

BRIEFING NOTE

Date: December 3, 2020

To: Executive Committee

From: Robin Oliphant, Acting President, Toronto Parking Authority

Jim Baxter, Director, Office of Energy and Environment

Wards: All

2021 Rate Supported Budgets - Toronto Parking Authority

ISSUE:

At its meeting of November 23, 2020, Budget Committee requested that the Acting President, Toronto Parking Authority (TPA) and the Director, Office of Energy and Environment submit a Briefing Note to the December 10, 2020 meeting of the Executive Committee on what can be done as part of the 2021 TPA budget to help achieve city climate change targets, including expanding bikeshare and cycling facilities at TPA lots, greening facilities, enhancing storm water management, and electric vehicle charging facilities at TPA lots.

BACKGROUND

- TPA is a key component within the municipal parking and mobility system, complementing and aligning with the City's Official Plan transportation policies as well as collaborating with other City divisions and agencies to achieve City wide initiatives.
- TPA operates 19,000 on-street and over 40,700 off-street parking spaces across 307 locations, processing over 34 million transactions. Bike Share Toronto's operating system includes 6,850 bikes and 625 bike stations spanning almost 200 square kilometres with over 186,000 members.
- The COVID-19 pandemic continues to evolve, creating significant revenue and cash flow uncertainty, requiring Toronto Parking Authority (TPA) to proceed cautiously to meet our self-funding mandate, performing only critical activities while investing in the delivery of key strategic initiatives to ensure both employee and customer safety and TPA's long-run financial sustainability.
- As the City continues to address the pandemic and its challenges, TPA will
 continue to support and collaborate with other City agencies, including CreateTO
 and Transportation Services to ensure our pandemic response is coordinated

and effective, including seeking further alternative parking supply and opportunities for Bike Share.

- TPA's 2021 budget recommendation is to support these key strategic growth investments, replacing out-of-date systems, supporting the replacement of lost on-street and off-street parking, ensuring the safety and cleanliness of our facilities, and to recognize the uncertainty of 2021 revenue by removing cash flow risk from the operating budget.
- With the uncertainty caused by the pandemic, TPA remains committed now more than ever to ensuring a resiliency in its operations and in identifying, assessing, monitoring, reporting and mitigating the risk associated with a changing climate and extreme weather events. The following provides a summary of ongoing programs and policies that demonstrate TPA's commitment to addressing climate change effects and contributing to the City's efforts to meet climate change targets. Over the medium and long-term TPA is committed to being a leader in climate action.

Bike Share

- Despite the pandemic's challenges in 2020, TPA continued to fully operate Bike Share Toronto, providing safe mobility options and supporting physical distancing for our customers and residents.
- TPA completed the last significant phase of the Bike Share expansion plan recommended through a 2015 Feasibility Study that concluded that a system in the range of 6,000 bicycles and 600 stations would be an optimum target to handle the demand within the City of Toronto. The \$11.25 million expansion brought the network to 6,850 bikes, including 300 e-bikes, 625 stations and 12,000 docks across the City.
- Over the past five years, the expansion program has primarily been funded by all three levels of government. TPA has been actively searching for new capital grants for 2021 however no funds have been secured at this time and therefore TPA has not put forth an expansion plan as part of its proposed 2021 Capital Budget and 2022 – 2030 Capital Plan.
- Without funding for an expansion, TPA's plan in 2021 is to initiate a feasibility study to support expansion of the program further into suburban areas and to investigate how to optimize connectivity at key transportation nodes in the City by reducing obstacles to transition between these nodes. The information gathered by the study will assist with plans for the future when funding has been acquired and will allow TPA to make strategic investments in Bike Share infrastructure where it matters most.

Bicycle Parking

- TPA has bicycle parking in proximity to a number of its parking facilities. While these facilties are most often located in the boulevard area adjacent to TPA car parks, TPA actively works with Transportation Services to assess new on-street locations where there is existing paid parking. Where adequate space cannot be identified within the City's boulevard or on-street, TPA will work with Transportation Services to assess the feasibility of locating bicycle parking within its off-street car parks. This is of particular importance in TPA lots proximate to rapid transit infrastructure such as subway stations.
- TPA and Transportation Serices have worked together in the past to convert space within Car Park 36 at City Hall from active parking spaces to bicycle parking and can continue to assess new locations based on operational feasibility.

Green P+

- As part of its proposed 2015 Capital Budget, TPA brought forward a multi-year plan to retrofit and apply the City's Design Guidelines for 'Greening' Surface Parking Lots. 'Greening' a surface parking lot can include planting trees, providing good quality soil and generous landscaped areas, enhancing pedestrian and cycling infrastructure, managing stormwater on-site, reducing the urban heat island effect, and using sustainable materials and technologies.
- TPA Policy 6-4, 'Greening' Elements in Carparks, establishes a process for incorporating 'greening' practices, to the extent practical, when planning, developing and retrofitting carparks, as outlined in The Design Guidelines for 'Greening' Surface Parking Lots and the Toronto Green Standards, and any other best practices that may emerge from time to time, including elements that support and enhance the vibrancy and liveability of the communities in which the facilities are located.
- The application of Greening Guidelines at TPA occurs where TPA is acquiring new parking (surface parking facilities and parking garages), through joint venture partnerships resulting in the redevelopment of existing sites and where retrofitting existing facilities requiring rehabilitation.
- TPA has and continues to be diligent in the quality and standards at all of its surface parking lots and garages. Any new developments, redevelopments of surface parking lots into garages and acquisition of already existing surface lots must adhere to TPA specifications.
- The Design Guidelines for 'Greening' Surface Parking Lots as well as the Toronto Green Standard are functional design requirements in the Toronto

Parking Authority's Outline Specifications for a Typical Proposed Surface Municipal Car Park.

- On an annual basis, TPA undertakes its' Surface Car Park Repaying Program
 which identifies a number of surface car parks where pavement surfaces have
 reached the end of their lifecycle and need to be replaced.
- Generally the Surface Car Park Repaving Program consists of asphalt replacement, adjusting existing catch basins and cleaning drainage pipes, repainting of car park layout / surface line markings, replacement of landscape material / improving planter beds, replacement of board and bumper fences, replacement of interlocking bricks and base material for improved drainage, electrical service and lighting upgrade work.
- The Surface Car Park Paving Program is the most cost and time effective
 means to retrofit and apply the design guidelines outlined in the report, Design
 Guidelines for 'Greening' Surface Parking Lots at its surface parking lots, as the
 Program already functions to identify the surface parking lots in need of
 improvement.
- The additional infrastructure needed to achieve the Greening Guidelines has been operationalized through TPA's Green P+ program. As the additional infrastructure can be implemented into work already underway without requiring a separate tender and contracting process, TPA is able to deliver cost-effective improvements while minimizing disruption to the operation of the Car Park.
- A major retrofit to an existing car park generally occurs on an approximate 20 year life cycle. TPA is working to ensure that the inventory of TPA car parks are retrofitted to conform to the Greening Guidelines within a 20 year period.
- TPA has completed 13 projects under the Green P + program, a number of which have been the recipients of International Parking Institute Awards of Excellence. Award winning locations include Car Park 256 at 1624 Queen Street West, Car Park 164 at 453 Spadina Road and Car Park 414 at 3885 Yonge Street.
- TPA has a further 10 Green P+ projects under development, which are planned for delivery commencing in 2022. Projects previously planned for 2020 and 2021 have been deferred due to the impacts of the COVID-19 pandemic and TPA's existing focus on critical projects addressing state of good repair and safety issues.
- These locations add to the 9 new facilities that have been designed and constructed to meet the Greening Guidelines that have been onboarded by TPA since 2011.

Storm Water Management

- All new TPA parking facilities are designed to address the on-site attenuation and treatment of stormwater runoff and meet the requirements of the City's Wet Weather Flow Management Guidelines and Ministry of the Envrionment Stormwater Management Guidelines. This involves a retention chamber to allow water to filter naturally back into the ground and a biofilter system that detains and filters any water before it is discharged back into the City's stormsewer system.
- As noted above, TPA will reconstruct its parking facilities included in the Green P+ program with permeable pavers, landscaped areas and new energy efficient lighting. Exceptions may occur where the facility is located above a TTC tunnel or other below grade structure or where the site has been identified for redevelopment in the short-term.

EV Charging Stations

- Currently, TPA EV infrastructure includes three (3) car parks with a total of nine
 (9) parking spaces equipped with L2 electric charging stations. The existing
 electric charging stations are free for TPA customers to use, with TPA bearing
 the cost of electricity. The nine (9) existing electric charging stations range from
 three (3) to eight (8) years in age.
- TPA has been working with Toronto Hydro-Electric System Limited (THESL) for the past two (2) years to assess the feasibility of a pilot project that would allow THESL to operate new L2 "smart" EV charging stations at TPA facilities.
- TPA also supported THESL's ZEVIP application. This application, which was recently approved for over \$200,000 would allow THESL to install additional L2 and L3 EV charging stations throughout the City of Toronto. The proposed projects would allow TPA to:
 - Increase the amount of EV charging infrastructure available to TPA patrons
 - Have usage of an app whereby customers would be directly billed for electricity usage
 - Gather customer data such as frequency of usage, time of day usage, day of week usage, etc
- TPA and THESL continue to assess the terms and conditions of an arrangement that would allow THESL to operate EV charging stations at TPA facilities. At this time, TPA is also examining other options to compare to the offering by THESL prior to proceeding with an agreement. This includes doing market research and engaging Fleet Services as per direction from City Council at its meeting of

October 18, 2019 to adopt and implement The Pathway to Sustainable City of Toronto Fleets Plan, of which TPA is a full partner and participant.

 TPA is a member of the City of Toronto Electric Vehicle Working Group and is an identified lead on various Actions and Activities within the City of Toronto Electric Vehicle Strategy, unanimously endorsed by City Council in January 2020. Through the Electric Vehicle Strategy, TPA's central commitments are to expand access to public charging infrastructure, and explore micromobility and EV carsharing through exploring partnerships, and supporting outreach and education initatives.

Solar Power and Investments in Energy Efficient Technology

- TPA operates approximately 3,300 Pay & Display machines, nearly all of which are powered by photovoltaic cells. A few exceptions are in place (e.g. approximately 1 %) at locations where there is insufficient solar energy (e.g. within underground parking garages) to power the Pay & Display machines.
- TPA has retrofitted approximately 90 % of its facilities to include energy-efficient lighting and will achieve 100 % in the next 3 5 years.
- In December 2006, TPA received authority from its Board to fund the installation
 of a photovoltaic system at the St Lawrence Garage. The Project includes a 21
 kilowatt system with a capacity to generate 21,000 kilowatt hours annually. The
 system was installaed in 2009 with the intention to sell the power generated
 back to Toronto Hydro through the Renewable Energy Standard Offer Program,
 replaced by the FIT program in 2009.
- The system was installed at a cost of \$269,740 and is expected to provide a return on investment in approximately 16 years.

Toronto Parking Authority Policy Resolutions

- TPA has a number of policy resolutions that guide its planning, design standards and operations. These include:
 - Policy Resolution 2-13: Climate Change Risk Management Policy
 - Policy Resolution 6-3 -Landscaping at all Parking Authority Facilities
 - Policy Resolution 6-4 -Incorporating "Greening" Elements in Car Park Development

FINANCIAL IMPACT

- TPA's annual distribution to the City of Toronto for the 2020 financial year is forecasted to be \$4.1 million, a decrease of \$(55.4) million or -93 percent below budget as a result of the impact of COVID-19 on parking operations during the remaining nine months of 2020 as Ontario COVID-19 restrictions and City initiatives reduced demand and available parking spaces. The impact of COVID-19 is anticipated to continue into 2021 with no annual distribution, with recovery expected in 2022.
- As a result of the reduction in revenues, TPA has deferred non-essential capital
 projects from 2020 and 2021 to 2022 at the earliest. During this period, TPA will
 focus on critical capital repairs that address identified state of good repair,
 resiliency and safety issues. Examples of projects include the replacement of
 sump pumps at Car Park 36 (City Hall), where the increased frequency and
 strength of storms has made it an essential to increase the capacity of sump
 pumps to protect other systems from flooding.
- Non-critical programs, including TPAs Green P+ program, which is focussed on greening surface car parks, are being deferred to 2022 until parking demands and revenues begin to stabilize. In the interim, localized repairs to surface car parks will be carried out on an as required basis.

DECISION HISTORY

- At its meeting of November 23, 2020, Budget Committee requested the Acting President, Toronto Parking Authority and the Director, Office of Energy and Environment to submit a Briefing Note to the December 10, 2020 meeting of the Executive Committee on:
 - a. what could be done as part of the 2021 Toronto Parking Authority budget to help achieve city climate change targets, including expanding bikeshare and cycling facilities at Toronto Parking Authority lots, greening facilities, enhancing storm water management, and electric vehicle charging facilities at Toronto Parking Authority lots.
 - http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2020.BU19.3
- At its meeting of October 18, 2019, City Council requested the Exhibition Place Board of Governors, the Toronto Community Housing Board of Directors, the Toronto Parking Authority Board of Directors, the Toronto Police Services Board, the Toronto Public Library Board, the Toronto Transit Commission Board and the Toronto Zoo Board of Management to adopt and implement The Pathway to Sustainable City of Toronto Fleets Plan. http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2019.GL8.16

 At its meeting of March 10 and 11, 2015, City Council adopted the 2015 Rate Supporting Budget – Toronto Parking Authority and received a January 12, 2015 report from the President, Toronto Parking Authority, titled, "Toronto Parking Authority - Multi-Year Plan for 'Greening' Surface Parking Lots."
 http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2015.EX3.3

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