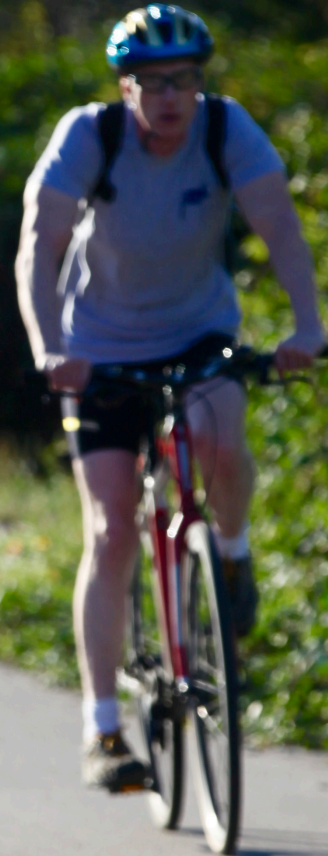


# ARBUTUS GREENWAY EVALUATION

**INTERACT**

INTERVENTIONS, RESEARCH,  
AND ACTION IN CITIES TEAM

## 2019 Report to Stakeholders



 active  
aging  
ENGAGE. EVALUATE. MOBILIZE.



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# INTRODUCTION

Our postal code may be a better predictor of our health than our genetic code. The design of our neighbourhoods influences how we move, feel, and interact, in turn impacting our chances of experiencing poor health outcomes like heart disease, diabetes, and cancer. Canada has committed to spending more than \$180 billion on infrastructure over 12 years. How will these investments impact our health and well-being? Who stands to benefit, and how?

The Active Aging Research Team (AART) from the Centre for Hip Health and Mobility is conducting research that aims to characterize the social and health impacts of the Arbutus Greenway development. AART will assess who, what, when, where, why, or why not people in surrounding neighbourhoods (or elsewhere) use the Arbutus Greenway. They seek to understand whether the Arbutus Greenway contributes to peoples' health and social interactions.

AART is also a part of a CIHR funded research team - INTERventions, Research, and Action in Cities Team (INTERACT). INTERACT is a national collaboration of scientists, urban planners, and public health decision-makers with a common vision of healthy, equitable, and sustainable cities by design. In partnership with cities and citizens, we harness big data to deliver timely public health intelligence on the influence of the built environment on health, well-being, and social inequities. Initially launching in four cities across Canada – Victoria, Vancouver, Saskatoon, and Montreal – INTERACT will evaluate the health impact of real world urban form interventions. The Arbutus Greenway is the study focus for the Vancouver site of INTERACT.



## AIMS

### 1. UNDERSTAND CONTEXT

Through engagement with stakeholders, we characterize the context of the intervention, including factors that impact its success or failure.

### 2. MEASURE CHANGE

With tools that integrate mobile sensing and geographic information science, INTERACT is objectively measuring changes in the urban environment.

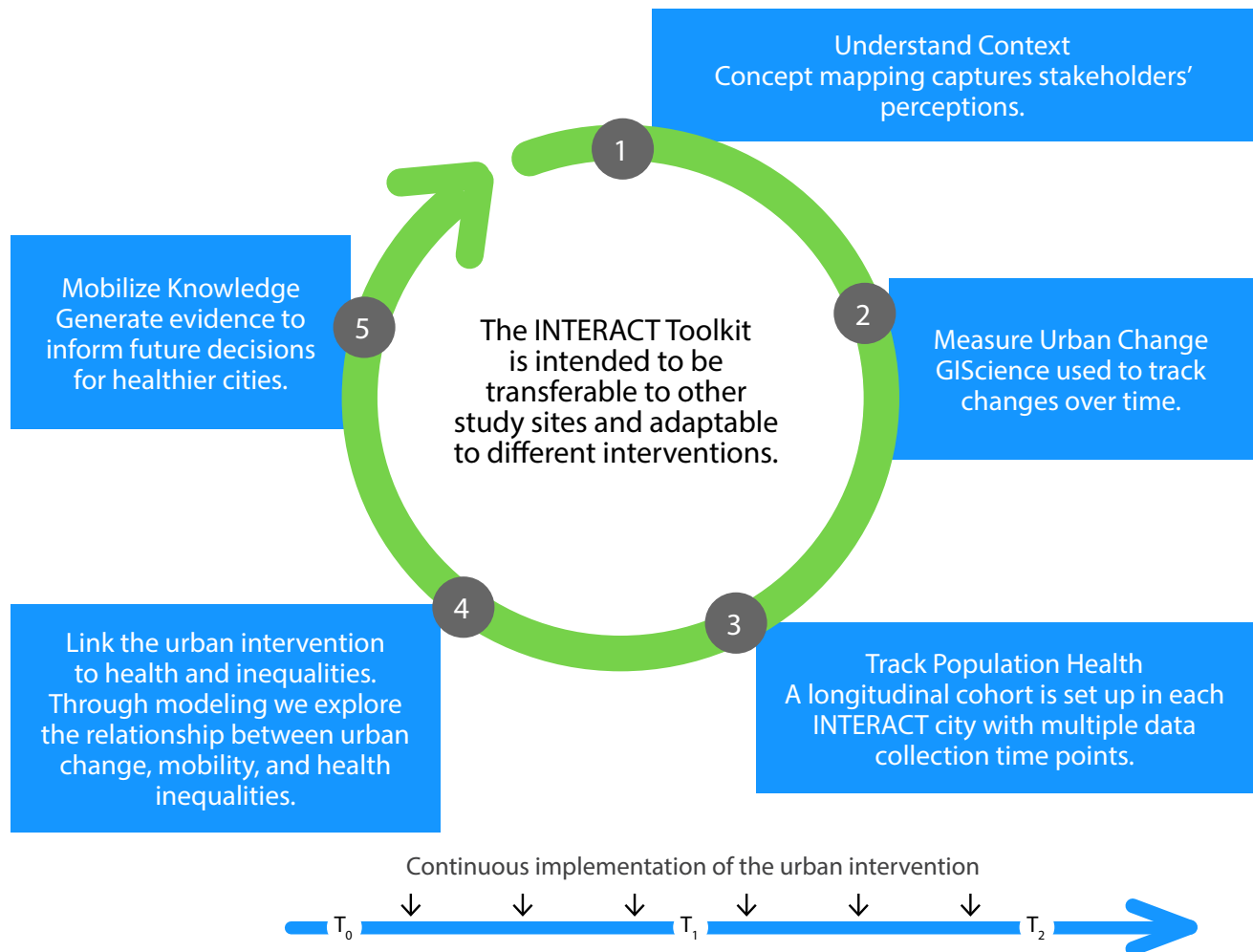
### 3. ANALYZE IMPACT

Using mixed methods, INTERACT is collecting data from participants over a five-year period to analyze the impact on health and well-being.

### 4. MOBILIZE KNOWLEDGE

We are producing timely evidence to guide decision-making on the ongoing implementation of the intervention and future investments in healthy urban development, as well as building capacity in urban research.

# OUR TOOLKIT



## Participant Tools

1. ONLINE SURVEYS - standardized questions for health, well-being, travel, and demographics.
2. NOVEL MAP-BASED SURVEY (VERITAS) - to understand where and with whom people travel.
3. WEARABLES AND SMARTPHONE APPS - record where and when people are active. Surveys to measure well-being.
4. INTERVIEWS - gain a deeper understanding of neighbourhoods, social connection, well-being, and the impact of the intervention.



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# INTERVENTION

## THE ARBUTUS GREENWAY VANCOUVER, BC

Vancouver's Arbutus Greenway project is transforming a historic railway into a vibrant corridor for people to walk, cycle, roll, and connect.

INTERACT and the Active Aging Research Team have launched a five-year study to uncover how the development of Vancouver's Arbutus Greenway is impacting physical activity, social participation, and well-being of nearby residents, and whether these impacts are felt equally across different socioeconomic groups.

### LOCAL STUDY TEAM

#### Research Leads

Meghan Winters (SFU)  
Joanie Sims-Gould (UBC)  
Heather McKay (UBC)

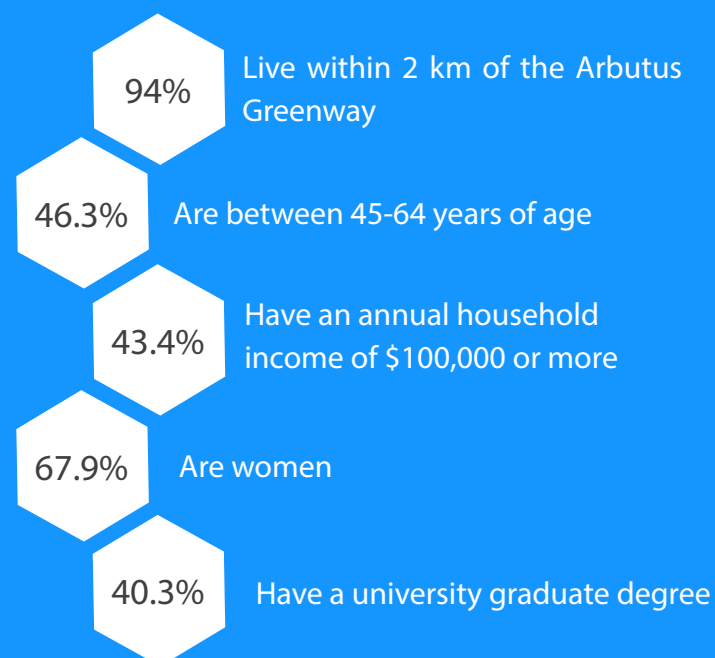
#### Knowledge Users

Dale Bracewell, City of Vancouver  
Maggie Buttle, City of Vancouver  
Megan Fitzgerald, City of Vancouver

#### Project Staff

Caitlin Pugh (Coordinator)  
Callista Ottoni (Qualitative Lead)  
Stella Zhou (Project Intern)

## OUR PARTICIPANTS



2017	2018	2019	2020
<ul style="list-style-type: none"> <li>• Qualitative study with older adults – first wave</li> <li>• Focus group study of youth perspectives</li> <li>• Quantitative data collection - pilot</li> <li>• Intercept surveys and count data</li> <li>• <b>Temporary path constructed on the Arbutus Greenway</b></li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative data collection – first wave</li> <li>• Intercept surveys and count data</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative study with older adults – second wave</li> <li>• Count data</li> <li>• <b>Construction begins towards finalized design along the Arbutus Greenway</b></li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative data collection – second wave</li> <li>• <b>Ongoing construction along the Arbutus Greenway</b></li> </ul>

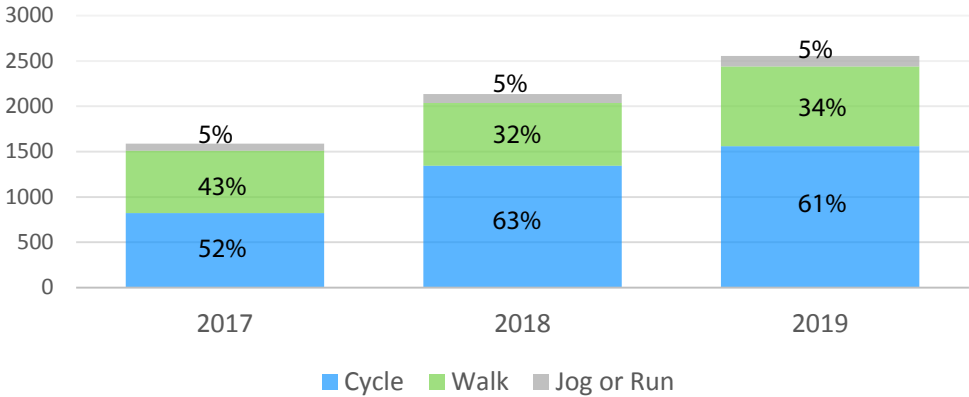
# HOW MANY PEOPLE ARE USING THE ARBUTUS GREENWAY?

We collected data at four locations in different neighbourhoods along the Arbutus Greenway in the spring of 2017, 2018, and 2019. Three data collection sessions were conducted per site, on weekdays at mid-day and afternoon commute times, and on weekends at mid-day.

## HOW ARE THEY USING IT?

We observed an increase in users each year (1587 users per hour totalled across all sites in 2017, 2133 in 2018, and 2555 in 2019). From 2017 to 2018, we observed substantial growth in people cycling along the Arbutus Greenway (52% to 63% of the total users), which remained high in 2019.

HOURLY USERS

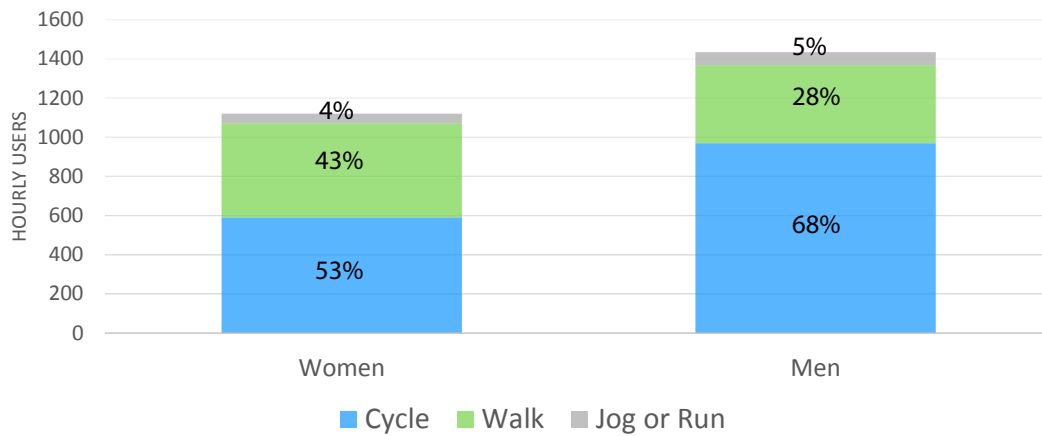




## GENDER

We observed more men along the Arbutus Greenway than women (56% men, 44% women in 2019), consistent across all years. In terms of travel mode, men and women were more likely to cycle than walk.

### MORE MEN USED THE GREENWAY IN 2019, AND THEY TENDED TO BE ON BICYCLES

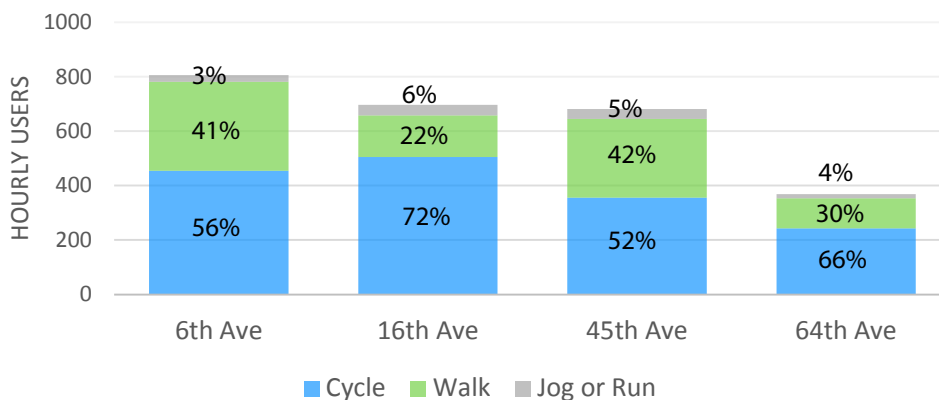


## USAGE IN DIFFERENT AREAS ALONG THE ARBUTUS GREENWAY

The four sites where we collected data on users were: 6th Ave at Cypress St, 16th Ave, 45th Ave, and 64th Ave. These sites were selected based on volume of users, presence of nearby bicycle routes, proximity to schools, and a priority for sites where people appeared to be making intentional trips along the Arbutus Greenway, as opposed to short-cuts through.

In all years, 64th Ave was the least busy of the sites. There was growth in user volumes year on year at all sites, with the exception of 64th Ave where volumes were consistent from 2018 to 2019. In terms of user mix, there was a greater proportion of people cycling at 16th Ave (72% in 2019).

### 2019 HOURLY USERS BY SITE



## AGE OF GREENWAY USERS

**72%** Of Arbutus Greenway users in 2019 were between 18-59 years old (estimated)

There was a slight increase in older adults along the Arbutus Greenway from 2017 to 2019 (424 per hour to 555 per hour, across all sites)



There was a slight decrease in the number of children along the Arbutus Greenway from 2017 to 2019 (189 per hour to 163 per hour, across all sites)





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# THE EXPERIENCES OF OLDER ADULTS

In addition to our data collection on usage along the Arbutus Greenway, we focused more specifically about the experiences of older adults (aged 65+ years). A common view of inclusive city building is that if you make a city great for people 8 to 80 years old - you make it great for everyone.

In 2017, we interviewed 42 older adults with an average age of 73 years, who all lived close to the Arbutus Greenway. Findings from our qualitative interviews from 2017 (the “first wave” of our research) is available; [Preliminary Evaluation Report](#)



In 2019, we followed up with 16 of those participants. We were curious about what had changed, and what had stayed the same. We asked them questions about their behaviours, likes, and dislikes in relation to the Arbutus Greenway.

In 2019, 75 percent of our interview participants were women, and their mean age was 76 years. We asked them about their typical use of the Arbutus Greenway. Fourteen of 16 respondents had used it in the past month. All indicated they plan to use the Arbutus Greenway in the future.

79 percent of the participants we interviewed used the Arbutus Greenway either more or the same as they did in 2017. 86 percent thought the safety and security along the Arbutus Greenway was excellent or good. A majority typically walked along the Arbutus Greenway as their preferred mode (92%), and 3 of our participants use a mobility aid when they walk.

We now highlight five themes that cross-cut many of the interviews:

## 1) OASIS IN THE CITY

Participants were motivated to spend time on the Arbutus Greenway to take in the sights, sounds, and calming effects of a natural environment.

“...It just feels spacious and open. I feel like I’m suddenly in the midst of nature in a middle of a very busy city, and it’s just peaceful.”

-Participant, Kerrisdale

“The humming birds were fluttering by, it was wonderful. I sit on that bench, and I can not only can see nature and I can smell it. The neighbouring flowers, the vegetation, and it’s like the earth is all there.”

-Participant, Marpole



## 2) FRIENDLY FACES

Many participants commented that informal social interactions along the Arbutus Greenway positively contributed to their experiences.

"It has opened an all new avenue of meeting and greeting people and getting to know neighbors."

-Participant, Marpole

"...Even total strangers say 'Hi, how are you? Enjoy the good weather?' or whatever. It creates openness for communication."

-Participant, Kitsilano



## 3) SAFE SPACE...MOSTLY



Many participants were encouraged to use the Arbutus Greenway since they found it to be safe physically and psychologically.

"It's easy walking, like I don't have to worry about whether or not I'm going to stumble...and if something were to happen to me health wise while I was walking, it wouldn't be long before somebody came by."

-Participant, Kitsilano

Despite noting mostly respectful interactions between people walking and cycling, some participants (especially those recovering from a fall, or who used a mobility aid) still felt scared. They commented that improved markings, cyclist speed calming, and physical separation between modes would make them feel safer.

"I have been surprised that the markings separating cyclists from pedestrians have been observed. Generally speaking I think the markings are good, but they could be reinforced at every intersection so new people coming off the side streets know rules of the game."

-Participant, Kerrisdale

"For older person in wheelchair it can seem overwhelming when bicycles move quicker than I do... I don't like to feel vulnerable."

-Participant, Marpole



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## 4) UNINTERRUPTED, SMOOTH STROLL

A favourite feature of many participants was the smooth pavement, uninterrupted by cars and frequent intersections.

"It's a great way to visit, we like the long stretches we can do, no traffic. We can hear each other when we talk. You know, we can breathe."

-Participant, Arbutus Ridge

"The pavement [encourages me to use the greenway]...you don't have to be looking where you're going to trip. Its smooth, well kept. And also I'm a bit older, you don't want to be watching your feet all the time."

-Participant, Kitsilano







## 5) AREAS FOR IMPROVEMENT

Most of the criticisms of the Arbutus Greenway centred on lack of specific amenities. Participants identified the need for more dog waste disposal bins, benches, water fountains, lights, trees for shade, and accessible bathrooms. While for many, these were a 'nice to have,' for those individuals with mobility limitations, they were essential to their ability to use the Arbutus Greenway:

"You have good days and bad days, you may be recovering from something [and unable to walk that far]. So I would like to see definitely many more benches."

-Participant, Kitsilano

"If I want to come home from an evening show from the Fifth Avenue theatre, I don't take the greenway because I won't feel safe if there are no overhead lights...I would feel better if it was just lit."

-Participant, Kitsilano

Many participants were curious about the next stages of the Arbutus Greenway development. They speculated about what changes will happen in the areas they frequent. One participant, who walked the Arbutus Greenway regularly as part of his recovery from knee surgery and cancer, had this message for the City:

"I couldn't do without [the Arbutus Greenway], so don't go messing with it unless you make it even more beautiful."

-Participant, Arbutus Ridge





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# LOOKING AHEAD

Our team will conduct another round of data collection in the spring and summer of 2020. We will also be recruiting additional participants to account for any attrition in our cohort. Analysis of the data is continuing with staff and trainees across the country working to answer some of our many research questions.

For example:

- What type of urban environments are associated with greater social participation?
- What are methods for detection of transportation mode using accelerometer and GPS data?
- How does using active transportation relate to feelings of well-being?
- What are participants' experience of place as it pertains to physical activity, social participation, and well-being?

We are continuing to work with stakeholders and partners across the country. Please contact us at: [vancouver@teaminteract.ca](mailto:vancouver@teaminteract.ca)

## Acknowledgements

This report was prepared by Caitlin Pugh, Karen Laberee, Meghan Winters, and Callista Ottoni. Photographs were taken by Callista Ottoni. Participant interviews were conducted by Douglas Race, Caitlin Pugh, and Callista Ottoni. Thank you to Tammy Do for conducting the 2019 Arbutus Greenway counts. We appreciate the support from the City of Vancouver. Finally, we are grateful to all of the participants who contributed to this research.

