Understanding a New Bike Share Program in Vancouver

2017 Focus Group Findings

Report Prepared for the City of Vancouver & Mobi Partners
June 2017- V1

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Simon Fraser University

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Data Analysis & Report Preparation: Jenny Scott and Suzanne Therrien

With funding from the Canadian Institutes of Health Research and
The City of Vancouver
Executive Summary

This report provides the findings from a set of focus groups conducted between February and April 2017 investigating the perceptions, experiences and barriers to use of the Vancouver public bike share program (‘Mobi’) within its first year of implementation. Specifically, this work is one component of a larger study that aims to examine the equity and impacts of Vancouver’s public bike share program with respect to travel and health outcomes in the general population, in users of the program, and within key population segments.

Eight focus groups (total participants n=55) were conducted to identify the motivators and barriers to bike share use and to help understand how public bike share usage can increase equitably in the population. Unique target populations were recruited for each of the eight focus groups (5-9 individuals recruited per group), specifically:

- Women, who are under-represented in the Canadian bicycling population;
- Adults over age 50, who are less likely to cycle;
- Adult with low income, who may struggle with transportation costs;
- Adults under age 25 who are attending college or university;
- Adults under age 25 who are attending an English as a Second Language (ESL) program;
- Regular transit commuters;
- Regular commuter bicyclist, to understand how bike share serves those already bicycling; and
- Public bike share users, to understand personal reasons for adoption.

The focus group discussions centered around five key themes:

- Potential users have a lack of knowledge and self-efficacy in using program
- Bike share locations and equipment does not suit specific needs
- The program seems not to be designed for the recreational user/tourist
- People that use bike share are active & care about the environment
- General barriers to bicycling in Vancouver

Recommendations based from the data can be classified into two types: recommendations that could increase equity of bike share use, and recommendations that could increase usage in general.

For equity...

- Provide instructions in multiple languages
- Provide ways to register that don’t require technology or smart phones
- Provide ways to register that don’t require the use of a credit card
- Provide subsidy programs for low-income residents/students
- Expand the service area further east and west, and to university campuses

To increase number of users and number of trips ...

- Create a more user-friendly day pass (i.e. sign up on site, no 30-minute restriction)
- Integrate with current transportation systems
- Market the program on campuses, and particularly near ESL schools
- Offer trial passes or demo days
- Make bicycles trendier and remove corporate branding
Theme summary

Table 1 provides a summary of all five major themes with related topics that arose within the eight focus group discussions. Columns with check marks (✓) indicate what topics arose in each group.

Table 1. Themes and related topics by group mention

<table>
<thead>
<tr>
<th>Theme 1: Potential users have a lack of knowledge and self-efficacy in using program</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclists</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Technology &amp; online system access a barrier</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.2 Lack of knowledge about program</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>1.3 Lack of knowledge about rules of road</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Theme 2: Bike share location and equipment not satisfactory

<table>
<thead>
<tr>
<th>Theme 2: Bike share location and equipment not satisfactory</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclists</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 No stations near me</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.2 Helmets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.3 Insufficient cargo space</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.4 Size, weight &amp; style of bicycle</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.5 Not competitive with owning a personal bicycle</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.6 Not a fan of corporate branding</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.7 Would like electric assist</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Theme 3: The program does not seem to be designed for the recreational user/tourist

<table>
<thead>
<tr>
<th>Theme 3: The program does not seem to be designed for the recreational user/tourist</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclists</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Need way to purchase passes offline</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.2 Price too high</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.3 Time restrictions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.4 Recreation and tourist use</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Theme 4: People that use bike share are active & care about their city

<table>
<thead>
<tr>
<th>Theme 4: People that use bike share are active &amp; care about their city</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclists</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Active</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.2 Part of a movement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.3 Part of your city</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Theme 5: General barriers to bicycling in Vancouver

<table>
<thead>
<tr>
<th>Theme 5: General barriers to bicycling in Vancouver</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclists</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Safety on roads</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.2 Bicycle theft</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.3 Weather</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.4 Hills</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.5 Commute distances far</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.6 Clothing &amp; hygiene concerns</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
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Project Background

This project aims to contribute to research and practice on active transportation. Specifically, this work is one component of a larger study that aims to examine the equity and impacts of Vancouver's public bike share program with respect to travel and health outcomes in the general population, in users of the program, and within key population segments. The larger study hopes to address the following objectives:

1. To estimate the impact of public bike share on changes in physical activity and transportation outcomes at a population-level.
2. To determine who uses public bike share and its impact on their individual health and transportation outcomes.
3. To characterize barriers to adoption of public bike share across socio-demographic groups.

To achieve these objectives, focus groups were conducted to identify the motivators and barriers to bike share use and to help understand how public bike share use can increase equitably in the population.

Methods

Our research team identified eight unique target groups through identifying populations groups identified in the field and literature as being less likely to bicycle in general (e.g. women, older adults). In addition, we consulted with partners (the City of Vancouver and Mobi) to understand the population segments they wished to learn more about. We also wished to know more about current bicyclists and users of bike share.

We engaged Context Research to support recruitment and facilitation of group interviews. Recruitment occurred through purposive and targeting sampling using existing networks and organizations that work with target populations to reach individuals (e.g. partnership with immigration support organizations to recruit newcomers, partnership with English as a Second Language (ESL) schools to recruit ESL students). To supplement recruitment, Context also advertised On Craigslist. In total, 8 focus groups (total participants n=55) were conducted between February and April 2017. Details of target groups chosen, recruitment approach, date of focus group facilitation and participant numbers are provided in Table 2.

Focus groups were conducted with the support of an interview guide, found in Appendix A. The interview guide was developed in collaboration with Dr. Meghan Winters and her team. In addition to a general set of questions, a specific set were developed for each group. A separate interview guide was created for individuals who were already bike share users.
Consent forms including an intake sheet were completed prior to the focus groups (Appendix B and C). Once participants had the opportunity to read through the consent, the facilitator verbally highlighted key components of the consent including voluntary participation, anonymity and the right to refuse to answer questions. Further, participants were informed that the focus group would be audio recorded, and that written notes would be taken. Finally, the facilitator asked participants to indicate that they understand the process of the focus group, and that they had all signed the consent form. All methods as described here were detailed and approved by the SFU Office of Research Ethics, application #2012s0286.

Data analysis was conducted in a stepwise process. First, interview notes were reviewed and initial coding of common ideas was developed. Next, complete transcripts of each focus group were reviewed and themes were drawn from the data. Finally, the intake forms were coded, and a brief analysis of participant characteristics was developed in Excel.

The results and recommendations that follow are taken directly from the data. Recommendations are from participants, and not of the research team.
Recruitment

Table 2. Participant target group details and recruitment

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Recruitment Approach</th>
<th>Date</th>
<th># Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>under-represented in the Canadian bicycling population</em></td>
<td>• In-person (6)</td>
<td>March 15, 2017</td>
<td>6</td>
</tr>
<tr>
<td><strong>Adults 50+</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>less likely to cycle</em></td>
<td>• Information brochure at the Centre for Hip Health &amp; Mobility (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Networking (4)</td>
<td>April 10, 2017</td>
<td>6</td>
</tr>
<tr>
<td><strong>Adults with low incomes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>who may struggle with transportation costs</em></td>
<td>• Staff person at a recreation centre (9)</td>
<td>March 21, 2017</td>
<td>9</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>under 25 years, attending college or university, also typically low income</em></td>
<td>• Instructors at Simon Fraser University (0)</td>
<td>April 18, 2017</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>• Information brochure at Harbour Centre Campus (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In-person (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ESL students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>under 25 years, typically newcomers to Canada. Many ESL schools operate near Mobi stations</em></td>
<td>• Staff person at an ESL school in downtown Vancouver (8)</td>
<td>March 14, 2017</td>
<td>8</td>
</tr>
<tr>
<td><strong>Regular transit commuters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>already using car alternatives for primary mode</em></td>
<td>• Craigslist (5)</td>
<td>March 9, 2017</td>
<td>5</td>
</tr>
<tr>
<td><strong>Regular commuter bicyclists</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>to understand how public bike share serves those who already cycle</em></td>
<td>• Craigslist (4)</td>
<td>March 7, 2017</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>• Information brochure in bike storage rooms located in downtown Vancouver office buildings (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mobi bike share users</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>to understand personal reasons for adoption</em></td>
<td>• Mobi (8)</td>
<td>February 28, 2017</td>
<td>8</td>
</tr>
</tbody>
</table>
Results

Description of Participants

Participant characteristics are summarized in the figures below. Participants’ primary modes of transportation was typically transit and walking. Most had at least some idea or awareness of what a public bike share program was prior to the focus groups. About two-thirds owned a bicycle— and varied in how much they bicycled, from regular to infrequent.

<table>
<thead>
<tr>
<th>Age</th>
<th>15 - 19</th>
<th>20 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60 - 69</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>2%</td>
<td>33%</td>
<td>18%</td>
<td>27%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>36%</td>
<td>64%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary mode of transportation</th>
<th>Transit*</th>
<th>Walk</th>
<th>Car/Truck</th>
<th>Bicycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>38%</td>
<td>29%</td>
<td>24%</td>
<td>9%</td>
</tr>
</tbody>
</table>

* Includes 13 bus, 7 skytrain, 1 seabus

<table>
<thead>
<tr>
<th>Heard of public bike share?</th>
<th>Yes</th>
<th>No/ not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>89%</td>
<td>11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you own a bicycle?</th>
<th>Yes</th>
<th>No/No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>67%</td>
<td>33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have used a bicycle in the past 12 months</th>
<th>Yes</th>
<th>No/No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>73%</td>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency of travelling by bicycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3 days/mth</td>
</tr>
<tr>
<td>16%</td>
</tr>
</tbody>
</table>
Main Findings

To synthesize results, a thematic analysis was conducted to reflect commonalities amongst all groups. All, many, few and one are terms used throughout the results to describe the number of people who agreed with the theme.

- All: 8 groups
- Many: 5-7 groups
- Few: 2-4 groups
- One: 1 group

From the data, five key themes emerged. They are:

- Potential users have a lack of knowledge and self-efficacy in using program
- Bike share equipment and locations does not suit specific needs
- Program does not seem to be designed for the recreational user/tourist
- Bicycling in Vancouver feels intimidating
- People that use bike share are active & care about the environment

Each theme is presented first with a table that highlights topics within that theme by group mention. Where check marks (✓) appear, the listed group had discussed something related to the noted topic. Each topic is then expanded with further description and sample quotes to bring out the voices of the participants.
Theme 1: Potential users have a lack of knowledge and self-efficacy in using program

Although most participants knew what the bike share program was, and had seen the bicycles around the city, half the groups had little understanding of how the program works and were uncertain if they would be able to figure it out even if they were interested in trying it.

Table 3. Topics mentioned for Theme 1: Potential users have a lack of knowledge and self-efficacy in using program, by group

<table>
<thead>
<tr>
<th>1.1 Technology &amp; online system access a barrier</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclist</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 Lack of knowledge about program</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>1.3 Lack of knowledge about rules of road</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

1.1 Technology & the online system a barrier to use

Many participants expressed concern with the online registration process, and the need to understand technology, both on the computer and using a Smartphone device.

“It’s intimidating and probably intimidating for older people too because the whole technology thing, they don’t want to do.” ~Adult 50+

 “[The] things they have is confusing to read so I just walk by and look at them once. It’s like too many buttons and choices.” ~Woman

In addition to intimidation around using the system, participants highlighted that having to go to a website to sign up would be a barrier for them.

“I guess I have not had a chance to look at the actual website to see how to sign-up, and I’ve heard that it seems you have to sign-up online, and you can’t just go to one of those machines and put in money.” ~Regular Transit User

“Computer[s] and I are not best friends. I want to see a human being at that spot to pay.” ~Adult with Low Income

1.2 Lack of knowledge about program

Although most participants knew what the bike share program was, and had seen the bikes around the city, half the groups had little understanding of how the program works. Comments ranged from not knowing much about the program to not having the confidence or knowledge to use the program.

“[I know] pretty much nothing.” ~Student
“…because we didn’t hear about it before.” ~ESL Student

“I would love to have a membership if I understand how to make it. Because it has a screen or something…I don’t know how, but it’s a really good idea.” ~ESL Student

“I think it’s intimidation on really not knowing what you do. You see them everywhere but there isn’t anything... They’re not accessible.” ~Adult 50+

“What about if there’s a mechanical problem?” ~Regular Transit User

Lack of knowledge of the program was also described in the limited information that was provided, one participant shared her experience:

“When I first heard about this on TV, I was all excited about it, and then I didn’t hear nothing about it again, and when I went out for a walk I’ve seen the bikes and asked my daughter, “When did they start this?” I started looking around for pamphlets. I couldn’t find no pamphlets. I went online and I find out about it by putting “blue bikes,” that’s all I put in there, and then I put “Vancouver.” I was thinking to myself, “Why didn’t they have pamphlets that was saying the prices and everything on there?” Because some people they don’t … use the computer.” ~Adult with low income

Not having instructions for using the public bikes in multiple languages was also described as a barrier for ESL students.

“Especially if people use English as a second language, like it just takes a lot longer to go through all the email process and like unlocking your pin process and everything. You have to read that and get translated - it takes a long time.” ~ESL Student

1.3 Lack of knowledge about rules of road

The ESL student group in particular commented on their lack of knowledge on how to use a bicycle in Vancouver. Limited language skills meant students felt intimidated by not knowing the rules of the road.

“The other important thing is I didn’t know which road I can ride a bicycle, which road I can’t. It’s very confusing for me, so I gave it up.” ~ESL Student

“Therefore, they don’t know the rules of roads .... When I use that at that time, sometimes I go by different roads, and everyone is against me. Everyone was shouting words at me, but I don’t speak English well. So, it was scary to ride a bike.” ~ESL Student
Theme 2: Bike share location and equipment not satisfactory

Bike share equipment, features and logistics was another common topic of discussion across all groups, specifically the design and access of the Mobi bikes and helmets as compared to personal bikes.

Table 4. Topics mentioned for Theme 2: Bike share equipment and location does not suit specific needs, by group

<table>
<thead>
<tr>
<th>Topic</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclist</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 No stations near me</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.2 Helmets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.3 Insufficient cargo space</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.4 Size, weight &amp; style of bicycle</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.5 Not competitive with owning a personal bicycle</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.6 Not a fan of corporate branding</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.7 Would like electric assist</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

2.1 There are no stations near me

Access to bike share docking station was a key element to whether using the program would be considered beneficial to participants. If no station was near, they would likely not go out of their way to find a bicycle.

“I’ve never seen a bike road nearby my house.” ~ESL Student

“If you lived down here and needed to go to UBC, you couldn’t take a Mobi down there because there are no docking stations.” ~Student

“I don’t live downtown either. I live in the Eastside so I didn’t have bike share because they are not on the Eastside so that is a barrier.” ~Woman

“They only go to Main Street and I’m about 10 blocks past Main Street. So that’s an issue for me in the sense that if I want to bike home, I have to drop it off at Main and still hoof it in another 10 blocks.” ~Commuter Bicyclist

2.2 Helmets

All groups identified helmets as a barrier to using the Vancouver bike share program. In some cases, this was related to sanitary concerns about the sharing of helmets.
“Helmets – that’s disgusting. My sons have lice. I would never put a helmet on my head that’s on – there’s no way.” ~Woman

“I’ve actually used it before and the strap here I have ended up with like a cold sore or rash around here [points to chin].” ~Mobi User

In other cases, helmets were brought up because of a lack of understanding about helmet laws, or frustration with the mandatory helmet law in Vancouver.

“Because I don’t have a helmet. I just heard of local people say, “You better get a helmet....” Because they have the law of this country.” ~ESL Student

“Helmets are really small or maybe I have a big head. It’s painful to wear them but the straps, if I don’t want to wear them, and risk a ticket putting them in the basket and strapping them in may fall out. It will be nice if the province would let the cities decide on their own helmet laws.” ~Mobi User

Others commented that they liked the helmet option.

“I think it’s really good that they come with helmets ... I really like the helmet situation. I think that encourages me to use them more than other places.” ~Student

2.3 Insufficient cargo space

Being able to haul bags, groceries, sporting equipment and children goods is a factor that most groups identified as being important.

“What about the storage space? I haven’t quite assessed out the look. I usually carry three bags with me and I don’t know if it would be able to hold all that.” ~Commuter Bicyclist

“I guess another thing is that sometimes we carry a lot of stuff. It’s inconvenient for us to get on the bike and prepare ourselves and then get off.” ~Student

“If you have to go get groceries or anything like that, there’s nowhere to put anything.” ~Woman

2.4 Size, weight and style of the bike share bicycle

The style of bike was an issue for many people. Complaints about the bike share bicycles included that they were too heavy, they didn’t come in enough sizes (for adults and for children), they were ugly, and people didn’t feel cool riding through the city on the bike. This was especially true after the bicycles were branded with SHAW advertising.

“The bikes are too heavy. I’m a girl, sorry. They’re too heavy and clumsy, could they have different types of bikes possibly?” ~Mobi User
“I find them quite unstable as well. I feel unstable ... and I'm a confident cyclist, like I would never ride hands free with those bikes.” ~Mobi User

“I think just the weight and the size of it is built too generically.” ~Transit User

“Frankly, they look clunky. They look bulky ... [and] they’re ugly ... you want to feel like you’re having fun or something.” ~Woman

“Heavy and ugly too. There might be like the cool factor ... they looked dorky.” ~Commuter Bicyclist

### 2.5 Not competitive with owning a personal bicycle

A few groups highlighted that they wouldn’t choose to use a bike share bicycle, when they already have access to their own bicycle.

“It’s just cheaper to run my own bike. My bike was $150.00 or whatever and it’s adjusted. It’s fitted for me. ... There’s like the limitations with the time and then it’s just having it adjusted and then cargo.” ~Commuter Bicyclist

“For anybody that lives here, why would you want to rent a bike that you might have to spend $1,200 to replace when you can have a really nice bike of your own for $500-$600 and not pay anything if it gets stolen?” ~Adult 50+

“It’s definitely less cool in my opinion ... than owning your own bike.” ~Mobi User

### 2.6 Not a fan of corporate branding

A few also mentioned that the Shaw corporate sponsorship of the bikes was a downgrade to the original local appeal of using the system.

“Biking should be fun, not Shaw.” ~Woman

“I don’t want to promote a company when I ride my bike. I don’t like the idea of riding around with a billboard of Shaw.” ~Adult 50+

“Why would anybody spend money painting it “Shaw Go”? The logo, why is that – that annoys me ... Does everything have to have an ad?” ~Regular Transit User

Related to this, some Mobi users mentioned their disappointment that the sponsorship had not translated to a drop in price, while others mentioned their distaste for riding around with advertisement on their bicycle.

“When I first signed up, I thought the cost was reasonable. There wasn’t a sponsor – whatever the company is that it has their advertising all over? When they did that, I
felt like the cost should have gone down because now we’re like walking billboards
... It feels like you’re like biking for the man.” ~Mobi User

2.7 Would like electric assist

A few groups discussed their interest and desire for the Vancouver public bike share program to have an option to use electrical assist while riding.

“If the bikes were electric assist, they’d be ... popular for older people.” ~Adult 50+

“I would use the bike share anytime if you guys had electric ones.” ~Transit User

Theme 3: The program does not seem to be designed for the recreational user/tourist

Most groups brought up that the nature of the bike share program did not lend itself well to recreational bicycling—that the current time and cost parameters were restrictive, especially for those interested in renting the bikes for recreation and leisure instead of transportation.

Table 5. Topics mentioned for Theme 3: Program is does not seem designed for the recreational user/tourist, by group

<table>
<thead>
<tr>
<th>Topic</th>
<th>Women</th>
<th>Regular Transit Users</th>
<th>Adults w/ Low Income</th>
<th>Adults 50+</th>
<th>Students &lt;25</th>
<th>Commuter Bicyclist</th>
<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Need way to purchase passes offline</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>3.2 Price too high</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>3.3 Time restrictions</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>3.4 Recreation and tourist use</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.1 Need way to purchase passes offline

Several groups mentioned their desire for there to be alternatives to buying a Mobi pass online. Some simply wished for there to being some in-person method to buying a membership, such as at stations, at community centres or where transit passes retail.

“It would just make so much more sense to me that you just go up to the stand, put your credit card in, ride your bike, get charge per minute.” ~Adult 50+

“Like in the recreation centers we have leisure access for low-income families, and I’d like to see a transference of that type of programs so that people of low income could access bikes.” ~Adult with low income

Others wished to integrate the cost and card with current transit passes (e.g. Compass card).
“If it was easier for you to access through your Compass Card … you didn’t have to sign up there, it’s not an additional card.”  ~Adult 50+

“Maybe even without integrating with Compass, opening it to credit cards directly would be much easier way for tourists to just go tap their credit card.”  ~Mobi User

3.1 Price is too high

Groups suggested that the price for using the system wasn’t ideal, and that particularly, the day pass fee of $7.50 was too high.

“[The] pricing structure is horrifying.”  ~Transit User

“That is one of the problem about the...for example the day pass, I need to pay $7.50 for 30 minutes. I think it’s very expensive.”  ~ESL Student

Students indicated that the bike share program would be an added cost, one that they might not be willing to spend since they already have transit (e.g., U-Pass) embedded into their tuition and considering many only spend part of the year in Vancouver.

“That’s already included in our [U-Pass] cost. Why would we spend the extra $7.50 on a bike?”  ~Student.

“I spent eight months here. ...The price, link it by the period, the time I spend here.”  ~ESL Student

Others (students, older adults, transit users) noted they had already purchased transit (Compass card or monthly pass) and questioned why they would pay for yet another transportation option, when for less money, they could use the transit system.

“I already paid for transport. Every time when I’m in downtown, I paid for the bus, I can take the bus. So, I won’t take the bike if it’s not a bigger advantage for me. Maybe .. you [could] got a lower price if you have a Compass Card.”  ~ESL Student

“If I was to come here tonight and I wanted to use one of their bikes, it would’ve cost $7.50. If I take the Skytrain and Canada Line, it only costs me half that. Unless you’re going to make two return trips per day, it’s not cost effective.”  ~Adult 50+

Lower income adults suggested that the monthly and annual prices may in fact be more affordable than the bus, which would encourage them to consider buying a Mobi membership.

“I like the sound of the price being cheaper than the bus pass, because I can’t just buy a bus pass.”  ~Adult with low income

3.2 Time restrictions

Many groups were concerned with the time restrictions and expressed that this would dissuade them from using the bike share program. In most cases, groups identified that they would use the bikes for leisure purposes (see section below) and that a limited time frame is stressful.
“Yes, that’s one thing I found tricky when I was using it before is that you always have to be aware like, ‘Oh, shoot. We left the last one at 12:22, so that means we got to be back at 12:52.’” ~Transit User

“If somebody wanted to stop for coffee then it would go tick, tick, tick, tick. If you’re on a holiday because you wanted to get away from the time monster.”

~Adult 50+

“Then the 30-minute thing is a big thing you’re saying too, because you can’t get from the seawall to the other side of the seawall in 30 minutes.” ~Woman

“I like the idea of just hopping on my bike, going door to door and then done deal so that I don’t have to worry about my time. Like, ‘I have five minutes left,’ and I got to find another station and park it. I just don’t want that. it’s not leisurely.”

~Commuter Cyclist

3.3 Recreation and tourist use

Many of the groups identified that they would currently use a bicycle for recreational purposes, rather than for commuting, but that the strict time limits (as already mentioned) would not allow for worry-free leisure use. Several recounted their experiences using public bike share programs in other cities (Montreal, European, and Asian cities) when they were tourists and wishing for a comparable system in Vancouver that they could promote visitors exploring the city on bicycle. Further, the bike share bikes do not accommodate transporting children, and some parents in the groups identified that this as problematic.

“Mine [bicycling habits] is mostly recreation and it would be weekends and it would be for meeting up with people for bicycling or getting downtown for an event or something like that. I don’t use it for errands and all that. It’s usually all recreational.” ~Adult 50+

“I do have a bike but I usually ride normally during the summer, just as a leisurely – going around Canada, the Sea [wall].” ~Student

“Yes, I ride my bike when I have a chance. During my day off with my three kids and my husband. That’s the best time to get together and just see things slower. It’s just fun and relaxing.” ~Adult with low income

“I was really surprised that their target audience is not tourists. ... that’s how I’d use it when I’ve gone to other cities.” ~Mobi User

“That’s the only time that I think I would actually use this, if I had my family visiting from somewhere.” ~Women
Theme 4: People that use bike share are active & care about their city

Focus group participants perceived that those who use bike share are healthy, active, and engaged citizens that are out and about and involved in their city.

*Table 6. Topics mentioned for Theme 5: People that use bike share are active & care about their city, by group*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Women</th>
<th>Regular Transit Users</th>
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<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Active</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>4.2 Part of a movement</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>4.3 Part of your city</td>
<td></td>
<td></td>
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<td></td>
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<td>✔</td>
</tr>
</tbody>
</table>

**4.1 Active**

When asked bike share how they perceived bike share users, the perception was that those who use bike share are active, and that using the program would be a good way to get exercise.

“I think people’s healthy attitudes in general. People who like to exercise and get out.” ~Transit User

“Every time I use I think, ‘Okay. This is burning calories. I can sit on a bus or I can burn 100 calories’.” ~Mobi User

**4.2 Part of a movement**

When participants see people around the city using bike share they perceive them as people who like to try something new. Others felt that being part of the Vancouver public bike share program was environmentally friendly and supporting sustainable city living.

“I think it makes you feel like you are part of a change. Especially younger people. ... they just seem to be people who don’t want to be driving as much. It’s part of being in a livable city and agents of change. It’s exciting.” ~Mobi User

**4.3 Part of your city**

Individuals who were already engaged in the Vancouver bike share program shared that they felt that having access to the bicycles allowed them to see more of their city.

“It’s opened up parts of the city to us that we didn’t really have thought about, especially Main Street. We live with kids. We don’t have a car. Now, it’s like, ‘Oh, just ride a bike. Go to 14th and Main and then go to... Kingsway.’ It’s so close. Just suddenly it’s like things don’t seem as far as they were. It’s fun. It’s fun to ride a bike.” ~Mobi User
Theme 5: General barriers to bicycling in Vancouver

Environmental barriers to bicycling in general was a common theme of discussion across most groups. Topics within this theme included concerns of safety, unfavorable weather and hills while riding, as well as worries about bicycle theft.

Table 7. Topics mentioned for Theme 4: General barriers to bicycling in Vancouver

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Regular Transit Users</th>
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<th>ESL Students</th>
<th>Mobi Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Safety on roads</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.2 Bicycle theft</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.3 Weather</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.4 Hills</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>5.5 Commute distances far</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>5.6 Clothing &amp; hygiene concerns</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

5.1 Safety on roads

Safety on the roads was a concern for all groups. In some cases, people indicated that they wouldn’t ride a bicycle at all because they didn’t feel it was safe to do so.

“It’s not safe. I am not comfortable.” ~Adult 50+

This was often for their own safety but also the safety of their children.

“I just don’t think I’d be feeling comfortable with having my children way low [to] the ground with cars making mistakes.” ~Woman

Another participant noted that they used to bicycle in the city, but not anymore.

“I used to bike but here I don’t bike because I am scared of the cars. It’s too fast. Too fast for me.” ~Adult with Low income

Finally, a commuter cyclist noted that at sometimes of year he felt less safe than others.

“I think also there are seasonal variations in terms of when drivers expect that there’d be bike there or when there’s not. When you get a critical mass of cyclists going down the bike lane, drivers are like, “Oh yes.” They see them all the time. [Even] in the winter.” ~Commuter Bicyclist
5.2 Bicycle Theft

Many groups discussed the realities of bicycle theft and their firsthand experiences with having their bicycle (or parts of their bicycle) stolen. While theft is a deterrent, perhaps bike share may be able to overcome these concerns given the user is not responsible for the bike once it is replaced in the dock.

“Well, that [bike theft] is an important factor because in the last year, my saddle was stolen, my saddle bag was emptied, my front wheel was stolen and so there are certain areas where I just avoid leaving it.” ~Adult 50+

“I would use if I had some station near by my house, because I believe it’s safer. I don’t have to be concerned about the bike; just park there and it’s not my responsibility anymore.” ~ESL Student

“I’ve had two bikes stolen and so I won’t go certain places because I just don’t feel safe locking my bike... It is more reason to actually use the bike share, because you don’t have to worry about it getting stolen.” ~Commuter Bicyclist

“The place where we live, we had mass stealing of bikes even though we had a special bike built. Probably our family had our bikes stolen three times.” ~Adult with Low Income

“The main reason I signed up for Mobi is when I used to go downtown with my own bike, I would bring no less than three locks, just to make sure that nothing could get stolen or taken off with my bike. Now, it’s I don’t care. Just go and lock it up somewhere.” ~Mobi User

5.3 Weather

The weather in Vancouver is a deterrent for many to get on any bicycle and ride—personal or bike share.

“It’s always raining – always raining, it’s a problem.” ~ESL Student

“It has to be ideal weather or else I’ll just forget it because I’m not out there.” ~Transit User

“I don’t mind being outside but I mind being in the rain while biking and then my pants getting all soaked and my shirt getting all soaked.” ~Student

“I find that they’re always wet with rain ... I carry a cloth with me now to wipe it down, but if there’s a way for them to just have small shelters ... Everything is wet – the handles, the thing where you put your bag in there. It’s not just the seat.” ~Mobi User
5.4 Hills

Vancouver’s topography can make bicycling be physically challenging. Coupled with the heavy bicycles provided in the bike share program, a few groups identified that this as a barrier to use.

“I always think if there’s a big hill for the way home, I sort of tend to walk on the hill...Sometimes, depending on what time at night, I like to go on flat.” ~Adult 50+

“Also, like Vancouver is so hilly, you have to go uphill or downhill, go uphill, go downhill the entire time. It’s really exhausting.” ~Student

5.5 Commute distances far

A few pointed out that even if they wanted to use a bicycle or Mobi bike, that distances they would need to travel would be far.

“I guess what makes it annoying to ride a bike is everything is so far away from each other if you want to get from one place to another.” ~Student

“I do not use a bike here. Maybe it would be possible for the way to the school, to the bus stop, or the whole way. The complete way would be seven kilometers or eight, and to the city, maybe it’s too much. I’m not sure.” ~ESL Student

5.6 Clothing & hygiene concern

Transit users and women in particular noted that a big barrier to using bike share for them was the complication of clothing and hygiene—not wanting to show up at work sweaty, needing a shower and crumpled professional clothing.

“You ride to work, then you have to have a shower, then you got to blow dry this mop and then to get presentable ... if you have a job where you have to wear a skirt or something, it’s really inconvenient.” ~Woman
Recommendations

Results of the focus groups provide insight into the barriers and facilitators for using the Vancouver bike share program. Building on these results, recommendations can be classified into two types: recommendations that could increase equity of bike share use, and recommendations that could increase number of members and number of total trips.

To increase equity in uptake...

To increase access and equity to the Vancouver bike share program, the following recommendations are provided. Each of these is drawn discussions within the eight focus groups.

1. **Provide ways to register that don’t require technology or smart phones**

   The online registration process was highlighted as a barrier to access for some. Not everyone has access to a computer which is needed to register online. Further to lack of access to a computer, some individuals highlighted the barriers to using a smart phone, both because the use of this technology is confusing for them, and for others, because they simply do not have one. Creating systems that would allow users to register in person (e.g. at a community center) or by telephone would improve equity and use for those who cannot access technology and smart phones.

2. **Provide ways to register that don’t require the use of a credit card**

   Payment by credit card was a barrier for some. Vancouver bike share may want to consider making different payment structures that would allow individuals to pay using cash or debit, as have been modeled in bike share programs elsewhere.

3. **Provide subsidy programs for low-income/students**

   Individuals in the low-income and student groups highlighted the cost of the Vancouver bike share program is a barrier. In both these groups, a reduced cost or subsidy option was suggested to make the program more accessible. Providing four and eight-month memberships as alternatives to an annual pass may also encourage students to enroll, in particular those who only live in Vancouver part of the year.

4. **Provide instructions in multiple languages**

   Vancouver is a multicultural city, with individuals from all over the world coming to call it home. Providing written materials in multiple languages both online and at the station in will allow for more users to feel comfortable with the process of signing up for the bike share program.

5. **Expand the service area further east and west, and to university campuses**

   A lack of docking stations near their houses or schools was a primary reason that participants indicated that they would not use bike share. Increasing the coverage of docking stations could allow more users to access the program for their needs. In addition, students highlighted that they spend a majority of their time on campus (Simon Fraser University & University of British Columbia), and they would be more likely to use the program if the bicycles could be used as a mode of travel while on campus (i.e. to get from class to class).
To increase number of users and number of trips ...

To increase Vancouver bike share membership and trips, several suggestions were provided in the focus groups:

1. **Create a more user-friendly day pass (i.e. sign up on site, no 30-minute restriction)**

   The day pass as is currently offered did not appeal to many. The cost ($7.50) was perceived as high and the need to register online to have access to a bicycle is a significant barrier. Participants of most groups indicated they would be more likely to use bike share (and bring their friends), if they could use their credit card directly at the station to take out a bicycle. Further, they suggested having a pay-per-use pricing structure that would allow people to use the bicycle for short trips, as well as longer trips.

2. **Integrate with current transportation systems**

   Older adults, transit users and students alike suggested that they might use the bike share program more if it was integrated with current transit systems (i.e. Compass, U-Pass, car-share). Advertising the program at transit stops and on buses/skytrains would also increase knowledge about access and use.

3. **Market the program on campuses, and particularly near ESL schools**

   Students at both public and private institutions indicated that they knew little about the bike share program. Providing targeted marketing to these groups could increase reach of the program. Having information on campuses as well as at the many English Language schools in the downtown core could raise awareness of the program, and increase users. Lower income adults also suggested making the program accessible to high-school students who wish to be more independent in their travel.

4. **Offer trial passes or demo days**

   Barriers to using the Vancouver bike share program were around self-efficacy, for instance, in how to lock/unlock a bicycle, about the style and weight of bicycle, and if it would fit a specific user. Having a trial or demo day at docking stations around town could allow people to become comfortable with the process of using the bike share program.

5. **Make bicycles trendier and remove corporate branding**

   Participants of the focus groups (including existing bike share members) were concerned about the look and feel of the bicycles. The Shaw branding that is on the bicycles was also of concern—people feel like a billboard, and described the process of using these bicycles as ‘uncool’ or ‘dorky’. Considering ways to improve the aesthetics of the bicycles may increase uptake.

**Conclusion**

Findings from the eight focus groups conducted with target audiences provide insight into the barriers and facilitators to use of the Vancouver public bike share program. In general, individuals are aware of the bike share program, but do not currently use it. Recommendations should be considered to increase equity, and uptake of the program. Future research may wish to understand certain groups (i.e. students, ESL, immigrants) or delve into market research to create a marketing strategy increase bike share use in Vancouver, especially within key populations.
Appendix A: Focus Group Interview Guide & Script

PRE-DISCUSSION (5-10 MINUTES)

Welcome
Good [morning/afternoon/evening], my name is Jenny Scott and I work at Context Research. We are working with Dr. Meghan Winters at SFU to lead a series of focus groups.

Review the informed consent and discussion structure
This session will be audio taped and will last about 1 hour. Our aim today is to understand how a public bike share program in Vancouver may serve or not serve your travel needs. During this time, we will ask you about your knowledge, feelings and experience with riding a bike and using bike share, including what barriers exist to using this travel mode. Finally, we will ask for your suggestions on what could be done to increase usage of the bike share program. During the discussion, we will be taking a few notes about the opinions and experiences you describe to us. You do not have to answer any questions during the interview if you are not comfortable with them. In addition, you should feel free to express your opinion openly and to disagree with the opinions of others. As moderator, it is my job to make sure that everyone is participating and that the conversation remains on topic.

Intake Questionnaire
PROVIDE EACH PARTICIPANT COPY OF INFORMATION LETTER, CONSENT & INTAKE QUESTIONNAIRE
Any questions about how we’re going to spend our time today?

Permission to record
At this moment, can everyone acknowledge that they signed the consent form giving us permission to record this focus group? START RECORDING

CURRENT TRANSPORTATION PATTERNS (5-10 MINUTES)

Most of the time in this focus group we will let anyone talk in random order and no one has to feel they need to respond to every question. However, just to start out to break the ice I’d like to give everyone in the room an opportunity to say something.

Q. Please describe in 1 minute or less how you usually get around town?
Prompt: For example, most days of the week I take the bus to work, and sometimes I will bike if the weather is good. I drive to get groceries and run errands and will walk to visit friends if they live within a 10 minute walk.

BIKE USE (5-10 MINUTES)

Thank you for letting us know how you typically get around town. We are now going to move into questions about bike use. Please note that if one person seems to be talking more than everyone else, I may interrupt them to allow everyone the chance to speak.

Q. Do you ever ride a bike? [Ask all but current cyclists and Van bike share users]

Q. What kinds of things make riding a bike easy or hard for you? [Ask all]
Prompts: Do you own a bike? Is it working? Are you fair-weather? Health or mobility challenges? Time constraints Prefer other forms of transportation or recreation? Safe places to ride in your area?
BIKE SHARE KNOWLEDGE AND USE (20 MINUTES) [Complete Section IV for everyone but bike share users]

Great. We appreciate your involvement so far. Next, we are going to talk to you about your experience with Vancouver’s public bike share program.

SHOW THEM A PICTURE OF BIKE SHARE AND PASS AROUND WHILE PROVIDING BRIEF DESCRIPTION BELOW

Public bike shares are self-service bicycle rental programs that are available to the public for making short trips by bicycle. These systems exist in Montreal and Toronto, and over 1000 other cities worldwide. In Vancouver, the public bike share system “MOBI” launched in 2016 and will have 1500 bicycles at 150 stations across the Downtown Peninsula and surrounding area. If you buy a membership you can pick up one of these bikes and use them for up to 30 minutes before returning to another station within the city.

Q. Have you seen public bike share bikes in Vancouver?
If so, describe a bit of what you have seen and what you know about the program.

Q. Have you ever used public bike share bikes? In Vancouver? Elsewhere? Please describe a little about these experiences. Probes: What did it look like and what did you like and not like about it? Do you think the Vancouver public bike share is different from others? If you haven’t, would you consider using the Vancouver public bike share program? What kinds of trips would you choose to make by public bikes (if any)

Q. What do you think are the main reasons you (and people like you) may or may not be using Vancouver bike share bikes? Probes: climate, infrastructure, cost, accessibility, distance, personal reasons (probe deeper on these to get at how/why/what aspect). Are these barriers the same, or different, then using a personal bicycle?

Q. What do you think are the unique challenges that [insert one of a-h for each target group] face in trying to use public bike share bicycles?
   a. women
   b. transit users
   c. lower income adults
   d. newcomers to Canada
   e. ESL students
   f. students/adults under 25 years
   g. adults over age 50+
   h. regular commuter cyclists

Probe: From your perspective, what do you consider the major problem affecting the Vancouver public bike share?

(If time permits) [not for newcomers and ESL students]:
Q. What do you think are the unique factors about the place and culture of Vancouver that might make bike share successful or unsuccessful here?
Prompt: From your perspective, how does bike share fit into current transportation systems, like transit or car share?

SUGGESTIONS TO INCREASE BIKE SHARE UPTAKE (10 MINUTES)

Lastly, we would like to hear from you regarding necessary changes to the public bike share program to further encourage uptake of the program, for people of all ages and abilities.

Q. How could the Vancouver public bike share be improved to be more appealing to you or better suit your needs? Prompt: Do you have any ideas for improving Vancouver public bike share?

Q. More generally, what do you think they could do specifically to make the Vancouver bike share more appealing and better used by [insert the description for each population] more generally?

Q. (If time permits): Is there anything else you want to tell me about how bike share use can be encouraged in Vancouver?
GROUP-SPECIFIC QUESTIONS (5 MINUTES)

For women only
A-1. What do you see as being the main reasons that Bicycling rates are lower amongst women in Canada?

For Transit Users Only
B-1. What would make it easier for you to integrate Vancouver public bike share into your current commute?

Lower income adults
C-1. Some have proposed Bicycling for transportation as an inexpensive transportation option. What do you think about this? Prompt: What kind of payment plans might work for you? (Maybe) How would you value bike share relative to transit?

Newcomers to Canada
D-1. Since you have moved to Canada and Vancouver, how have your daily transportation patterns changed from when you lived in the country and city you moved from?

ESL students & Students/adults under 25 years
F-1. What do you think are the unique challenges for students using the Vancouver public bike share?
F-2. What do you see as being the unique opportunities for students using the Vancouver public bike share?

Adults over age 50+
G-1. Have your Bicycling habits changed as you have grown older? If so, tell me more about that?
G-2. Do these differences affect your potential use of a bike share system?
G-3. Has aging affected the design features of a bike that are important to you? If so, what are the ones that are more important now?
G-4. Have you downsized your home? If so, has that affected the storage space you have available for bikes?

Regular commuter cyclists
H-1. Do you think people who already cycle are more or less likely to use the Vancouver public bike share system? Describe some of the reasons.

For Bike share users only [Note: This section longer here, but this group excluded from section IV]

Q. Have you ever used public bike share elsewhere? How does this compare to riding Mobi bikes? Please describe a little about these experiences.
Q. Do you find riding the Mobi bikes to be different than riding another personal bicycle? If so, please describe.
Q. Has the way you get around changed while or since using Mobi?
Probe: Do you bicycle more, less or about the same as you did before using Mobi?
Q. What does using public bike share say about you?
Q. What do you like most about using the Mobi? What do you like least?
(If time permits): Q. What changes to the Vancouver Bike share system (if any) do you think would increase the use of helmets by bikesharing riders?
Q. Have any friends, family or coworkers started to use Mobi or to ride a bike because you do?
Q. Do you think there are differences in attitudes and lifestyle between people that use public bikes and people that do not?
Appendix B: Participant Letter of Information & Consent

*Note: actual form larger font, included here for content reference only*

1. **Invitation and study purpose**
   We are inviting people from a variety of backgrounds to participate in focus groups to understand your thoughts on Vancouver’s public bike share program, and how this program may or may not meet your transportation needs. You are being invited to participate because you belong to a population of interest within our study.

2. **Who is conducting this study?**
   This study is being conducted by Dr. Meghan Winters at Simon Fraser University (SFU) (Faculty of Health Sciences, 778-782-9325) and is funded by the Canadian Institute for Health Research. Focus groups are being led by Context Research.

3. **Who can participate in this study?**
   You can participate if: 1) You are age 19 years or older; 2) You can read English well enough to understand this consent form.

4. **What will your participation involve?**
   Your participation is voluntary. Should you choose to participate in the study, you will be asked to complete a 1-page questionnaire and take part in a discussion session that will take approximately 1 hour. The sessions will include 5-7 people plus a facilitator and note-taker. The discussion will be audio taped and some notes will be taken about the things said. You do not have to answer any questions during the session if you are not comfortable with them. You will be compensated $50 cash for your participation.

5. **What are the risks of participation?**
   We do not think there are any risks to you by participating in this study. Some topics of discussion may make you feel uncomfortable but you do not have to answer.

6. **How will we protect your identity?**
   Strict confidentiality cannot be maintained in a group setting. We encourage participants not to discuss the content of the focus group to people outside the group; however, we can’t control what participants do with the information discussed. The study team commit to protecting your privacy. As such they will keep your name and discussion answer separate. Name and discussion answer will only be linked with an ID in a secure password-protected electronic file accessible only to Dr. Winters and approved project staff. Any paper-based study materials will be kept in a locked filing cabinet at Simon Fraser University. Any electronic data and audio recordings will be stored on a secure password-protected database and destroyed after a 5 year period.

7. **How will the results be used?**
   The results of your focus group session will be reported in scientific meetings, journal articles, and a graduate thesis. Your name will never be revealed in these reports.

8. **You can participate or not. You can stop at any time without giving reason.**

9. **Who to contact if you have questions or complaints about the study**
   If you have any questions, or would like to receive copies of the final results you may contact Dr. Meghan Winters (778-782-9325). If you have any concerns about your rights or experiences as a research participant in this study, you may contact Dr. Jeffrey Toward, at the SFU Office of Research Ethics (jtoward@sfu.ca, 778-782-6593).

**Participant Consent**

*Taking part in this study is up to you. You have the right to not participate. If you decide to take part, you may choose to pull out of the study at any time without giving reason.*

☐ Yes I consent to participate in this study
☐ Yes I have received a copy of this consent letter for my own records

______________________________  ______________________________  ______________________________
Printed name of participant       Signature                           Date
Appendix C: Focus Group Intake Questionnaire

1. What is your age category?
   - □ 15-19
   - □ 20-29
   - □ 30-39
   - □ 40-49
   - □ 50-59
   - □ 60-69
   - □ 70-79
   - □ 80+

2. Are you ...
   - □ Female
   - □ Male
   - □ I prefer to not answer

3. Overall, which mode of transportation do you use most often to get around? (Select one only)
   - □ Car/truck
   - □ Transit bus
   - □ Skytrain
   - □ Seabus
   - □ Bicycle
   - □ Walk
   - □ Motorcycle
   - □ Taxi
   - □ Other (specify: ______________)
   - □ I prefer to not answer

4. Do you own a bike?
   - □ Yes
   - □ No
   - □ I prefer to not answer

5. In the previous 12 months, have you used a bicycle?
   - □ Yes
   - □ No
   - □ I prefer to not answer

5b. If yes, how often do you typically travel by bicycle?
   - □ 4 or more days per week
   - □ 1-3 days per week
   - □ 1-3 day per month
   - □ Less than once per month
   - □ I prefer to not answer

6. Have you ever heard of a public bike share program?
   - □ Yes
   - □ No
   - □ Don’t know/not sure
   - □ I prefer to not answer