

2020 Program Summary

Environment & Energy Division

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What we do

The Environment & Energy Division (EED) will lead, foster, coordinate and support city action towards achieving Toronto's greenhouse gas reduction targets outlined in TransformTO, the City of Toronto's climate change action plan.

The Environment & Energy Division is leading the implementation of the City's Resilience strategy, resulting in stronger, healthier and more prosperous communities.

The Environment & Energy Division is continuing to lead the City as it navigates the nexus of environmental mitigation, adaptation and resilience strategies.

Why we do it

Achieving TransformTO's greenhouse gas (GHG) emissions reduction targets will require transformational changes in how we live, work, build and commute.

The Environment & Energy Division is leading, enabling and supporting both the City's and the city-wide community's environmental and energy actions to achieve TransformTO's goals and targets, to ensure Toronto is a sustainable, healthy, equitable and prosperous and resilient city.

Who we serve

The Environment & Energy Division, through both local and global initiatives and partnerships, serves, inspires and empowers citizens, City staff, businesses, organizations, local communities and other stakeholders to take transformative action. The Division also represents and serves the future generations who will live in Toronto.

Energy & Environment

- Residential / Commercial tenants
- Staff – City Divisions
- Staff – Agencies and Boards
- Community Groups

Beneficiaries

- Residents
 - Provincial & Federal Agencies
 - Visitors/Tourists
-







Budget at a glance

OPERATING BUDGET				10-YEAR CAPITAL PLAN			
\$Million	2020	2021	2022	\$Million	2020	2021-2029	Total
Revenues	\$4.1	\$3.2	\$3.2	Gross Expenditures	\$43.7	\$106.0	\$149.7
Gross Expenditures	\$17.1	\$17.6	\$17.9	Debt	\$0.0	\$0.0	\$0.0
Net Expenditures	\$13.0	\$14.4	\$14.7				
Approved Positions	101.6	100.6	100.6				

Key service outcomes

Outcomes	Description
Reduce Local Greenhouse Gas Emissions	By 2050, all existing buildings will have been retrofitted to achieve net-zero emissions, and 30% of total floor space community-wide (residential and commercial) will be connected to low-carbon thermal energy. By 2030, all new buildings will be built to produce near-zero greenhouse gas (GHG) emissions.
Increasing Resiliency	Outreach and Engagement supporting transformative climate and resiliency change. Effective inter-divisional collaboration while working closely with the community, partner agencies, local utilities, and other levels of government to achieve transformative change. This is only possible through the education of all Torontonians and through the provision of timely and relevant information. This will allow residents to make choices to improve resiliency.

Goals and metrics

Planned Activities to Achieve Outcomes		2018 Actual	2019 Proj. Actual	2020 Target	Status
	Financing to enable energy projects in the community	\$34.8M	\$29.6M	\$43.7M	
	Cumulative GHG reductions resulting from the Toronto Green Standard (2020 target 10,000 tonnes)	6,500 tonnes	12,500 tonnes	18,500 tonnes	
	Community outreach & engagement events	1,440	1,679	1,779	

Our experience and success

- Established an innovative joint development partnership for low-carbon thermal networks with Enwave
- Community-wide greenhouse gas emissions are 44% lower than estimated 1990 levels, surpassing the 2020 TransformTO target to reduce emissions by 30% by 2020.
- Since 2017, issued \$87.85 million in loans through the Sustainable Energy Plan Financing program that have enabled \$142.7 million of energy projects across the City by leveraging co-investments & partnerships
- Partnered with over 30 different community organizations, not-for-profits, foundations and resident groups on new projects that support climate action engagement
- Leveraged over \$135 million from external sources to support new and enhanced infrastructure, pilot projects, research and technical studies.
- Emissions reductions resulting from the Toronto Green Standard are 6,500 tonnes in 2018, 12,500 tonnes in 2019, and projected to be 18,500 by December 2020, surpassing the target of 10,000 tonnes for 2018 to 2020.

Key challenges and risks

- TransformTO includes targets for emission reductions across all of Toronto. The EED must enable residents, businesses and building owners to change behaviors and take action towards meeting the overall target of net-zero emissions before 2050 through leadership, creating partnerships, providing advice, and the promotion of sustainable solutions.
- Political uncertainty and changing priorities at the provincial and federal level present challenges to developing and delivering programs that leverage funding or services from those governments. A notable example being the loss of provincial Cap and Trade funding to support low-carbon thermal energy networks.
- Scaling outreach efforts to reach a broader audience across the City and encourage wide-spread changes in behavior. Changing behaviors through outreach is challenged by the broader social climate in which some disagree with the need for climate change mitigation and adaptation.

Priority actions

- Enhancing the Better Buildings Partnership, the Mayor's Green Will Initiative, scaling up innovative financing mechanisms, dedicated funding for community based climate action, improving energy efficiency of social housing, continuing support for residential property owners, continuing to seek additional sources of partnership funding and co-investments, and leading by example by expanding energy retrofits at City facilities.
- Raising the bar for New Construction by advancing leading edge new construction standards, and creating strategic partnerships with the private sector and other partners
- Outreach and Engagement to support transformative change through TransformTO Community Engagement, Live Green Toronto activities, networks and communication channels, and deliver award-winning programs like Smart Commute and Live Green Toronto.
- Integrated Community Energy Planning by advancing low-carbon Thermal Energy Networks (District Energy), creating a Renewable Energy Strategy, and leading by example by scaling up renewable energy.

Our key service levels



Revenue (\$) generated from renewable energy projects per year



Achieve or surpass 90% waste diversion per year on a corporate level



% of Reduction in city-wide eCO2 emissions to environment relative to 1990 level

Key service deliverables

- Delivery of The Mayor's Green Will Initiative and expand current programs to reduce energy use in houses, multi-residential and other buildings. This includes offering a suite of resources to save on energy costs, reduce GHG emissions, and enhance the quality of housing stock and improve affordability across all neighbourhoods.
- Elevate the energy performance of new buildings trending towards net-zero energy through the Toronto Green Standard and create a Renewable Energy Strategy that integrates neighbourhood-scale energy solutions and advances low-carbon/renewable thermal energy networks (district energy).

RECOMMENDATIONS

City Council approved the following recommendations:

1. City Council approve the 2020 Operating Budget for Environment & Energy of \$17.1 million gross, \$13.0 million net for the following services:

Service:	Gross (\$000s)	Revenue (\$000s)	Net (\$000s)
Environment & Energy	17,095.7	4,093.6	13,002.1
Total Program Budget	17,095.7	4,093.6	13,002.1

2. City Council approve the 2020 staff complement for Environment & Energy of 101.6 positions, comprising 2 capital positions and 99.6 operating positions.
3. City Council request the Chief Financial Officer and Treasurer and the Director, Environment and Energy to include in the report to City Council on TransformTO implementation in the second quarter of 2020, funding options for immediate implementation of TransformTO by way of an in-year budget adjustment to the 2020 Environment and Energy Operating Budget.
4. City Council approve 2020 Capital Budget for Environment & Energy with cash flows and future year commitments totaling \$51.2 million as detailed by project in Appendix 5a.
5. City Council approve the 2021-2029 Capital Plan for Environment & Energy totalling \$98.5 million in project estimates as detailed by project in Appendix 5b.

2020 OPERATING BUDGET

2020 OPERATING BUDGET OVERVIEW

Table 1: 2020 Operating Budget by Service

(\$000s)	2018 Actual	2019 Projected Actual*	2020 Base Budget	2020 New / Enhanced	2020 Budget	Change v. 2019 Projected Actual	
By Service	\$	\$	\$	\$	\$	\$	%
Revenues							
Environment & Energy	2,954.5	3,076.3	3,197.2	71.4	3,268.6	192.3	6.2%
Total Revenues	2,954.5	3,076.3	3,197.2	71.4	3,268.6	192.3	6.2%
Expenditures							
Environment & Energy	10,645.5	12,452.2	13,353.6	3,742.1	17,095.7	4,643.5	37.3%
Total Gross Expenditures	10,645.5	12,452.2	13,353.6	3,742.1	17,095.7	4,643.5	37.3%
Net Expenditures	7,691.0	9,375.9	10,156.4	3,670.7	13,827.1	4,451.2	47.5%
Approved Positions	80.3	83.6	83.6	18.0	101.6	18.0	21.5%

*2019 Projected Actual (based on Q3 2019) adjusted retroactively to remove interdepartmental charges and recoveries.

COSTS TO MAINTAIN EXISTING SERVICES

Total 2020 Base Budget expenditures of \$13.4 million gross, reflecting an increase of \$0.9 million in spending above 2019 projected year-end actuals (prior to enhancements), predominantly arising from:

- Salary & benefits increases due to inflationary increases and annualization of TransformTO positions approved through the 2019 budget process, and
- External contract increases for feasibility studies and industry expertise related to TransformTO goals approved through the 2019 budget process.

COSTS TO ENHANCE SERVICES

New and Enhanced Service expenditures of \$3.7 million gross, enabling:

- TransformTO (\$0.802 million).
- Acceleration of TransformTO climate action (\$1.210 million)
- Implementation of Climate Components – Resilience Strategy (\$0.650 million)
- Development of the Plan to achieve net-zero before 2050 (\$1.080 million)

EQUITY IMPACTS OF BUDGET CHANGES

Increasing the equity impact of climate actions for persons with low income, women and Indigenous people:

The Environment & Energy Division's 2020 Operating Budget includes significant investments to advance TransformTO and other climate change or resilience projects. These projects include initiatives that will have a positive impact on Indigenous People and various equity seeking groups in Toronto, including low income residents, women, and racialized communities. Resources will be dedicated to increase engagement and partnerships with Indigenous communities, low income residents, and women in the planning, development and implementation of the City's climate actions. This will ensure outcomes also benefit equity seeking groups, such as improving access to jobs in the low carbon sector. Access to affordable housing will also be improved because investments in climate resilience can be leveraged to accelerate state of good repair programs in residential towers such as Toronto Community Housing buildings.

2020 OPERATING BUDGET KEY DRIVERS

The 2020 Operating Budget for Environment & Energy is \$17.1 million gross or 37.3% higher than the 2019 Projected Actuals. Table 2a below summarizes the key cost drivers for the base budget, while Table 2c summarizes New and Enhanced requests

Table 2a: 2020 Key Drivers – Base Budget

Key Cost Drivers (\$000)	2018 Actual	2019 Proj. Actual	2020 Base Budget	Year over Year Changes	
				\$	%
Expenditures					
1 Salaries and Benefits	6,810.2	8,450.9	8,914	462.7	5.5%
2 Materials & Supplies	137.8	34.6	17.8	(16.8)	(48.6%)
3 Equipment	147.6	43.1	46.7	3.6	8.3%
4 Service and Rent	2,291.5	2,650.6	3,370.9	720.3	27.2%
5 Contribution To Capital					
6 Contribution To Reserves	32.4	42.7	42.7	0.0	
7 Other Expenditures	1,226.1	1,230.3	961.9	(268.4)	(21.8%)
Total Expenditures	10,645.5	12,452.2	13,353.6	901.4	7.2%
Revenues					
1 Provincial Subsidies	145.0	105.0	93.5	(11.5)	(10.9%)
2 Federal Subsidies				0.0	
3 User Fees & Donations	779.3	653.5	132.8	(520.7)	(79.7%)
4 Transfers From Capital	81.1	155.50	144.7	(10.8)	(6.9%)
5 Other Revenues	1,949.1	2,162.3	2,826.1	663.8	30.7%
Total Revenues	2,954.4	3,076.3	3,197.2	120.9	3.9%
Net Expenditures	7,691.0	9,375.9	10,156.4	780.5	8.3%

*2018 Actual and 2019 Q3 Proj Actual adjusted retroactively to remove interdepartmental charges and recoveries

Salaries & Benefits:

Increase primarily driven by annualization of positions approved through Budget 2019 related to TransformTO Climate Action plans and inflationary increases.

Service & Rents:

Increase to address feasibility studies and industry expertise related to TransformTO goals approved through the 2019 budget process

User Fees & Donations:

Decrease due to elimination of Smart Commute Funding from Metrolinx.

Other Revenues:

Funding requirement for programs such as the Eco-Roof Grants and the Home Energy-Retrofit Loan Program supported through Divisional & Corporate reserves, Inter-Divisional Recoveries and external parties.

Table 2c: 2020 Key Drivers – New / Enhanced

New / Enhanced (\$000)	2020				2021 Annualized Gross	Equity Impact
	Revenue	Gross	Net	Positions		
In \$ Thousands						
1 Transform TO	71.4	802.2	730.9	5.00	1,103.8	Low
2 2019.MM10.3 Accelerate TTO Climate Action (Inc. Green Will)		1,210.4	1,210.4	5.00	1,551.8	Low
3 2019.MM10.3 Implement Climate Components-Resilience Strategy		650.4	650.4	4.00	926.6	Low
4 2019.MM10.3 Develop the Plan to achieve Net-Zero before 2050	825.0	1,079.0	254.0	4.00	1,359.5	Medium
Total New / Enhanced	896.4	3,742.1	2,845.7	18.00	4,941.7	

TransformTO

Resources are required to advance leading edge new construction standards, create the Renewable Energy Strategy, continue to seek additional sources of partnership funding and projects, and leading by example by expanding energy retrofits at City Facilities.

2019.MM10.3 Accelerate TransformTO Climate Action (Inc. Green Will)

The Green Will Initiative will demonstrate the ability to achieve Transform TO targets and drive transformative action in existing buildings to the market. In 2020, the first cohort (11 participants/4500 buildings/300M sq. ft) will be onboarded to the program and EED will identify opportunities to accelerate actions and implement quick wins within these organizations.

2019.MM10.3 Implement Climate Components-Resilience Strategy

Resources are required to implement the Resilience Strategy, which was developed at the direction of City Council. Outputs include:

- Map of flood risk areas of Toronto and approach to address urban flooding
- Heat Relief Network expansion to respond to growing impacts of extreme heat on vulnerable populations
- Neighbourhood Resilience Pilot project to support communities in building local capacity to respond to the shocks and stresses associated with climate change

2019.MM10.3 Develop the Plan to achieve Net-Zero before 2050

The resources will both develop the plan and also be responsible for various other elements of the member motion including the carbon budget, peer review/advisory groups, equity and indigenous inclusion, and an ongoing adaptive resource management approach and dashboard.

Note:

1. For additional information on 2020 key cost drivers refer to [Appendix 1](#) and [Appendix 3](#) for the 2020 New and Enhanced Service Priorities, respectively.

2021 & 2022 OUTLOOKS**Table 3: 2021 and 2022 Outlooks**

(\$000s)	2019 Projected Actual*	2020 Budget	2021 Outlook	2022 Outlook
	\$	\$	\$	\$
Revenues	3,076.3	3,269.9	3,243.2	3,208.8
Gross Expenditures	12,452.2	17,095.7	18,439.9	18,744.8
Net Expenditures	9,375.9	13,825.8	15,196.7	15,535.9
Approved Positions	83.6	101.6	100.6	100.6

*2019 Q3 Projected Actual adjusted retroactively to remove interdepartmental charges and recoveries

Key 2021 drivers**Impacts of 2020 decisions**

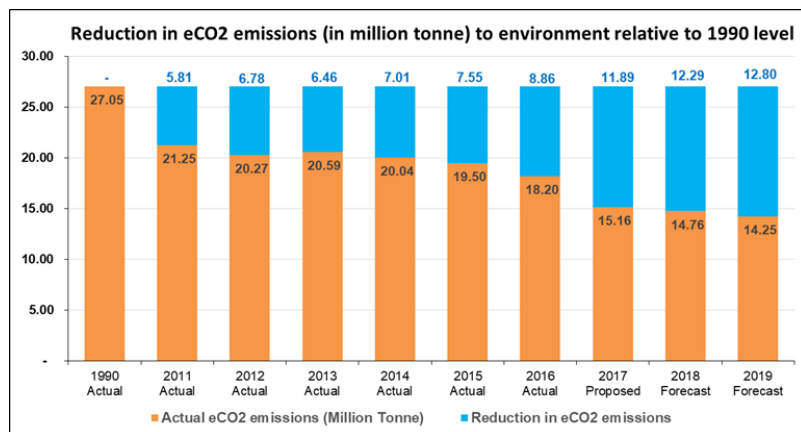
- Salaries and Benefits increase year over year primarily driven by annualization of 2020 new positions related to new & enhanced budget requests.

Key 2022 drivers**Salaries and Benefits**

- Inflationary increases

How well we are doing

Performance measures



Behind the numbers

- Better Buildings Partnership has retrofitted over 550 million square feet of commercial building space to improve energy and emissions performance
- District energy systems have reduced demand on Toronto's electrical system and have reduced GHG emissions by over 0.5 Mega tonnes since 2013.

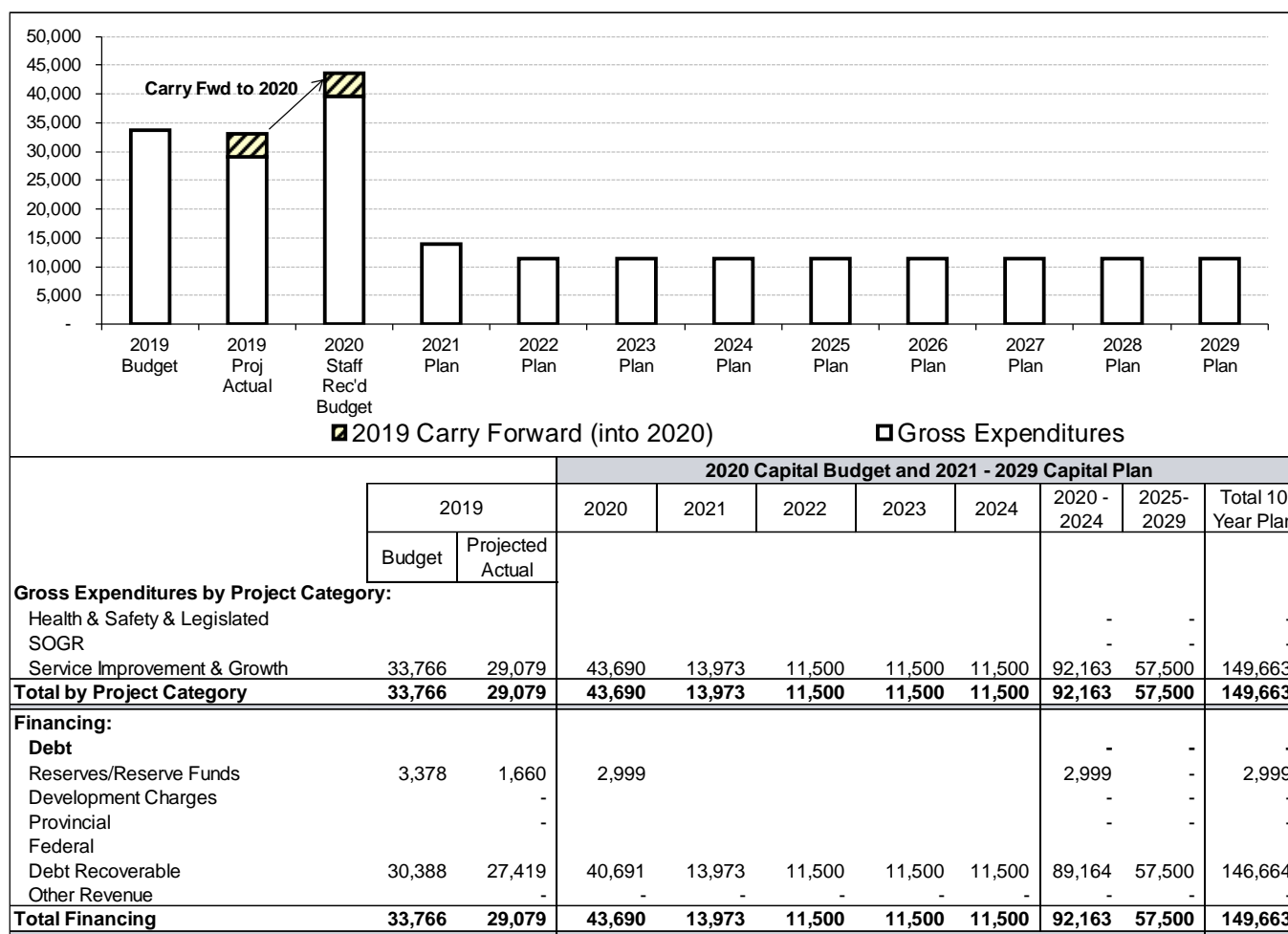
Other key performance metrics are under development and will be reported through the 2021 budget process.

2020 – 2029 CAPITAL BUDGET AND PLAN

2020 – 2029 CAPITAL BUDGET & PLAN OVERVIEW

Chart 1: 10-Year Capital Plan Overview

(\$000)



Changes to Existing Projects

- Nil

New Projects (\$18.8M)

- TransformTO - Renewable Thermal Energy Program (\$12.3M) to install renewable energy on City buildings
- Low interest financing to enable community energy projects that reduce emissions (\$5M)
- Residential Energy Retrofit Program (HELP) (\$1.5M) to enable home energy improvements through low-interest financing.




Capital Needs Constraints

- Nil

Note:

For additional information, refer to [Appendix 5](#) for a more detailed listing of the 2020 and 2021-2029 Capital Budget & Plan by project.

2020 – 2029 CAPITAL BUDGET AND PLAN**\$149.7 Million 10-Year Gross Capital Program**

		
Support Energy Efficiency	Reducing GHG Emissions	Environmental & Resilience Program Delivery
\$30.3 M 20%	\$104.7 M 70%	\$14.7 M 10%
Toronto Community Housing Corp (TCHC) Retrofits Residential Energy Retrofit Program (HELP)	Transform TO Renewable Energy Program Combined Heat & Power (CHP) District Energy Systems	Community Energy Planning

How the Capital Program is Funded

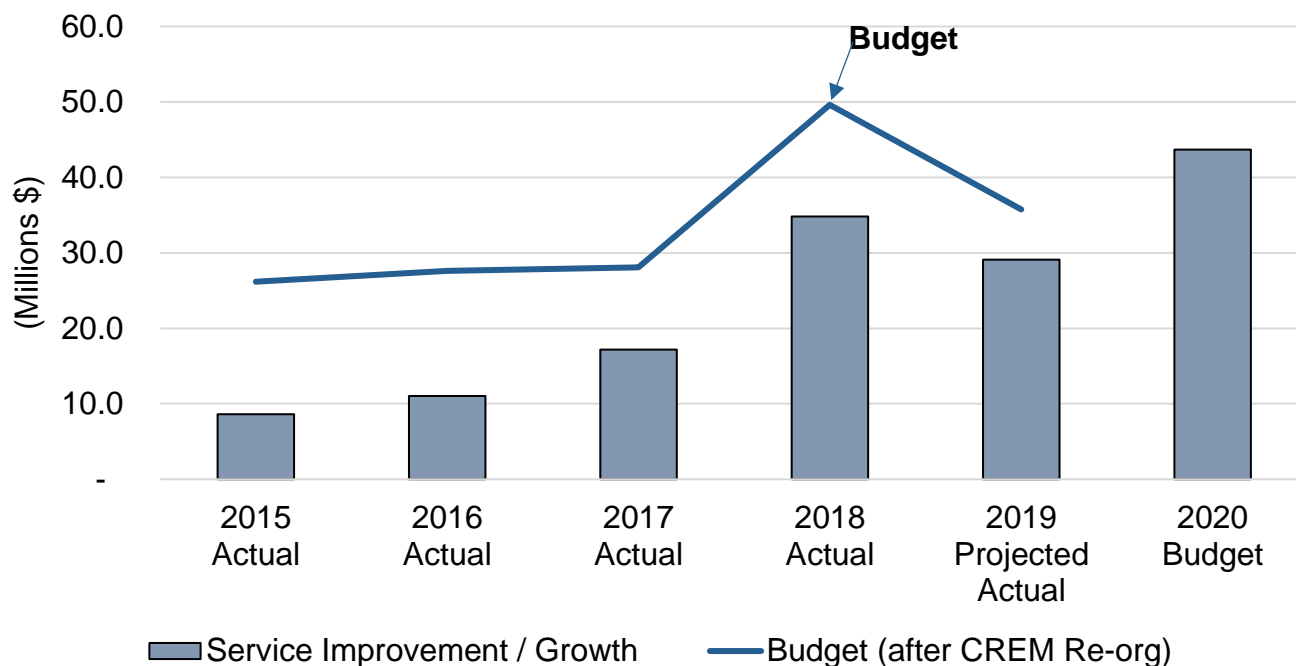
City of Toronto		Provincial Funding	Federal Funding
\$149.7 M 100%		\$0 M 0%	\$0 M 0%
Recoverable Debt	\$ 146.7 M		
Reserve Draws	\$ 3.0 M		

CAPACITY TO SPEND REVIEW

The Recommended 10-Year Capital Plan was developed with consideration of historical demonstrated ability to spend within any given year of the ten year capital plan. A review was undertaken to ensure budgets align with the Environment & Energy's ability to spend and the markets capacity to deliver.

Key components in determining an appropriate level of annual cash flows included historical capacity to spend reviews by project categories (Chart 2 below) as well as the level of projected 2019 underspending that will be carried forward into 2020 to complete capital work.

Chart 2 – Capacity to Spend



Category (in \$ Million)	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Projected Actual	2020 Budget
Service Improvement / Growth	8.6	11.0	17.2	34.8	29.1	43.7
Total	8.6	11.0	17.2	34.8	29.1	43.7
% Spent	33%	40%	61%	70%	81%	

Capacity to Spend Review Impact on the Recommended 10-Year Plan

Based on the review historical capital spending constraints, key adjustments to the Capital Plan are noted below:

- While the budget is higher than historical spend rates, 2020 includes a \$28 million loan to TCHC for energy retrofit projects at 39 buildings

APPENDICES

Appendix 1

2020 Operating Budget by Expenditure Category

Category (\$000s)	2017 Actual*	2018 Actual*	2019 Budget*	2019 Projected Actual**	2020 Total Budget	2020 Change from 2019 Projected Actual	
	\$	\$	\$	\$	\$	\$	%
Provincial Subsidies							
Federal Subsidies	113.8	145.0	408.0	105.0	93.5	(11.5)	(10.9%)
Other Subsidies							
User Fees & Donations	636.8	779.3	234.4	653.5	132.8	(520.7)	(79.7%)
Licences & Permits Revenue							
Transfers From Capital	256.9	81.1	150.3	155.5	216.1	60.6	39.0%
Contribution From Reserves/Reserve Funds	1,293.7	1,000.0	3,385.7	976.0	3,209.4	2,233.4	228.8%
Sundry and Other Revenues	750.4	949.1	453.2	1,106.4	360.4	(746.1)	(67.4%)
Inter-Divisional Recoveries			79.7	79.9	81.4	1.5	1.9%
Total Revenues	3,051.6	2,954.5	4,711.3	3,076.3	4,093.6	1,017.3	33.1%
Salaries and Benefits	4,840.0	6,810.2	9,669.6	8,450.9	10,005.7	1,554.8	18.4%
Materials & Supplies	54.1	137.8	136.3	34.6	17.8	(16.8)	(48.5%)
Equipment	10.7	147.6	35.7	43.1	46.7	3.6	8.3%
Service and Rent	1,321.5	2,291.5	3,370.9	2,650.6	6,020.9	3,370.3	127.2%
Contribution To Capital							
Contribution To Reserves/Reserve Funds	46.9	32.4	42.7	42.7	42.7		
Other Expenditures	1,109.6	1,226.1	1,961.9	1,229.7	961.9	(267.8)	(21.8%)
Inter-Divisional Charges				0.6		(0.6)	(100.0%)
Total Gross Expenditures	7,382.7	10,645.5	15,217.2	12,452.2	17,095.7	4,643.5	37.3%
Net Expenditures	4,331.1	7,691.0	10,505.9	9,375.9	13,002.1	3,626.2	38.7%
Approved Positions	60.3	80.3	83.6	83.6	101.6	18.0	

* Actuals and 2019 Budget adjusted retroactively to remove interdepartmental charges and recoveries

** Year-End Projection Based on Q3 2019 Variance Report

Appendix 2

Summary of 2020 Service Changes

N/A

Appendix 3

Summary of 2020 New / Enhanced Service Priorities Included in Budget

2020 Operating Budget - Council Approved New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services Program - Environment & Energy	Adjustments				2021 Plan Net Change	2022 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
21196		2019.MM10.3 Implement Climate Components-Resilience Strategy						
72	Positive	Description:						

The total proposed changes related to MM10.3 include a further new & enhanced request of \$2,939,853 in 2020, including 13 new positions and \$2,125,000 for non-salary costs. One of the three components of the proposed change is \$650,000 to implement the climate components of the Resilience Strategy, which consists of 4 positions and \$450,000 in non-salary costs.

Service Level Impact:

The Environment & Energy Division has been tasked with developing a plan for the City to achieve net-zero before 2050. The resources requested in this business case are required to accelerate current TransformTO Climate Actions, Develop a plan for Toronto to get to net-zero by 2050 and implement the climate related components of the City's Resilience Strategy.

Equity Statement:

The Implement Climate Components-Resilience Strategy budget proposal's overall equity impact is low positive. Women's access to affordable housing, access to city services and civic engagement & community participation will be positively impacted. Building community resilience fosters social inclusion by providing supports to connect residents to each other and build networks of care that women are often central to. Low income residents' access to affordable housing and civic engagement & community participation will be positively impacted. Investments in climate resilience can be leveraged to accelerate state of good repair programs in Toronto Community Housing buildings. Indigenous peoples' civic engagement & community participation will be positively impacted. The Resilience Strategy identifies a commitment to reconciliation and indigenous engagement that will be delivered through climate resilience implementation actions. Dedicating resources to indigenous collaborations moves Toronto towards fulfilling our commitment to indigenous peoples. Racialized residents' and women's access to affordable housing will be positively impacted. Implementing the climate resilience actions related to heat in apartment towers will deliver housing affordability benefits by reducing the burden of energy poverty to all tower residents who are disproportionately racialized and equity seeking.

Service: Environment & Energy

Staff Recommended Changes:	650.4	0.0	650.4	4.00	276.2	18.1
BC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
EC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
CC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
Total Council Approved:	650.4	0.0	650.4	4.00	276.2	18.1
Staff Recommended:	650.4	0.0	650.4	4.00	276.2	18.1
Budget Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0

Category:

71 - Operating Impact of New Capital Projects 74 - New Services
72 - Enhanced Services-Service Expansion 75 - New Revenues

2020 Operating Budget - Council Approved New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services	Adjustments				2021 Plan Net Change	2022 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		Program - Environment & Energy						
		Executive Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		City Council Approved:	0.0	0.0	0.0	0.00	0.0	0.0
		Council Approved New/Enhanced Services:	650.4	0.0	650.4	4.00	276.2	18.1

21197	2019.MM10.3 Develop the Plan to achieve Net-Zero before 2050
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72	Positive
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Description:

The total proposed changes related to MM10.3 include a further new & enhanced request of \$2,939,853 in 2020, including 13 new positions and \$2,125,000 for non-salary costs. One of the three components of the proposed change is \$1,079,000 to Develop the Plan to Achieve Net-Zero before 2050, which consists of 4 positions and \$825,000 in non-salary costs.

Service Level Impact:

The EED has been tasked with developing a plan for the City to achieve net-zero before 2050. The resources requested in this business case are required to accelerate current TransformTO Climate Actions, Develop a plan for Toronto to get to net-zero by 2050 and implement the climate related components of the City's Resilience Strategy.

Equity Statement:

The Develop the Plan to achieve Net-Zero before 2050 budget proposal's overall equity impact is medium positive. Low income residents' access to economic development opportunities and civic engagement & community participation will be positively impacted. The proposal includes dedicated resources to engage persons with low income in the development and ongoing implementation of TransformTO. This will ensure outcomes also benefit low income residents, such as access to jobs in the low carbon sector. Indigenous peoples' civic engagement & community participation and sense of identity & belonging will be positively impacted. TransformTO includes a commitment to meaningfully consult and cooperate with Indigenous communities on the development and implementation of the city's climate actions. Dedicated resources to ensure meaningful engagement and partnership with the Indigenous communities in Toronto is critical to moving forward on the City's commitments to reconciliation and including Indigenous Traditional Knowledge into climate action planning. This will ensure that Indigenous voices are heard and strengthened through the climate action planning and implementation process of developing the plan to achieve net zero by 2050. Vulnerable youth's civic engagement & community participation will be positively impacted. The acceleration of TransformTO climate actions will include a plan to include youth, including youth from equity-seeking groups, to increase youth participation in the development and implementation of TransformTO strategies. Increased engagement with youth will ensure Toronto's plan to get to net zero by 2050 includes youth voices and participation.

Service: Environment & Energy

Category:

71 - Operating Impact of New Capital Projects	74 - New Services
72 - Enhanced Services-Service Expansion	75 - New Revenues

2020 Operating Budget - Council Approved New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services	Adjustments				2021 Plan Net Change	2022 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		Program - Environment & Energy						
		Staff Recommended Changes:	1,079.0	825.0	254.0	4.00	280.4	18.3
		BC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		EC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		CC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		Total Council Approved:	1,079.0	825.0	254.0	4.00	280.4	18.3
		Staff Recommended:	1,079.0	825.0	254.0	4.00	280.4	18.3
		Budget Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		Executive Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		City Council Approved:	0.0	0.0	0.0	0.00	0.0	0.0
		Council Approved New/Enhanced Services:	1,079.0	825.0	254.0	4.00	280.4	18.3

20566	TransformTO
72	No Impact

Description:

Additional staffing and resources are required to implement the following TransformTO Report #1 Short-Term Actions, as approved by City Council in December 2016 (2016.PE15.1): 1.1 Enhance the Better Buildings Partnership, 1.3 Dedicate Funding for Community-Based Climate Action, 2.3 Advance Low-Carbon/Renewable Thermal Energy Networks, 4.2 Scale-up Renewable Energy Installations.

Service Level Impact:

Our current level of Green House Gas emission reduction activity means we are projected to be 8.7 million tonnes above Councils adopted Green House Gas emissions target in 2050. With the full implementation of TransformTO Toronto can reach its 2050 target.

Equity Statement:

The proposal is unlikely to have an equity impact.

Service: Environment & Energy

2020 Operating Budget - Council Approved New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services Program - Environment & Energy	Adjustments				2021 Plan Net Change	2022 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		Staff Recommended Changes:	802.2	71.4	730.9	5.00	222.3	16.8
		BC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		EC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		CC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		Total Council Approved:	802.2	71.4	730.9	5.00	222.3	16.8
		Staff Recommended:	802.2	71.4	730.9	5.00	222.3	16.8
		Budget Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		Executive Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		City Council Approved:	0.0	0.0	0.0	0.00	0.0	0.0
		Council Approved New/Enhanced Services:	802.2	71.4	730.9	5.00	222.3	16.8

21151	2019.MM10.3 Accel. TransformTO Climate Action Inc.Green Will
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72	No Impact	Description:
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The total proposed changes related to MM10.3 include a further new & enhanced request of \$2,939,853 in 2020, including 13 new positions and \$2,125,000 for non-salary costs. One of the three components of the proposed change is \$1,210,000 to Accelerate TransformTO Climate Action (including the Mayor's Green Will Program), which consists of 5 positions and \$850,000 in non-salary costs.

Service Level Impact:

The Environment & Energy Division has been tasked with developing a plan for the City to achieve net-zero before 2050. The resources requested in this business case are required to accelerate current TransformTO Climate Actions, Develop a plan for Toronto to get to net-zero by 2050 and implement the climate related components of the City's Resilience Strategy.

Equity Statement:

The proposal is unlikely to have an equity impact.

Service: Environment & Energy

2020 Operating Budget - Council Approved New and Enhanced Services Summary by Service (\$000's)

Form ID		Corporate Services Program - Environment & Energy	Adjustments				2021 Plan Net Change	2022 Plan Net Change
Category	Equity Impact		Gross Expenditure	Revenue	Net	Approved Positions		
		Staff Recommended Changes:	1,210.4	0.0	1,210.4	5.00	341.4	22.9
		BC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		EC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		CC Recommended Changes:	0.0	0.0	0.0	0.00	0.0	0.0
		Total Council Approved:	1,210.4	0.0	1,210.4	5.00	341.4	22.9
		Staff Recommended:	1,210.4	0.0	1,210.4	5.00	341.4	22.9
		Budget Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		Executive Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		City Council Approved:	0.0	0.0	0.0	0.00	0.0	0.0
		Council Approved New/Enhanced Services:	1,210.4	0.0	1,210.4	5.00	341.4	22.9
Summary:								
		Staff Recommended:	3,742.1	896.4	2,845.7	18.00	1,120.4	76.1
		Budget Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		Executive Committee Recommended:	0.0	0.0	0.0	0.00	0.0	0.0
		City Council Approved:	0.0	0.0	0.0	0.00	0.0	0.0
		Council Approved New/Enhanced Services:	3,742.1	896.4	2,845.7	18.00	1,120.4	76.1

Appendix 4

Summary of 2020 New / Enhanced Service Priorities Not Included in Budget

N/A

Appendix 5

**2020 Capital Budget;
2021 - 2029 Capital Plan Including Carry Forward Funding**

Project Code	(In \$000s)	2020 Budget	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2029 Plan	2020 - 2029 Total	Health & Safety & Legislated	SOGR	Growth & Improved Service
CCA001	<i>Toronto Community Housing Corp (TCHC) Retrofits</i>	28,000	-	-	-	-	-	-	-	-	-	28,000			28,000
CCA002	<i>Residential Energy Retrofit Program (HELP)</i>	2,320	-	-	-	-	-	-	-	-	-	2,320			2,320
CCA003	<i>Community Energy Planning</i>	5,679	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	14,679			14,679
CCA004	<i>Transform TO</i>	6,443	7,473	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	53,916			53,916
CCA005	<i>Renewable Energy Program</i>	1,248	500	500	500	500	500	500	500	500	500	5,748			5,748
CCA006	<i>Combined Heat & Power (CHP)</i>	-	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	27,000			27,000
CCA007	<i>District Energy Systems</i>	-	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	18,000			18,000
	Total Expenditures (including carry forward from 2019)	43,690	13,973	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	149,663	-	-	149,663

Appendix 5a

2020 Cash Flow and Future Year Commitments Including Carry Forward Funding

Project Code	(In \$000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total 2020 Cash Flow & FY Commits	Previously Approved	Change in Scope	New w/ Future Year
CCA001	Toronto Community Housing Corp (TCHC) Retrofits	28,000										28,000	28,000		-
CCA002	Residential Energy Retrofit Program (HELP)	2,320										2,320	820		1,500
CCA003	Community Energy Planning	5,679										5,679	679		5,000
CCA004	Transform TO	6,443	7,473									13,916	1,650		12,266
CCA005	Renewable Energy Program	1,248										1,248	1,248		(0)
CCA006	Combined Heat & Power (CHP)	-										-			-
CCA007	District Energy Systems	-										-			-
	Total Expenditure (including carry forward from 2019)	43,690	7,473	-	-	-	-	-	-	-	-	51,163	32,397	-	18,766

The 2020 Cash Flow and Future Year Commitments as noted in the table above, reflects a sub-set of the 10-Year Capital Plan. This sub-set consists of 2020 and future year cash flow funding estimates for projects that have either previously received Council approval or will require approval in 2020 to begin, continue or complete capital work. This approval will enable Environment and Energy to begin work and/or commit funding for expenses that may not be incurred until 2021 or future years.

Appendix 5b

2021 - 2029 Capital Plan

Project Code	(In \$000s)	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2029 Plan	2021 - 2029 Total	Health & Safety & Legislated	SOGR	Growth & Improved Service
CCA001	<i>Toronto Community Housing Corp (TCHC) Retrofits</i>	-	-	-	-	-	-	-	-	-	-			-
CCA002	<i>Residential Energy Retrofit Program (HELP)</i>	-	-	-	-	-	-	-	-	-	-			-
CCA003	<i>Community Energy Planning</i>	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	9,000			9,000
CCA004	<i>Transform TO</i>		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	40,000			40,000
CCA005	<i>Renewable Energy Program</i>	500	500	500	500	500	500	500	500	500	4,500			4,500
CCA006	<i>Combined Heat & Power (CHP)</i>	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	27,000			27,000
CCA007	<i>District Energy Systems</i>	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	18,000			18,000
	Total Expenditures (including carry forward from 2019)	6,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	98,500	-	-	98,500

Appendix 6

Reporting on Major Capital Projects: Status Update

N/A

Appendix 7

Summary of Capital Needs Constraints

N/A

Appendix 8

2020 User Fee Changes

(Excludes User Fees Adjusted for Inflation)

N/A

Appendix 9

Inflows and Outflows to/from Reserves and Reserve Funds

2020 Operating Budget

Program Specific Reserve / Reserve Funds

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020	2021	2022
			\$	\$	\$
Beginning Balance *			605.1	305.1	5.1
Conservation Management Reserve Fund	XR3029				
<i>Withdrawals (-)</i>					
Environment & Energy			-300.0	-300.0	-300.0
			0.0	0.0	0.0
Total Withdrawals			-300.0	-300.0	-300.0
<i>Contributions (+)</i>					
Environment & Energy			0.0	0.0	0.0
			0.0	0.0	0.0
Total Contributions			0.0	0.0	0.0
Total Reserve / Reserve Fund Draws / Contributions			-300.0	-300.0	-300.0
Balance at Year-End			605.1	305.1	5.1

* Based on 9-month 2019 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020	2021	2022
			\$	\$	\$
Beginning Balance *			3,406.0	2,460.6	1,511.1
Eco-Roof Financial Assistance RF	XR1723				
<i>Withdrawals (-)</i>					
Environment & Energy			-945.5	-949.4	-953.8
			0.0	0.0	0.0
Total Withdrawals			-945.5	-949.4	-953.8
<i>Contributions (+)</i>					
Environment & Energy			0.0	0.0	0.0
			0.0	0.0	0.0
Total Contributions			0.0	0.0	0.0
Total Reserve / Reserve Fund Draws / Contributions			-945.5	-949.4	-953.8
Balance at Year-End			3,406.0	2,460.6	1,511.1

* Based on 9-month 2019 Reserve Fund Variance Report

Corporate Reserve / Reserve Funds

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020	2021	2022
			\$	\$	\$
Beginning Balance *			5,372.4	3,440.0	1,504.3
Local Improvement Charge Energy Works F	XR1724				
<i>Withdrawals (-)</i>					
Environment & Energy			-238.9	-238.9	-238.9
Other Division/Agency Withdrawals			-1,693.5	-1,696.8	0.0
Total Withdrawals			-1,932.4	-1,935.7	-238.9
<i>Contributions (+)</i>					
Environment & Energy			0.0	0.0	0.0
Other Division/Agency Contributions			0.0	0.0	0.0
Total Contributions			0.0	0.0	0.0
Total Reserve / Reserve Fund Draws / Contributions			-1,932.4	-1,935.7	-238.9
Balance at Year-End			5,372.4	3,440.0	1,504.3

* Based on 9-month 2019 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020 \$	2021 \$	2022 \$
Beginning Balance *			29,462.4	26,035.4	22,539.9
Insurance Reserve Fund	XR1010				
<i>Withdrawals (-)</i>					
Environment & Energy			0.0	0.0	0.0
Other Division/Agency Withdrawals			-65,835.2	-65,966.2	-65,970.8
Total Withdrawals			-65,835.2	-65,966.2	-65,970.8
<i>Contributions (+)</i>					
Environment & Energy			39.2	39.2	39.2
Other Division/Agency Contributions			62,369.0	62,431.5	62,783.7
Total Contributions			62,408.2	62,470.7	62,822.9
Total Reserve / Reserve Fund Draws / Contributions			-3,427.0	-3,495.5	-3,147.9
Balance at Year-End			29,462.4	26,035.4	22,539.9

* Based on 9-month 2019 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020 \$	2021 \$	2022 \$
Beginning Balance *			893.3	1,169.3	1,445.3
Vehicle Reserve- Facilities & Real Estat	XQ1502				
<i>Withdrawals (-)</i>					
Environment & Energy			0.0	0.0	0.0
Other Division/Agency Withdrawals			0.0	0.0	0.0
Total Withdrawals			0.0	0.0	0.0
<i>Contributions (+)</i>					
Environment & Energy			3.5	3.5	3.5
Other Division/Agency Contributions			272.5	272.5	272.5
Total Contributions			276.0	276.0	276.0
Total Reserve / Reserve Fund Draws / Contributions			276.0	276.0	276.0
Balance at Year-End			893.3	1,169.3	1,445.3

* Based on 9-month 2019 Reserve Fund Variance Report

Reserve / Reserve Fund Name (In \$000s)	Project / Sub Project Name and Number	Projected Balance as at Dec. 31, 2019*	Withdrawals (-) / Contributions (+)		
			2020 Plan	2021 Plan	2022 Plan
XQ0703	Beginning Balance		88,946.3	95,036.7	126,283.8
Tax Rate Stabilization	<i>Withdrawals (-)</i>				
	Environment & Energy (Operating)		- 825.0	-	-
	Other Division/Agency Operating Withdrawals		-26,146.6	- 1,814.9	- 1,822.5
	Environment & Energy (Capital)		-	-	-
	Other Division/Agency Capital Withdrawals		-	-	-
	Total Withdrawals		-26,971.6	- 1,814.9	- 1,822.5
	<i>Contributions (+)</i>				
	Environment & Energy (Operating)		-	-	-
	Other Division/Agency Contributions		-	-	-
	Other Contributions		33,062.0	33,062.0	33,062.0
	Total Contributions		33,062.0	33,062.0	33,062.0
Total Reserve / Reserve Fund Draws / Contributions			6,090.4	31,247.1	31,239.5
Balance at Year-End			88,946.3	95,036.7	126,283.8

* Based on 9-month 2019 Reserve Fund Variance Report

Inflows and Outflows to/from Reserves and Reserve Funds

2020 – 2029 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, 2019*	Contributions / (Withdrawals)										Total
			2020 Plan	2021 Plan	2022 Plan	2023 ∞ Plan	2024 ∞ Plan	2025 ∞ Plan	2026 ∞ Plan	2027 ∞ Plan	2028 ∞ Plan	2029 ∞ Plan	
XR1715	Beginning Balance		2,968.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	
Energy Conservation	<i>Withdrawals (-)</i>												
	Environment & Energy (Operating)		-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0
	Environment and Energy (Capital)		-679.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-679.0
	Total Withdrawals		-679.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-679.0
	<i>Contributions (+)</i>												
	Environment & Energy (Operating)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Contributions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Reserve / Reserve Fund Draws / Contributions			-679.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-679.0
Balance at Year-End			2,968.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	2,289.0	

* Based on 9-month 2019 Reserve Fund Variance Report

∞ Using 2022 Contributions, figures have been projected for 2023-2029 contributions

Reserve / Reserve Fund Name (In \$000s)	Project / Sub Project Name and Number	Projected Balance as at Dec. 31, 2019*	Contributions / (Withdrawals)										Total
			2020 Plan	2021 Plan	2022 Plan	2023 ∞ Plan	2024 ∞ Plan	2025 ∞ Plan	2026 ∞ Plan	2027 ∞ Plan	2028 ∞ Plan	2029 ∞ Plan	
XR1724	Beginning Balance		7,654.6	3,402.2	1,466.6	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	
Local Improvement Charge	<i>Withdrawals (-)</i>												
Energy Works	Environment & Energy (Operating)		-238.9	-238.9	-238.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-716.6
	Other Division/Agency Operating Withdrawals		-1,693.5	-1,696.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3,390.3
	Environment and Energy (Capital)		-2,320.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2,320.0
	Total Withdrawals		-4,252.4	-1,935.7	-238.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6,426.9
	<i>Contributions (+)</i>												
	Environment & Energy (Operating)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Contributions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Reserve / Reserve Fund Draws / Contributions			-4,252.4	-1,935.7	-238.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6,426.9
Balance at Year-End			7,654.6	3,402.2	1,466.6	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	1,227.7	

* Based on 9-month 2019 Reserve Fund Variance Report

∞ Using 2022 Contributions, figures have been projected for 2023-2029 contributions

Appendix 10

Glossary of Terms

Approved Position: Permanent or temporary positions that support the delivery of City services and service levels as approved by Council.

Actuals: An actual financial amount paid (or received) for the delivery of City services (these exclude any commitments to be paid in the future).

Capacity to Spend: Ability to spend money along with the capacity to deliver projects as demonstrated by historic spending patterns and approved contractual obligations.

Capital Budget: A Capital Budget is the City's plan to acquire / build assets or extend the useful life of existing assets; an example of a capital expenditure is the construction of a new community centre.

Capital Needs Constraints: The capital needs that cannot be accommodated within the capital plan that the Division or Agency have the capacity to deliver.

Complement: Positions that support the delivery of City services and service levels as approved by Council.

Efficiencies: Reductions in the cost of delivering a service without a reduction in service level.

New / Enhanced: New and enhanced service changes resulting in an increase in service levels from what was previously approved by Council.

Operating Budget: An Operating Budget is the City's annual plan to provide services to the residents of Toronto; the budget includes all revenues and expenses needed to provided services; an example of an operating cost would be the cost to run the TTC subways.

Operating Impact of Completed Capital Projects: The additional expense (or savings) and positions needed to operate or maintain a new asset; an example would be the additional expense and staff needed to operate a recently completed community centre.

Rate Supported Budget: Budget fully funded by user fees such as Solid Waste, Toronto Water and Toronto Parking Authority

State of Good Repair (SOGR): The cost of maintaining assets to ensure they are able to support the delivery of City services and meet service outcomes

Tax Supported Budget: Budget funded by property taxes.

User Fees: Program generated fee and rental revenue for the use of its services (such as the TTC fare, ice rental fees and various City permits).

Value Based Outcome Review (VBOR): The City conducted a Value Based Outcome Review in 2019 for all of its operations and agencies to identify specific opportunities and strategies to maximize the use of tax dollars, enhance its financial sustainability while achieving service outcomes. These opportunities will help the City chart its financial course in the next four years.