From: "Mochrie, Paul" < Paul. Mochrie@vancouver.ca>

To: "Direct to Mayor and Council - DL"

Date: 11/24/2021 6:25:26 PM

Subject: Public Bike Share – E-Bike Addition and Service Area Expansion

Attachments: Memo - Public Bike Share - E-Bike Addition and Service Area Expansion.pdf

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire. A short summary of the memo is as follows:

- City staff have worked with Vancouver Bike Share Inc. (VBSI), the operator of Mobi, for an upcoming system expansion that will:
 - o add 500 e-bikes to the system, and
 - o expand the service area with 50 new stations starting in the summer of 2022.
- In other cities, the addition of e-bikes has shown to foster more gender and age balance in ridership and allowed people with physical disabilities to use bike share. E-bikes also allow for longer trips which can reduce motor vehicle trips and emissions.
- System Updates:
 - o equity program continues to grow, over 1,000 members served, and
 - o in total Mobi has facilitated over 3.5 million trips by over 200,000 people.

City staff will continue to work with the operator of the system, Vancouver Bike Share Inc. to plan the new
station locations and subsequently start the engagement process in 2022 with local residents and
businesses at these locations.

☐ Staff plan to introduce the first e-bikes and new stations in the summer of 2022.

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclaire@vancouver.ca.

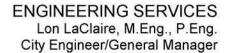
Best,

Paul

Paul Mochrie (he/him)
City Manager
City of Vancouver
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The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x^wməθk^wəyəm (Musqueam), Skwxwú7mesh (Squamish), and səlilwəta+ (Tsleil-Waututh) Nations.





MEMORANDUM

November 24, 2021

TO: Mayor and Council

CC: Paul Mochrie, City Manager

Karen Levitt, Deputy City Manager

Katrina Leckovic, City Clerk

Lynda Graves, Administration Services Manager, City Manager's Office

Maria Pontikis, Director, Civic Engagement and Communications

Anita Zaenker, Chief of Staff, Mayor's Office Neil Monckton, Chief of Staff, Mayor's Office

Alvin Singh, Communications Director, Mayor's Office

FROM: Lon LaClaire

General Manager, Engineering Services

SUBJECT: Public Bike Share – E-Bike addition and service area expansion

RTS #: N/A

The purpose of this memo is to provide an update to Mayor and Council on the City's Public Bike Share (PBS) system, Mobi by Shaw Go. Over the summer, City staff have worked with Vancouver Bike Share Inc. (VBSI), the operator of Mobi, for an upcoming system expansion that will add 500 e-bikes to the system and expand the service area with 50 new stations starting in the summer of 2022.

In other cities, the addition of e-bikes has shown to foster more gender and age balance in ridership and allowed people with physical disabilities to use bike share. E-bikes also allow for longer trips which can reduce motor vehicle trips and emissions.

For this expansion, the new e-bikes and stations are provided by VBSI at no cost to the City. The City is providing the electrical connections for the electrified stations through the rezoning and redevelopment process and the curbside electrical program.

Background

Vancouver's public bike share system – Mobi by Shaw Go – launched summer 2016 with 150 stations and 1,500 bikes. With bicycles located across the network at secure, easy-to-use



docking stations, Mobi by Shaw Go offers a convenient, comfortable, flexible, and affordable way to get around.

The system has facilitated over 3.5 million trips by over 200,000 people. Most trips are made by local residents that prefer to use bike share to take one-way trips and because it is often the quickest and most convenient way to get around. In 2018, the system expanded east to Victoria Drive, bringing the total to 200 stations and 2,000 bikes and launched the system's equity program.



The system's equity program aims to reduce barriers to bike share by making it more accessible and affordable to local residents. Uptake of the program exceeded expectations and it now has served **over 1,000 members**. Some of the ways barriers are reduced:

- \$20 subsidized annual pass (Regularly \$159) or free (e.g. through the Pathways to Education program) for eligible people
- Reduced rider age limit from 16 to 12 years old
- Partnership with 47 social service, non-profit and community organizations
- Outreach at community events and hosting in person signup events
- One-on-one bike share orientation/support for new members
- Cash Payment Options
- Reduced liability for lost or damaged bikes

Equity program members have taken over 93,000 trips, ridden over 250,000 kilometres, and are some of the most active Mobi users. Annual user surveys also highlight that although Mobi members overall had higher incomes than the Vancouver population, super users (people who make 20 or more bike share trips per month) tended to have lower incomes compared to those who used it less often. Super users were two and a half times as likely to be in the lowest income category (with an annual household income below \$35,000) as compared to the highest (over \$150,000).

The upcoming expansion of the service area should allow more people to use bike share and further expand on the success and service area of Mobi's equity program.

E-bike expansion plans

The upcoming expansion will introduce 500 pedal assist e-bikes throughout the entire service area. The system will be fully interoperable, meaning any e-bike can be docked at both electrified charging stations as well as the existing non-electrified stations and the regular pedal bikes can be docked in electrified charging stations as well as the existing non-electrified stations, creating a hybrid system that has both e-bikes and regular pedal bikes. The e-bikes have a range of about 50 km and a maximum speed of 25km/h (the average bike share trip in Vancouver is about 2.5 km long).



Service area

The new e-bikes (500) and stations (50) will allow the system to expand its service area in the City. In planning the expansion and identifying station locations, safe infrastructure, popular destinations and population density are taken into account. Some spaces for bike share stations have been secured through the rezoning and redevelopment process over a number of years. Through this work the City is able to locate stations off-street, on private property. Other stations will generally be located on-street often reallocating street space from motor vehicle parking to bike share parking where a single car parking spot can accommodate 6-8 bikes.

Outreach and engagement

New station locations will follow the same station siting and outreach process as all other stations. Outreach begins at least two weeks in advance of the station installation and includes notifying residents and business owners in the direct vicinity around the proposed station location. In some cases, there may be additional dialog or 'walkabouts' with residents and business owners so staff can better understand site-specific considerations.

There were some key lessons learned from outreach in the Phase I (initial launch in 2016) and II (East Van in 2018) that staff are applying to the upcoming locations. For example, when adding stations to residential areas in the West End and Mount Pleasant, residents preferred stations located on the flankage of buildings rather than in front of homes. Additionally, ridership data indicates that riders prefer to use stations located on bikeways. These factors are considered when identifying suitable station locations, in addition to many other station siting requirements (e.g. located at intersections, underground utility access points, grades and topography, existing use of the street including access for emergency services, ground surface quality, proximity to destinations, network density, etc.) which inform the opportunities for station placement.

Next steps

City staff will continue to work with VBSI to plan the new station locations and subsequently start the engagement process in 2022 with local residents and businesses at these locations. Staff plan to introduce the first e-bikes and new stations in the summer of 2022.

If you have any questions, please do not hesitate to contact me directly.

Lon LaClaire, M.Eng., P.Eng.

General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca