
2019 OPERATING BUDGET BRIEFING NOTE

TransformTO 2019 Budget Request

Issue/Background:

The 2017 to 2020 TransformTO Short-term Strategies were endorsed by City Council in December 2016 (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PE15.1>).

As part of the 2018 budget process, City Council committed to funding all of the TransformTO Short-term Strategies and approved the long-term TransformTO strategy to reduce carbon emissions by 80% by 2050 through a phased implementation approach. This phased implementation approach recognizes that in 2018 effort was heavily focused on program design and development and in 2019 the focus shifts to accelerated implementation of the TransformTO Short-term Strategies. The Environment & Energy Division will be bringing a status report on progress to date to Council in Q2 of this year, and an implementation plan for the next 4 years in Q3.

Per Table 1 below, the TransformTO net operating budget for the previously approved 2017 and 2018 is \$3.055 million. The total over the 4-year short-term strategy funding timeline is \$15.472 million.

Year	Budget Year	Annualized	Total Annual Budget	Total Cumulative Budget	FTEs
2017	443.3		443.3	443.3	7
2018	2,221.9	389.6	2,611.6	3,054.9	27
2019	1,314.2	1,072.1	2,386.2	5,441.1	5
2020	833.0	259.1	1,092.1	6,533.2	5
Total	4,812.4	1,720.8	6,533.2	15,472.4	44

TransformTO – 2019 Recommended Operating Budget:

Included in the 2019 Recommended Operating Budget is \$1.458 million (\$1.314 million net) towards the next phase of implementing the TransformTO Short-term Strategies. This is comprised of a new and enhanced request of \$1.133 million in 2019 (\$0.989 million net)

including 5 new positions starting July 2019. In addition, the Facilities, Real Estate, Environment & Energy (FREEE) Program reallocated \$0.365 million gross (\$0.365 million net) from the base budget to fund TransformTO Planning and Coordination. The reallocation was based on a review of priorities within the FREEE program.

If approved by City Council, the total annualized net operating budget for TransformTO implementation for 2019 will be about \$5.441 million.

How that new and enhanced funding for 2019 is allocated across the TransformTO Short-term Strategies is outlined below.

1) Leading by Example - 2 new positions (recovered from capital) & \$0.025 million in non-salary costs:

Leading by example is critical to set the pace and demonstrate commitment by the City of Toronto towards achieving the goals of TransformTO. Additional resources will allow the City to expand efforts to reduce energy consumption and install renewable energy systems in municipally-owned facilities. These activities are reducing operating costs and greenhouse gas emissions.

Annual avoided energy costs associated with energy efficiency retrofits were \$0.300 million in 2016 and over \$0.500 million in 2018. In 2018, work was initiated on three deep energy efficiency retrofits, where we are testing approaches to achieve GHG reductions in the order of over 60%. The three City-owned buildings are the Waterfront Neighbourhood Centre, Toronto Paramedic Services Headquarters and the East York Civic Centre. 10 additional projects of this scale are planned for 2019.

In 2018, EED installed its 100th solar photovoltaic system on City property. Currently the City has installed over 10 MW of renewable energy capacity. The TransformTO goal is to install 24 MW of renewable energy by the end of 2020.

2) New Community Energy Projects – 3 new positions & \$0.730 million in non-salary costs:

The majority (75%) of the new TTO funding request for New Community Energy Projects is to finalize the expansion and acceleration of the Better Buildings Partnership, the Home Energy Loan Program (HELP) and other building energy efficiency retrofit programs. These efforts target private and broader public sector owned and operated buildings.

In July 2018, City Council authorized the use of City recoverable debt to enable carbon-reducing retrofits of privately owned buildings. With this decision we are now able to leverage funding available from other orders of government, the utilities and private financing to facilitate deep energy retrofits. The 3 new positions requested will be focused on marketing this offering and building the necessary partnerships with the utilities to identify and take advantage of opportunities.

Recent financing provided to TCHC and YMCA provide examples of how we are approaching implementation. TCHC was provided with a \$35.000 million loan while also leveraging \$25.000 million in Provincial grant funding which enabled the retrofitting of 9 buildings resulting in significant energy savings, reduced emissions, resident comfort and increased building resiliency. Similarly YMCA has been provided with \$12.000 million in financing which it is using at 10 sites to implement energy efficiency and climate resiliency retrofits, and install electric vehicle charging stations and renewable energy systems to be completed by 2020. These building retrofits also provide the YMCA with better ability to provide emergency respite centres during extreme climate events. The estimated GHG reduction is in range of 2,600 to 5,000 tonnes.

Between 2017 and 2018, the Home Energy Loan Program has seen an increase of over 100% in the number of applications (113 in 2017 to 234 in 2018) and a \$10,000 increase in the average size of homeowner loans (\$18,700 to \$28,700). This progress is overtly attributable to the addition of increased staffing dedicated to expansion of the Program. Additional resources will allow us to continue program expansion and achievement of the program goal of supporting 1,000 applications a year.

The remaining 25% of the budget request in this area will support our work with resident and neighbourhood groups and Non-Governmental Organizations (NGOs) in activities that encourage residents and businesses to take action to reduce their carbon emissions. In 2018, we tested one approach with three neighbourhood groups through the TransformTO Neighbourhood Mobilization Campaign. The 2019 request will allow us to seed activities with additional partners participating in neighbourhood focused engagement efforts.

3) Community Energy Plan & Low Carbon Thermal Networks – \$0.075 million in non-salary costs:

City Council has authorized the Joint Development Agreement with Enwave for the development and operation of low carbon thermal energy systems (e.g. sewer heat recovery, lake water cooling, large geo-exchange fields augmented with solar thermal collectors, as well as, biogas and biomass from municipal operations). Implementation of this direction of Council is already underway, with priority developments including the Etobicoke Civic Precinct for Toronto's first new Net-Zero Neighbourhood and preliminary design and infrastructure installation work being done as part of the redevelopment of the Westwood Theatre Lands. These projects will help the City meet TransformTO climate targets, while attracting significant investments to the benefit of the local economy, generating revenue, ensuring energy does not become a limiting factor for growth, and improving energy resilience.

4) TransformTO Planning - \$0.365 million in non-salary costs (funded through an internal realignment of budget within FREEE)

TransformTO Planning and Coordination oversees the implementation of all TransformTO short-term strategies across the Corporation, designs and manages collective impact process and engagements for three approved acceleration campaigns. Ongoing research includes the development of the electric mobility and renewable energy strategies. This ensures the needed oversight and coordination is in place to leverage financing, manage the multiple internal and external stakeholders, and create a sustainable program with appropriate governance, reporting and funding to achieve Council's GHG reduction goals.

Part of the 2019 incremental funding will support the development of issue/topic specific strategies and other measures associated with implementation of TransformTO. These include the Electric Mobility Strategy being prepared in collaboration with stakeholders, such as the auto industry, EV charging manufacturers and residents. The majority of the funding in 2019 will support stakeholder engagement required to develop the next TransformTO Implementation Plan (2021 to 2023) that will be presented to City Council in September 2019. An area of particular focus will be on engaging with hard-to-reach segments of society whose views are traditionally under-represented in the strategy development.

The Broader Influence of TransformTO in 2017-18

Since adoption by City Council, the goals and resources allocated through TransformTO have supported and influenced a number of City initiatives. For example:

- TTC's Green Fleet Transition Strategy and shift to fully electric buses. This strategy will significantly reduce TTC's GHG emissions from its bus fleet, noise at street level and has the potential to reduce long term operating costs;
- Issuance of Toronto's first Green Debenture (Bond.) This debenture raised \$300 million in financing for transit related projects and responded to investor expectations of the City to demonstrate social and environmental responsibility;
- Endorsement by City Council of the revised Toronto Green Standard which puts Toronto on track to achieve the TransformTO goal for all new construction to be net zero GHGs by 2030; and
- Successful applications for funding from Federal and Provincial sources to support initiatives that implement the goals of TransformTO

Does this Operating Budget Request differ from what was presented in 2018?

The new and enhanced TransformTO recommended funding for Phase 3 of the Short Term strategies for 2019 is different from what was originally presented in 2018 in that the number of new positions being requested has been reduced from 10 to 5 positions and hiring will occur by July 2019 as opposed to April 2019.

The hiring of the remaining five positions will be deferred until 2020. This deferral will delay the implementation of program elements, but will not curtail the implementation of the overall TransformTO Short Term Strategies. The positions to be deferred are associated with advancing

retrofits in existing buildings across the city. As implementation of these strategies is carried out, we will report to City Council, if necessary, if there are any significant implications of the resource changes and recommend any necessary corrective action.

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Appendix 1: Overview of TransformTO

- Toronto is a climate leader and as of 2016 has seen its community-wide GHGs drop by 33% against 1990 levels.
- Toronto City Council, in July 2017, adopted the TransformTO strategy to address the issue of climate change. Goals of TransformTO include:
 - reduce emissions by 65% against 1990 levels by the year 2030 and by 80% by the year 2050;
 - 100% of new buildings are built to near zero emissions by 2030;
 - 100% of existing buildings are retrofitted to achieve an average of 40% improvement in energy efficiency by 2050;
 - 75% of energy used in the city comes from renewable or low carbon sources by 2050;
 - 30% of the total floor space in Toronto is connected to low carbon heating and cooling energy sources by 2050;
 - 100% of transportation is powered by low carbon energy sources by 2050;
 - 75% of trips under 5 kilometres are made by walking or cycling by 2050; and
 - 95% of waste is diverted away from landfills by 2050.
- Implementation is well underway and initial successes that built upon past achievements include:
 - Adoption of the Zero Emissions Building Framework
 - Development of a collaboration with Enwave to build and develop local low carbon thermal energy systems across Toronto;
 - Emphasis on circular economy principles in solid waste management and procurement;
 - Exploration of biogas assets to produce renewable natural gas;
 - Investment in the 10-year Cycling Network Plan; and
 - The City's first green bond issuance raising \$300 million for de-carbonization work including public transit investments.
- TransformTO implements the environmental sustainability objectives of the City and also advances its economic, equity, health and resilience city building priorities.
- In October 2018, Environics Research completed a representative survey of residents to identify current perceptions on climate change. The survey was delivered online with 404 respondents, with a representative accuracy of ± 4.9 percentage points, 19 times out of 20. A few key findings are:
 - 82% of Torontonians report there is a link between extreme weather events in Toronto and climate change;
 - 92% of Torontonians believe climate change threatens personal health and well-being;
 - 91% of Torontonians believe that collective action from all individuals and nations is required to address climate change;

Appendix 2: Overview of TransformTO net funding 2017 to 2020

TransformTO Short Term Strategy		Operating Budget Approved/Requested by Year, 2017 to 2020 (\$000)				
		2017 Approved	2018 Approved	2019 Recommended	2020 Planned	Total
1.2	Innovative financing mechanisms	\$ 60	\$ 114	\$ 142	\$ 147	\$ 463
4.4	Improve fleet fuel efficiency	\$ 110	\$ 234	\$ 284	\$ 291	\$ 919
4.5	Promote Smart Commute to Toronto Public Service	\$ 40	\$ 91	\$ 96	\$ 99	\$ 326
1.1	Enhance the Better Building Partnership	\$ 233	\$ 1,074	\$ 1,710	\$ 2,306	\$ 5,323
1.5	Continue support for residential property owners	\$ -	\$ 260	\$ 448	\$ 530	\$ 1,238
2.3	Advance low-carbon / renewable thermal energy networks	\$ -	\$ 122	\$ 252	\$ 367	\$ 741
2.2	Advance community energy planning	\$ -	\$ 281	\$ 438	\$ 478	\$ 1,197
2.1	Advance leading edge new construction standard	\$ -	\$ 127	\$ 252	\$ 302	\$ 681
5.2	User building energy disclosure as an engagement tool	\$ -	\$ 6	\$ 73	\$ 76	\$ 156
5.1	TransformTO community engagement	\$ -	\$ 353	\$ 636	\$ 644	\$ 1,633
5.3	Leverage Live Green Toronto	\$ -	\$ 270	\$ 632	\$ 788	\$ 1,690
1.3	Dedicate funding for community based climate action	\$ -	\$ -	\$ 66	\$ 137	\$ 203
5.4	Collaborate with utilities on local programing					\$ -
4.3	Utilize landfill gas & biogas					\$ -
4.1	Expand energy retrofits in City facilities	\$ -	\$ 44	\$ 92	\$ 98	\$ 234
1.4	Improve energy efficiency in social housing					\$ -
4.2	Scale-up renewable energy installations	\$ -	\$ 52	\$ 122	\$ 119	\$ 293
3.5	Enable electric vehicles	\$ -	\$ -	\$ 75	\$ 75	\$ 150
3.4	Develop a freight strategy	\$ -	\$ -	\$ 75	\$ 75	\$ 150
2.4	Create a renewable energy strategy	\$ -	\$ 25	\$ 50	\$ -	\$ 75
3.1	Explore road pricing					\$ -
3.2	Support safe cycling & walking					\$ -
3.3	Enhance transit service					\$ -
TOTAL		\$ 443	\$ 3,055	\$ 5,441	\$ 6,533	\$ 15,472

Note 1: New TTO capital funding in FREEE's plan over the same 2017-2022 period is \$31.5 million.