



REPORT FOR ACTION

Bike Share Program Financial Considerations

Date: November 20, 2018
To: Board of Directors, Toronto Parking Authority
From: Acting President, Toronto Parking Authority
Wards: All

SUMMARY

Responsibility for all aspects of the City's bike share program (then known as "BIXI") was transferred to the Toronto Parking Authority, as of early 2014, and rebranded as "*Bike Share Toronto*". Since that time, the system has seen significant expansion, and currently comprises approximately 3,750 bikes with 360 stations and 6,170 dock points. (BIXI consisted of 1,000 bikes with 80 stations comprising 1,500 docks at the time of transfer). Over this period, annual ridership has grown exponentially from approximately 400,000 to approaching 2 million projected in 2018.

City Council, in considering TPA's *2018 Budgets*, directed the Acting President, to report back to the Executive Committee, through the Budget Committee, with a comprehensive strategy to address the funding for the Bike Share Program on a longer term basis, to inform the 2019 and future years Budget processes.

Bike Share is an integral and increasingly prominent component in the City's transportation and mobility network, and as such merits continuing City investment and support. The public policy contributions, as well as the numerous benefits Bike Share Toronto brings to the city and its residents/visitors, ranging from a viable, healthy active transportation and mobility alternative, environmentally friendly green mode of travel in reducing congestion and emissions, and augmenting the public transit systems as a "first/last mile" alternative, are beyond question in a modern city.

The Bike Share program has been extremely successful in terms of capitalizing on the opportunities to facilitate expansion of the system with significant capital funding from all three levels of Government. With that said, on the operating side, Bike Share Toronto reflects the experience of all similar systems, and in fact all public transit operations worldwide, in that it is extremely rare that user/operating revenues alone will completely offset operating expenses. Funding of the vast majority of such systems, both in Canada and internationally, typically derives from three primary sources: user-pay operating revenues (usually in the range of one-half to two-thirds; sponsorship /

advertising rights; and subsidy of remaining shortfall. In addition, based on industry-wide trends, we are of the view that the Bike Share Toronto system will become an increasingly valuable City asset, as technologies become more autonomous and converge over time as the future of the urban transportation-as-a-service model advances. In the realm of overall transportation investment, while the system requires some level of ongoing support over and above its ability to fully self-fund, it exhibits, in relative terms, low implementation and maintenance costs and short delivery timeframes.

This report proposes a framework of "*Financial Sustainability Principles*", intended to guide the range of decisions on capital and operating funding in the ongoing provision and operation of the bike share system. It also proposes specific funding actions to address current outstanding, as well as future Bike Share capital programs and operating deficits, as necessary, to be considered as part of the 2019 and future years' annual Budget cycles. This report has been prepared in close consultation with the City's Transportation Services and Financial Planning Divisions.

RECOMMENDATIONS

The Acting President, Toronto Parking Authority recommends that:

1. The Board of Directors of the Toronto Parking Authority forward this report of the Acting President (November 20, 2018) including the following recommendations of the Acting President, to City Council, through the Budget and Executive Committees, for consideration in the 2019 and future years' Budget processes:
 - a. City Council approve the principle that Bike Share as a municipal service is an integral component in the City's transportation, transit and mobility network, and as such, there is considerable merit in continuing City investment and support in the program;
 - b. City Council acknowledges that user/operating revenues alone will not completely cover ongoing operating expenses of Bike Share, and municipal subsidy will likely be required to offset capital requirements (SOGR and expansion) and net operating deficits;
 - c. City Council approve the "*Financial Sustainability Principles*" set out in this report, and that funding current outstanding, as well as future Bike Share capital programs and operating deficits, as necessary, be considered as part of the annual budget cycle in accordance with these principles, namely:
 - i. *Efficiency in operations* – the need to continually optimize the expense side of operating the Bike Share system;
 - ii. *Securing system sponsorship and advertising* - as key elements to offset operating deficits and ensure the long-term financial sustainability of Bike Share;

- iii. *Commitment to municipal funding subsidies* – to address any system shortfalls as well as capital programs, recognizing the value of the municipality continuing to invest in a Bike Share program;
 - iv. *Subsidy funding would not rely on property tax sources, debt financing or impact operating budgets; and,*
 - v. *Future years' net surplus operating funds, if any, be deposited to the Bike Share Reserve;*
- d. City Council authorize that, in accordance with the principles set out in Recommendation No. 3 above, current outstanding unallocated Capital and Operating cash deficits, for Bike Share be funded as follows:
- i. Outstanding 2016 capital requirements in the amount of \$301,000: from interest accruing on Metrolinx funds and retained by TPA (\$123,500); and from the Bike Share Reserve XQ-0013 (\$177,500);
 - ii. Remaining 2013-2016 cumulative operating cash deficit which has not been covered by existing Bike Share Reserve funds, in the amount of \$1,054,000 from the Public Realm Reserve Fund XR-1410;
 - iii. 2017 Operating cash deficit of \$2,148,000 from the Public Realm Reserve;
 - iv. 2018 Operating final cash deficit amount, currently projected to be \$2,279,000, from the Public Realm Reserve Fund XR-1410;
 - v. Proposed 2019 capital expansion, municipal share under the OMCC Program, in the amount of \$1.5 million from received Section 37 and 45 funds.
- e. City Council direct that its previous request, namely that the Chief Planner and Executive Director, City Planning and the General Manager, Transportation Services report back on a review of Toronto's parking standards for new multi-unit residential and commercial developments with the objective to consider the expansion of public bike sharing programs at net zero costs to the City, be revisited.

FINANCIAL IMPACT

This report recommends endorsement of the principle that Bike Share, as a municipal service and integral component in the City's integrated transportation, transit and mobility network, merits continuing City investment and support. A series of *Financial Sustainability Principles* are advanced as a framework for decision-making with respect to funding current outstanding, as well as future Bike Share capital programs and operating deficits, as necessary, to be considered as part of the 2019 and future years' annual Budget cycles. Specific recommendations are contained herein to address the following funding requirements:

- Outstanding 2016 capital requirements (\$301,000);
- Remaining 2013-2016 cumulative operating cash deficit (\$1,054,000);
- 2017 Operating cash deficit (\$2,148,000);
- 2018 Operating final cash deficit (\$2,279,000 - projected); and
- Proposed 2019 capital expansion, 20 percent municipal share under the OMCC Program (\$1,500,000).

These requirements will be fully funded by reserves / reserve funds and interest accrued on contributions from Metrolinx.

Additionally, the 2019 Capital Budget Submission for Toronto Parking Authority includes a total of \$7.500 million for Bike Share Program expansion, which will be funded by \$6.000 million (80%) in provincial contributions as part of the Ontario Municipal Commuter Cycling (OMCC) Program and \$1.500 in received eligible Section 37 and 45 funds (20%).

The City of Toronto's Chief Financial Officer, and Toronto Parking Authority's Vice President, Finance, have reviewed this report and agree with the financial impact information.

DECISION HISTORY

City Council, at its meeting of November 13, 14, 15 and 18, 2013 in considering, "*Strategy for Continuing Toronto's Bike Share Program*" (Item EX35.8), enacted a multi-faceted strategy to develop a plan and strengthen the financial viability of Toronto's bike share program.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX35.8>

City Council, at its meeting of December 5, 6, 7 and 8, 2017, in considering, "*2018 Rate Supported Budgets - Toronto Parking Authority*" (Item EX29.20), among other things, directed the Acting President, Toronto Parking Authority to report back to the Executive Committee, through the Budget Committee, with a comprehensive strategy to address the funding for the Bike Share Program on a longer term basis, to inform the 2019 and future years Budget processes by March 31, 2018:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EX29.20>

The Board of Directors of the Toronto Parking Authority, at its meeting of June 25, 2018, among other things, approved Bike Share program user fee adjustments and other operational matters:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.PA12.4>

COMMENTS

The Federal and Provincial governments, Metrolinx and the City have all made significant funding commitments for capital expansion of the Bike Share network. As we are now well into the fifth year of the re-launch of Bike Share Toronto, it is an

appropriate juncture to affirm the funding model in a manner that ensures the system remains on a sustainable, sound footing.

Initial Strategy for Bike Share Program, 2014-2018

The following elements were among the highlights of the plan originally established by City Council when responsibility for the bike share system and operation was transferred to TPA, which in turn were based on reports (October 15 and November 11, 2013) from the General Manager of Transportation Services:

- Termination of the agreement with then-program operator, BIXI Toronto Inc., including payment of various loan guarantee/debts and liabilities;
- Transfer and assignment of the program assets and all responsibilities of ownership, acquisition, management, maintenance and operation of the bike share program on behalf of the City of Toronto to the Toronto Parking Authority for the purpose of continuing the program;
- Establishment of a Bike Share Program Reserve for the purpose of providing a source of funding for the BIXI loan guarantee/debt (\$3,687,500 plus \$200,000); transition costs incurred by the City and TPA (\$550,000); interim operating payments to BIXI (\$300,000); capital expansion and replacement costs; and ongoing operating contributions to the Toronto Parking Authority for any system operating losses.
- The Reserve was funded by an initial \$5 million contribution through the cash-out of 11 automated public toilets (APTs) under the City-Astral Media Street Furniture Contract. (The current balance of the Bike Share Reserve XQ-0013 is \$324,000).
- Council also authorized the cash-out of 2 additional APT's (approx. \$800,000), and that commencing 2015, \$70,000 annually be included for consideration in the Transportation Services annual capital budget, for the "replenishment of Toronto bike share program capital assets, as required" (state of good repair - SOGR). For a number of reasons, these were not pursued at the time.
- In addition, Council requested the Chief Planner and Executive Director, City Planning and the General Manager, Transportation Services to report back on a review of Toronto's parking standards for new multi-unit residential and commercial developments with the objective to consider the expansion of public bike sharing programs at net zero costs to the City.

The report of the General Manager, Transportation Services (November 11, 2013) setting out the financial details of the various aspects of the BIXI settlement, asset transfer to TPA and transition/interim operations, generally provided a five (5)-year operating outlook for the program. The report noted that the system cannot support any level of debt, and forecast an on-going operating deficit averaging \$200,000 per year over the near-term (based on system parameters and known expansion plans at the

time and accounting for anticipated sponsorship funds), requiring an on-going contribution from the City.

The TPA Board of Directors, in assuming responsibility for bike share, directed its staff to enter into discussions with the City to amend the Revenue Sharing Agreement with the City to ensure that any operating and capital shortfalls resulting from this program are 100% reimbursed by the City (TPA Board meeting, September 25, 2013, Minute 13-133: *Toronto Bicycle Sharing Program*). It is noted that the Revenue Sharing Agreement was subsequently amended (City Council meeting of February 15 and 16, 2017, Item EX22.2: *Capital and Operating Budgets*), however, the recommendations did not specifically address the matter of funding Bike Share.

Public Policy Alignment

The considerable and direct value that bike share brings to the broader transportation and mobility network, and the urban environment generally, is reflected in a number of the Council's vision and planning documents ranging from the Official Plan to the Climate Change Risk Management Strategy. The City's Official Plan outlines the long-term vision, objectives and policies and sets direction to achieve safe and sustainable growth and development, including how the City will facilitate more desirable travel patterns and encourage sustainable transportation options. Key elements of the Plan as they relate to cycling generally and Bike Share specifically are:

- Encouraging cycling as a preferred, more efficient mode for making local trips and reducing car dependency;
- Supporting transit by creating cycling linkages to transit stations;
- Fostering safer and more attractive conditions for cycling; and,
- Promoting cycling as a healthier clean-air alternative to other modes of travel.

The 2014 update of transportation policies of the Plan targets an increase in cycling modal share to at least 20% of all trips within the downtown and surrounding areas and specifically, an expansion of the Bike Share system to at least 5,000 bikes.

Sustained success of the program will continue to rely on the solid partnership between key City Divisions - Transportation Services and City Planning - and the Toronto Parking Authority, as well as the financial commitment of the City and support of other partners and stakeholders.

System Plan

In 2016 a Feasibility Study commissioned by TPA and carried out by the firm MMM Group, was completed. The study was undertaken with the goal of developing a framework for prioritizing expansion of the Bike Share network over the subsequent 5 years. The framework relies on a series of data-driven performance indicators that were combined into a spatial model and applied to minimize expansion risks and maximize benefit to users. The study concluded that the best opportunity for success of the network would be achieved by building a generally contiguous expansion of the existing network, with some potential for satellite networks anchored around TTC and GO

Transit hubs. A system in the range of 6,000 bicycles and a 600 stations was determined to be an optimum target to handle the demand within the City of Toronto.

The following sections of this report provide an overview of system progress in terms of expansion, operations, ridership, fee and non-user generated revenue streams, and financial review including affirmation of funding principles and parameters going forward.

System Expansion - Capital Performance

The opportunities for the capital expansion of the program have arisen at a far accelerated pace than could have been anticipated at the time of transition. Substantive capital funding programs have emerged from all three levels of government over the past three years to support Bike Share infrastructure expansion, reflecting the recognition of cycling's importance as a pivotal element in achieving far-ranging transportation, health and environmental goals. This trend in availability of capital funding is continuing and in fact growing. In the Bike Share "*Five Year Expansion Plan*", it is estimated that Toronto could support a system containing between 5,000 and 6,000 bikes (500 to 600 stations). The increased critical mass resulting from expansion of the program will ultimately provide operational efficiencies and reduce the overall operating deficits inherent with the original system size. A system in the order of 6,000 bikes is more likely to approach break-even. However, it is also important to note that if the system is too large and expanded to areas without enough demand, the operating costs and operating subsidy would grow accordingly. Table 2: *Capital Investment*, contained in Appendix 1 of this report, provides a summary of annual Bike Share system expansion, associated costs and funding sources for the period 2014-2019.

Capital Expansion 2016

At the time of its re-launch in 2014, the Bike Share system consisted of 1,000 bikes with 80 stations comprising 1,500 docks.

The bike share program more than doubled in size in 2016 to 2,000 bikes with 200 stations comprising 3,500 docks. This was made possible through capital contributions from a number of sources:

- \$3,920,000 - Metrolinx funding agreement;
- \$1,200,000 - Bikelinx funding for cycling infrastructure - Move Ontario 2020 Reserve Fund (XR3025); and,
- \$667,000 – Pan Am Games - Major Special Events Reserve Fund (XR1218).

In addition to the expansion of the system, the initiative also included removal and replacement of the then-existing hardware (except bikes). However, the targeted amount was overspent by \$301,000 arising from installation of the equipment, and certain issues with the system operator at the time. Discussions with TPA, Transportation Services, Metrolinx and Financial Planning have resulted in recommendations that this shortfall be funded as follows: \$123,500 from interest accruing on Metrolinx funds held by TPA and \$177,500 from the Bike Share Reserve Fund (XQ-0013).

Capital Expansion 2017

In 2017 the system expanded further with the addition of 750 bikes and 70 stations comprising 1,200 docking points. This was made possible through a \$4 million commitment from the Public Transit Infrastructure Fund (PTIF) - \$2 million of Federal funds matched with \$2 million from TPA retained earnings, Capital Reserve Fund XR-6002, representing the municipal contribution share to the program. With this expansion, the system comprised 2,750 bikes with 270 stations and 4,600 docks.

Capital Expansion 2018

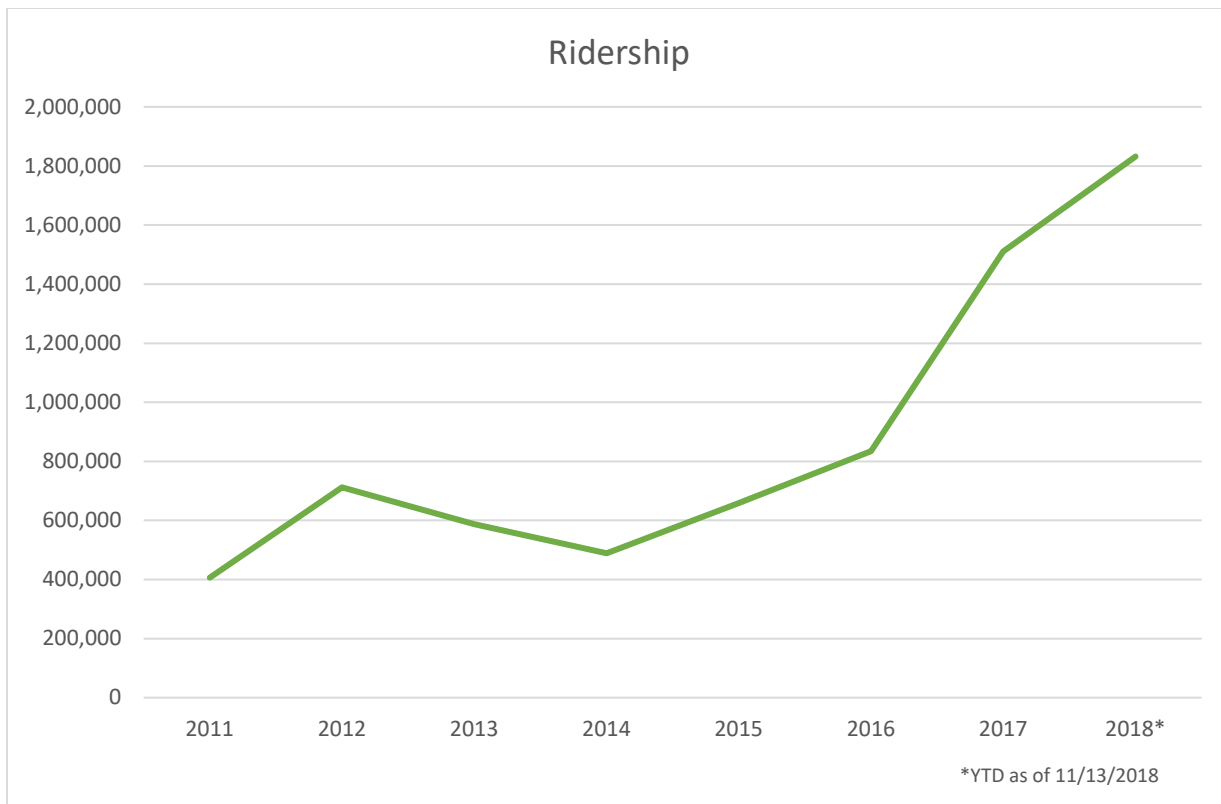
In 2018, through the approved Capital Budget, the system expanded by approximately 1,000 bikes, 90 stations and 1,570 docks, through second year funding from the PTIF program (\$2 million federal contribution and \$2 million matching municipal share) as well as \$980,000 from the previous Metrolinx commitment. This brings the system to its current size of approximately 3,750 bikes with 360 stations comprising 6,170 dock points. The City's portion in the amount of \$2 million is funded from the Public Realm Reserve Fund XR-1410.

Planned Capital Expansion 2019 and beyond, including SOGR

In December 2017, the Province announced the four-year *Ontario Municipal Commuter Cycling (OMCC) Program* as part of its Climate Change Action Plan, to provide dedicated funding to Ontario's municipalities to support the implementation of commuter cycling infrastructure. The program funds 80 percent of eligible projects, with a 20 percent municipal contribution required. TPA's 2019 Capital Budget submission contains a request for funding under this program of \$7.5 million in 2019 and \$5 million in 2020. It is recommended that the 2019 municipal contribution (\$1.5 million) be sourced from received Section 37 and 45 funds. Recommendation as to the source of municipal contribution for 2020, and any future programs beyond which may be announced, is to be determined.

Ridership

Bike Share in Toronto has been in continual operation since May 3, 2011 and has had over 7 million user trips to date. The system has seen a continuous upward trend in ridership since the phased expansion began in 2016. The year over year growth of ridership in 2017 was 81% with a total of over \$1.5 million trips, a significant increase over 2016's ridership of 834,235 trips. To date, the year over year growth in ridership in 2018 has been a further 21%. Bike Share Toronto members represent approximately 80% of all trips and casual users represent the remaining. Historically the summer months (July, August and September) see the highest ridership, representing approximately 50% of all annual trips taken throughout the system.



As the bike share program grows toward a 6,000 bike system, the number of trips per year is expected to be 3.5 million, with annual members forecast to be making 2.7 million trips per year.

Interestingly, the Bike Share Toronto program is a service used regularly by people from across Toronto and the GTHA, with well over 1/3 of active members (users with an annual pass) living beyond the Bike Share service area (generally bounded by Roncesvalles to the west, Bloor to the north, Broadview to the east and additional stations east on Danforth to Main, east on Queen to Jones, and north on Yonge and Christie to St Clair). A schematic illustration of the distribution of users is provided in Appendix 2, *Distribution of Bike Share Members, 2018*. Specifically, 28 percent of users live within Toronto, outside of the bike share service area, and the remaining 9 percent live in the GTHA and beyond.

Operating Performance

All reports at the time of the assignment of the Bike Share system to TPA, both to City Council and the TPA Board, from the General Manager and President respectively, noted clearly that operation of the system was not self-funding (from the user base alone) - including the need for reserves to refurbish the system beyond normal maintenance - and would require significant funding infusion from other sources. Table 1: *Operating Performance*, contained in Appendix 1 of this report provides a summary of annual Bike Share system-generated revenues, operating expenses and incurred/forecast deficits for the period 2014-2019.

Operations 2014-2016

Cumulative operating losses across the 4-year period ended December 2016 were \$1,577,000, before reserve fund recoveries of \$523,000. Staff of TPA, Financial Planning and Transportation Services recommend the remaining \$1.054 million deficit be funded through proceeds from the Public Realm Reserve Fund. It is noted that the operations were also partially supported during a portion of this period, namely the 2 years, late-2014 to late-2016, through a sponsorship agreement with TD Bank, in the total amount of \$1.5 million.

Operations in 2017 and 2018

In 2017, carrying over to 2018, a series of factors and events converged which significantly hampered the financial performance of Bike Share. TPA Budgets for both 2017 and 2018 included a revenue provision of \$1.5 million in sponsorship each year, however, this has not materialized. A program operating deficit of \$2.148 million was incurred in 2017, with a \$2.279 million deficit projected for 2018. Funding sources must be approved to offset these amounts. Staff are recommending this be provided from the Public Realm Reserve Fund XR-1410.

Non-User Revenue Opportunities

Non-user revenue opportunities fall into three broad streams, or combinations thereof: system sponsorship, third party advertising and time-limited promotions, also known as activations. Based on past experience and projections through the budget processes, these sources of funds had been expected to fill a significant portion of the user fee gap.

Sponsorship

The continued success of the Bike Share Toronto includes a sponsorship program. Attracting a major sponsor to Bike Share Toronto has been successful in the past. The TD Bank sponsorship program announced in late 2014 covered a 2 year period and generated \$750,000 per annum. That firm did not renew upon expiry.

In 2016, TPA retained a firm to develop a sponsorship strategy to value and sell sponsorship rights to the existing and expanded system and assist with the ongoing relationship between a sponsor and Bike Share. Despite considerable time and effort, and a number of potential candidates, this exercise did not yield a sponsorship commitment and the relationship was been terminated. This setback has certainly had a measurable impact in the short term on the financial performance of the system. As noted above, funding from this source in the amount of \$1.5 million was anticipated (budgeted) in 2017 and 2018, but did not materialize.

A concerted effort is underway to secure sponsorship/system naming opportunities for Bike Share. We are confident that despite the recent setbacks, there is significant value in the Bike Share system and it offers a very unique and exciting opportunity for sponsorship. Key factors as to why a socially responsible, forward thinking enterprise would partner include: cycling is an integral and growing part of the City's overall transportation network and is permeating the culture of Toronto; Bike Share has

considerable awareness across Toronto and a Bike Share partnership provides an excellent platform to accelerate a brand's impact; and Bike Share aligns to the reduction of on-street congestion, and positive environmental impact. Over the last year, we have seen significant growth in revenue, membership and rides. These metrics help tell a very compelling story about the relevancy of Bike Share and the benefits of sponsoring the program. Given this broader impact and recognition, the potential benefits of a sponsorship are much wider than simply targeting the current user base.

Currently, we are directly engaged in discussions with several organizations that identify a relationship with Bike Share Toronto within their scope of consideration. They look at the metrics noted, and the fact that their involvement can amplify both their brand and the Bike Share Toronto brand within the city of Toronto and are engaging in meaningful dialogue with us. We would anticipate to be in a position to bring a significant sponsor on board in 2019 and will report to the TPA Board accordingly.

Limited-Time Activations

In addition to system sponsorship, "activations" provide a way to increase revenue with short duration promotions. Essentially, Brand Activations are intended to drive consumer action through brand interactions and experiences. The Bike Share system offers companies unique access to a brand's potential consumer. It enables brands to support local infrastructure and connect with residents and visitors. Activations have become a key success factor for bike shares globally. For example, earlier this year TPA/Bike Share partnered with the Canadian Automobile Association ("CAA") to implement a marketing campaign called "Free Ride Wednesdays". This promotion with the valued involvement of the CAA generated \$195,000 in sponsorship revenue. In conjunction with sponsorship, we continue to pursue potential activation opportunities.

Advertising

At the time of transfer of the program to TPA, it was contemplated that use of the caisson panels on the bike share stations for advertising could be a viable source of revenue to support Bike Share. Recently, Astral Out-of-Home/Bell Media, the partner in the City's Coordinated Street Furniture program, has been working with TPA and Transportation Services on options for facilitating advertising on Bike Share panel infrastructure. It is envisaged that one face of the two-sided panels could be used for this purpose. Detailed analysis and discussions with Astral are underway. TPA staff are reporting back to the Board on this matter.

Beyond Sponsorship: "Mobility as a Service" - Bike Share's Role

Beyond the traditional sponsorship model, we are also closely monitoring emerging trends in the transportation realm as a whole both in Canada and internationally, whereby major technology and automotive companies are linking to bike shares in unique partnerships; in particular, relationships and interest between car-share and ride-share enterprises like Uber and Lyft, with bike share programs. Both companies are now actively engaged with bike sharing and creating multi-modal experiences. Uber is testing the market in San Francisco with a focus on E-bikes for a nine month pilot and Lyft has partnered with bike share Baltimore. Lyft has invested to establish pick-up and

drop-off hubs at five stations. This also includes full branding on these five stations. The plan would be to grow the relationship and have bike share integrated into their app. Other ride/car share companies currently engaging with bike share include: Maven (GM), Ford and Zip Car. We are of the view that within the next couple of years there could well be further partnership opportunities of this type focusing on Bike Share Toronto which would not only align with the rapidly accelerating, globally trending "Mobility as a Service" model, but could also lend significant financial support to the program. We are of the view that the Bike Share system is a valuable City asset as technologies become more autonomous and converge in the future of urban transportation. We will continue to engage in the pursuit of these types of relationships.

Benchmarking

In an effort to assess Bike share's performance in comparison with municipal systems in other jurisdictions, TPA staff with the assistance of Financial Planning attempted to scan available relevant documentation. Not surprisingly, many bike share systems are not very transparent with their financial information and it was difficult to find multiple jurisdictions with the exact information we were seeking. A few considerations which make comparisons suspect is that much of the data seems to combine operating and capital, it is not clear/there is inconsistency how upper-level government grants/subsidies are factored into the calculations, it is impossible to validate what costs are included and whether the self-reported numbers are all-inclusive, and there does not appear to be much consistency with how advertising and sponsorship are factored. One of the source documents, the *North American Bike Share Association 2016 Benchmarking Survey* noted, "fare recovery rates are hard to track (operators have one number and Cities don't authenticate)". With that said, we are able to provide the following in this regard.

Figure 1, *Operation Costs*, contained in Appendix 3 of this report presents data on monthly costs per bike (average US\$186, range is \$88 to \$385) and cost per dock (average US\$98, range is \$50-\$155). Toronto's (2018) compare favourably, at \$126 (US\$96) and \$77 (US\$59) respectively. It is also noted that many systems in the northern cities shut down over winter, leading to a significantly reduced operating burden. A second source, the Institute for Transportation and Development Policy (ITDP) shows the operating cost per ride on five large bike shares in North America:

Comparing Bikeshare Operating Costs Per Trip	
Washington, DC	US \$2.55
Chicago	US \$2.59
New York City	US \$3.14
Denver	US \$3.24
Toronto	C \$2.50 (US \$1.90)
Average	US \$2.68

Source: ITDP 2018 Bikeshare Planning Guide

Again, the Toronto system compares favourably against this measure.

Reliable information comparing revenue funding sources for bike share operation is even less available. As a broad measure, the *North American Bike Share Association 2016 Benchmarking Survey* contained the graph provided in Figure 2, *Revenue*, of Appendix 3 of this report, illustrating that based on information provided from 18 systems, user fee revenue covers just over 40% of costs, while municipal subsidy and higher government level grant funding comprises about a third of bike share revenue funding.

Financial Sustainability Principles

As noted above, staff reports at the time of the assignment of the Bike Share system to TPA, both to City Council and the TPA Board, from the General Manager and President respectively, highlighted that operation of the system was not self-funding from the user base alone - including the need for reserves to refurbish the system beyond normal maintenance - and would require funding infusion from other sources. As a framework guiding the range of decisions affecting the ongoing provision and operation of a municipal bike share system, the following principles are proposed:

1. *Efficiency in operations* – This recognizes the need to continually optimize the expense side of operating the Bike Share system. In this regard, in 2019 TPA will be issuing an RFP to secure a system operator and will rely on experience of the previous years in compiling terms of reference to maximize operating efficiencies;
2. *Securing system sponsorship and advertising* - As noted throughout this report, these elements are key to the long-term financial sustainability of most bike share systems throughout the world. At this time, staff are actively engaged in negotiations with a potential system sponsor, as well as with Astral Out-of-Home/Bell Media for the use of the bike station poster panels for third-party advertising. While the delay has certainly had a measurable impact in the short-term on the financial performance of the system, we remain confident that there is significant value in sponsorship of the Bike Share system and it offers a compelling opportunity for a socially responsible, forward thinking enterprise.
3. *Commitment to municipal funding subsidies* – At this time a decision needs to be made with respect to the value of the municipality continuing to invest in a bike share program. Despite the current cost implications, we are of the view the case to do so is compelling, as discussed in terms of the positive public policy and transportation systems impacts discussed in detail above. For at least the near-term, public subsidy investments in Bike Share as a transit network are recommended to offset capital requirements (SOG and expansion) and net operating deficits. Subject to securing sponsorship/advertising opportunities noted above, while significant over the 2-3 year period 2016-2019, the magnitude of this requirement should be considerably reduced thereafter. Performance should again be assessed as part of the 2020 budget process.
4. *Subsidy funding would not rely on property tax sources, debt financing or impact operating budgets* - as a guiding principle for staff and Council in making funding decisions. TPA, Transportation Services and Financial Planning looked at certain options and recommend, going forward that funding gaps be provided from the

Public Realm or other available reserve fund source (i.e. received Section 37 as available) for Capital. This approach is consistent with the principle of recognizing and supporting the integral role of Bike Share in the overall municipal transportation and mobility network, while having the benefit of not directly impacting City/TPA revenues, and does not rely on property taxation funds or debt financing.

5. *Future years' net surplus operating funds, if any, be deposited to the Bike Share Reserve* - in the event annual program revenues (from the combination of user fees, sponsorship, advertising and activations) exceed operating expenses in a given year.

This report outlines a framework intended to guide the range of decisions on capital and operating funding in the ongoing provision and operation of the Bike Share Toronto system. It also proposes specific funding actions to address current outstanding, as well as future, Bike Share capital programs and operating deficits, as necessary, to be considered as part of the 2019 and future years' annual Budget cycles.

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SIGNATURE

Andrew Koropeski
Acting President, Toronto Parking Authority

ATTACHMENTS

APPENDIX 1: Operation Performance and Capital Investment (2014-2019)
APPENDIX 2: Distribution of Bike Share Members, 2018
APPENDIX 3: Benchmarking Information - Operation Costs and Revenue

APPENDIX 1:

OPERATING PERFORMANCE AND CAPITAL INVESTMENT (2014-2019)

Table 1: OPERATING PERFORMANCE (\$ thousands)	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Forecast	2018 Budget	2019 Budget
Sponsorship	125	750	625	-	-	1,500	1,500
Ridership and other revenue	-	-	-	2,124	3,390	3,610	4,620
Total System-generated revenue	125	750	625	2,124	3,390	5,110	6,120
Operating expenses	(965)	(1,059)	(1,053)	(4,272)	(5,669)	(5,520)	(6,145)
Operating cash loss	(840)	(309)	(428)	(2,148)	(2,279)	(410)	(25)
Bike Share Reserve Fund XQ-0013 draw	214	309					
Operating cash deficit to be funded	(626)	-	(428)	(2,148)	(2,279)	(410)	(25)
No. of Rides (annual)	488,448	663,286	834,235	1,510,424	2,267,100	2,500,000	3,500,000
Subsidy per ride	\$ (1.72)	\$ (0.47)	\$ (0.51)	\$ (1.42)	\$ (1.01)	\$ (0.16)	\$ (0.01)

Notes: 1. The cumulative 2014-2016 operating cash losses (\$1,054K) **recommended** to be funded from the Public Realm Reserve.

2. 2017 and 2018 operating cash loss **recommended** to be funded from the Public Realm Reserve.

Table 2: CAPITAL INVESTMENT (\$ thousands)	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Forecast	2018 Budget	2019 Budget
No. of Bikes	1,000	1,000	2,000	2,750	3,750	3,750	5,550
Bike system expansion	-	-	6,088	3,724	5,256	4,980	7,500
Funded by:							
Provincial funding (OMCC)			-	-	-	-	(6,000)
Metrolinx			(3,920)	-	(980)	(980)	-
Public Transit Infrastructure Fund				(1,862)	(2,138)	(2,000)	-
Move Ontario 2020 Reserve Fund (XR3025)			(1,200)	-	-	-	-
Public Realm Reserve Fund			-	-	(2,000)	(2,000)	-
PanAm Reserve Fund (XR1218)			(667)	-	-	-	-
Reserve Funds (Section 37 and 45)			-	-	-	-	(1,500)
TPA Capital Expenditure Reserve Fund (XR6002)			-	(1,862)	(138)	-	-
Capital expansion unfunded	-	-	301	-	-	-	-

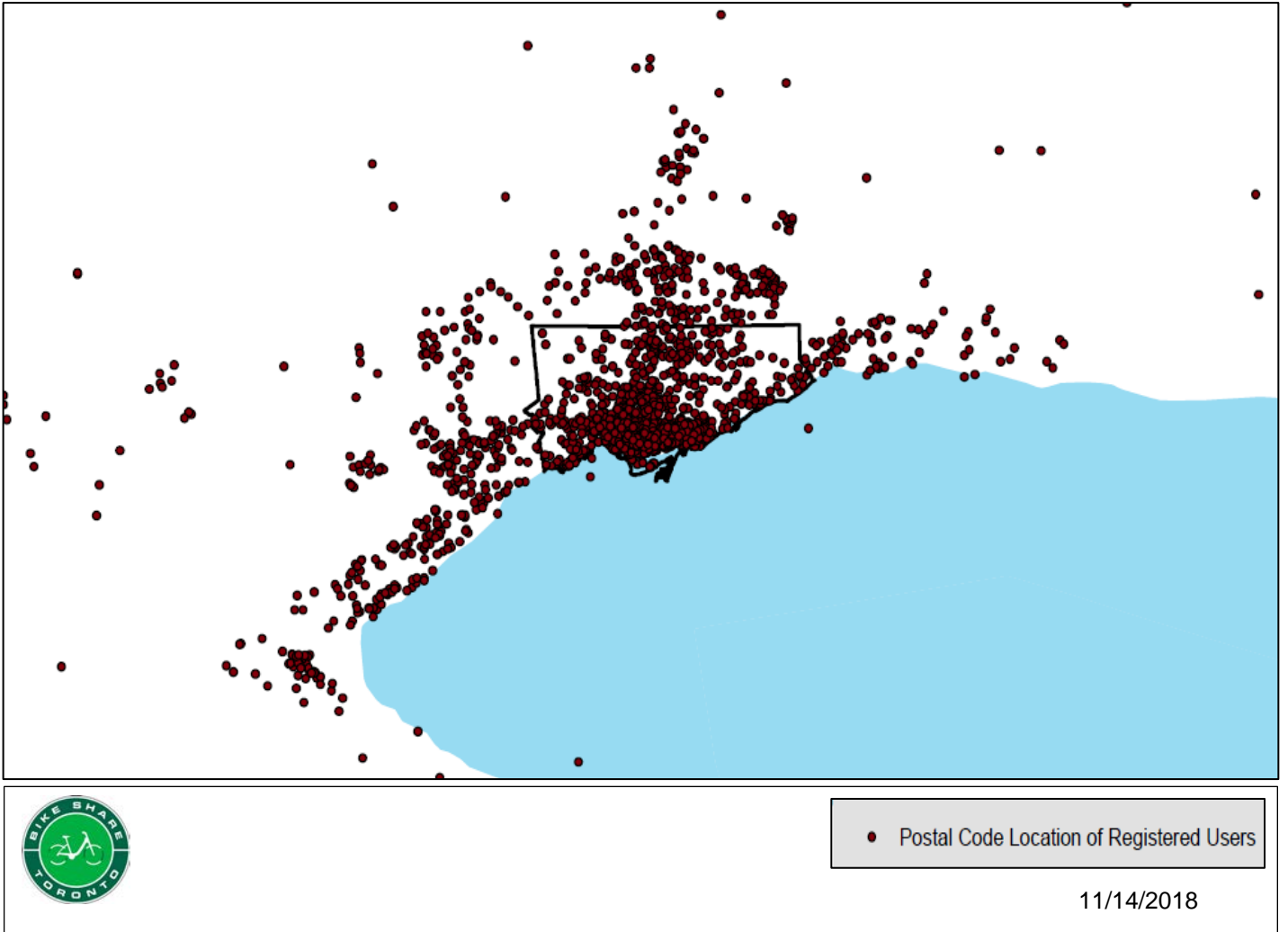
Notes: 1. The 2016 capital expansion funding deficit of \$301K **recommended** to be recovered from:

- accrued Metrolinx fund interest (\$123.5K); and
- the Bike Share Reserve Fund (\$177.5K).

2. 2019 capital funding \$1,500K is **recommended** to be recovered through received Section 37 and 45 funds (\$1,500K).

Figures shown in RED require funding source approval at this time.

APPENDIX 2: DISTRIBUTION OF BIKE SHARE MEMBERS, 2018



APPENDIX 3:

BENCHMARKING INFORMATION: OPERATION COSTS AND REVENUE

Figure 1: Operation Costs

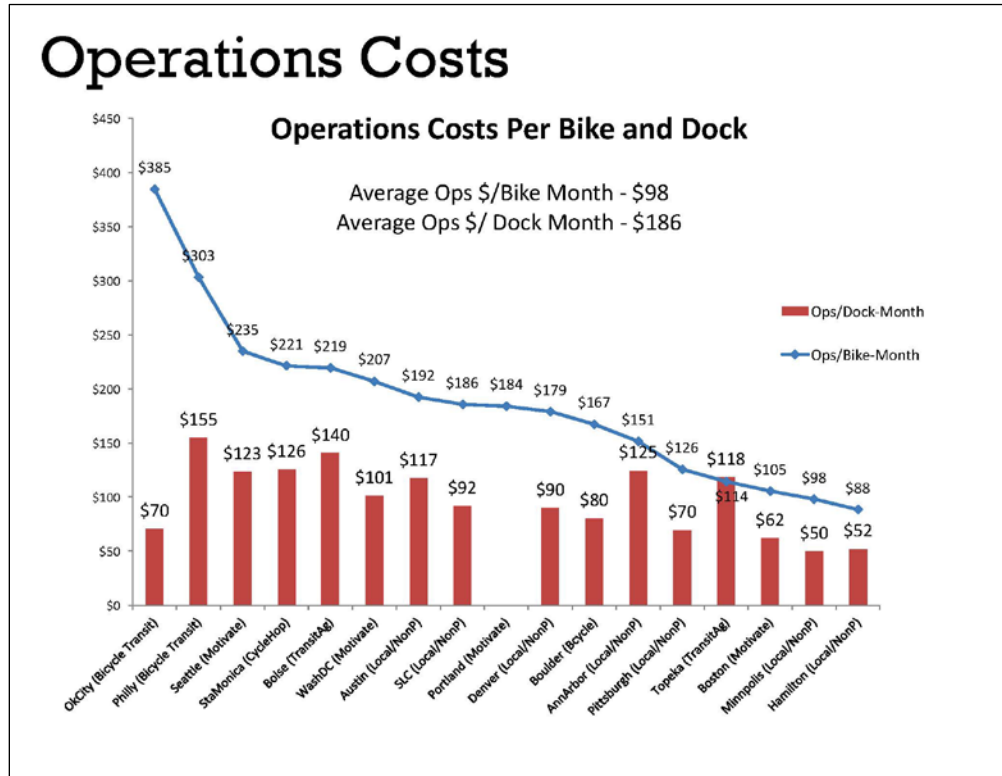
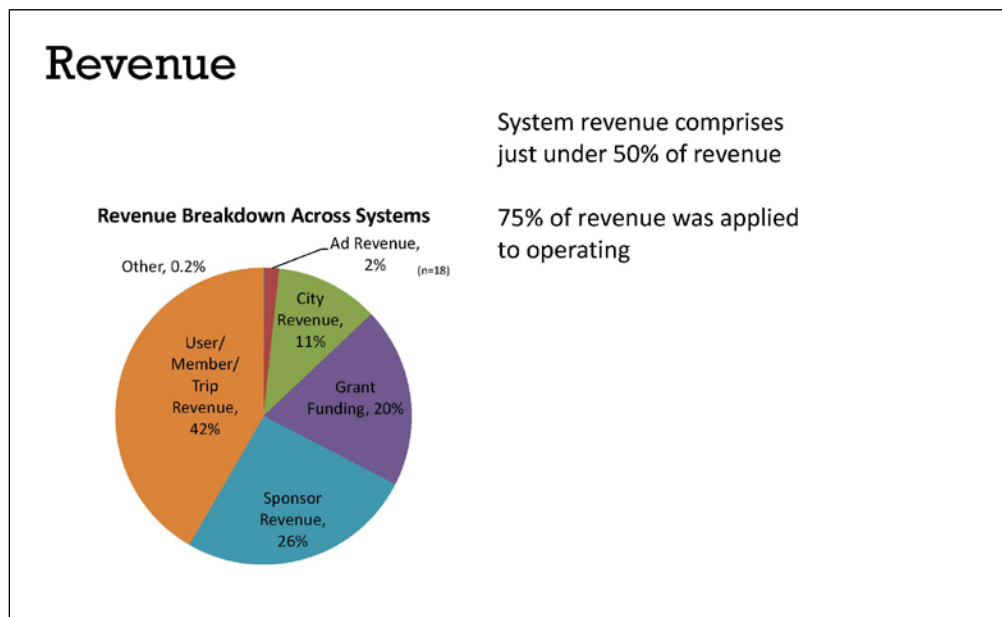


Figure 2: Revenue



Source: North American Bike Share Association 2016 Benchmarking Survey