Understanding a New Bikeshare Program in Vancouver

2016 Mobi Member Survey Results

Report Prepared for the City of Vancouver & Mobi Partners

April 2017 -V1

Dr. Meghan Winters' Cycling Research Team Simon Fraser University

Analysis in SAS by Nimesh Patel Report Preparation by Suzanne Therrien

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









Contents

EXECUTIVE SUMMARY	3
RESPONDENT DEMOGRAPHICS	
TRANSPORTATION PATTERNS	
PERCEPTIONS OF CYCLING SAFETY IN VANCOUVER	
MOBI BIKE SHARE USE	
HELMET USE	
MOTIVATORS & BARRIERS	
MOBI CUSTOMER SERVICE	21
APPENDIX A: FULL INVENTORY OF 2016 MORI MEMBER ONLINE SURVEY OLIESTIONS	





EXECUTIVE SUMMARY

Context

This survey was a joint effort between Dr. Meghan Winters and colleagues and the Mobi Bike Share provider (Cycle Hop) with input from the City of Vancouver. It was designed to include questions that would meet both team's informational needs regarding Vancouver public bike share members. For a full set of questions included in the survey refer to Appendix A. With approval from the SFU ethics board, it was programmed and launched through the SFU approved Fluid Survey™ online platform. This report provides a selection of results from completed surveys.

Response

All annual and monthly members of the Vancouver Public Bike Share system (Mobi) as of November 14, 2016, (N=4862) were invited to participate in a survey via an email invitation with a link to an online questionnaire. The survey was hosted on the Fluid Survey platform and was open for two weeks (November 16-30, 2016) with a result of 37% (n=1759) completing the survey.

Respondent Demographics

Respondents identified as 57% male, with the overall sample being young (39% <35 years, 47% 35-54 years and 13% 55+). Two-thirds (65%) were born in Canada. A majority worked (78% full-time, 8% part-time); were educated (24% college, 30% undergraduate degree, 20% graduate degree); and had household income above \$100,000 before taxes (45%).

Transportation Patterns

Walking was the top everyday mode of transportation (31%), followed by driving (26%) and bicycling (16%). Participants had an average of 1.7 adult bikes, and 0.9 motor vehicles per household. A total of 61% also belonged to a car share program. Thirty-seven percent (37%) of Mobi member respondents indicated not owning their own personal bike. Forty-one percent (41%) reported riding Mobi bikes at least once or more weekly.

Perceptions of Cycling Safety in Vancouver

Most (72%) thought cycling was somewhat (59%) or very (13%) safe in Vancouver. By in large, members also felt the program has had a positive impact on road safety, the easy of connecting with public transit, the image of Vancouver, the promotion of active transportation and the health of the population

Mobi Bike Share Use

Most learned about Mobi through social media (25%) or from seeing the bikes/stations on the street (24%). Forty-one percent (41%) reported riding Mobi bikes at least once or more weekly and 80% had taken more than 4 trips since becoming a member. As a result of member's use of Mobi 43% reported walking less (and 11% more), 38% using transit less and 29% riding their own personal bicycle less.





Helmet Use

About half (53%) report typically using the Mobi helmets when they ride the Mobi bikes, and an additional 17% report wearing their own personal helmet, with the remaining reporting no helmet (26%) or preferring not to say (4%). Top reasons cited for not wearing a helmet were sanitary concerns with a shared helmet (34%), not usually otherwise wearing a helmet (19%), not needing a helmet for riding slowly and in quiet areas (13%), and poor fit (11%).

Motivators & Barriers

Top motivators to using the system were being able to ride one-way/for just part of one's trip (79%); not having to worry about having one's bike stolen (65%); and being able to get around more easily than other types of transportation (62%). Top barriers to riding Mobi bikes more were rain and bad weather (53%); not having stations where members are coming from (e.g. home) or going (e.g. work, school) (53%); and not wanting to ride on hills (25%) or in traffic (23%) along one's route. Overall, members indicated strong support for expanding the operating area for the system but popularly recommended more stations in general and specifically in residential areas.

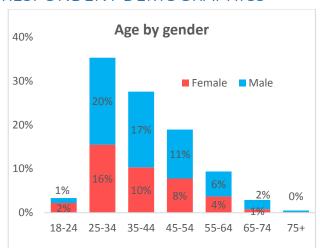
Mobi Customer Service

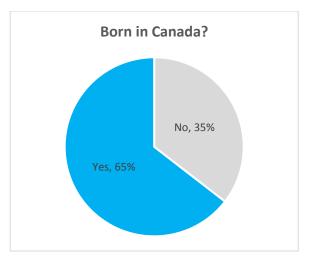
The Mobi member experience was overall rated well, including plan options, pricing, finding stations and locking and unlocking a bike. Largest areas needing attention or improvement include customer service, methods to report problems with the bikes, lighting and maps at station. Fewer than 60% thought the Mobi app, online map and website were good or excellent also revealing opportunity for improvement.

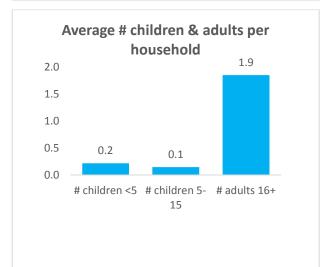


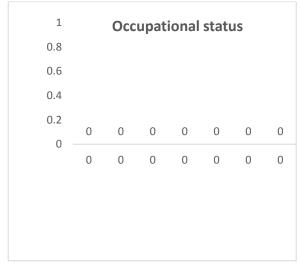


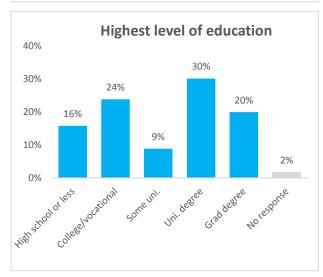
RESPONDENT DEMOGRAPHICS

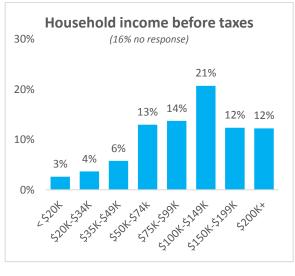










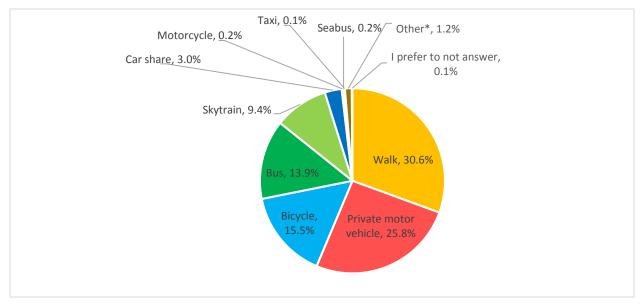






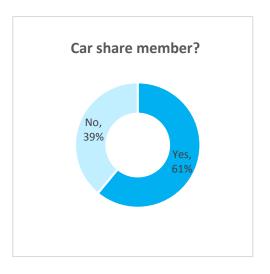
TRANSPORTATION PATTERNS

Overall, which mode of transportation do you use most often to get around?



^{*} Other includes: an equal mix of modes—can't pick one (n=8), main mode varies by season (n=2), a mix of modes depending on destinations (n=5), West Coast Express (n=3), water taxi (n=2)

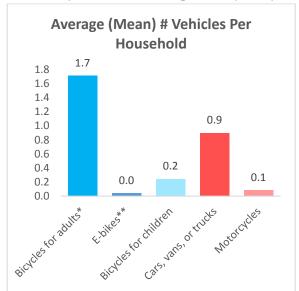
Primary mode of		
transportation	n	%
Walk	538	30.6%
Private motor vehicle	453	25.8%
Bicycle	273	15.5%
Bus	244	13.9%
Skytrain	166	9.4%
Car share	52	3.0%
Motorcycle	4	0.2%
Seabus	4	0.2%
Taxi	2	0.1%
Other*	21	1.2%
I prefer to not answer	2	0.1%
Total Responses	1759	100%

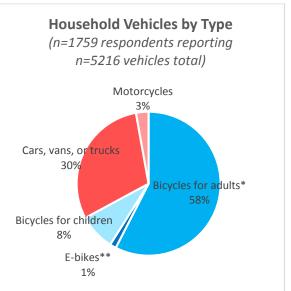






How many of the following are kept in your household?





# of vehicle per household	Bicycles adults*	for	E-bikes**		Bicycles for children		Cars, vans, trucks	or	Motorcycle	es
регновоснова	n	%	n	%	n	%	n	%	n	%
0	537	31%	1692	96%	1528	87%	601	34%	1631	93%
1	363	21%	41	2%	96	5%	811	46%	92	5%
2	435	25%	9	1%	72	4%	270	15%	20	1%
3	189	11%	0	0%	34	2%	47	3%	5	0%
4	110	6%	0	0%	12	1%	9	1%	0	0%
5	48	3%	0	0%	2	0%	3	0%	0	0%
6	26	1%	1	0%	3	0%	1	0%	0	0%
7	18	1%	0	0%	0	0%	0	0%	0	0%
8	11	1%	0	0%	1	0%	1	0%	0	0%
9	6	0%	1	0%	0	0%	0	0%	0	0%
10	5	0%	0	0%	0	0%	0	0%	0	0%
11	1	0%	0	0%	0	0%	1	0%	0	0%
12	3	0%	0	0%	0	0%	0	0%	0	0%
I prefer to not										
answer	7	0%	15	1%	11	1%	15	1%	11	1%
Total										
respondents	1759	100%	1759	100%	1759	100%	1759	100%	1759	100%
Total # type of										
vehicle	3001		74		426		1568		147	3001
% Vehicle type	58%		1%		8%		30%		3%	
MEDIAN	1.0		0.0		0.0		1.0		0.0	
MODE	0.0		0.0		0.0		1.0		0.0	
MIN	0.0		0.0		0.0		0.0		0.0	
MEAN	1.7		0.0		0.2		0.9		0.1	

^{*(}including tandems, trikes, or cargo bikes without electric assist)

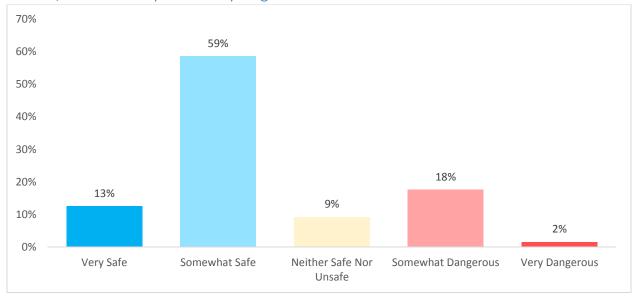
^{** (}including all bikes with any form of assistance)





PERCEPTIONS OF CYCLING SAFETY IN VANCOUVER

Overall, how safe do you think cycling is in Vancouver?

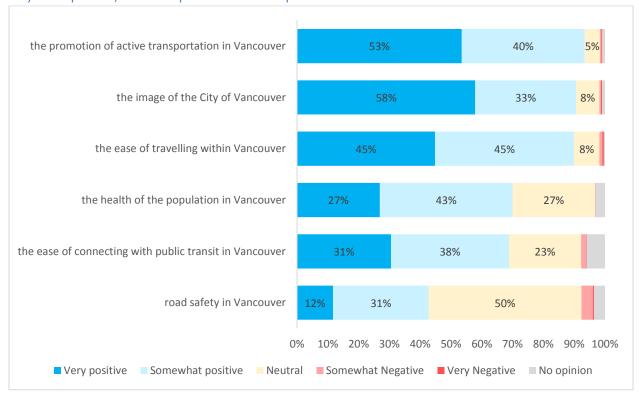


Response	n	%
Very Safe	220	13%
Somewhat Safe	1030	59%
Neither Safe nor Unsafe	162	9%
Somewhat Dangerous	309	18%
Very Dangerous	27	2%
Don't Know/Not Sure	10	1%
I prefer to not answer	1	0%
TOTAL	1759	100%





In your opinion, what impact has the implementation of Mobi had on...



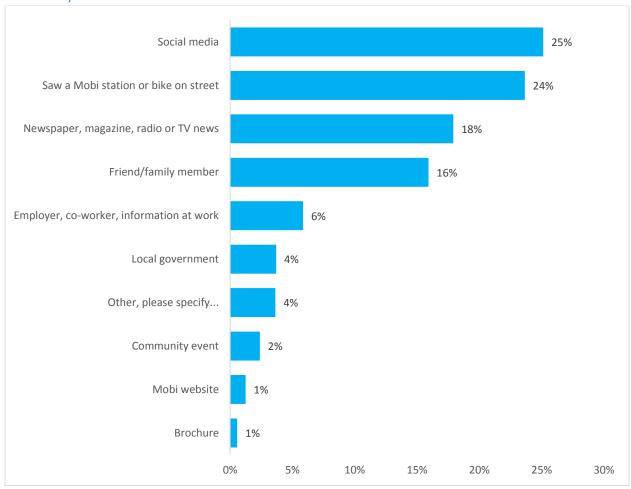
	Very positive	Somewhat positive	Neutral	Somewhat Negative	Very Negative	No opinion
road safety in Vancouver	12%	31%	50%	4%	0%	4%
the ease of connecting with						
public transit in Vancouver	31%	38%	23%	2%	0%	6%
the health of the population						
in Vancouver	27%	43%	27%	0%	0%	3%
the ease of travelling within						
Vancouver	45%	45%	8%	1%	0%	0%
the image of the City of						
Vancouver	58%	33%	8%	1%	0%	1%
the promotion of active						
transportation in Vancouver	53%	40%	5%	0%	0%	1%





MOBI BIKE SHARE USE

How did you first learn about Mobi?

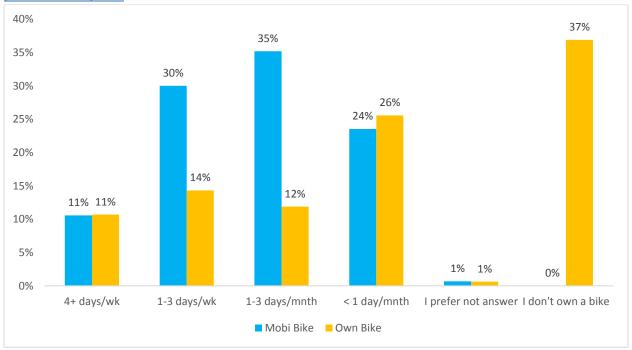


Response	n	%
Social media	442	25%
Saw a Mobi station or bike on street	416	24%
Newspaper, magazine, radio or TV news	315	18%
Friend/family member	280	16%
Employer, co-worker, information at work	103	6%
Local government	65	4%
Other, please specify	64	4%
Community event	42	2%
Mobi website	22	1%
Brochure	10	1%
Total	1759	100%





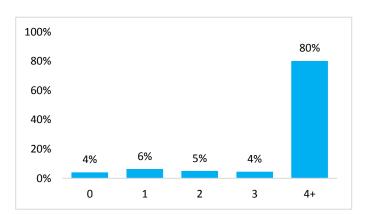
In the past <u>3 MONTHS</u>, how often did you typically travel using a <u>Mobi bicycle/your own</u> personal bicycle?



	Mobi Bike		Persona	l Bike
Response	n	%	n	%
4 or more days per week	186	11%	188	11%
1-3 days per week	528	30%	252	14%
1-3 days per month	619	35%	209	12%
Less than once per month	414	24%	450	26%
I prefer to not answer	12	1%	11	1%
I don't own a bike	n/a	n/a	649	37%
Total Responses	1759	100%	1759	100%

Since joining Mobi, how many trips have you made on a Mobi bike?

Response		n	%
	0	72	4%
	1	111	6%
	2	88	5%
	3	78	4%
4	+	1410	80%
Total Responses		1759	100%

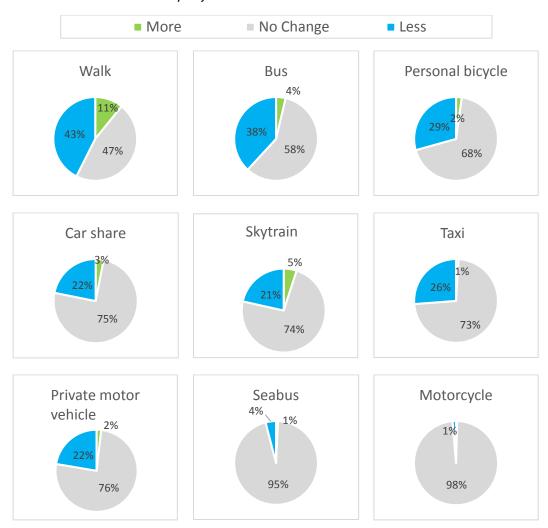






Shifts in travel modes

As a result of your use of Mobi, do you use each of the following types of travel options more often, less often, or about the same as before you joined Mobi?



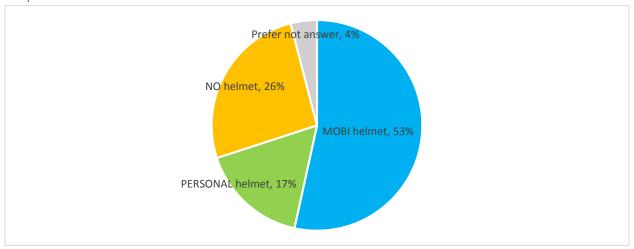
%	Much more often	Somewhat more often	About the same	Somewhat less often	Much less often	NA/never used
Walk	2.0%	8.9%	45.5%	38.5%	4.1%	1.0%
Bus	1.0%	2.7%	39.8%	26.7%	11.5%	18.4%
Personal bicycle	0.5%	1.7%	30.1%	17.2%	12.1%	38.4%
Taxi	0.2%	0.8%	33.0%	15.0%	11.3%	39.9%
Private motor vehicle	1.0%	0.9%	47.9%	16.9%	5.4%	28.0%
Car share	0.5%	2.6%	33.1%	16.4%	5.5%	42.0%
Skytrain	1.2%	3.8%	58.7%	15.0%	6.5%	14.8%
Seabus	0.2%	0.6%	39.3%	1.8%	2.3%	55.9%
Motorcycle	0.2%	0.3%	8.9%	0.7%	0.6%	89.3%





HELMET USE

Which of the following best describes your TYPICAL helmet use when riding a Mobi bicycle?

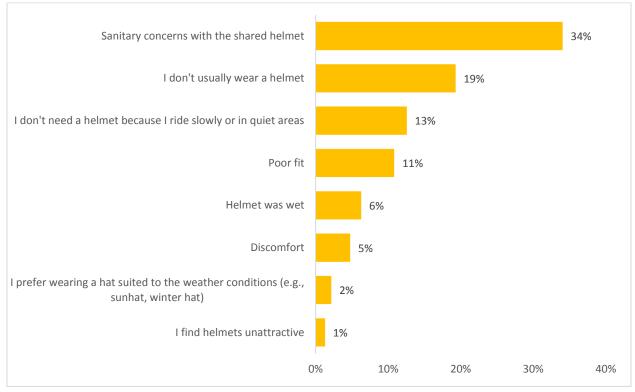


Response	n	%
I wear the provided MOBI bike helmet	940	53%
I wear my personal bike helmet	291	17%
I don't typically wear a helmet	457	26%
I prefer to not answer	71	4%
Total Responses	1759	100%





What is your main reason for not typically using a helmet when riding a Mobi bicycle?



Response	n	%
Sanitary concerns with the shared helmet	157	9%
I don't usually wear a helmet	89	5%
I don't need a helmet because I ride slowly or in quiet areas	58	3%
Poor fit	50	3%
Helmet was wet	29	2%
Discomfort	22	1%
I prefer wearing a hat suited to the weather conditions	10	1%
I find helmets unattractive	6	0%
I prefer to not answer	2	0%
Helmet was damaged	1	0%
Other, please specify *	36	4%
NA (Wears helmet) / Missing	1299	74%
Total Responses	1759	100%

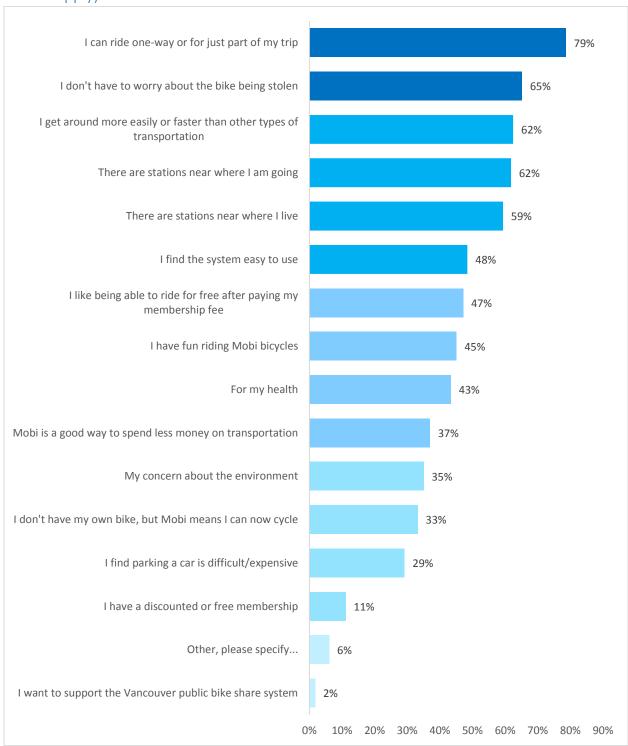
^{*}Other includes: I don't believe helmets make cyclists safer/ mandatory helmets infer cycling is dangerous (n=12), All of the above/I choose multiple reasons (n=9), I don't like the helmet law (n=5), It messes my hair (n=3), Because it's optional (n=2), and Inconvenience (n=2)





MOTIVATORS & BARRIERS

In general, which of the following reasons motivated your decision to use Mobi? (Select all that apply)







In general, which of the following reasons motivated your decision to use Mobi? (Select all that apply)

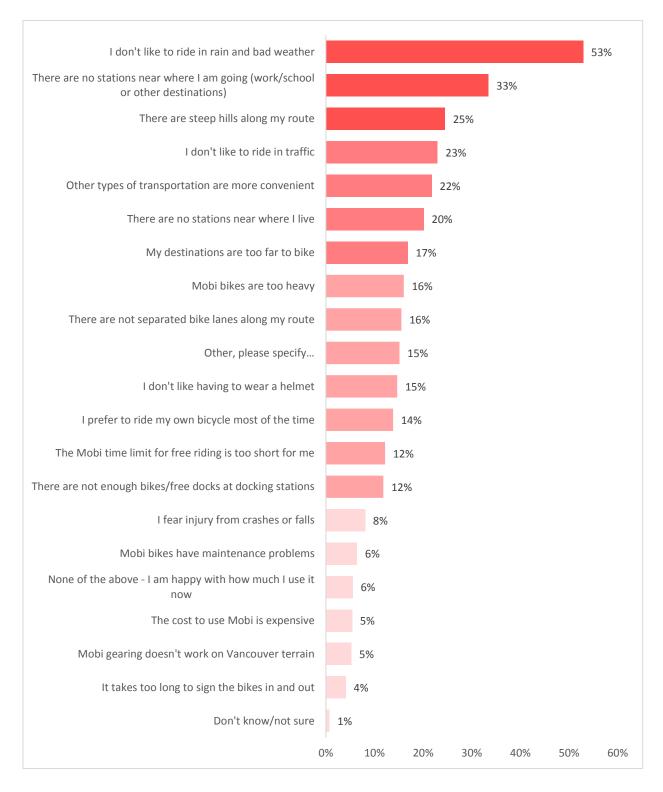
Response	n	%
I can ride one-way or for just part of my trip	1383	79%
I don't have to worry about the bike being stolen	1146	65%
I get around more easily or faster than other types of transportation	1099	62%
There are stations near where I am going	1087	62%
There are stations near where I live	1044	59%
I find the system easy to use	852	48%
I like being able to ride for free after paying my membership fee	829	47%
I have fun riding Mobi bicycles	793	45%
For my health	763	43%
Mobi is a good way to spend less money on transportation	650	37%
My concern about the environment	616	35%
I don't have my own bike, but Mobi means I can now cycle	584	33%
I find parking a car is difficult/expensive	513	29%
I have a discounted or free membership	196	11%
Other, please specify	107	6%
I want to support the Vancouver public bike share system	31	2%
It is an employer benefit	17	1%
Don't know/not sure	8	0%
Total Responses	11718	-

Number of motivating factors	n	%
1	176	10.01
2	60	3.41
3	97	5.51
4	110	6.25
5	174	9.89
6	208	11.82
7	210	11.94
8	170	9.66
9	167	9.49
10	166	9.44
11	115	6.54
12	71	4.04
13	29	1.65
14	4	0.23
15	2	0.11





In general, which of the following reasons <u>prevent you</u> from using Mobi more often? (Select all that apply)







In general, which of the following reasons prevent you from using Mobi more often? (Select all that apply)

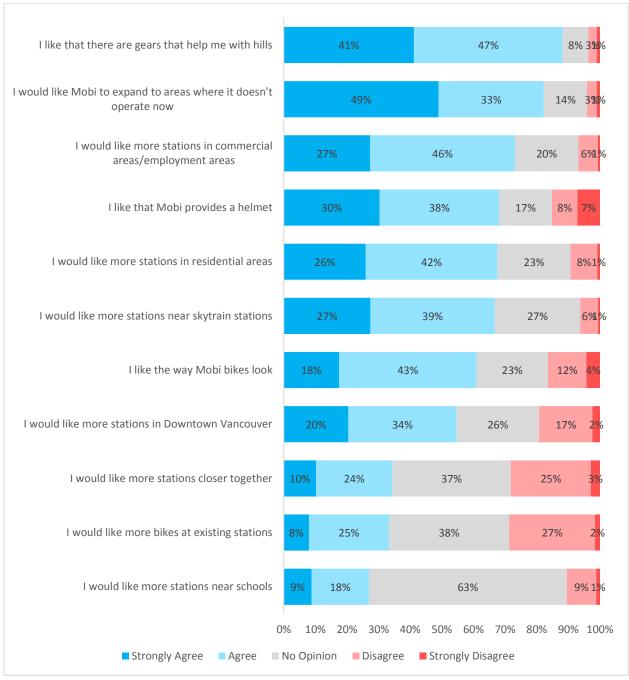
Response	n	%
I don't like to ride in rain and bad weather	931	53%
There are no stations near where I am going (work/school or other		
destinations)	588	33%
There are steep hills along my route	431	25%
I don't like to ride in traffic	404	23%
Other types of transportation are more convenient	383	22%
There are no stations near where I live	354	20%
My destinations are too far to bike	296	17%
Mobi bikes are too heavy	282	16%
There are not separated bike lanes along my route	273	16%
Other, please specify	266	15%
I don't like having to wear a helmet	258	15%
I prefer to ride my own bicycle most of the time	243	14%
The Mobi time limit for free riding is too short for me	214	12%
There are not enough bikes/free docks at docking stations	208	12%
I fear injury from crashes or falls	142	8%
Mobi bikes have maintenance problems	113	6%
None of the above - I am happy with how much I use it now	97	6%
The cost to use Mobi is expensive	95	5%
Mobi gearing doesn't work on Vancouver terrain	92	5%
It takes too long to sign the bikes in and out	72	4%
Don't know/not sure	13	1%

Number of barriers	n	%
1	382	22%
2	352	20%
3	346	20%
4	251	. 14%
5	188	11%
6	117	7%
7	59	3%
8	31	. 2%
9	19	1%
10	7	0%
11	4	0%
12	1	. 0%
13	1	. 0%
14	1	. 0%





Please share how strongly you agree or disagree with each statement relating to Mobi service area and supply







Please share how strongly you agree or disagree with each statement relating to Mobi service area and supply

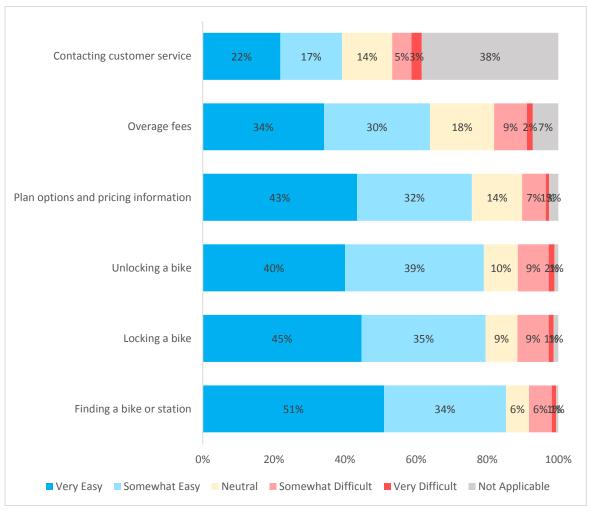
	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
I would like more stations near schools	9%	18%	63%	9%	1%
I would like more bikes at existing station	8%	25%	38%	27%	2%
I would like more stations closer together	10%	24%	37%	25%	3%
I would like more stations Downtown	20%	34%	26%	17%	2%
I like the way Mobi bikes look	18%	43%	23%	12%	4%
I would like more stations near skytrain stations	27%	39%	27%	6%	1%
I would like more stations in residential areas	26%	42%	23%	8%	1%
I like that Mobi provides a helmet	30%	38%	17%	8%	7%
I would like more stations in commercial areas/employment areas	27%	46%	20%	6%	1%
I would like Mobi to expand to areas where it doesn't operate now	49%	33%	14%	3%	1%
I like that there are gears that help me with hills	41%	47%	8%	3%	1%





MOBI CUSTOMER SERVICE

Please rate how easy or difficult it was for you to understand the following when using Mobi

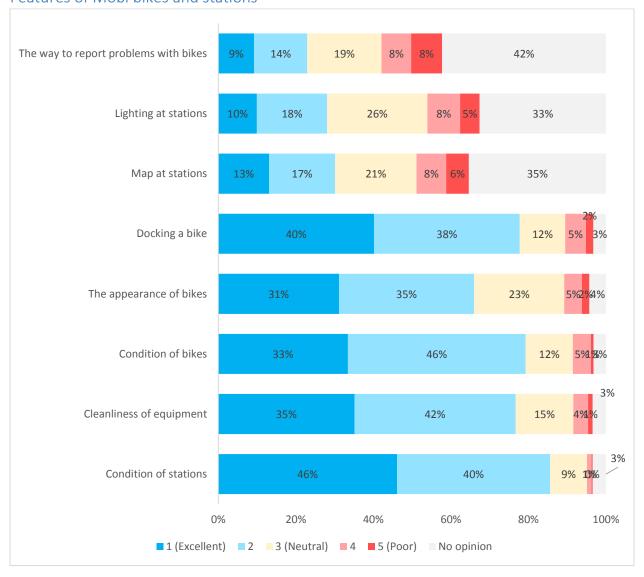


	Very Easy	Somewhat Easy	Neutral	Somewhat Difficult	Very Difficult	Not Applicable
Finding a bike or station	51%	34%	6%	6%	1%	1%
Locking a bike	45%	35%	9%	9%	1%	1%
Unlocking a bike	40%	39%	10%	9%	2%	1%
Plan options & pricing info	43%	32%	14%	7%	1%	3%
Overage fees	34%	30%	18%	9%	2%	7%
Contacting customer service	22%	17%	14%	5%	3%	38%





Features of Mobi bikes and stations

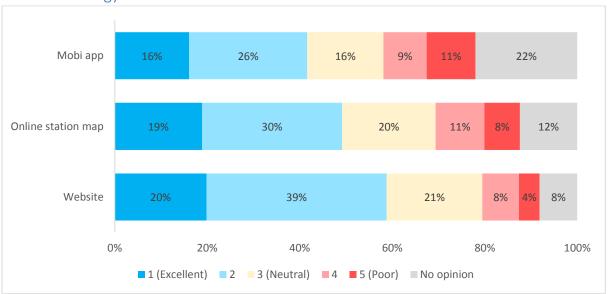


	(Excellent)		(Neutral)		oor) N	lo opin	ion
	1	2	3	4	5	6	
The way to report problems with bikes	9%	14%	19%	8%	8	%	42%
Map at stations	13%	17%	21%	8%	6	%	35%
Lighting at stations	10%	18%	26%	8%	5	%	33%
Docking a bike	40%	38%	12%	5%	2	%	3%
The appearance of bikes	31%	35%	23%	5%	2	%	4%
Condition of bikes	33%	46%	12%	5%	1	%	3%
Cleanliness of equipment	35%	42%	15%	4%	1	%	3%
Condition of stations	46%	40%	9%	1%	0	%	3%





Mobi technology

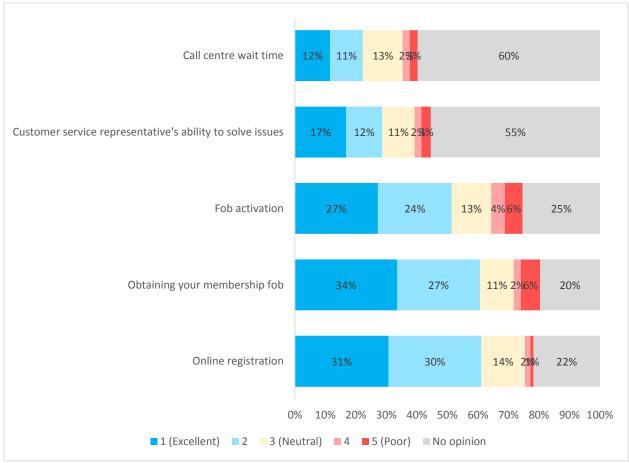


						No
	(Excellent)		(Neutral)		(Poor)	opinion
	1	2	3	4	5	6
Website	20%	39%	21%	8%	4%	8%
Online station map	19%	30%	20%	11%	8%	12%
Mobi app	16%	26%	16%	9%	11%	22%





Registration and the Call Centre



	(Excelle	nt)	(Neutral)	(Poor) No opini		inion
	1	2	3	4	5	6
Online registration	31%	30%	14%	2%	1%	22%
Obtaining your membership fob	34%	27%	11%	2%	6%	20%
Fob activation	27%	24%	13%	4%	6%	25%
Customer service representative's						
ability to solve issues	17%	12%	11%	2%	3%	55%
Call centre wait time	12%	11%	13%	2%	3%	60%





APPENDIX A: FULL INVENTORY OF 2016 MOBI MEMBER ONLINE SURVEY QUESTIONS

Question results reported in this document indicated ()

TRAVEL BEHAVIOUR

- *1. Overall, which mode of transportation do you use most often to get around?
- *2. Overall, how safe do you think cycling is in Vancouver? Would you say it is:
- *3. In the past 3 MONTHS, how often did you typically travel using a Mobi bicycle?
- *4. In the past 3 MONTHS, how often did you typically travel using your own bike?
- 5. In the past <u>7 DAYS</u>, did you do any of the following? (Please don't count any activity twice)

MOBI USE

- *6. How did you first learn about Mobi?
- *7. In your opinion, what impact has the implementation of Mobi had on...
 - a. the image of the City of Vancouver
 - b. road safety in Vancouver
 - c. the ease of travelling within Vancouver
 - d. the promotion of active transportation in Vancouver
 - e. the health of the population in Vancouver
 - f. the ease of connecting with public transit in Vancouver
- *8. As a result of your use of Mobi, do you use each of the following types of travel options more often, less often, or about the same as before you joined Mobi?
- *9. Which of the following best describes your TYPICAL helmet use when riding a Mobi bicycle?
- *10. What is your main reason for not typically using a helmet when riding a Mobi bicycle?

MOBI TRIPS

- 11. Since joining Mobi, how many trips have you made on a Mobi bike?
- 12. Please think about your most recent trip on Mobi. We shall call this "Trip A".

TRIP A:

- i. What was the trip purpose?
- ii. Would you have made this trip if Mobi was not available?
- iii. If YES, what mode would you have used?
- iv. What other modes of transportation did you combine with Mobi on this trip?

(Repeat for TRIP B, C, D etc.)

MOTIVATORS & BARRIERS

- *13. In general, which of the following reasons motivated your decision to use Mobi?
- *14. In general, which of the following reasons prevent you from using Mobi more often?
- *15a. Please share how strongly you agree or disagree with each statement relating to the Mobi service area and supply
- 15b. Where specifically would you like Mobi to install another station (e.g. street, neighbourhood, landmark)?





MOBI CUSTOMER SERVICE

- *16. Please rate how easy or difficult it was for you to understand the following when using Mobi:
- Please rate the following questions on a scale of 1 to 5, where 1 is Excellent and 5 is Poor. (Select one option)
 - *17. Features of Mobi bikes and stations:
 - *18. Mobi technology:
 - *19. Registration and the Call Centre:

SAFETY & CYCLING INCIDENTS

- 20. How many times in the past <u>3 months</u> have you been involved in a crash or fall (for any reason) while riding your own bike in the city?
- 21. How many times in the past <u>3 months</u> have you been involved in a crash or fall (for any reason) while riding a <u>Mobi bicycle</u> in the city?
- 22. Please think about your most recent crash or fall. We shall call this "Crash/Fall A".

CRASH/FALL A:

- a. What was the month of the crash or fall?
- b. Did your crash or fall involve any of the following?
- c. Were you on a Mobi bike at the time of the crash or fall?
- d. Did any of the following result from your crash or fall?
- e. Was the crash reported to any of the following?(repeat for CRASH/FALL B, C etc.)

DEMOGRAPHIC INFORMATION

- 23. Do you have a driver's licence?
- 24. What car share services do you belong do?
- 25. How many of the following are kept in your household?
- *26. How many people, including yourself, live in your household?
- *27. Are you...? male or female?
- *28. What year were your born?
- *29. What is the highest level of education you have completed?
- 30. What is your postal code of your home?
- *31. What best describes your current employment status?
- 32a. What is the postal code of your main place of work or study?
- 32b. If you do not know the postal code, please give the name of your workplace or school and nearby cross-streets of your place of work or study
- *33. Were you born in Canada?
- 34. Vancouver residents come from many different backgrounds. How would you describe yourself?
- 35. In general for someone your age, would you say that your health is:
- *36. Which of the following best describes your total annual household income before taxes?
- 37. Finally, do you have any suggestions to improve Mobi