



## ADMINISTRATIVE REPORT

Report Date: November 2, 2017  
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Meeting Date: November 15, 2017

TO: Standing Committee on City Finance and Services  
FROM: General Manager of Engineering Services  
SUBJECT: Update on Vancouver Public Bike Share Program

### **RECOMMENDATION**

- A. THAT Council receive this report for information.
- B. THAT Council direct staff to prepare by-law amendments to allow for Public Bike Share City-wide.
- C. THAT Council refer this report to the Vancouver Board of Parks and Recreation for information.

### **REPORT SUMMARY**

A public bike share (PBS) system - Mobi by Shaw Go - was launched in Vancouver in 2016. Over one year of operations, Mobi by Shaw Go has facilitated over 650,000 cycling trips from 123 stations on 1,300 bikes. System coverage extends from Arbutus to Main Street, and 16<sup>th</sup> Avenue to the downtown and into Stanley Park. Stations located in parks and along the seawall were popular this summer among residents and visitors alike, providing access to green space, beaches, and community facilities. The success of the first year suggests an optimistic outlook towards growth and expansion in future years. Some by-law amendments will be required to facilitate expansion of public bike share throughout the City.

### **COUNCIL AUTHORITY/PREVIOUS DECISIONS**

There is a long history of Council policy that supports the implementation of a PBS system, including the City of Vancouver's 1997 Transportation Plan, the 2002 Downtown Transportation Plan, the Greenest City Action Plan, and the Transportation 2040 Plan, all of which articulate objectives to increase walking, cycling, and transit trips to align with climate change goals, smart growth principles, and a sustainable transportation system. Decisions in recent years include:

In July 2011, the Greenest City Action Plan "Green Transportation" priority was approved by Council, directing staff to pursue the development and installation of a PBS system in Vancouver.

In June 2012, staff presented a report reference updating Council on the PBS system procurement process and timeline.

In October 2012, Council approved amendments to the City Land By-Law, the Street Vending By-Law, the Vehicle for Hire By-Law, the License By-Law, the Building By-Law, the Sign By-Law, the Zoning and Development By-Law, and various CD-1 by-laws to facilitate the implementation of a PBS system in certain areas of the city.

In October 2012, Council also approved the Transportation 2040 Plan which calls for a public bicycle system to support combining cycling trips with other transportation modes.

On July 23, 2013 Council authorized staff to enter into an agreement with Alta Bicycle Share. After two years of discussions with Alta, in June 2015 the City collapsed the process with Alta and announced a new procurement process. At the conclusion of the new procurement process, in February 2016, staff presented to Council a signed agreement with CycleHop Corp Canada.

### ***CITY MANAGER'S/GENERAL MANAGER'S COMMENTS***

The City Manager and the General Manager of Engineering Services support the recommendations of this report.

Public bike share has been an objective in the City of Vancouver for many years. Since being launched in July 2016, Mobi by Shaw Go has made cycling more convenient and provided a new transportation choice for people in Vancouver. Expanding the potential for public bike share throughout the City is consistent with and builds on policy directions established in several strategic plans, namely Transportation 2040 and the Greenest City Action Plan.

### ***REPORT***

#### ***Background/Context***

##### **System Development**

In February 2016 the City entered into an agreement with Vancouver Bike Share, CycleHop, and Smoove as its partners for implementing a public bike share system. Vancouver Bike Share is a wholly-owned subsidiary of CycleHop, and is responsible for the daily operations of the public bike share system. The City supported Vancouver Bike Share with \$5 million for the launch and operation of the PBS for 5 years, to help achieve the City's transportation and sustainability goals. The initial service area for the PBS includes the Downtown Peninsula, bounded by Arbutus Street, 16<sup>th</sup> Avenue, and Main Street.

Vancouver's public bike share program - Mobi- launched in July 2016 with 23 stations and 250 bikes. The program quickly grew and through this past summer more than 120 stations and 1,200 bikes were available to members. In December 2016, Vancouver Bike Share and Shaw Communications announced a multi-year partnership agreement, introducing the new system name - Mobi by Shaw Go.

The partnership with Shaw lends itself to synergies with the Shaw Go Wi-Fi network. Shaw is providing Wi-Fi at Mobi by Shaw Go stations allowing public access to the internet at no cost

to the user. Wi-Fi access includes the ability to download the Mobi by Shaw Go mobile application, sign-up with Mobi by Shaw Go, and view system information.

### **Station Implementation**

Station deployment was conducted in alignment with guidelines published by the National Association of City Transportation Officials (NACTO) and the North American Bike Share Association (NABSA). To maintain a minimum station density required for a convenient and easy-to-use system, stations were installed about 200 to 300 metres apart - or 10 stations per square kilometre. For every bike in the system there are 1.75 to 2 docks, to ensure adequate bikes to begin a ride and adequate docks to end a ride.

Stations are designed to be modular and flexible, and easy to remove or re-locate if required. The flexible nature of the equipment facilitates the many filming opportunities and special events in Vancouver. Staff are working to refine the role of Mobi by Shaw Go in special events, to balance event requirements and demands for space with the desire to provide an active transportation option for event attendees.

PBS stations have been placed on-street in parking, on zoned lands, on wide sidewalks or plazas, in parks, and on Statutory Rights-of-Way. The increasing demand on public space has encouraged staff to be creative to meet the station siting guidelines for a convenient and easy-to-use station network. This includes securing space through development and re-zoning to reduce obligations on public property, protect public accessibility, and enhance the public realm.

### **Ridership**

Since the 2016 launch, the system has rapidly grown with new stations almost every week. As the system has grown, the number of memberships and rides continued to grow along with it. Ridership over the last year was strong, as monthly ride counts increased month over month. The peak month for ridership in 2016 was September with over 40,000 rides with 650 bikes. In 2017, the peak month was July with over 95,000 rides with 1,200 bikes.

In the summer of 2017 the system was consistently experiencing 2.5 rides per bike per day, a strong performance for a new system. Ridership in cities with more established systems such as Toronto and Montreal show 2.0 and 3.6 rides per bike per day respectively.

Aligning with typical trends from other cities, the average ride duration in Vancouver is 18 minutes and travels 4 kilometres.

The City is partnering with Simon Fraser University (SFU) to research PBS impacts and ridership trends. SFU's research included a member survey and focus groups which identified some patterns in the member base and highlighted some themes for future improvements. The City will continue the partnership with SFU and research is expected to proceed throughout 2017 and 2018.

### **Helmets**

Providing helmets and facilitating compliance with the mandatory helmet law had been identified as a risk leading up to the procurement and launch of the Vancouver PBS. The preferred solution was to affix a helmet to the bike using the cable lock that is located within the handlebar. Helmets are inspected and cleaned daily during regular station rebalancing, and undergo monthly deep cleaning at the Mobi warehouse. Helmet liners are also provided at

stations to provide a sanitary layer between the helmet and the riders' head. Helmets and liners are provided at no additional cost. Helmet compliance for Mobi by Shaw Go riders is approximately 70%, with 53% wearing the Mobi-provided helmet and 17% wearing a personal helmet.

Future plans to refine the helmet solution include exploring methods to increase resistance to rain, a more visually distinct exterior, and improving the fit for a wider range of users.

### **Memberships and Rates**

When the system was first launched, access to the system was limited to members who purchased discounted annual passes as Founding Members. The Founding Members jump-started the program with over 3,700 members signing up in the first 2 months. In September 2016, the membership and rate offerings were expanded to include regular annual passes, monthly passes, and 24-hour passes. The day pass rate was raised in spring 2017 to be comparable with the cost of a one-day transit pass. At the end of September 2017 there were 4,700 memberships and almost 40,000 24-hour passes sold.

The first 30 or 60 minutes (depending on the plan) of a trip is included. Beyond the first 30 or 60 minutes of a trip, the user will incur overage fees. The overage fees are intended to encourage users to take multiple short trips. This also complements our city's many successful retail bike rental outlets, as long excursions are more cost effective with a rental bike than with a Mobi by Shaw Go bike.

Local bike rental companies have also emphasised the continued need to promote the use of bike shops for tourists. Vancouver Bike Share has supported this by ensuring a non-competitive rate structure, targeting residents as the primary users of PBS, and avoiding placing stations within 50 metres of a local bike rental shop.

### ***Strategic Analysis***

#### **Regulations**

In 2012, Council approved amendments to several by-laws to facilitate the introduction of public bike share to Vancouver. Currently, on zoned lands, public bike share is only a permitted use in certain zones and is limited to the area north of 16<sup>th</sup> Avenue, between Alma Street and Victoria Drive. Staff are recommending further investigation into by-law amendments that are required to expand public bike share as a permitted use on all lands throughout the City to provide more communities access to the benefits and convenience of public bike share.

Subject to Council approval of recommendation B, Staff will report back with the necessary by-law amendments in order to facilitate public bike share across the entire city.

#### **Emerging Industry Trends**

There has been significant evolution in the public bike share industry in the past year, primarily due to advances in technology. Staff have been following emerging trends in shared e-bikes, pedelec bikes, and dockless bikes; data availability due to GPS-enabled bikes; and advancing creativity in mobile applications. As these trends are being introduced worldwide, there has been a diverse response from cities as regulatory agencies. The accommodation of these new technologies has ranged in each circumstance. For example, some cities are limiting the top speed of e-bikes; and, in the case of dockless or free-floating bikes, some

cities are issuing outright bans while some are allowing companies to operate without any regulation. Responses are evolving rapidly as new opportunities arise and new challenges appear. In the coming months, staff expect to observe continued development as other liveable cities work to respond to these innovations. Some of the primary concerns from other cities are focused on protecting public safety and balancing the competing demands on a compact and vibrant public realm.

### **Public and Stakeholder Input**

Through the launch of the system staff received input from members of the public as stations were being deployed throughout the service area. Key themes included comments requesting stations near popular destinations and transit hubs and complaints regarding the loss of motor vehicle parking. Staff worked with residents, business owners, and community partners to balance trade-offs between competing demands on public space, including securing space on private property through the development and re-zoning process.

In May 2016, the Active Transportation Policy Council (ATPC) passed a motion recommending membership types, payment plans, and prices. In September 2017, ATPC passed a motion recommending staff investigate ways of increasing system accessibility for low-income residents, specifically in the context of the Leisure Access Program. Details on those recommendations are included in Appendix A.

Staff are working towards fulfilling several of those recommendations. In all memberships, the first 30 or 60 minutes of any trip is included. Vancouver Bike Share is developing a program to increase accessibility to low-income Vancouver residents, and staff are exploring the potential for synergies with the Leisure Access Program.

One of the ATPC recommendations was to make prices for casual users comparable to the price of a one-zone trip on a Compass Card (at that time, \$2.10). Instead, staff encouraged Vancouver Bike Share to align the Mobi by Shaw Go day pass with the price of a transit day pass (at that time, \$9.75). This was to encourage the use of Mobi by Shaw Go for several short trips, and to limit competition with the bike rental industry.

Some of the comments heard from ATPC as well as other stakeholders were around accessibility and providing options for people with mobility barriers, people with balance challenges, and people with children or families. Vancouver Bike Share is exploring creative opportunities to increase accessibility to these groups, including changes to equipment and pricing structures. Staff and Vancouver Bike Share are also exploring the potential to lower the minimum age for riders (currently 16 years old), and to include qualifiers such as bike skills training and a minimum height and weight.

Through the research completed in partnership with SFU, it was found that 54% of all recommendations for Mobi were related to stations and access. The Commercial Drive and East Broadway area was the number one recommendation for expansion that has not yet been achieved. Staff are working closely with Vancouver Bike Share to explore opportunities for improving access in specific neighbourhoods and are also exploring opportunities for expansion of the system coverage area.

***Implications/Related Issues/Risk******Financial***

There are no financial implications.

***CONCLUSION***

The first year of public bike share in the City of Vancouver was a success. While the unusually cold winter was not a popular time for cycling, by spring and summer there was renewed enthusiasm with over 95,000 rides in July 2017. Support for Mobi by Shaw Go was illustrated by the thousands of people riding Mobi bikes to extend the reach of transit, reduce the need for personal vehicle trips, and simply to ride for fun. The public bike share system was built on the foundation of several City strategies. Mobi by Shaw Go has moved the city towards achieving those strategies by enhancing cycling as an easy and convenient transportation choice.

Looking ahead, staff recommend future by-law amendments such that public bike share can expand throughout the city. Staff will continue following technological advancements as the public bike share industry rapidly evolves worldwide.

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**Active Transportation Policy Council - Bike Share Pricing Motion (May 4, 2016)**

**WHEREAS:**

1. The City of Vancouver, CycleHop, and Smoove have entered into an agreement to provide a bikesharing system in Vancouver launching in Summer 2016;
2. Bikesharing is successful when it is well integrated with other sustainable transportation modes. One of the factors people consider when making choices on which mode to take is monetary;
3. Looking at best practices from other cities with public bikeshare systems, it is also important to encourage bike equity with low-income options;
4. Bikeshare trips tend to be an average of 19 minutes long. Other bikeshare systems will often have a substantial increase in price after the first 30-60 minutes so as not to compete with bike rental agencies.

**THEREFORE BE IT RESOLVED THAT** the Active Transportation Policy Council recommends:

- A. THAT the City of Vancouver encourage CycleHop to allow an annual membership fee to be paid monthly or in a few installments. Also, that with an annual membership the first 30 minutes of each trip be included.
- B. THAT the City of Vancouver encourage CycleHop to provide a low-income option for bikesharing.
- C. THAT The City of Vancouver encourage CycleHop to make the price for the first 30 minutes for a casual user (without an annual membership) be less than the price of a one-zone trip on a Compass Card, currently \$2.10.

**CARRIED UNANIMOUSLY**

**Responses:**

Motion was forwarded to the Mayor and Council on May 20, 2016. The motions were also forwarded to the City Manager, the City Clerk, a Vancouver School Board Trustee, Engineering staff, and Vancouver Police Department staff.

**Active Transportation Policy Council - Bike Share Pricing Motion (September 13, 2017)**

WHEREAS:

1. Active transportation should be encouraged as participation is tied to improved health, a sustainable environment and connection to community;
2. Achieving the goals as established in the Greenest City plan are contingent on increasing the mode share of Active Transportation in Vancouver;
3. Mobi is the official City of Vancouver bike share program, providing residents with increased transportation choice;
4. The City of Vancouver and Vancouver Park Board have established the Leisure Access Program (LAP) to provide low-income Vancouver residents with access to basic recreation programs and services at Park Board facilities at a reduced cost;
5. There are currently corporate Mobi memberships but no low income passes for Vancouver residents;
6. Low-income Vancouver residents have the least access to transportation choices.

THEREFORE BE IT RESOLVED THAT

1. The Active Transportation Policy Council recommends that the City of Vancouver evaluate and pursue ways of making active transportation more accessible to low-income Vancouver residents; and
2. The Active Transportation Policy Council recommends that the City of Vancouver and Vancouver Parks Board look at including the Mobi Bike Share Program as part of the Leisure Access Program.

CARRIED UNANIMOUSLY

Responses:

Motion was forwarded to the Mayor and Council on September 25, 2017. The motions were also forwarded to the City Manager, General Manager of the Vancouver Board of Parks and Recreation, General Manager of Engineering, and the Director Transportation.