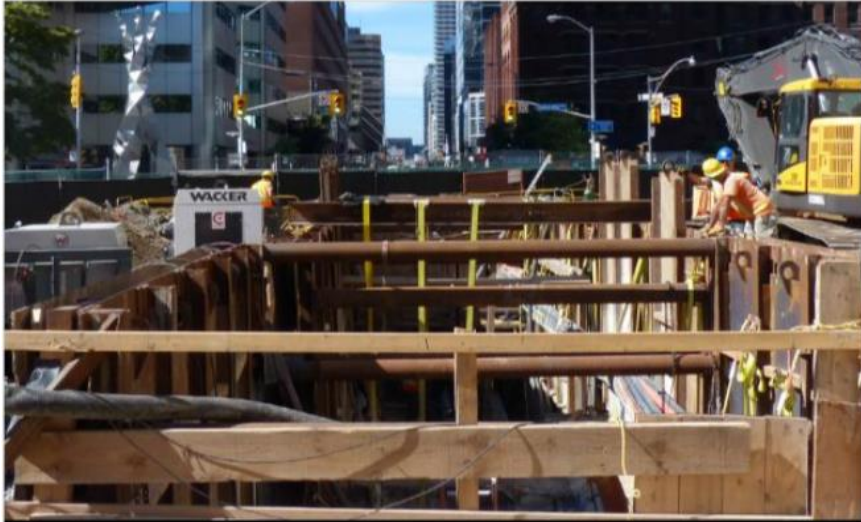


Toronto 2018 BUDGET



OPERATING BUDGET NOTES



Engineering & Construction Services

2018 OPERATING BUDGET OVERVIEW

Engineering & Construction Services provides specialized engineering design and construction services to internal clients (Toronto Water, Transportation Services, Solid Waste Management Services, and other City Programs and Agencies), and external clients (the development industry, utility companies and other public agencies) creating safe and sustainable municipal infrastructure.

2018 Budget Summary

The total cost to deliver these services to Toronto residents is \$75.220 million gross and \$4.082 million net as shown below:

| (in \$000's) | 2017 Budget | 2018 Preliminary Budget | Change | |
|-------------------------|----------------|-------------------------|------------|-------------|
| | | | \$ | % |
| Gross Expenditures | 73,272.6 | 75,220.1 | 1,947.5 | 2.7% |
| Revenues | 69,191.1 | 71,138.7 | 1,947.5 | 2.8% |
| Net Expenditures | 4,081.5 | 4,081.5 | 0.0 | 0.0% |

Through previously implemented operational efficiency measures (i.e. reductions in the use of fleet vehicles, etc.) and increased recoveries from Metrolinx for survey services, the Program is able to achieve the budget target of a 0% net increase and maintain 2017 service levels for 2018.

CONTENTS

Overview

- 2018-2020 Service Overview and Plan [5](#)
- 2018 Preliminary Operating Budget by Service [12](#)
- Issues for Discussion [22](#)

Appendices

- 2017 Service Performance [25](#)
- 2018 Preliminary Operating Budget by Expenditure Category [26](#)
- 2018 Organization Chart [27](#)
- Summary of 2018 Service Changes [N/A](#)
- Summary of 2018 New / Enhanced Service Priorities [28](#)
- Inflows/Outflows to/from Reserves & Reserve Funds [29](#)
- 2018 User Fee Rate Changes [30](#)

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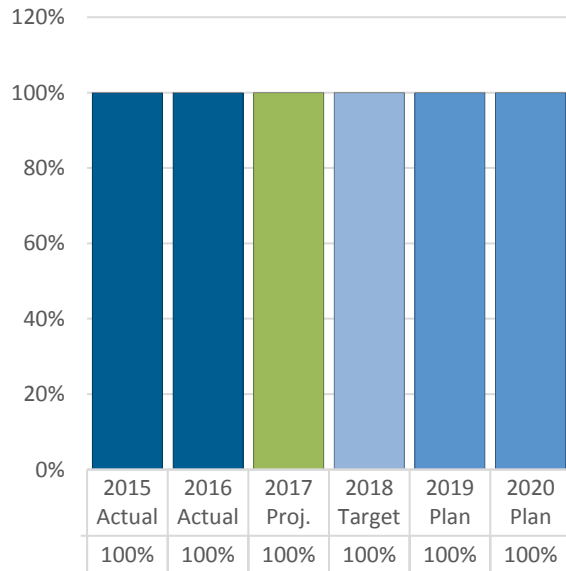
FAST FACTS

- \$568 million in capital projects delivered in 2017, \$77.0 million more than in 2016.
- 279 bridge condition inspections completed in 2017.
- 1,850 engineering reviews of development applications completed in 2017.

TRENDS

- In 2017, Engineering & Construction Services (ECS) is projecting to again complete 100% of planned bridge condition inspections, therefore ensuring full compliance with regulatory requirements.
- ECS is targeting to maintain a 100% completion rate in 2018 and future years for the 2-year bridge condition inspection cycle that requires a consistent level of effort in each year.

% of Bridge Condition Inspections Completed Compared to Plan



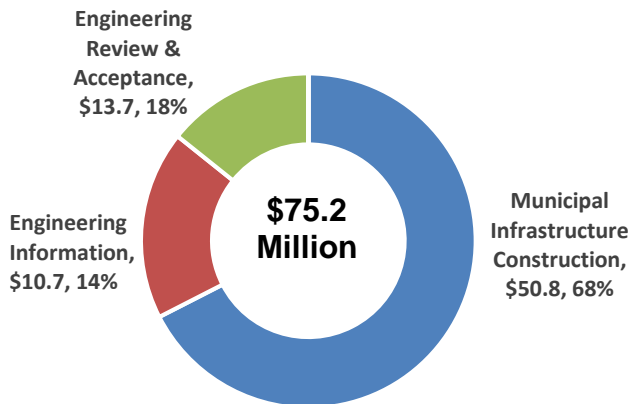
KEY SERVICE DELIVERABLES FOR 2018

The 2018 Operating Budget will enable Engineering & Construction Services to continue to:

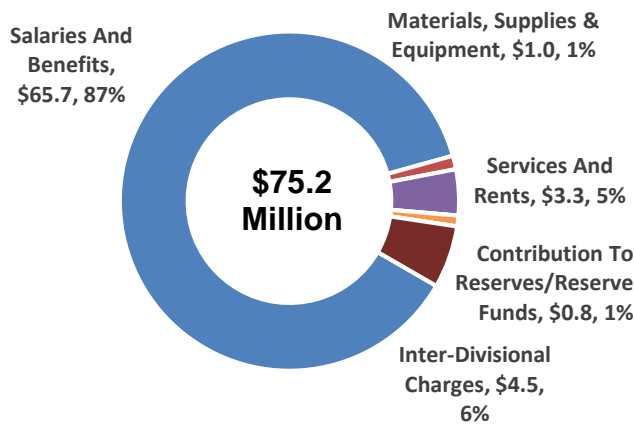
- Sustain capital delivery at an estimated 80% year-end actual expenditure as a percentage of Approved Capital Budget.
- Sustain at least 75% compliance with "Streamlining the Application Review" (STAR) timelines for review of development applications.
- Start construction on the first contract for the Strategic Rehabilitation of the F.G. Gardiner Expressway, between Jarvis and Cherry Streets.
- Begin demolition of bridges at the Six Points Interchange and commence reconstruction.
- Begin construction on the new Ultraviolet Irradiation disinfection system at the Ashbridges Bay Treatment Plant.
- Commence construction of the Coxwell Bypass Sewer, which will intercept most of the combined sewer overflows to the Don River and will act as a back up to the existing sewer.
- Implement the new Professional Services Performance Evaluation tool.
- Prepare for implementation of Bill 142 – the updated Construction Lien Act – including revising contract documents and streamlining payment processing.
- Complete all utility reviews for Bell’s multi-year “Smart City” fibre optic implementation program by year end.
- Advance the mandate to expand the Digital Map Owners Group (DMOG) across the City and develop new agreements with each utility company.
- Complete Phase 1 of the long-term electronic circulation IT solution for development application review.
- In collaboration with Toronto Water, establish Development Application protocols to address servicing issues related to groundwater discharges and sanitary sewer capacity in Basement Flooding areas.
- Draft an Excess Soils Management Implementation Plan for City projects in response to the MOECC’s forthcoming new policy.
- Provide specialized surveying support to Metrolinx.

Where the money goes:

2018 Budget by Service

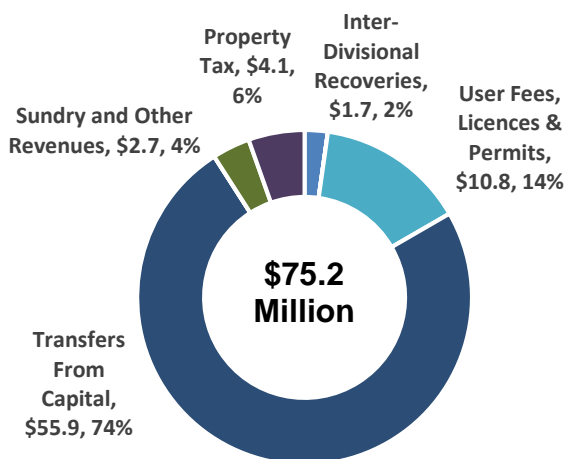


2018 Budget by Expenditure Category



Where the money comes from:

2018 Budget by Funding Source



OUR KEY ISSUES & PRIORITY ACTIONS

- **Managing Multi-Year Construction**
 - ✓ Continue to enhance planning and coordination of multi-year Capital Program with internal and external stakeholders.
 - ✓ Emphasize the need for asset-owning Programs to define and "lock-down" multi-year programs (e.g. 3 years).
 - ✓ Ensure multi-year budget approvals to allow for tender issuance and awards for large SOGR projects.

- **Increasing Delivery Capacity**
 - ✓ Ongoing significant forecasted year-over-year increase in the Capital Program assigned to ECS:
 - Presents a challenge to sustain the 80% capital delivery rate.
 - Represents pressure on the ECS Operating Budget to provide necessary resources.
 - ✓ Revisit alternative procurement strategies (e.g. Task Order Contracting) to increase capital throughput.

2018 OPERATING BUDGET HIGHLIGHTS

- The 2018 Preliminary Operating Budget for Engineering & Construction Services is \$75.220 million gross and \$4.082 million net representing a 0% change to the 2017 Approved Operating Budget. Primarily due to increased recoveries from Metrolinx for survey services.

- The 2018 Preliminary Operating Budget provides new and enhanced funding (\$1.677 million gross and \$0 net) for:
 - ✓ Review / project management for the Lawrence Heights Revitalization Project.
 - ✓ Legal expertise for properties related to the F.G. Gardiner Expressway.
 - ✓ Specialized support for Metrolinx transit projects.
 - ✓ Communication Coordinators for the Basement Flooding Protection Program and the Local Roads Program.
 - ✓ Digital communications expertise for projects related to Transportation Services.

- Staff complement will increase by 11 positions from 2017 to 2018, for new and enhanced services above.

Actions for Consideration

Approval of the 2018 Preliminary Budget as presented in these notes requires that:

1. City Council approve the 2018 Preliminary Operating Budget for Engineering & Construction Services of \$75.220 million gross, \$4.082 million net for the following services:

| <u>Service</u> | <u>Gross</u> <u>(\$000s)</u> | <u>Net</u> <u>(\$000s)</u> |
|---------------------------------------|---------------------------------|-------------------------------|
| Municipal Infrastructure Construction | 50,754.3 | 1,342.1 |
| Engineering Review & Acceptance | 13,737.3 | 1,238.3 |
| Engineering Information | <u>10,728.6</u> | <u>1,501.1</u> |
| Total Program Budget | <u>75,220.1</u> | <u>4,081.5</u> |

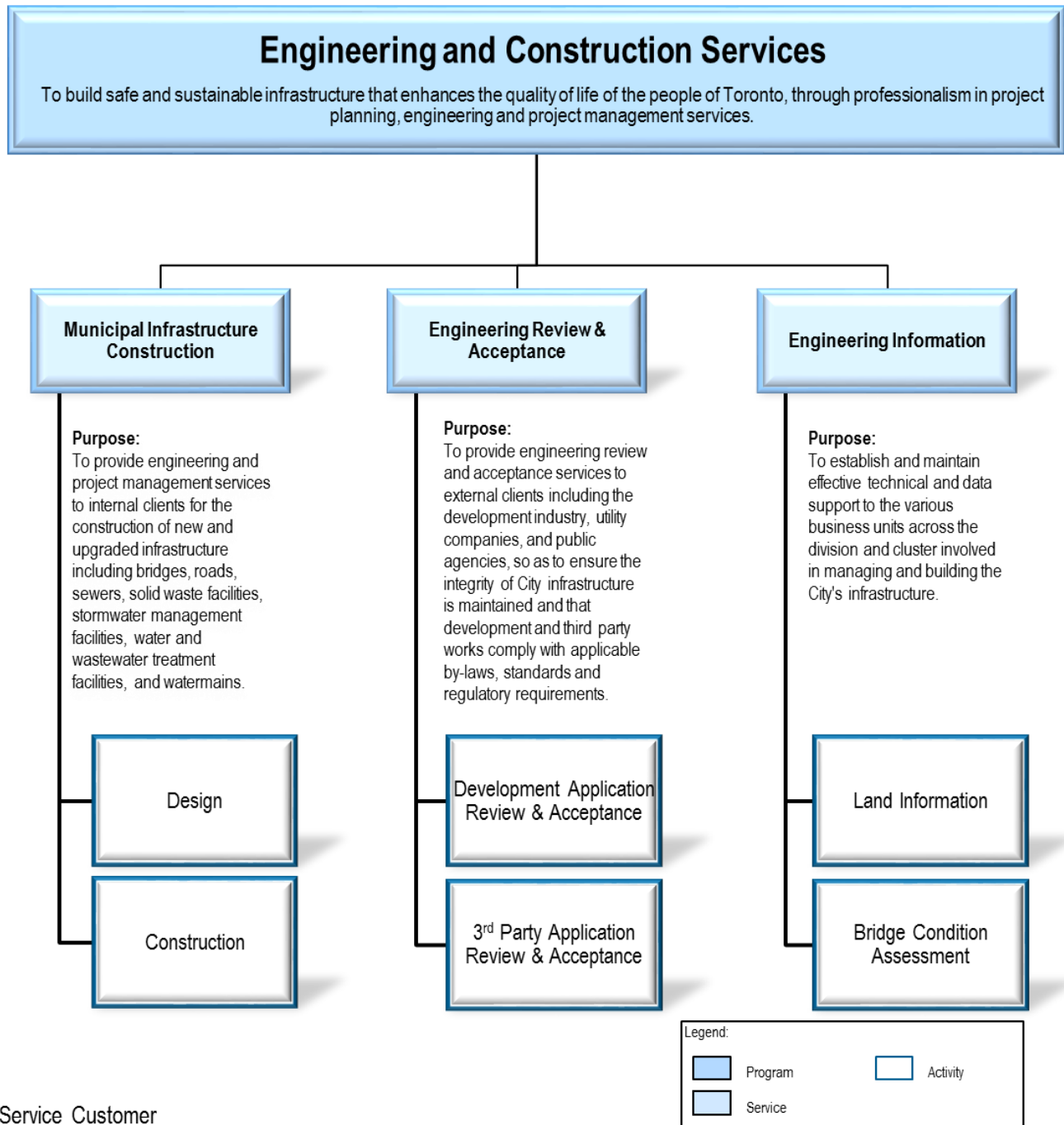
2. City Council approve the 2018 service levels for Engineering & Construction Services as outlined on pages 13, 16, and 19 of this report, and associated staff complement of 585.1 positions, comprising 457.0 capital project delivery positions and 128.1 operating service delivery positions.



Part 1

2018 - 2020 Service Overview and Plan

Program Map



Service Customer

Municipal Infrastructure Construction

- Staff – City Divisions
- Staff – Agencies & Boards
- Business Improvement Areas (BIAs)
- Utility Companies

Indirect (Beneficiary)

- Residents
- Businesses
- Visitors

Engineering Review & Acceptance

- Staff – City Divisions
- Staff – Agencies & Boards
- Business Improvement Areas (BIAs)
- Utility Companies

Indirect (Beneficiary)

- Residents
- Businesses
- Visitors

Engineering Information

- Mayor & City Council
- Residents
- Staff – City Divisions
- Staff – Agencies & Boards
- Metrolinx
- Waterfront Toronto

Indirect (Beneficiary)

- Businesses
- Visitors

Table 1
2018 Preliminary Operating Budget and Plan by Service

| (In \$000s) | 2017 | | 2018 Preliminary Operating Budget | | | 2018 Preliminary vs. 2017 Budget Change | | Incremental Change | | | |
|--|----------------|------------------|-----------------------------------|--------------|----------------|---|----------------|--------------------|---------------|--------------|---------------|
| | Budget | Projected Actual | Base | New/Enhanced | Total Budget | | | 2019 Plan | 2020 Plan | | |
| By Service | \$ | \$ | \$ | \$ | \$ | \$ | % | \$ | % | \$ | % |
| Municipal Infrastructure Construction | | | | | | | | | | | |
| Gross Expenditures | 50,175.7 | 46,638.8 | 50,169.3 | 585.1 | 50,754.3 | 578.6 | 1.2% | 1,065.7 | 2.1% | 880.0 | 1.7% |
| Revenue | 48,083.7 | 43,153.5 | 48,827.1 | 585.1 | 49,412.2 | 1,328.5 | 2.8% | 1,065.7 | 2.2% | 880.0 | 1.7% |
| Net Expenditures | 2,092.0 | 3,485.4 | 1,342.1 | 0.0 | 1,342.1 | (749.9) | (35.8%) | (0.0) | (0.0%) | (0.0) | (0.0%) |
| Engineering Review & Acceptance | | | | | | | | | | | |
| Gross Expenditures | 13,418.5 | 12,480.3 | 13,596.4 | 140.9 | 13,737.3 | 318.8 | 2.4% | 290.6 | 2.1% | 257.6 | 1.8% |
| Revenue | 13,242.3 | 17,251.7 | 12,358.1 | 140.9 | 12,499.0 | (743.3) | (5.6%) | 290.6 | 2.3% | 257.6 | 2.0% |
| Net Expenditures | 176.2 | (4,771.4) | 1,238.3 | 0.0 | 1,238.3 | 1,062.1 | 602.8% | 0.0 | 0.0% | 0.0 | 0.0% |
| Engineering Information | | | | | | | | | | | |
| Gross Expenditures | 9,678.4 | 9,112.7 | 9,777.2 | 951.4 | 10,728.6 | 1,050.2 | 10.9% | 220.7 | 2.1% | 153.1 | 1.4% |
| Revenue | 7,865.1 | 8,031.6 | 8,276.1 | 951.4 | 9,227.5 | 1,362.3 | 17.3% | 220.7 | 2.4% | 153.1 | 1.6% |
| Net Expenditures | 1,813.3 | 1,081.2 | 1,501.1 | (0.0) | 1,501.1 | (312.2) | (17.2%) | 0.0 | 0.0% | 0.0 | 0.0% |
| Total | | | | | | | | | | | |
| Gross Expenditures | 73,272.6 | 68,231.9 | 73,542.8 | 1,677.3 | 75,220.1 | 1,947.5 | 2.7% | 1,577.0 | 2.1% | 1,290.6 | 1.7% |
| Revenue | 69,191.1 | 68,436.7 | 69,461.4 | 1,677.3 | 71,138.7 | 1,947.5 | 2.8% | 1,577.0 | 2.2% | 1,290.6 | 1.8% |
| Total Net Expenditures | 4,081.5 | (204.8) | 4,081.5 | 0.0 | 4,081.5 | 0.0 | 0.0% | (0.0) | (0.0%) | (0.0) | (0.0%) |
| Approved Positions | 574.1 | 532.1 | 574.1 | 11.0 | 585.1 | 11.0 | 1.9% | 0.0 | 0.0% | 0.0 | 0.0% |

The Engineering & Construction Services' 2018 Preliminary Operating Budget is \$75.220 million gross and \$4.082 million net, representing a 0% increase to the 2017 Approved Net Operating Budget and achieves the reduction target of 0% as set out in the 2018 Operating Budget Directions approved by Council.

- The Program is able to maintain its net base budget at 2017 levels mainly due to increased recoveries from Metrolinx for survey services, reduced benefits and the continuation of previously implemented operational efficiency measures (i.e. reductions in the use of fleet vehicles, etc.).
- New and enhanced service funds of \$1.677 million gross and \$0 net with 11.0 new positions are included for work that will be performed on behalf of Metrolinx; communications support for delivery of construction projects for the Basement Flooding Protection Capital Program and the Local Roads Capital Program; for legal expertise services required for properties related to the Strategic Rehabilitation of the F.G. Gardiner Expressway; and for review and project management of the Lawrence Heights Revitalization project on behalf of Toronto Community Housing Corporation (TCHC).
- Approval of the 2018 Preliminary Operating Budget will result in Engineering & Construction Services increasing its total staff complement by 11 positions from 574.1 to 585.1, all for new and enhanced services.
- The 2019 and 2020 Plans reflect increases attributable to COLA, progression pay, step and other payroll costs, resulting in an increase of \$1.577 million gross in 2019 and an increase of \$1.291 million gross in 2020.

The following graph summarizes the operating budget pressures for Engineering & Construction Services.

Key Cost Drivers

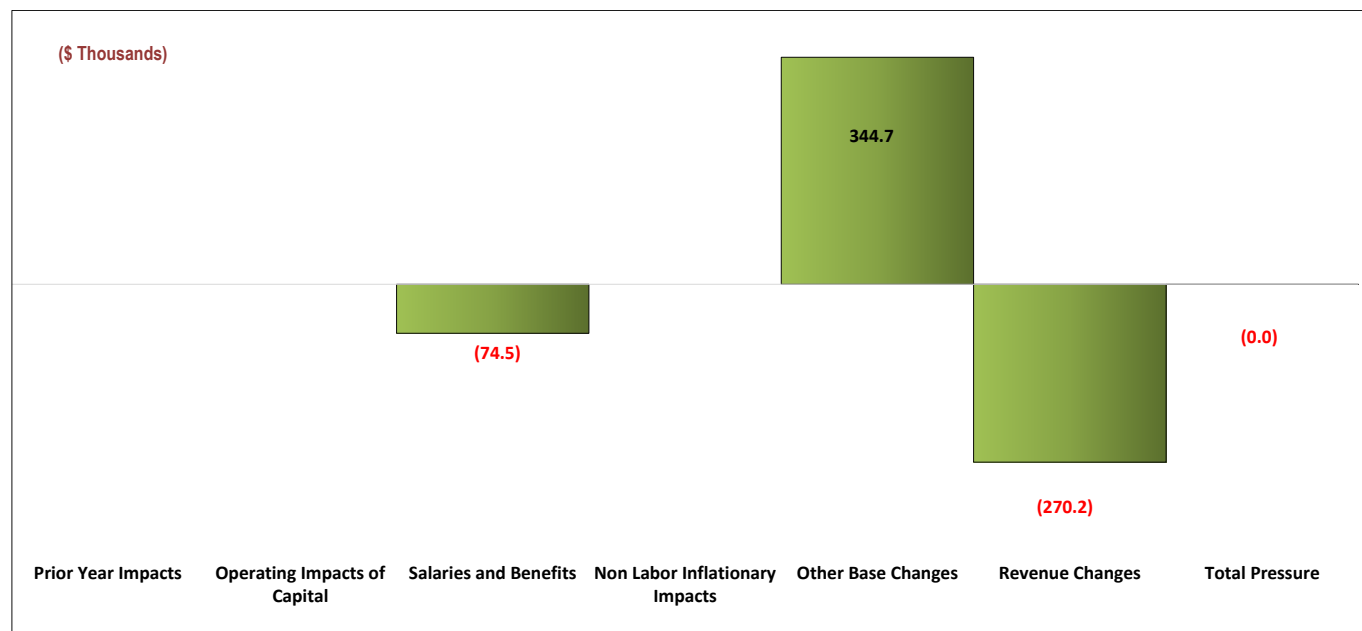


Table 2
Key Cost Drivers

| (In \$000s) | 2018 Base Operating Budget | | | Total | |
|---|---------------------------------------|---------------------------------|-------------------------|--------------|--|
| | Municipal Infrastructure Construction | Engineering Review & Acceptance | Engineering Information | | |
| | \$ | \$ | \$ | \$ | |
| Gross Expenditure Changes | | | | | |
| Salaries and Benefits | | | | | |
| COLA, Progression Pay, Step Increases, Re-earnables and Adjustments / Realignment | (120.9) | 64.7 | (18.2) | (74.5) | |
| Other Base Expenditure Changes | | | | | |
| 1 Other Base Changes | 114.4 | 113.3 | 117.0 | 344.7 | |
| Total Gross Expenditure Changes | (6.5) | 177.9 | 98.8 | 270.2 | |
| Revenue Changes | | | | | |
| Base Revenue Changes | | | | | |
| Bell Smart City Recovery (volume) | | (793.5) | | (793.5) | |
| Metrolinx Recovery (volume) | | (500.0) | | (500.0) | |
| Survey Services for Metrolinx (recovered through Legal Services) | | | 1,200.0 | 1,200.0 | |
| 1 Other Revenue Changes and Realignment | 743.4 | 409.3 | (789.0) | 363.7 | |
| Total Revenue Changes | 743.4 | (884.2) | 411.0 | 270.2 | |
| Net Expenditure Changes | (749.9) | 1,062.1 | (312.2) | (0.0) | |

Key cost drivers for Engineering & Construction Services are discussed below:

Gross Expenditure Changes

- COLA, non-union progression pay, union step increases and other salary adjustments result in a pressure of \$0.407 million across all ECS services, however this was mitigated by the lower cost of benefits of \$0.482 million. Overall, salaries and benefits decreased by \$0.075 million across all three services.

Other Base Changes

- Various Inter-Departmental Charge (IDC) adjustments and other expenditure adjustments to align the budget with actual experience of \$0.345 million across all ECS services. Primarily offset by revenue/recovery adjustments.

Base Revenue Changes

- The volume of work is anticipated to be lower for the Bell Smart City program as the project is approaching completion. As a result, recoveries are reduced by \$0.794 million.
- The volume of review work anticipated to be received from Metrolinx in 2018 has been reduced and therefore recoveries are lower by \$0.500 million. The estimated revenues are based on historical information and the expected roll-out of the project going forward, based on information provided by the proponent.
- An increase of \$1.200 million in recoveries to be received through Legal Services is anticipated for 2018, as demand for surveying work for Metrolinx is expected to increase.
- Various revenue/recovery adjustments of \$0.364 million to align the budget with actual experience, applicable across all ECS services.

Table 4
2018 Preliminary New & Enhanced Service Priorities

| Description (\$000s) | New and Enhanced | | | | | | Total New and Enhanced | | | Incremental Change | | | |
|--|---------------------------------------|------------|---------------------------------|--------------|-------------------------|-----|------------------------|-----|-------------|--------------------|------|-----------|------|
| | Municipal Infrastructure Construction | | Engineering Review & Acceptance | | Engineering Information | | \$ | | Position | 2019 Plan | | 2020 Plan | |
| | Gross | Net | Gross | Net | Gross | Net | Gross | Net | # | Net | Pos. | Net | Pos. |
| Enhanced Services Priorities | | | | | | | | | | | | | |
| Staff Initiated: | | | | | | | | | | | | | |
| Metrolinx Transit Projects | | | | | 885.0 | | 885.0 | | 8.0 | | | | |
| Legal Advice for Properties related to Gardiner Rehab | 241.0 | | | | 60.3 | | 301.3 | | | | | | |
| Digital Comm Expertise (Water & Transportation projects) | 116.6 | | | | 6.1 | | 122.7 | | | | | | |
| Communication Coordinators (Basement Flooding & Local Roads) | 227.4 | 0.0 | | | | | 227.4 | | 2.0 | | | | |
| Sub-Total Staff Initiated | 585.1 | 0.0 | | | 951.4 | | 1,536.4 | | 10.0 | | | | |
| Total Enhanced Service Priorities | 585.1 | 0.0 | | | 951.4 | | 1,536.4 | | 10.0 | | | | |
| New Service Priorities | | | | | | | | | | | | | |
| Staff Initiated: | | | | | | | | | | | | | |
| Review/ Project Mgmt for Lawrence Heights Revitalization | | | | 140.9 | | | 140.9 | | 1.0 | | | | |
| Sub-Total Staff Initiated | | | | 140.9 | | | 140.9 | | 1.0 | | | | |
| Total New Service Priorities | | | | 140.9 | | | 140.9 | | 1.0 | | | | |
| Total New / Enhanced Services | 585.1 | 0.0 | | 140.9 | | | 1,677.3 | | 11.0 | | | | |

The 2018 Preliminary Operating Budget includes funding for the following new and enhanced service priorities:

Enhanced Service Priorities (\$1.536 million gross & \$0 net)

Metrolinx Transit Projects (\$0.885 million gross & \$0 net)

- The 2018 Preliminary Operating Budget includes funding for 8 permanent positions (2 Senior Ontario Land Surveyors; 4 Engineering Technician Technologist 1; 2 Engineering Technician Technologist 3), fully funded by Metrolinx, to undertake legal surveying for property acquisitions for the Etobicoke-Finch West LRT.
- The positions are required by ECS to ensure that the City meets its commitments under agreements with Metrolinx and has the resources needed to support TTC transit expansion.

Legal Advice for Properties Related to the F.G. Gardiner Rehabilitation (\$0.301 million gross & \$0 net)

- Funding of \$0.301 million is provided for temporary dedicated support within Legal Services to ensure that there is sufficient capacity to provide effective and timely advice and service to ECS so as to facilitate

compliance with the Council-approved implementation schedule for the F.G. Gardiner Expressway Revised Strategic Rehabilitation Plan.

- This funding will provide resources to undertake the review of title to affected properties; interpret and provide advice regarding existing legal rights and obligations; assist with the acquisition of title or easement interests as required; and, draft, prepare and register related documents. These costs will be fully recovered from the Transportation Services Capital Program.

Digital Communications Expertise (\$0.123 million gross & \$0 net)

- The 2018 Preliminary Operating Budget includes funding for dedicated resources (Senior Communications Coordinator), fully recovered from the Transportation Services Capital Program, in the Cluster B Communications Unit of Strategic Communications within the City Manager's Office.
- This resource is required to: refine and improve communications and issues management plans for major individual and overall City-wide road construction projects to better coordinate and minimize impact on residents and road users; improve delivery of construction-related messaging and build credibility and confidence in the City's efforts; increase coordination and consistency among operating and delivery programs, thereby improving media and public awareness about road, sewer and watermain construction projects, including providing key messages for front-line staff and key stakeholders.

Communication Coordinators for Basement Flooding Protection & Local Roads (\$0.227 million gross & \$0 net)

- The 2018 Preliminary Operating Budget includes funding for 2 permanent positions (Communications Coordinators), fully funded by the capital programs of Toronto Water and Transportation Services.
- These positions will perform the communications and issues management functions that have typically been done by ECS Project Managers and Engineers working on the capital construction projects being delivered in support of the Basement Flooding Protection Program and the Local Roads Program. They will undertake communication planning, public notifications, and project signage; and, assist with the identification and development of timely responses to resolve ongoing and emerging issues, complaints and customer service issues and provide guidance to Project Managers and Engineers, and senior divisional management staff, in response to enquiries and escalated complaints.

New Service Priorities (\$0.141 million gross & \$0 net)

Project Management for Lawrence Heights Revitalization (\$0.141 million gross & \$0 net)

- Funding is included in the 2018 Preliminary Operating Budget for 1 permanent position (Senior Engineer), fully funded by the Toronto Community Housing Corporation (TCHC), to achieve the aggressive development schedule for review and project management of Phase 1 of the Lawrence Heights Revitalization Project. Continued funding is subject to future approval of the next phases for this project.
- The position will provide ECS with a dedicated resource to undertake review of the development application for Phase 1 of the Lawrence Heights revitalization project within a timeframe that respects current agreements, and will be able to advise on the effect of the revitalization project on City infrastructure to ensure the integrity of the assets is maintained.

Table 5
2019 and 2020 Plan by Program

| Description (\$000s) | 2019 - Incremental Increase | | | | | 2020 - Incremental Increase | | | | |
|---|-----------------------------|----------------|-------------|----------|----------|-----------------------------|----------------|-------------|----------|----------|
| | Gross Expense | Revenue | Net Expense | % Change | Position | Gross Expense | Revenue | Net Expense | % Change | Position |
| Known Impacts: | | | | | | | | | | |
| COLA, Progression Pay, Step Increases and Other changes to align with actual experience | 1,485.7 | 1,485.7 | | | | 1,235.2 | 1,235.2 | | | |
| IDC/IDR Changes | 62.3 | 62.3 | | | | 29.3 | 29.3 | | | |
| Metrolinx Transit Projects | 9.6 | 9.6 | | | | 7.4 | 7.4 | | | |
| Legal Advice for Properties related to Gardiner Rehab | 7.0 | 7.0 | | | | 5.8 | 5.8 | | | |
| Digital Comm Expertise (Water & Transportation projects) | 2.8 | 2.8 | | | | 3.2 | 3.2 | | | |
| Communication Coordinators (Basement Flooding & Local Roads) | 5.9 | 5.9 | | | | 6.0 | 6.0 | | | |
| Review / Project Mgmt for Lawrence Heights Revitalization | 3.7 | 3.7 | | | | 3.7 | 3.7 | | | |
| Total Incremental Impact | 1,576.9 | 1,576.9 | 0.0 | | | 1,290.6 | 1,290.6 | 0.0 | | |

Future year incremental costs are primarily attributable to the following:

Known Impacts:

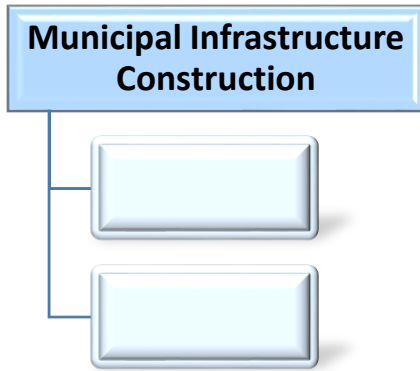
- COLA, progression pay, step and other adjustments are anticipated to result in incremental increases of \$1.486 million in 2019 and a further increase of \$1.235 million in 2020.



Part 2

2018 Preliminary Operating Budget by Service

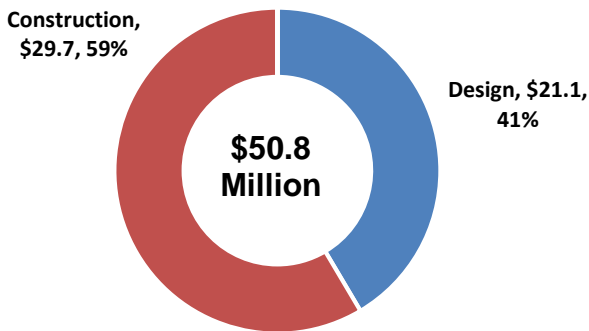
Municipal Infrastructure Construction



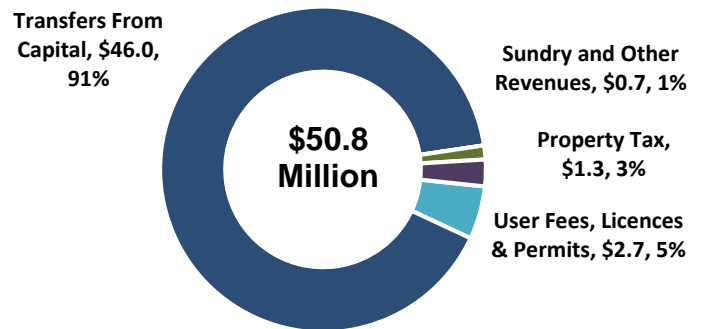
What We Do

- Provide engineering and project management services to internal clients for the construction of new and upgraded infrastructure including bridges, roads, sewers, solid waste facilities, stormwater management facilities, water and wastewater treatment facilities, and watermains.

2018 Service Budget by Activity (\$Ms)



2018 Service Budget by Funding Source (\$Ms)



2018 Service Levels

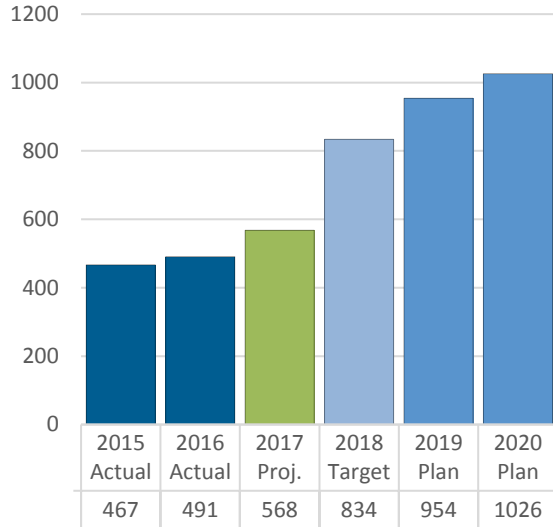
Municipal Infrastructure Construction

| Activity | Type | Service Level Description | Status | 2015 | 2016 | 2017 | 2018 |
|--------------|--------------------------|---|----------|------|------|------|------|
| Design | Engineering Design | % of tenders / RFPs / RFQs issued compared to plan | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 92% | 87% | | |
| Construction | Engineering Construction | % of contracts substantially completed compared to plan | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 48% | 53% | | |
| | Engineering Construction | Year End Actual Expenditure as a % of Approved Capital Budget | Approved | 80% | 80% | 80% | 80% |
| | | | Actual | 79% | 74% | | |

Overall, the 2018 Service Levels are consistent with the approved 2017 Service Levels for Municipal Infrastructure Construction.

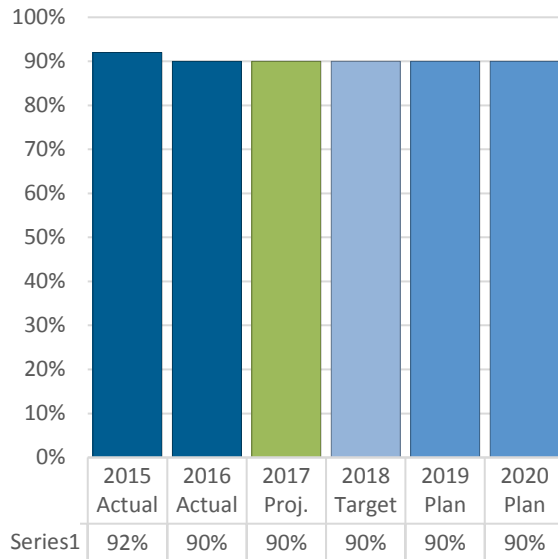
Service Performance Measures

Annual Expenditure on Municipal Infrastructure Design & Construction (\$ Millions)



- This measure indicates year-to-date expenditures on municipal infrastructure design and construction in millions.
- Engineering & Construction Services continues to experience substantial growth in construction activity for clients' capital programs.
- \$568 million in capital projects are expected to be delivered by ECS in 2017, an increase of \$77 million compared to 2016.
- The 2018 Preliminary Operating Budget is targeting the delivery of 80% of the Capital Budget assigned to the Program, which is estimated to be \$830 million in 2018.

% of Tenders issued compared to plan at year-end



- The number of tenders, requests for proposals, and requests for qualifications decreased from 143 in 2015 to 141 in 2016.
- The Program expects to issue an estimated 154 tenders for a capital program assigned to ECS that is currently valued at over \$710 million.
- 2018 and future year estimates are 150 for each of 2018, 2019 and 2020, and will be based on client's requirements and the planned continued bundling of construction projects into single tenders.

Table 6
2018 Preliminary Service Budget by Activity

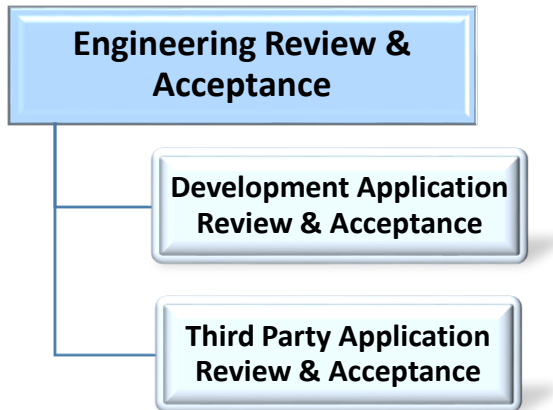
| (\$000s) | 2017 | | 2018 Preliminary Operating Budget | | | | | | | Incremental Change | | | | | |
|---------------------------|-----------------|-----------------|-----------------------------------|------------------|-------------------------------------|----------------|--------------|-----------------|------------------------------------|--------------------|----------------|-------------|--------------|---------------|----|
| | Approved Budget | Base Budget | Service Changes | Preliminary Base | Prelim. Base Budget vs. 2017 Budget | % Change | New/Enhanced | Prelim Budget | 2018 Prelim Budget vs. 2017 Budget | | 2019 Plan | | 2020 Plan | | |
| | | | | | | | | | \$ | % | \$ | % | \$ | % | \$ |
| GROSS EXP. | | | | | | | | | | | | | | | |
| Design | 20,766.5 | 20,882.7 | | 20,882.7 | 116.2 | 0.6% | 173.2 | 21,055.9 | 289.4 | 1.4% | 427.7 | 2.0% | 305.5 | 1.4% | |
| Construction | 29,409.2 | 29,286.6 | | 29,286.6 | (122.7) | (0.4%) | 411.8 | 29,698.4 | 289.2 | 1.0% | 638.0 | 2.1% | 574.5 | 1.9% | |
| Total Gross Exp. | 50,175.7 | 50,169.3 | | 50,169.3 | (6.5) | (0.0%) | 585.1 | 50,754.3 | 578.6 | 1.2% | 1,065.7 | 2.1% | 880.0 | 1.7% | |
| REVENUE | | | | | | | | | | | | | | | |
| Design | 20,256.3 | 20,494.8 | | 20,494.8 | 238.5 | 1.2% | 173.2 | 20,668.1 | 411.8 | 2.0% | 427.7 | 2.1% | 305.5 | 1.4% | |
| Construction | 27,827.4 | 28,332.3 | | 28,332.3 | 504.9 | 1.8% | 411.8 | 28,744.1 | 916.7 | 3.3% | 638.0 | 2.2% | 574.5 | 2.0% | |
| Total Revenues | 48,083.7 | 48,827.1 | | 48,827.1 | 743.4 | 1.5% | 585.1 | 49,412.2 | 1,328.5 | 2.8% | 1,065.7 | 2.2% | 880.0 | 1.7% | |
| NET EXP. | | | | | | | | | | | | | | | |
| Design | 510.2 | 387.9 | | 387.9 | (122.3) | (24.0%) | 0.0 | 387.9 | (122.3) | (24.0%) | 0.0 | 0.0% | 0.0 | 0.0% | |
| Construction | 1,581.8 | 954.2 | | 954.2 | (627.6) | (39.7%) | 0.0 | 954.2 | (627.6) | (39.7%) | (0.0) | 0.0% | (0.0) | (0.0%) | |
| Total Net Exp. | 2,092.0 | 1,342.1 | | 1,342.1 | (749.9) | (35.8%) | 0.0 | 1,342.1 | (749.9) | (35.8%) | (0.0) | 0.0% | (0.0) | (0.0%) | |
| Approved Positions | 380.7 | 379.7 | | 379.7 | (1.0) | (0.3%) | 2.0 | 381.7 | 1.0 | 0.3% | | 0.0% | | | |

The **Municipal Infrastructure Construction Service** provides engineering and project management services to internal clients for the construction of new and upgraded infrastructure including bridges, roads, sewers, solid waste facilities, stormwater management facilities, water and wastewater treatment facilities, and watermains.

The Municipal Infrastructure Construction Service's 2018 Preliminary Operating Budget of \$50.754 million gross and \$1.342 million net is \$0.750 million or 35.8% under the 2017 Approved Net Budget.

- Lower base budget benefit costs that are common across all services are partially offset by various Inter-Departmental Charge (IDC) increases and other expenditure adjustments to align the budget with actual experience of \$0.114 million net. Higher recoveries of \$0.743 million will be realized based on the expenditure increases and to align the budget with actual experience.
- The 2018 Preliminary Operating Budget includes funding of \$0.585 million gross and \$0 net for new/enhanced initiatives including:
 - Partial funding for legal advice for properties related to the F.G. Gardiner Expressway, fully recovered from the capital program (\$0.241 million gross and \$0 net).
 - Partial funding for digital communications expertise within Strategic Communications in the City Manager's Office, fully recovered from the capital program (\$0.117 million gross and \$0 net).
 - Funding for 2 permanent positions (Communications Coordinators), fully recovered from the capital programs of Toronto Water and Transportation Services for the Basement Flooding Protection & Local Roads programs (\$0.227 million gross and \$0 net).

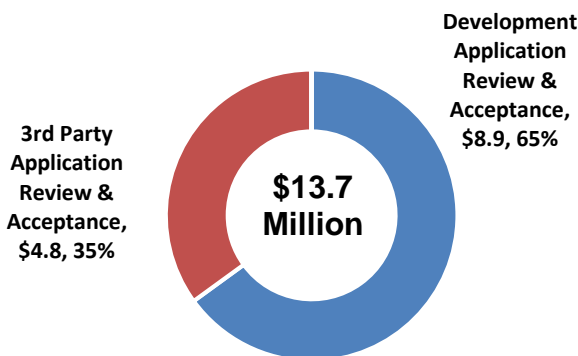
Engineering Review & Acceptance



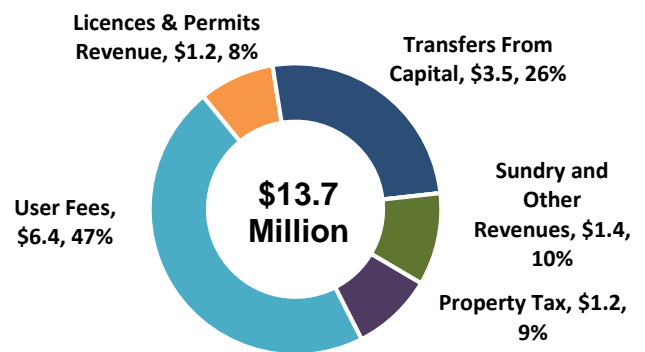
What We Do

- Provide engineering review and acceptance services to external clients including the development industry, utility companies, and public agencies, so as to ensure that the integrity of City infrastructure is maintained and that development and third party works comply with applicable by-laws, standards and regulatory requirements

2018 Service Budget by Activity (\$Ms)



2018 Service by Funding Source (\$Ms)



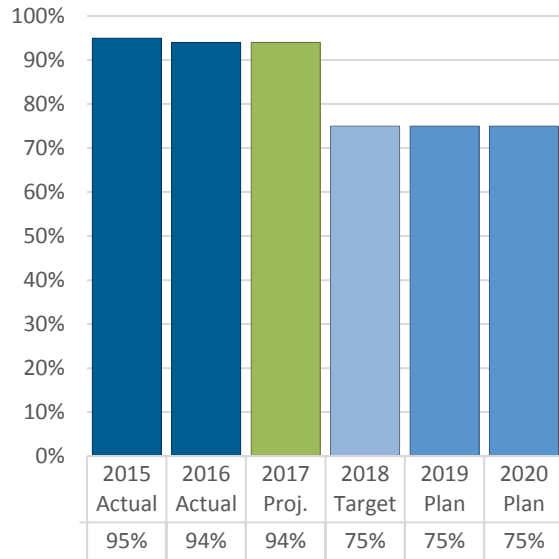
2018 Service Levels Engineering Review & Acceptance

| Activity | Type | Service Level Description | Status | 2015 | 2016 | 2017 | 2018 |
|--|--------------------------|--|----------|------|------|------|------|
| Development Applications Review & Acceptance | Development Applications | Review and acceptance of Development Applications within STAR timelines | Approved | 75% | 75% | 75% | 75% |
| | | | Actual | 95% | 94% | | |
| | Engineering Drawings | Review of engineering drawing sets within established timelines | Approved | 75% | 75% | 75% | 75% |
| | | | Actual | 98% | 93% | | |
| Third Party Application Review & Acceptance | Third Party Applications | Review and acceptance of Third Party and Utility Applications within 20 working days | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 99% | 99% | | |

Overall, the 2018 Service Levels are consistent with the approved 2017 Service Levels for Engineering Review & Acceptance.

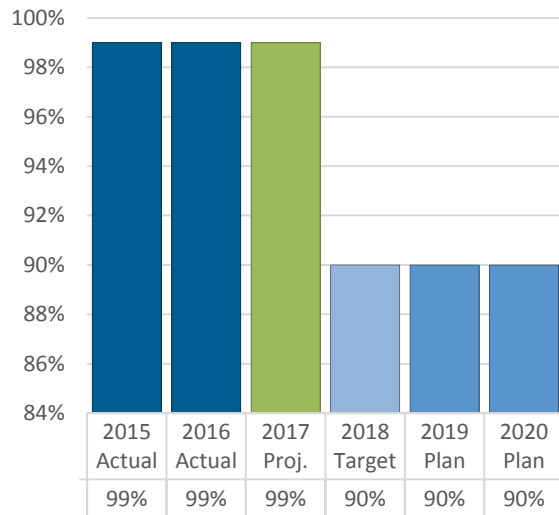
Service Performance Measures

% of Development Applications and Revisions Reviewed within STAR timelines



- This measure indicates the percentage of development applications and revisions reviewed within "Streaming the Application Review" (STAR) timelines.
- In 2017, 94% of development applications and revisions by Engineering & Construction Services were completed within STAR timelines.
- This high level of achievement builds on the trend set in 2015, when 95% of applications were reviewed within STAR timelines.
- ECS will continue to target compliance with STAR timelines in 2017 and future years.

% of Third Party and Utility Applications and Revisions Reviewed Within Set Timelines



- This measure indicates the percentage of third party and utility applications reviewed within the set timelines.
- For the fifth year in a row, ECS reviewed 99% of third party and utility applications within set timelines in 2017.
- This represents a very high level of responsiveness to third party and utility clients.
- 2018 and future year targets will continue to be 90% compliance with set timelines.

Table 6
2018 Preliminary Service Budget by Activity

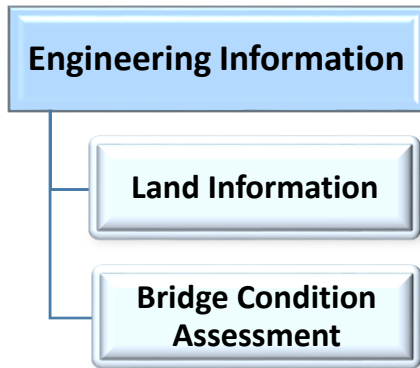
| (\$000s) | 2017 | 2018 Preliminary Operating Budget | | | | | | | | Incremental Change | | | | | |
|---|-----------------|-----------------------------------|-----------------|------------------|-------------------------------------|---------------|--------------|--------------------|------------------------------------|--------------------|--------------|-------------|--------------|-------------|--|
| | Approved Budget | Base Budget | Service Changes | Preliminary Base | Prelim. Base Budget vs. 2017 Budget | % Change | New/Enhanced | Preliminary Budget | 2018 Prelim Budget vs. 2017 Budget | | 2019 Plan | | 2020 Plan | | |
| | \$ | \$ | \$ | \$ | \$ | % | \$ | \$ | \$ | % | \$ | % | \$ | % | |
| GROSS EXP. | | | | | | | | | | | | | | | |
| Development Application Review & Acceptance | 6,977.7 | 8,801.9 | | 8,801.9 | 1,824.2 | 26.1% | 126.8 | 8,928.7 | 1,951.0 | 28.0% | 204.7 | 2.3% | 202.6 | 2.2% | |
| 3rd Party Application Review & Acceptance | 6,440.8 | 4,794.5 | | 4,794.5 | (1,646.3) | (25.6%) | 14.1 | 4,808.6 | (1,632.2) | (25.3%) | 85.9 | 1.8% | 55.0 | 1.1% | |
| Total Gross Exp. | 13,418.5 | 13,596.4 | | 13,596.4 | 177.9 | 1.3% | 140.9 | 13,737.3 | 318.8 | 2.4% | 290.6 | 2.1% | 257.6 | 1.8% | |
| REVENUE | | | | | | | | | | | | | | | |
| Development Application Review & Acceptance | 6,589.7 | 7,569.1 | | 7,569.1 | 979.4 | 14.9% | 126.8 | 7,695.9 | 1,106.2 | 16.8% | 204.7 | 2.7% | 202.6 | 2.6% | |
| 3rd Party Application Review & Acceptance | 6,652.6 | 4,789.0 | | 4,789.0 | (1,863.6) | (28.0%) | 14.1 | 4,803.1 | (1,849.5) | (27.8%) | 85.9 | 1.8% | 55.0 | 1.1% | |
| Total Revenues | 13,242.3 | 12,358.1 | | 12,358.1 | (884.2) | (6.7%) | 140.9 | 12,499.0 | (743.3) | (5.6%) | 290.6 | 2.3% | 257.6 | 2.0% | |
| NET EXP. | | | | | | | | | | | | | | | |
| Development Application Review & Acceptance | 388.0 | 1,232.8 | | 1,232.8 | 844.8 | 217.7% | | 1,232.8 | 844.8 | 217.7% | 0.0 | 0.0% | 0.0 | 0.0% | |
| 3rd Party Application Review & Acceptance | (211.8) | 5.4 | | 5.4 | 217.3 | (102.6%) | | 5.4 | 217.3 | (102.6%) | 0.0 | 0.0% | 0.0 | 0.0% | |
| Total Net Exp. | 176.2 | 1,238.3 | | 1,238.3 | 1,062.1 | 602.8% | | 1,238.3 | 1,062.1 | 602.8% | 0.0 | 0.0% | 0.0 | 0.0% | |
| Approved Positions | 106.3 | 106.9 | | 106.9 | 0.6 | 0.6% | 1.0 | 107.9 | 1.6 | 1.5% | | | | | |

The **Engineering Review & Acceptance Service** provides engineering review and acceptance services to external clients including the development industry, utility companies, and public agencies, so as to ensure that the integrity of City infrastructure is maintained and that development and third party works comply with applicable by-laws, standards and regulatory requirements.

The Engineering Review & Acceptance Service's 2018 Preliminary Operating Budget of \$13.737 million gross and \$1.238 million net is \$1.062 million or 602.8% over the 2017 Approved Net Budget.

- This service is also experiencing lower base budget benefit costs that are common across all services, however these are more than offset by other expenditure adjustments to align the budget with actual experience that reduce the budget by \$0.113 million.
- While the service has higher recovery adjustments of \$0.409 million to recover the expenditure adjustments and to align the budget with actual experience, the volume of work is anticipated to be lower for both the Bell Smart City program and Metrolinx projects resulting in lower revenues of \$0.794 million and \$0.500 million respectively.
- The 2018 Preliminary Operating Budget includes new funding of \$0.141 million gross and \$0 net for one permanent position (Senior Engineer) for the review and project management of Phase 1 of the Lawrence Heights Revitalization Project, fully funded by the TCHC.

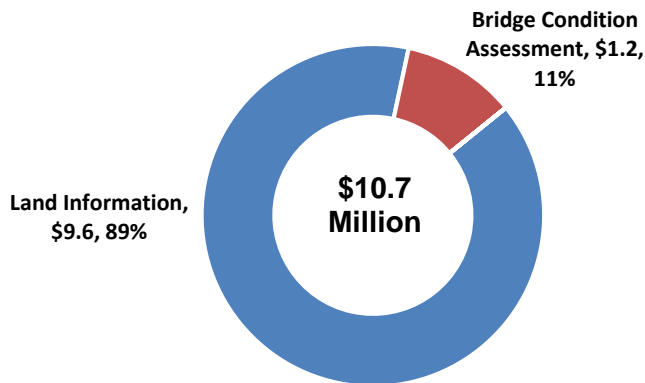
Engineering Information



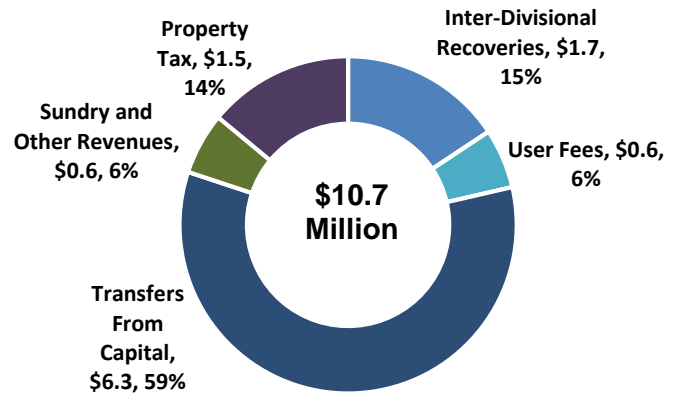
What We Do

- Establish and maintain effective technical and data support to the various business units across the division and cluster involved in managing and building the City's infrastructure.

2018 Service Budget by Activity (\$Ms)



2018 Service by Funding Source (\$Ms)



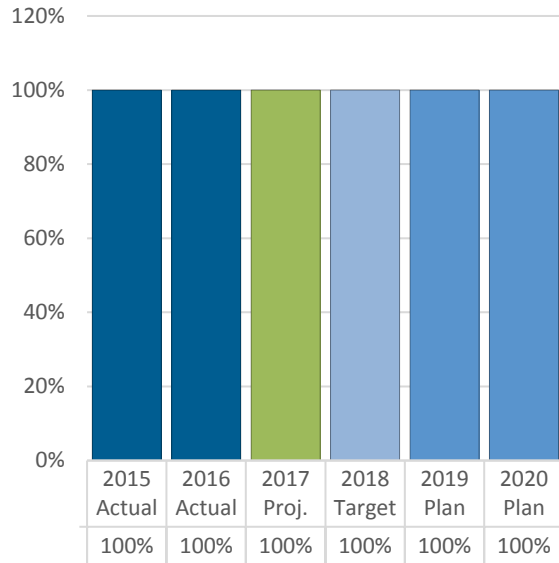
2018 Service Levels Engineering Information

| Activity | Type | Service Level Description | Status | 2015 | 2016 | 2017 | 2018 |
|-----------------------------|--------------------------------|--|----------|------|------|------|------|
| Land Information | Land Surveying | Completion of projects by estimated date | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 90% | 90% | | |
| | Street Naming | Provide a recommendation within 6 months | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 90% | 90% | | |
| | Municipal Numbering | Provide comments within 5 working days | Approved | 100% | 100% | 100% | 100% |
| | | | Actual | 100% | 100% | | |
| | Utility Mapping | Completion of planned km | Approved | 90% | 90% | 90% | 90% |
| | | | Actual | 90% | 90% | | |
| Bridge Condition Assessment | Bridge Inspection & Assessment | Bridge condition inspection compliance within regulatory timelines | Approved | 100% | 100% | 100% | 100% |
| | | | Actual | 100% | 100% | | |

Overall, the 2018 Service Levels are consistent with the approved 2017 Service Levels for Engineering Information.

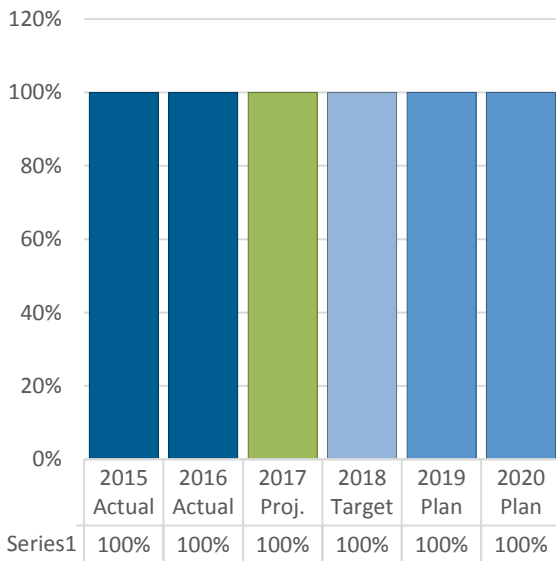
Service Performance Measures

% of Bridge Condition Inspections Completed Compared to Plan



- This measure indicates the percentage of bridge condition inspections completed compared to the plan.
- In 2017, ECS again completed 100% of planned bridge condition inspections.
- ECS is targeting to maintain a 100% completion rate in 2018 and future years for the legislated 2-year bridge condition inspection cycle.

% of Municipal Numbers Processed Within Timelines



- This measure indicates the percentage of municipal numbers processed within the set timelines.
- In 2017, ECS again completed 100% of municipal numbering within 5 business days.
- ECS is targeting to maintain a 100% compliance with the set timelines for 2018 and future years.

Table 6
2018 Preliminary Service Budget by Activity

| | 2017 | 2018 Preliminary Operating Budget | | | | | | | Incremental Change | | | | | |
|-----------------------------|-----------------|-----------------------------------|-----------------|------------------|-------------------------------------|----------------|--------------|--------------------|------------------------------------|----------------|--------------|-------------|--------------|-------------|
| | Approved Budget | Base Budget | Service Changes | Preliminary Base | Prelim. Base Budget vs. 2017 Budget | % Change | New/Enhanced | Preliminary Budget | 2018 Prelim Budget vs. 2017 Budget | | 2019 Plan | | 2020 Plan | |
| | (\$000s) | \$ | \$ | \$ | \$ | % | \$ | \$ | \$ | % | \$ | % | \$ | % |
| GROSS EXP. | | | | | | | | | | | | | | |
| Land Information | 8,602.3 | 8,684.6 | | 8,684.6 | 82.2 | 1.0% | 885.0 | 9,569.5 | 967.2 | 11.2% | 192.0 | 2.0% | 129.9 | 1.3% |
| Bridge Condition Assessment | 1,076.0 | 1,092.6 | | 1,092.6 | 16.6 | 1.5% | 66.4 | 1,159.0 | 83.0 | 7.7% | 28.6 | 2.5% | 23.2 | 1.9% |
| Total Gross Exp. | 9,678.4 | 9,777.2 | | 9,777.2 | 98.8 | 1.0% | 951.4 | 10,728.6 | 1,050.2 | 10.9% | 220.7 | 2.1% | 153.1 | 1.4% |
| REVENUE | | | | | | | | | | | | | | |
| Land Information | 6,835.9 | 7,221.2 | | 7,221.2 | 385.3 | 5.6% | 885.0 | 8,106.1 | 1,270.2 | 18.6% | 192.0 | 2.4% | 129.9 | 1.6% |
| Bridge Condition Assessment | 1,029.2 | 1,055.0 | | 1,055.0 | 25.7 | 2.5% | 66.4 | 1,121.3 | 92.1 | 8.9% | 28.6 | 2.6% | 23.2 | 2.0% |
| Total Revenues | 7,865.1 | 8,276.1 | | 8,276.1 | 411.0 | 5.2% | 951.4 | 9,227.5 | 1,362.3 | 17.3% | 220.7 | 2.4% | 153.1 | 1.6% |
| NET EXP. | | | | | | | | | | | | | | |
| Land Information | 1,766.4 | 1,463.4 | | 1,463.4 | (303.1) | (17.2%) | (0.0) | 1,463.4 | (303.1) | (17.2%) | 0.0 | 0.0% | 0.0 | 0.0% |
| Bridge Condition Assessment | 46.8 | 37.7 | | 37.7 | (9.1) | (19.5%) | (0.0) | 37.7 | (9.1) | (19.5%) | 0.0 | 0.0% | 0.0 | 0.0% |
| Total Net Exp. | 1,813.3 | 1,501.1 | | 1,501.1 | (312.2) | (17.2%) | (0.0) | 1,501.1 | (312.2) | (17.2%) | 0.0 | 0.0% | 0.0 | 0.0% |
| Approved Positions | 87.1 | 87.4 | | 87.4 | 0.4 | 0.4% | 8.0 | 95.4 | 8.4 | 9.6% | | 0.0% | | 0.0% |

The **Engineering Information Service** establishes and maintains effective technical and data support to various business units across the division and cluster involved in managing and building the City's infrastructure.

The Engineering Information 2018 Preliminary Operating Budget of \$10.729 million gross and \$1.501 million net is \$0.312 million or 17.2% under the 2017 Approved Net Budget.

- Lower base budget benefit costs that are common across all services are more than offset by various Inter-Departmental Charge (IDC) adjustments and other expenditure adjustments to align the budget with actual experience of \$0.117 million.
- Higher recoveries will be received through Legal Services (\$1.200 million) as demand for surveying work for Metrolinx is expected to increase, are partially offset by lower recoveries of \$0.789 million to align the budget with actual experience.
- The 2018 Preliminary Operating Budget includes new funding of \$0.951 million gross and \$0 net for new/enhanced initiatives including:
 - Funding for 8 permanent positions (2 Senior Ontario Land Surveyors; 4 Engineering Technician Technologist 1; 2 Engineering Technician Technologist 3 Communications Coordinators), fully recovered from Metrolinx, to undertake legal surveying for property acquisitions for the Etobicoke-Finch West LRT (\$0.885 million gross and \$0 net).
 - Partial funding for legal advice for properties related to the F.G. Gardiner Expressway, fully recovered from the capital program (\$0.061 million gross and \$0 net).
 - Partial funding for digital communications expertise within Strategic Communications in the City Manager's Office, fully recovered from the capital program (\$0.006 million gross and \$0 net).



Part 3

Issues for Discussion

Issues Impacting Future Years

Increase in Capital Project Delivery

- Engineering & Construction Services (ECS) is projecting delivery of \$568 million in capital work by 2017 year-end. However, the annual value of the capital program to be delivered by ECS is forecast to continue to grow significantly. The projected increase in capital delivery is primarily driven by increases in both Toronto Water's and Transportation Services' Capital Budgets and Plans.
- The delivery of clients' capital programs and major third party work has increased substantially over the past decade and is characterized by workload peaks. These demands are difficult to accommodate even at a full staff complement and ECS continues to experience difficulties in hiring skilled professional and technical staff due to the competitive market conditions in the Greater Toronto Area.
- Given the projected increase in the City's capital programs for municipal infrastructure projects, ECS proposes to engage outside engineering consultants to supplement the robust in-house core capacity of internal engineering, design, inspection and surveying to meet the forecasted demand. ECS has always procured engineering consultant services to augment capacity for the delivery of the Capital Program managed by ECS.
- Additionally, the Program will continue to enhance planning and coordination of the Multi-year Capital Program with internal and external stakeholders by:
 - Emphasizing the need for asset owning divisions to define and "lock-down" multi-year programs (e.g. 3 years from the planned year of construction).
 - Issue multi-year construction contracts in areas where multi-year programs are defined.
 - Ensure multi-year budget approvals are obtained by asset owning divisions and funds are sufficient to award contracts so that construction schedule delays are avoided.
- The increase in the Capital Budgets assigned for delivery by this Program will require even more proactive management of construction-related disruption, including traffic disruption, at the project planning stage and during construction. This will be supplemented by ongoing improvements to communication and relations with the public and businesses before, during and after construction; and consideration of options such as extended hours to shorten overall construction schedules and impacts.
- The Program will continue to exercise a high degree of vigilance and oversight on construction contracts to address issues highlighted in Auditor General's reports.



Appendices

Appendix 1

2017 Service Performance

Key Service Accomplishments

In 2017, Engineering & Construction Services accomplished the following:

Municipal Infrastructure Construction

- ✓ Sustained capital delivery at an estimated 80% year end actual expenditure as a % of approved capital budget (2017 capital program expenditure target = \$568 M).
- ✓ Undertook the 2017 Local Road Resurfacing program from Transportation Services in Q1 2017, successfully planned and tendered the work for completion in 2017, and developed a comprehensive program for delivery of the entire LRRS program in future years.
- ✓ Processed over 90% of payments within the 30 day compliance period (most payments completed within 20 days).

Engineering Review & Acceptance

- ✓ Achieved 86% compliance with mandated timelines for review of 1,850 Complex, Routine, and Quick Applications development applications (STAR requirement is 75%).
- ✓ Achieved 99% compliance for the review of approximately 7,200 utility applications as of September 30 (2,000 more than were reviewed in all of 2016).

Engineering Information

- ✓ Maintained 100% completion rate in 2017 for the provincially-legislated 2-year bridge condition inspection cycle - 279 bridges inspected (including large diameter culverts).

Appendix 2

2018 Preliminary Operating Budget by Expenditure Category

Program Summary by Expenditure Category

| Category of Expense (\$000's) | 2015 | 2016 | 2017 | 2017 | 2018 | 2018 Change from | | Plan | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------|-----------------|-----------------|
| | Actual | Actual | Budget | Projected | Preliminary | 2017 Approved | | 2019 | 2020 |
| | \$ | \$ | \$ | Actual * | Budget | \$ | % | \$ | \$ |
| Salaries And Benefits | 55,014.3 | 56,551.6 | 64,566.0 | 59,960.6 | 65,706.8 | 1,140.7 | 1.8% | 67,217.5 | 68,469.6 |
| Materials & Supplies | 156.6 | 130.1 | 401.3 | 201.7 | 355.5 | (45.8) | (11.4%) | 355.5 | 355.5 |
| Equipment | 245.0 | 354.5 | 479.4 | 479.4 | 616.6 | 137.2 | 28.6% | 610.6 | 610.6 |
| Service And Rent | 2,577.0 | 2,352.9 | 3,010.0 | 2,763.0 | 3,301.9 | 291.9 | 9.7% | 3,302.1 | 3,302.3 |
| Contribution To Reserves/Reserve Funds | 797.0 | 797.0 | 768.4 | 774.5 | 768.4 | | | 768.4 | 768.4 |
| Other Expenditures | (58.0) | 289.6 | | | | | - | | |
| Inter-Divisional Charges | 3,597.2 | 3,934.8 | 4,047.4 | 4,052.7 | 4,470.9 | 423.5 | 10.5% | 4,542.9 | 4,581.3 |
| Total Gross Expenditures | 62,329.2 | 64,410.6 | 73,272.6 | 68,231.9 | 75,220.1 | 1,947.5 | 2.7% | 76,797.1 | 78,087.7 |
| Inter-Divisional Recoveries | 557.8 | 1,177.0 | 482.5 | 1,004.4 | 1,682.5 | 1,200.0 | 248.7% | 1,682.5 | 1,682.5 |
| User Fees & Donations | 5,221.8 | 9,306.3 | 9,910.5 | 13,208.1 | 9,117.0 | (793.5) | (8.0%) | 9,117.0 | 9,117.0 |
| Licences & Permits Revenue | 1,969.8 | 2,178.4 | 1,729.8 | 1,729.8 | 1,729.8 | | | 1,729.8 | 1,729.8 |
| Transfers From Capital | 46,050.2 | 44,383.4 | 54,371.1 | 50,429.7 | 55,863.1 | 1,492.0 | 2.7% | 57,436.4 | 58,723.0 |
| Sundry and Other Revenues | 2,228.6 | 3,173.0 | 2,697.3 | 2,064.7 | 2,746.4 | 49.0 | 1.8% | 2,750.1 | 2,754.0 |
| Total Revenues | 56,028.1 | 60,218.1 | 69,191.1 | 68,436.7 | 71,138.7 | 1,947.5 | 2.8% | 72,715.7 | 74,006.2 |
| Total Net Expenditures | 6,301.0 | 4,192.6 | 4,081.5 | (204.8) | 4,081.5 | 0.0 | 0.0% | 4,081.5 | 4,081.5 |
| Approved Positions | 498.1 | 519.1 | 574.1 | 532.1 | 585.1 | 11.0 | 1.9% | 585.1 | 585.1 |

* Based on the 9-month Operating Variance Report

As shown in the table, the projected favourable net variance is a result of under-spending in salaries and benefits due to vacant positions and lower recoveries from client capital projects as a result of the vacant positions. The lower recoveries are partially offset by higher full stream application fees due to higher volume of applications from utility companies.

For additional information regarding the 2017 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, 2017" considered by Budget Committee at its meeting on November 27, 2017.

2017.BU37.2 - Operating Variance Report for the Nine Month Period Ended September 30, 2017

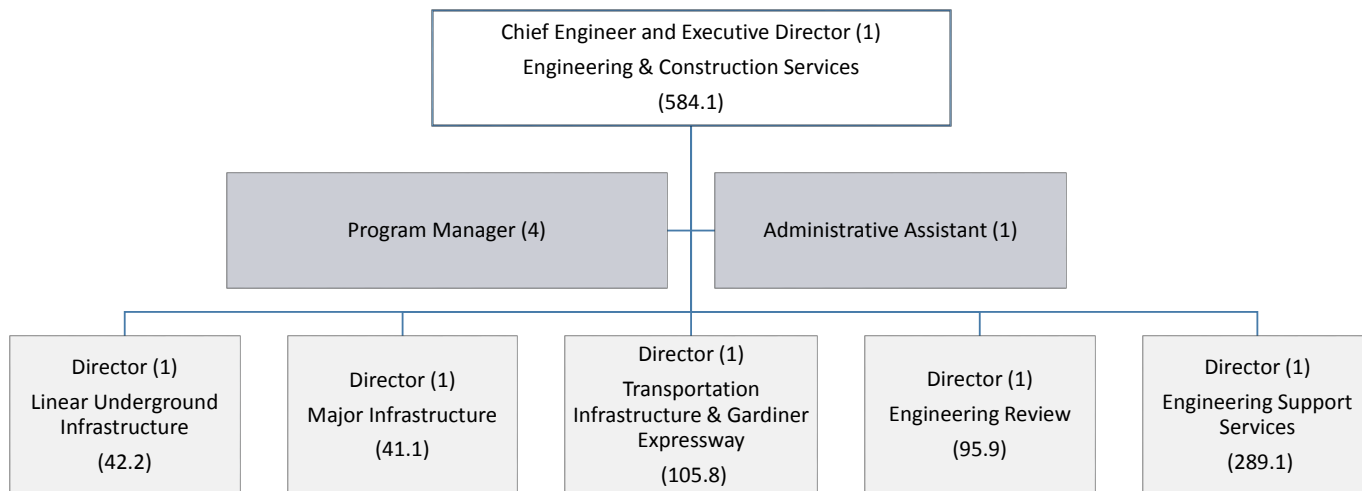
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.BU37.2>

Impact of 2017 Operating Variance on the 2018 Preliminary Operating Budget

- ECS has been implementing Program-wide resource optimization, aimed at improving efficiencies and increasing annual capital delivery rates to support the forecasted growth in the City's Capital Program. This also involves the utilization of a program management approach, including multi-year contracts for Engineering & Construction Services, managed by specialized program teams.
- The Program plans to continue an aggressive recruitment campaign. However, as experienced in the past, filling vacancies has been an on-going challenge for Engineering & Construction Services due to competitiveness in the market place.

Appendix 3

2018 Organization Chart



2018 Total Complement

| | Category | Senior Management | Management with Direct Reports | Management without Direct Reports/Exempt Professional & Clerical | Union | Total |
|--------------------|------------------------|-------------------|--------------------------------|--|--------------|--------------|
| Operating | Permanent | 1.5 | 8.6 | 52.4 | 57.1 | 119.6 |
| | Temporary | | | 2.8 | 5.6 | 8.4 |
| | Total Operating | 1.5 | 8.6 | 55.2 | 62.7 | 128.1 |
| Capital | Permanent | 4.5 | 41.4 | 135.6 | 262.9 | 444.4 |
| | Temporary | | | 5.2 | 7.5 | 12.66 |
| | Total Capital | 4.5 | 41.4 | 140.8 | 270.4 | 457.0 |
| Grand Total | | 6.0 | 50.0 | 196.0 | 333.1 | 585.1 |

Appendix 5

Summary of 2018 New / Enhanced Service Priorities

**2018 Operating Budget - Preliminary New and Enhanced Services
Summary by Service (\$000's)**

| Form ID | | Citizen Focused Services B Program - Engineering & Construction Services | Adjustments | | | | 2019 Plan Net Change | 2020 Plan Net Change |
|----------|------------------|---|----------------------|---------|-----|-----------------------|-------------------------|-------------------------|
| Category | Equity Impact | | Gross Expenditure | Revenue | Net | Approved Positions | | |
| 14676 | | Metrolinx Transit Projects | | | | | | |
| 72 | Positive | Description: | | | | | | |

Add 8 permanent positions, comprising 2 Senior Ontario Land Surveyors (Senior OLS), 4 Engineering Technician Technologist 1 (ETT1), and 2 Engineering Technician Technologist 3 (ETT3), fully funded by Metrolinx and with the expectation of funding from TTC for the future Scarborough and other subway lines. The 8 positions will provide 2 teams of 4. Each team will include 1 Senior OLS, who will be responsible for implementing program specific requirements associated with surveying the large-scale transit projects and for leading 2 ETT1s and 1 ETT3. The Senior OLS will have overall responsibility for assembling and evaluating the survey and ownership information necessary to acquire lands along the transit corridors. The Senior OLS will direct and supervise a field crew (1 ETT1 and 1 ETT3) in the performance of the surveys, and examine and ensure the accuracy of the survey results. The Senior OLS will also direct and supervise the preparation of survey drawings / plans (via 1 ETT1) that will illustrate the survey data collected in the field.

Service Level Impact:

The Program has supported delivery of the Metrolinx ECLRT since 2013 by providing necessary survey work. The services have been provided through positions created in 2013. Although workload on the ECLRT is in its final stages, additional resource pressures have resulted from the increase in workload due to the Etobicoke-Finch West LRT. These pressures will be further exacerbated with the start of legal survey work required for the Scarborough subway.

Equity Statement:

This proposal, which supports the expansion of public transport, will have a positive equity impact on persons with low-income, women, racialized groups, immigrants and refugees, Aboriginal people, youth and women. Members of these equity-seeking groups are likely to rely on public transit. The positive impacts include an increased access to public transit, which in turn increases access to employment and training opportunities, as well as to City services, City spaces and opportunities for community participation.

Service: WT-Engineering Information

| | | | | | | |
|---|--------------|--------------|--------------|-------------|------------|------------|
| Preliminary New / Enhanced Services: | 885.0 | 885.0 | (0.0) | 8.00 | 0.0 | 0.0 |
| Total Preliminary New / Enhanced Services: | 885.0 | 885.0 | (0.0) | 8.00 | 0.0 | 0.0 |

| | | | | | | | |
|-------|-----------|--|--|--|--|--|--|
| 14675 | | Communication Coordinators (Basement Flooding & Local Roads) | | | | | |
| 72 | No Impact | Description: | | | | | |

2018 Operating Budget - Preliminary New and Enhanced Services Summary by Service (\$000's)

| Form ID | | Citizen Focused Services B Program - Engineering & Construction Services | Adjustments | | | | 2019 Plan Net Change | 2020 Plan Net Change |
|----------|------------------|---|----------------------|---------|-----|-----------------------|-------------------------|-------------------------|
| Category | Equity Impact | | Gross Expenditure | Revenue | Net | Approved Positions | | |

Add 2 Communication Coordinators, 1 in both the Basement Flooding Protection Program unit of the Linear Underground Infrastructure section and the Local Roads unit of the Transportation Infrastructure section, fully funded from capital. The main duties of the Communication Coordinator will be to take over the communications and issues management functions that have typically been done by ECS Project Managers and Engineers. Specifically, the Communications Coordinator will undertake communication planning, public notifications, and project signage; and, assist with the identification and development of timely responses to resolve ongoing and emerging issues, complaints and customer service issues and provide guidance to Project Managers and Engineers, and senior divisional management staff, in the response to enquiries and escalated complaints.

Service Level Impact:

The Program currently has 1 position dedicated to customer service and issues management, therefore these tasks are not completed in a timely manner due to the competing demands required in delivering the project. The addition of 2 Communication Coordinators will maintain acceptable customer service levels given the expected increase in the capital program that will be assigned to the Program.

Equity Statement:

This proposal has no equity impacts.

Service: WT-Municipal Infrastructure Construction

| | | | | | | |
|---|--------------|--------------|------------|-------------|--------------|--------------|
| Preliminary New / Enhanced Services: | 227.4 | 227.4 | 0.0 | 2.00 | (0.0) | (0.0) |
| Total Preliminary New / Enhanced Services: | 227.4 | 227.4 | 0.0 | 2.00 | (0.0) | (0.0) |

| | |
|-------|---|
| 14903 | Legal Advice for Properties related to Gardiner Rehab |
|-------|---|

| | |
|----|-----------|
| 72 | No Impact |
|----|-----------|

Description:

Legal Services will provide dedicated support to the F.G. Gardiner Strategic Rehabilitation Project and be responsible to: Undertake the review of title to affected properties; Interpret and provide advice regarding existing legal rights and obligations; Assist with the acquisition of title or easement interests as required; and, Draft, prepare and register related documents.

Service Level Impact:

The dedicated resources in Legal Services will ensure that there is sufficient capacity to provide effective and timely advice and service to ECS so as to facilitate compliance with the Council-approved implementation schedule for the F.G. Gardiner Expressway Revised Strategic Rehabilitation Plan.

Equity Statement:

This proposal has no equity impacts.



**2018 Operating Budget - Preliminary New and Enhanced Services
Summary by Service (\$000's)**

| Form ID | | Citizen Focused Services B Program - Engineering & Construction Services | Adjustments | | | | 2019 Plan Net Change | 2020 Plan Net Change |
|--|------------------|---|----------------------|--------------|------------|-----------------------|-------------------------|-------------------------|
| Category | Equity Impact | | Gross Expenditure | Revenue | Net | Approved Positions | | |
| Service: WT-Engineering Information | | | | | | | | |
| Preliminary New / Enhanced Services: | | | 60.3 | 60.3 | 0.0 | 0.00 | 0.0 | 0.0 |
| Service: WT-Municipal Infrastructure Construction | | | | | | | | |
| Preliminary New / Enhanced Services: | | | 241.0 | 241.0 | 0.0 | 0.00 | 0.0 | 0.0 |
| Total Preliminary New / Enhanced Services: | | | 301.3 | 301.3 | 0.0 | 0.00 | 0.0 | 0.0 |

| | |
|-------|--|
| 15074 | Digital Comm Expertise (Water & Transportation projects) |
|-------|--|

| | |
|----|-----------|
| 72 | No Impact |
|----|-----------|

Description:

Add 1 permanent Senior Communications Coordinator in the Cluster B Communications Unit of Strategic Communications within the City Manager's Office to support Engineering and Construction Services (ECS) and Transportation Services. The position will be funded by the capital budget of Transportation Services.

Service Level Impact:

Expected Service Level Enhancements: Refine and improve communications and issues management plans for major individual and overall City-wide road construction projects to better coordinate and minimize impact on residents and road users; Improve delivery of construction-related messaging and build credibility and confidence in City's efforts; Increase coordination and consistency among operating and delivery Programs, thereby improving media and public awareness about road, sewer and watermain construction projects, including providing key messages for front-line staff and key stakeholders.

Equity Statement:

This proposal has no equity impacts.

Service: WT-Engineering Information

| | | | | | | |
|--------------------------------------|-----|-----|-----|------|-----|-----|
| Preliminary New / Enhanced Services: | 6.1 | 6.1 | 0.0 | 0.00 | 0.0 | 0.0 |
|--------------------------------------|-----|-----|-----|------|-----|-----|

Service: WT-Municipal Infrastructure Construction

| | | | | | | |
|--------------------------------------|-------|-------|-----|------|-----|-----|
| Preliminary New / Enhanced Services: | 116.6 | 116.6 | 0.0 | 0.00 | 0.0 | 0.0 |
|--------------------------------------|-------|-------|-----|------|-----|-----|

| | | | | | | |
|---|--------------|--------------|------------|-------------|------------|------------|
| Total Preliminary New / Enhanced Services: | 122.7 | 122.7 | 0.0 | 0.00 | 0.0 | 0.0 |
|---|--------------|--------------|------------|-------------|------------|------------|



**2018 Operating Budget - Preliminary New and Enhanced Services
Summary by Service (\$000's)**

| Form ID | | Citizen Focused Services B Program - Engineering & Construction Services | Adjustments | | | | 2019 Plan Net Change | 2020 Plan Net Change |
|---|------------------|---|----------------------|----------------|------------|-----------------------|-------------------------|-------------------------|
| Category | Equity Impact | | Gross Expenditure | Revenue | Net | Approved Positions | | |
| 14674 | | Review/ Project Mgmt for Lawrence Heights Revitalization | | | | | | |
| 74 | Positive | Description: Add 1 permanent Senior Engineer in the Engineering Review Section, fully funded by Toronto Community Housing Corporation. Service Level Impact: The change will provide the Program with a dedicated resource to undertake review of the development application for the Lawrence Heights revitalization project within a timeframe that respects current agreements, and to advise on the effect of the revitalization project on City infrastructure to ensure the integrity of the assets is maintained. Equity Statement: This proposal, which supports the revitalization of public housing, will have a positive impact on persons with low-income, homeless people and underhoused people, many of whom are also members of other equity-seeking groups. The proposal will increase access to affordable housing. Service: WT-Engineering Review & Acceptance | | | | | | |
| Preliminary New / Enhanced Services: | | | 140.9 | 140.9 | 0.0 | 1.00 | 0.0 | 0.0 |
| Total Preliminary New / Enhanced Services: | | | 140.9 | 140.9 | 0.0 | 1.00 | 0.0 | 0.0 |
| <hr/> | | | | | | | | |
| Summary: | | | | | | | | |
| Total Preliminary New / Enhanced Services: | | | 1,677.3 | 1,677.3 | 0.0 | 11.00 | (0.0) | (0.0) |

Appendix 6

Inflows/Outflows to/from Reserves & Reserve Funds

Corporate Reserve / Reserve Funds

| Reserve / Reserve Fund Name (In \$000s) | Reserve / Reserve Fund Number | Projected Balance as of Dec. 31, 2017 \$ | Withdrawals (-) / Contributions (+) | | |
|---|-------------------------------------|---|-------------------------------------|----------------|----------------|
| | | | 2018 \$ | 2019 \$ | 2020 \$ |
| Projected Beginning Balance | | | 1,085.7 | 1,271.4 | 1,457.2 |
| Vehicle Equipment Reserve | XQ1016 | | | | |
| <i>Proposed Withdrawals (-)</i> | | | | | |
| <i>Contributions (+)</i> | | | 185.7 | 185.7 | 185.7 |
| Total Reserve / Reserve Fund Draws / Contributions | | | 1,271.4 | 1,457.2 | 1,642.9 |
| Balance at Year-End | | 1,085.7 | 1,271.4 | 1,457.2 | 1,642.9 |

* Based on 9-month 2017 Reserve Fund Variance Report

| Reserve / Reserve Fund Name (In \$000s) | Reserve / Reserve Fund Number | Projected Balance as of Dec. 31, 2017 \$ | Withdrawals (-) / Contributions (+) | | |
|---|-------------------------------------|---|-------------------------------------|-----------------|-----------------|
| | | | 2018 \$ | 2019 \$ | 2020 \$ |
| Projected Beginning Balance | | | 25,981.1 | 26,563.7 | 27,146.4 |
| Insurance Reserve Fund | XR1010 | | | | |
| <i>Proposed Withdrawals (-)</i> | | | | | |
| <i>Contributions (+)</i> | | | 582.7 | 582.7 | 582.7 |
| Total Reserve / Reserve Fund Draws / Contributions | | | 26,563.7 | 27,146.4 | 27,729.1 |
| Balance at Year-End | | 25,981.1 | 26,563.7 | 27,146.4 | 27,729.1 |

* Based on 9-month 2017 Reserve Fund Variance Report

Appendix 7a

User Fees Adjusted for Inflation and Other

| Rate Description | Service | Fee Category | Fee Basis | 2017 | 2018 | | | 2019 | 2020 |
|---|--|--------------------|--|---|--|------------------|---|---|---|
| | | | | Approved Rate | Inflationary Adjusted Rate | Other Adjustment | Budget Rate | Plan Rate | Plan Rate |
| Review of development files and environmental database to provide a response to inquiries regarding compliance with development agreements and identification of sites located on closed landfills. | Municipal Infrastructure Design & Construction | Full Cost Recovery | Per review | \$67.79 | \$1.36 | \$0.00 | \$69.15 | \$70.53 | \$71.94 |
| Request for new municipal number as a result of a severance/consolidation of property | Engineering Information | Full Cost Recovery | Flat fee for assignment / re-assignment of first two numbers; then fee per each additional number assigned | \$155.82 for first two numbers, then \$39.31 for each additional number | \$3.12 for first two numbers, then \$0.79 for each additional number | \$0.00 | \$158.94 for first two numbers, then \$40.10 for each additional number | \$162.12 for first two numbers, then \$40.90 for each additional number | \$165.36 for first two numbers, then \$41.72 for each additional number |
| Changing municipal number | Engineering Information | Full Cost Recovery | Per change | \$398.10 | \$7.96 | \$0.00 | \$406.06 | \$414.18 | \$422.47 |
| To perform engineering review and site inspection of utility infrastructure work within the City's Right of Way | Municipal Infrastructure Design & Construction | Full Cost Recovery | Per application (for excavation up to 1 km) | \$1,180.85 | \$23.62 | \$0.00 | \$1,204.47 | \$1,228.56 | \$1,253.13 |