</b>			31,921.8	32,050.5	32,179.1
Insurance Reserve Fund	XR1010				
<i>Withdrawals (-)</i>					
<i>Transfers to Operating</i>					
<i>Transfers to Capital</i>					
<i>Contributions (+)</i>					
<i>Transfers from Operating</i>			128.6	128.6	128.6
<b>Total Reserve / Reserve Fund Draws / Contributions</b>		390.9	32,050.5	32,179.1	32,307.7
<b>Other Program / Agency Net Withdrawals &amp; Contributions</b>					
<b>Balance at Year-End</b>		31,921.8	32,050.5	32,179.1	32,307.7

\* Based on 9-month 2018 Reserve Fund Variance Report

**Inflows and Outflows to/from Reserves and Reserve Funds**  
**2019 – 2028 Capital Budget and Plan**

**Corporate Reserve / Reserve Funds**

Reserve / Reserve Fund Name (In \$000s)	Project / Sub Project Name and Number	Projected Balance as at Dec 31, 2018 *	Contributions / (Withdrawals)										Total
			2019 Budget	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	
XQ0011 Capital Financing Reserve	Beginning Balance	434,550	434,550	432,234	430,634	430,634	430,634	430,634	430,634	430,634	430,634	430,634	
	Withdrawals (-)												
	Consolidated Data Center WAN High Speed Fibre Data Services		(2,234)	(1,600)									(3,834)
			(82)										(82)
	Total Withdrawals		(2,316)	(1,600)	-	-	-	-	-	-	-	-	(3,916)
	Contributions (+)												
	Total Contributions		-	-	-	-	-	-	-	-	-	-	-
Other Program/Agency Net Withdrawals and Contributions													
<b>Balance at Year-End</b>		<b>434,550</b>	<b>432,234</b>	<b>430,634</b>	<b>(3,916)</b>								

\* Based on 9-month 2018 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Project / Sub Project Name and Number	Projected Balance as at Dec 31, 2018 *	Contributions / (Withdrawals)										Total
			2019 Budget	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	
XQ1508 Vehicle Reserve - IT Sustainment	Beginning Balance	12,166	12,166	6,917	(4,148)	(3,919)	(3,839)	(8,144)	(8,895)	(20,924)	(22,715)	(23,859)	
	Withdrawals (-)												
			(26,546)	(32,362)	(21,068)	(21,217)	(25,602)	(22,048)	(33,326)	(23,088)	(22,441)	(26,819)	(254,517)
	Total Withdrawals		(26,546)	(32,362)	(21,068)	(21,217)	(25,602)	(22,048)	(33,326)	(23,088)	(22,441)	(26,819)	(254,517)
		Contributions (+)											
	Total Contributions		21,297	21,297	21,297	21,297	21,297	21,297	21,297	21,297	21,297	21,297	212,970
<b>Balance at Year-End</b>		<b>12,166</b>	<b>6,917</b>	<b>(4,148)</b>	<b>(3,919)</b>	<b>(3,839)</b>	<b>(8,144)</b>	<b>(8,895)</b>	<b>(20,924)</b>	<b>(22,715)</b>	<b>(23,859)</b>	<b>(29,381)</b>	<b>(41,547)</b>

\* Based on 9-month 2018 Reserve Fund Variance Report