

GRANVILLE BRIDGE CONNECTOR

Engagement Summary Phases 1 - 3

Q3 2020



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Granville Bridge Connector

Engagement Summary

The City of Vancouver conducted a three-phase engagement process on the *Granville Bridge Connector* to provide new walking, rolling, and cycling connections across the Granville Bridge, as directed by Council in January 2019. This report summarizes feedback from all phases of engagement.

Summaries for individual phases of engagement are online at vancouver.ca/granvilleconnector.

Overall Engagement Approach

Public and stakeholder engagement took place throughout 2019 and early 2020. This work informed ongoing design efforts and included:

- Targeted discussions, walking tours, and workshops with key user groups and stakeholders that are most directly affected
- A three-phase public engagement process including open houses, workshops, walking tours, and surveys for the broader public to share their ideas and concerns

The three phases of public engagement are described below.

1. In **Phase 1 (April 2019)**, staff sought input on the draft project goals and invited the public to share how they currently use the bridge, along with specific ideas and concerns. Based on this engagement, staff refined the goals and explored over 20 options for the Connector.
2. In **Phase 2 (September 2019)**, staff provided the public with an opportunity to review and comment on six shortlisted design options, and shared information on other options which were explored but eliminated. Based on this engagement and further analysis, staff advanced the *West Side Plus* option, making refinements informed by public and stakeholder feedback.
3. In **Phase 3 (January & February 2020)**, staff presented a recommended design (a refined version of the *West Side Plus* option), and provided opportunities for the public to share opinions and provide further comments. In this phase, staff heard strong support for the recommended design, along with suggestions to consider as the design is developed in more detail.

The engagement will culminate with a report to Council on a recommended design in 2020.

What We Did

Stakeholder Engagement

Throughout the conceptual design process, City staff engaged with a wide range of stakeholders representing diverse interests. Outreach frequency and tactics varied depending on group availability and interest, and included phone conversations, in-person presentations and discussions, walking tours, and workshops.

Targeted groups represented local resident and business associations; transportation, seniors, accessibility, and placemaking organizations; citizen advisory bodies; equity seeking groups; emergency, health, and social services; and Granville Island. The full list of stakeholders consulted with is highlighted in *Table 1* below.

Staff also reached out to Musqueam, Squamish, and Tsleil-waututh First Nations through the City liaison, presenting at 2019 intergovernmental meetings and offering additional engagement opportunities should there be interest.

From project launch in early 2019 through March 2020, staff held over 80 stakeholder sessions with more than 830 participants. Additional meetings are taking place as staff finalize recommendations to Council.

Table 1: Stakeholder groups engaged

Stakeholder Group	Phase 1	Phase 2	Phase 3
CITY OF VANCOUVER ADVISORY COMMITTEES			
Children, Youth and Families Advisory Committee		✓	✓
Persons with Disabilities Advisory Committee		✓	✓
Seniors' Advisory Committee		✓	✓
Transportation Advisory Committee		✓	✓
Women's Advisory Committee			✓
Members of the former People with Disabilities and Seniors' Advisory Committees	✓		
EMERGENCY SERVICES & ENFORCEMENT			
BC Emergency Health Services		✓	✓
Vancouver Fire & Rescue Services	✓	✓	✓
Vancouver Police Department	✓	✓	✓
HEALTH SERVICES			
Canadian National Institute for the Blind	✓		✓
Rick Hansen Foundation			✓
Vancouver Coastal Health	✓	✓	✓
Vision Loss Rehabilitation Canada			✓
RESIDENT & BUSINESS ASSOCIATIONS			

Stakeholder Group	Phase 1	Phase 2	Phase 3
Burrard Slopes Stakeholder Association	✓		
Canada Mortgage Housing Corporation (CMHC) - Granville Island	✓	✓	✓
Downtown Vancouver Business Improvement Association	✓	✓	✓
False Creek South Neighbourhood Association	✓		
Granville Island Business & Community Association	✓	✓	
Granville Island Head Lease Tenants		✓	
South Granville Business Improvement Association	✓	✓	✓
West 4 th Avenue Business Improvement Association		✓	
West End Seniors' Network	✓	✓	✓
West End Seniors' Community Planning Table		✓	
SOCIAL SERVICES & CIVIC ENGAGEMENT			
Youth Walkshop (co-hosted with CityHive)			✓
Covenant House Vancouver			✓
Force of Nature	✓	✓	✓
Gathering Place Community Centre			✓
Jane's Walk (co-hosted with Vancouver Park Board)	✓		
SFU City Conversations (public event)		✓	
Vancouver Design Nerds	✓		
TRADE & TOURISM			
Greater Vancouver Board of Trade	✓	✓	✓
Tourism Vancouver		✓	
Tour Bus Working Group		✓	
Vancouver Economic Commission	✓		✓
TRANSPORTATION & PUBLIC SPACE			
Better Environmentally Sound Transportation (B.E.S.T.)	✓	✓	✓
Cycling Without Age	✓		
HUB Cycling - Vancouver-UBC Local Committee	✓	✓	✓
TransLink & Coast Mountain Bus Company (CMBC)		✓	✓
Vancouver Public Space Network (VPSN)	✓	✓	✓
OTHER GOVERNING AGENCIES			
Musqueam, Squamish and Tsleil-waututh First Nations	✓	✓	
Vancouver Park Board	✓	✓	✓

Intersectional Work

This project aligns with citywide efforts to ensure an inclusive city that is safe and welcoming for all people. An intersectional lens is being applied, recognizing the complexity of personal identity, and the overlapping and interdependent systems of discrimination that people face.

From the outset, the project goals included directions that the Connector should feel safe to use for people of all ages and abilities, support all modes of transportation and connect places people want to go, and create inclusive spaces that feel comfortable at all hours of the day and times of the year. Engagement and promotional tactics strived to reach a broad and diverse audience, and allow people to provide input at different levels and ways that reflect their level of interest.

Beginning in Phase 2, the City has been working with intersectionality expert Jay Pitter to further enhance this approach. Her initial contribution included a workshop in November 2019 with a focus on groups that often have less of a voice in traditional engagement methods. This was followed by a Women's Storytelling Walk on January 29, 2020.

This work will continue in 2020, providing for continued dialogue and further informing the detailed design should the project be approved by Council.

Public Engagement

Outreach Tactics

A communications outreach plan was developed at the project outset to support the engagement process by ensuring diverse public awareness of the scope, timeline, and opportunities for input. The plan included an extensive print, digital, and radio campaign to ensure a broad, multilingual, and regional reach across all modes of transportation. .

Specific tactics are highlighted below and were employed for each phase unless otherwise noted.

- **Media technical briefings:** Media briefings took place approximately one week prior to each engagement phase to generate earned media, raise awareness of the project, support accurate reporting, and help promote public engagement.
- **Notification letters:** Letters were sent to over 25,000 residents and businesses near the Granville Bridge prior to each phase.
- **Electronic signage:** For the first two phases, changeable message boards were installed at each bridge access point, targeting people driving or taking transit across the bridge. This was not possible for Phase 3 due to construction taking place on the bridge where the signs would otherwise have gone.
- **Poster signage:** Prior to each phase, eye-level signs were installed at each end and along the span of the bridge, as well as nearby bike network intersections, targeting people walking or cycling in the area.
- **Transit Shelters:** During Phases 2 and 3, three transit shelter advertisements were displayed in the vicinity of Granville Bridge, with an estimated total of over 2,780,000 impressions.¹
- **Print:** Advertisements were printed in 14 papers in Phase 1 and 16 papers in Phases 2 and 3, across Vancouver and the Lower Mainland including Chinese-language media, with a total circulation of over 1 million people.
- **Radio:** 220 spots aired across 14 stations during the three phases of engagement, with over 1.4 million impressions.²
- **Social Media:** Organic and paid posts were published during each phase across the City's Instagram, Facebook and Twitter platforms. The paid campaign reached over 164,000 people

¹ Including over 970,000 impressions in Phase 2 and 1,810,000 in Phase 3.

² Including 115 spots during Phase 1 (over 920,000 impressions), 36 during Phase 2 (over 216,000 impressions), and 69 during Phase 3 (over 307,800 impressions). *Impressions* refers to the number of times an ad or message was seen or heard.

with the organic posts acquiring over 425,000 impressions. An organic campaign also ran across the Chinese-language social media platforms of Weibo and WeChat.³

- **Digital Ads:** During each phase, digital advertisements were shown in Metro Vancouver on the Weather Network and their network of publishers, with over 530,000 impressions.⁴
- **Earned media:** A combined total of 69 unique pieces of coverage were identified across all media formats (print, web, TV and radio) during active engagement periods.⁵
- **Partner networks:** Stakeholders were encouraged to share engagement opportunities with their membership.
- **E-Newsletter:** Over 3,000 people had subscribed to the email newsletter as of March 2020.

Engagement Events and Surveys

A variety of methods were used to solicit public feedback, including open houses, workshops, and surveys (see). **In total through all phases of engagement, there were over 3,000 attendees at 9 open houses and 12 workshops, and over 9,300 surveys received.** More detail on specific events is provided in *Table 2* below.

Table 2: Summary of engagement events and surveys

Engagement Events & Feedback Tools	Purpose	Participants
PHASE 1		
Pop-up Workshop (x1) co-hosted by community partner Vancouver Design Nerds <ul style="list-style-type: none"> • Date: April 6, 2019 • Location: 800 Robson 	<ul style="list-style-type: none"> • Provide opportunity for public to learn about the project, and share ideas on how the bridge could be used via drawing activity • Promote future engagement opportunities 	~ 50
Phase 1 Open Houses (x3) <ul style="list-style-type: none"> • Dates: April 12, 13, and 16, 2019 • Locations: CityLab x2 (511 W Broadway), Central Library 	<ul style="list-style-type: none"> • Provide opportunity for public to learn about the project, discuss draft goals, issues & opportunities through dialogue and mapping exercises, and complete survey in person or online 	1000+
Phase 1 Workshops (x4) Three hour sessions <ul style="list-style-type: none"> • Dates: April 27 and 30, 2019 • Locations: CityLab x2 (511 W Broadway), Central Library x2 	<ul style="list-style-type: none"> • Provide opportunity for public to discuss and brainstorm project hopes, fears, and ideas in greater depth, in facilitated small groups 	~60

³ Including over 58,000 people and 68,000 impressions in Phase 1, over 7,200 people and 102,500 impressions in Phase 2, and over 99,000 people and 255,000 impressions in Phase 3.

⁴ Including over 100,000 impressions in Phase 1, and over 215,000 impressions each in Phases 2 and 3.

⁵ Including 24 pieces for Phase 1 (April 4 – May 10), 30 for Phase 2 (September 1 – 30), and 15 for Phase 3 (January 20 – February 20).

Engagement Events & Feedback Tools	Purpose	Participants
<p>Walking Tour (x1) Two-hour Jane’s Walk</p> <ul style="list-style-type: none"> Dates: May 3, 2019 Location: Walk across bridge <p>Intercept Survey On-location survey of people walking across the bridge, conducted by Mustel Group</p> <ul style="list-style-type: none"> Dates: April 2019 (multiple days) Location: on bridge 	<ul style="list-style-type: none"> Provide opportunity for public to learn more about the project, experience challenges first-hand, and share ideas and concerns on-site Better understand who uses the bridge and why, perceptions of safety Establish baseline data for potential post-construction evaluation 	<p>23</p> <p>615</p>
<p>Phase 1 Survey</p> <ul style="list-style-type: none"> Dates: April 4 to May 10, 2019 	<ul style="list-style-type: none"> Provide opportunity for public to share how they use the bridge today, discuss challenges, comment on draft goals, and share specific ideas and concerns 	<p>4870 (Online) 170 (Paper)</p>
<p>Other Submissions</p> <ul style="list-style-type: none"> Dates: April 4 to May 24, 2019 Format: Letters, 3-1-1, Emails 	<ul style="list-style-type: none"> Provide opportunity for individuals and organizations to share additional comments 	<p>57</p>
<h2>PHASE 2</h2>		
<p>Phase 2 Open Houses (x3)</p> <ul style="list-style-type: none"> Dates: September 13, 14, and 17, 2019 Locations: CityLab x2 (511 W Broadway), Central Library 	<p>Provide opportunity for public to learn about Phase 1 feedback, review six shortlisted options and eliminated options through dialogue and mapping exercises, and complete survey in person or online</p>	<p>1150+</p>
<p>Phase 2 Workshops (x3)</p> <p>Three hour sessions</p> <ul style="list-style-type: none"> Dates: September 19 and 21, 2019 Location: CityLab (511 W Broadway) 	<p>Provide opportunity for public to discuss in detail the six shortlisted options and review other eliminated options</p>	<p>64</p>
<p>Phase 2 Survey</p> <ul style="list-style-type: none"> Dates: September 13 to 30, 2019 	<p>Provide opportunity for public to share how they use the bridge today, discuss challenges, comment on draft goals, and share specific ideas and concerns</p>	<p>2513 (Online) 73 (Paper)</p>
<p>Other Submissions</p> <ul style="list-style-type: none"> Dates: September 1 to Dec 31 2019 	<p>Provide opportunity for individuals and organizations to share additional comments</p>	<p>100</p>

Engagement Events & Feedback Tools	Purpose	Participants
PHASE 3		
<p>Phase 3 Open Houses (x3)</p> <ul style="list-style-type: none"> Dates: January 24, 25 & 28, 2020 Locations: CityLab x2 (511 W Broadway), Central Library 	<p>Provide opportunity for public to review and comment on recommended option</p>	<p>725</p>
<p>Phase 3 Workshops (x3)</p> <p>Three hour sessions</p> <ul style="list-style-type: none"> Dates: February 1 & 4, 2020 Location: CityLab (511 W Broadway) 	<p>Provide opportunity for public to discuss in detail the recommended option, with themes around transportation, overall experience, and special places</p>	<p>77</p>
<p>Phase 3 Survey</p> <ul style="list-style-type: none"> Dates: January 24 to February 10, 2020 	<p>Provide opportunity for public to share how they use the bridge today, discuss challenges, comment on draft goals, and share specific ideas and concerns</p>	<p>1682</p>
<p>Other Submissions</p> <ul style="list-style-type: none"> Dates: January 1 – March 1 	<p>Provide opportunity for individuals and organizations to share additional comments</p>	<p>43</p>

Who We Heard From

The demographic information below reflects information respondents provided in over 9,300 surveys received through three phases of engagement. Demographic information was not collected at open houses or workshops.

Responses by Area of Residence

Self-reported postal code data indicated responses from across the city and region, with higher representation from people living closer to the bridge (see Table 3):

Table 3. Survey responses by area of residence

Where do you live?	Downtown Peninsula	Elsewhere in the City of Vancouver	Elsewhere in Metro Vancouver	Outside Metro Vancouver
Phase 1 (5044 responses)	28%	61%	6%	5%
Phase 2 (2608 responses)	27%	65%	4%	4%
Phase 3 (1682 responses)	28%	65%	4%	3%

Responses by Age and Gender

A diverse range of ages was represented at each phase of engagement, with the exception of people 19 and under (see Table 4). To address this under-representation, staff conducted complementary efforts such as a youth walkshop in partnership with CityHive, and engagement with the City's Children, Youth, and Families Advisory Committee.

Table 4. Survey responses by age

How old are you?	0-19	20-29	30-39	40-49	50-59	60-69	70+
Phase 1 (5044 responses)	<1%	13%	25%	18%	17%	16%	10%
Phase 2 (2608 responses)	<1%	10%	23%	18%	19%	18%	12%
Phase 3 (1682 responses)	<1%	9%	19%	16%	19%	21%	15%

Respondents were more likely to identify as male, although those identifying as female were also well-represented (see Table 5). Complementary engagement efforts included a Women's Storytelling Walk

conducted by intersectionality expert Jay Pitter, as well as engagement with the City's Women's Advisory Committee.

Table 5. Survey responses by gender

Do you identify as...	Male	Female	Other or prefer not to say
Phase 1 (5044 responses)	54%	41%	5%
Phase 2 (2608 responses)	52%	43%	4%
Phase 3 (1682 responses)	51%	45%	4%

Responses by Mode of Travel

Respondents reported broad experience in crossing the bridge using a wide variety of travel modes (see Table 6).

Table 6. Survey respondent' experience using various modes of travel across the bridge

% of respondents who have...	Walked across the bridge	Cycled across the bridge	Taken transit across the bridge	Travelled by car across the bridge
Phase 1 (5044 responses)	53% (15% ≥ once / week)	23% (5% ≥ once / week)	69% (30% ≥ once / week)	84% (47% ≥ once / week)
Phase 2 (2608 responses)	59% (20% ≥ once / week)	31% (9% ≥ once / week)	72% (33% ≥ once / week)	82% (43% ≥ once / week)
Phase 3 (1682 responses)	63% (19% ≥ once / week)	34% (10% ≥ once / week)	80% (36% ≥ once / week)	84% (44% ≥ once / week)

When asked about their main mode(s) of travel, respondents reported a broad mix (see *Table 7*).

Table 7. Survey respondents' preferred modes of travel in everyday life

Main mode(s) of travel in everyday life	Walk (including using a mobility aid)	Cycle	Transit	Drive	Other
Phase 1⁶ (5044 responses)	24%	18%	24%	31%	3%
Phase 2 (2608 responses)	50%	32%	41%	41%	4%
Phase 3 (1682 responses)	56%	34%	44%	41%	2%

⁶ For Phase 1, respondents were only allowed to choose one mode; for Phases 2 and 3, respondents could choose up to two modes. The question was revised to reflect Vancouver's multi-modal nature, where many people use a variety of ways to get around.

What We Heard in Phase 1

In Phase 1 (April 2019), staff sought input on the draft project goals and invited the public to share how they currently use the bridge, along with specific ideas and concerns. This section highlights key findings and themes from stakeholders and the general public.

Key Findings

- Most people **currently do not feel comfortable walking or cycling across the bridge**
- Many people avoid walking or biking across the bridge even when it would be the most direct route, indicating a **latent demand** for using the bridge
- **People with mobility challenges and people who cycle find it especially challenging** to use the bridge today, due to unsignalized crossings with steps and a lack of cycling facilities
- There was **strong support for the project in general** from stakeholders and the general public
- There was **general support for each of the draft goals**, with many ideas for how the goals could be delivered
- There were **limited suggestions for new or strengthened goals**, particularly relating to climate emergency, means prevention, and environmental considerations (e.g. rainwater management, habitat preservation)
- There were **diverse opinions on the level of investment required**, with many people interested in a once-in-a-lifetime placemaking opportunity, and others more concerned with safety and transportation function
- There were **many ideas for particular alignments** to explore, including centre, west side, east side, bilateral (both sides), and underside options

These findings are discussed in more detail below.

Most People Feel Uncomfortable Using the Bridge Today

The Phase 1 Survey results confirm that most people feel the bridge is currently uncomfortable for both walking and cycling:

- More than half of respondents indicated they would feel uncomfortable walking across the Granville Bridge on their own, and **almost 80% would be uncomfortable walking across the bridge with a person who needed assistance**, such as a child or senior (see *Figure 1*).
- Almost 80% of respondents indicated they would feel uncomfortable cycling across the bridge on their own, and **almost 90% would be uncomfortable cycling across the bridge with someone who is less confident biking** (see *Figure 2*)

How **comfortable** would you be **walking** across the Granville Bridge...

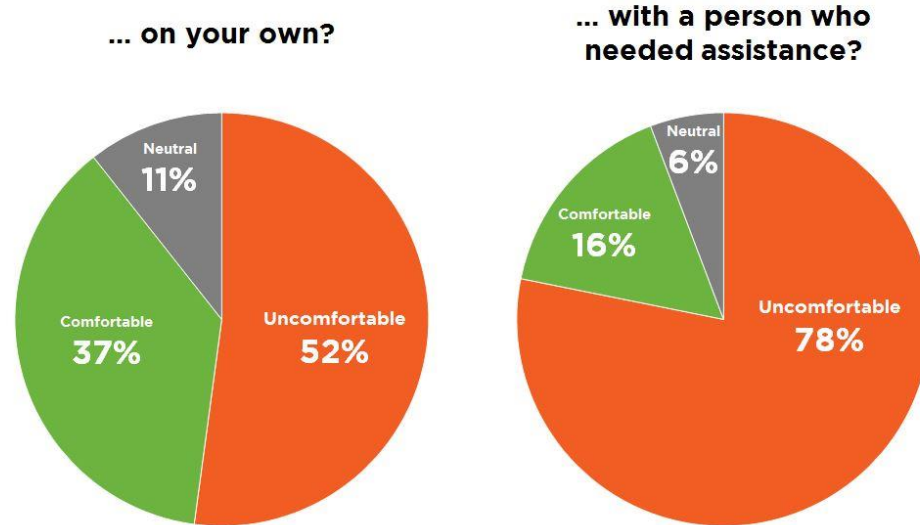


Figure 1: Level of comfort walking across the Granville Bridge, from people who reported they sometimes travel by walking (96% of respondents)

How **comfortable** would you be **cycling** across the Granville Bridge...

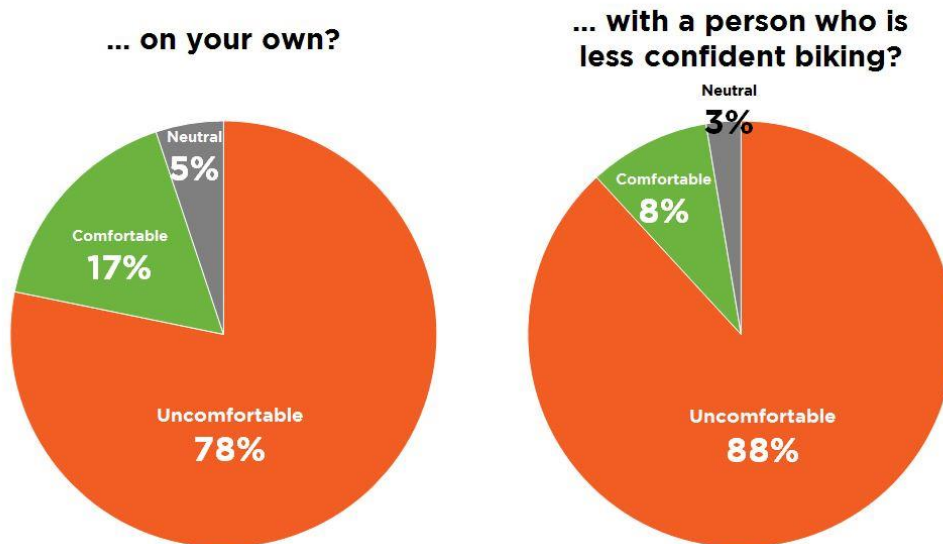


Figure 2: Level of comfort cycling across the Granville Bridge, from people who reported they sometimes travel by bicycle (80% of respondents)

These results are echoed by 615 intercept interviews conducted by Mustel with people walking across the bridge:

- Fewer than a third of people who currently walk across the bridge would be comfortable doing so with a child or elderly person needing assistance
- Only 3% of people who regularly cycle would be comfortable cycling across the bridge with a child or someone new to cycling
- Of the 62% of interviewees who sometimes cycle to get around, only 11% of them had biked across the Granville Bridge
- Of those that had cycled across the Granville Bridge, almost two-thirds indicated they (64%) ride on the sidewalk rather than mix with motor traffic⁷

The most-often cited reasons people feel uncomfortable walking across the bridge include the lack of a barrier between the sidewalk and traffic (85%), narrow sidewalks (81%), high-speed motor vehicle traffic (78%), and confusing connections at bridge ends (50%) (see *Figure 3*).

Reasons people feel **uncomfortable walking** across the bridge

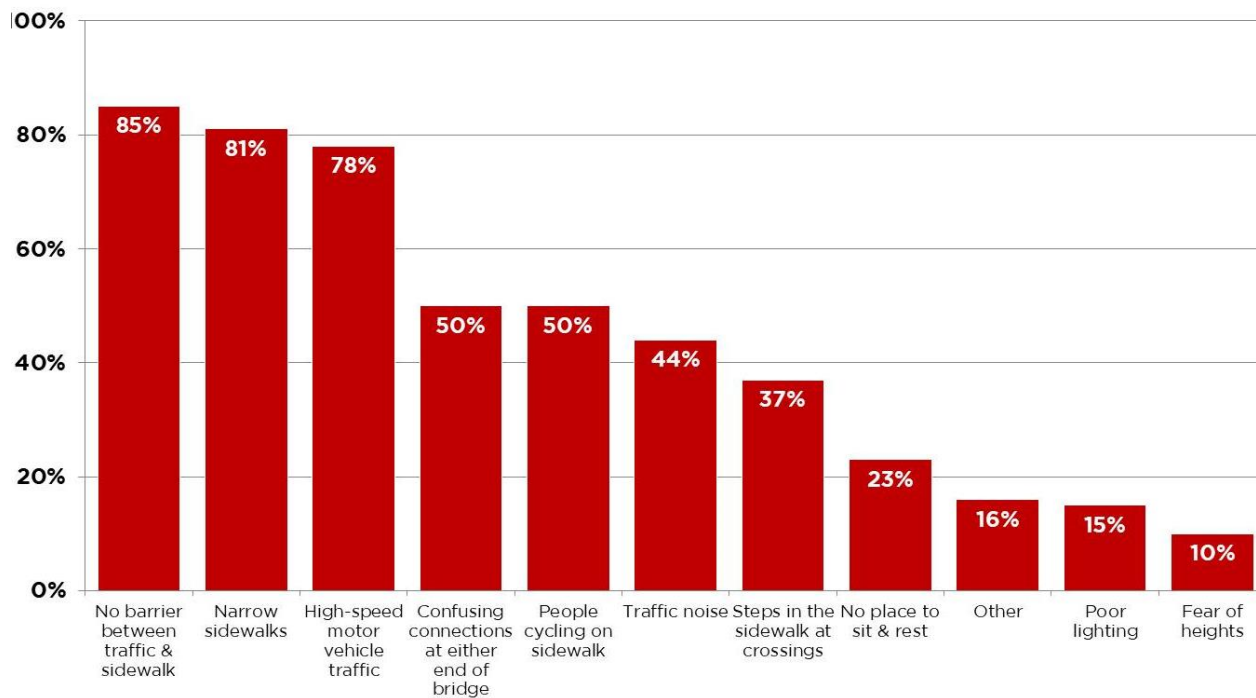


Figure 3: Reasons people feel uncomfortable walking across the Granville Bridge⁸

⁷ In comparison, only 0.4% of people cycling on the Burrard Bridge use the sidewalk, with 99.6% using the designated protected path. The large discrepancy between the two bridges is because the Burrard Bridge has a safe connected path for people cycling, whereas the Granville Bridge lacks such facilities; when people ride on the sidewalk, it is usually because they don't feel they have a safe and/or convenient alternative.

⁸ Based on 3,669 responses.

For cycling, the top reasons were discomfort sharing a lane with motor traffic (87%), the lack of a bike lane (85%), discomfort changing lanes at the on- or off-ramps (70%), discomfort mixing with pedestrians of the sidewalk (68%), and confusing connections at bridge ends (50%) (see *Figure 4*).

Reasons people feel uncomfortable cycling across the bridge

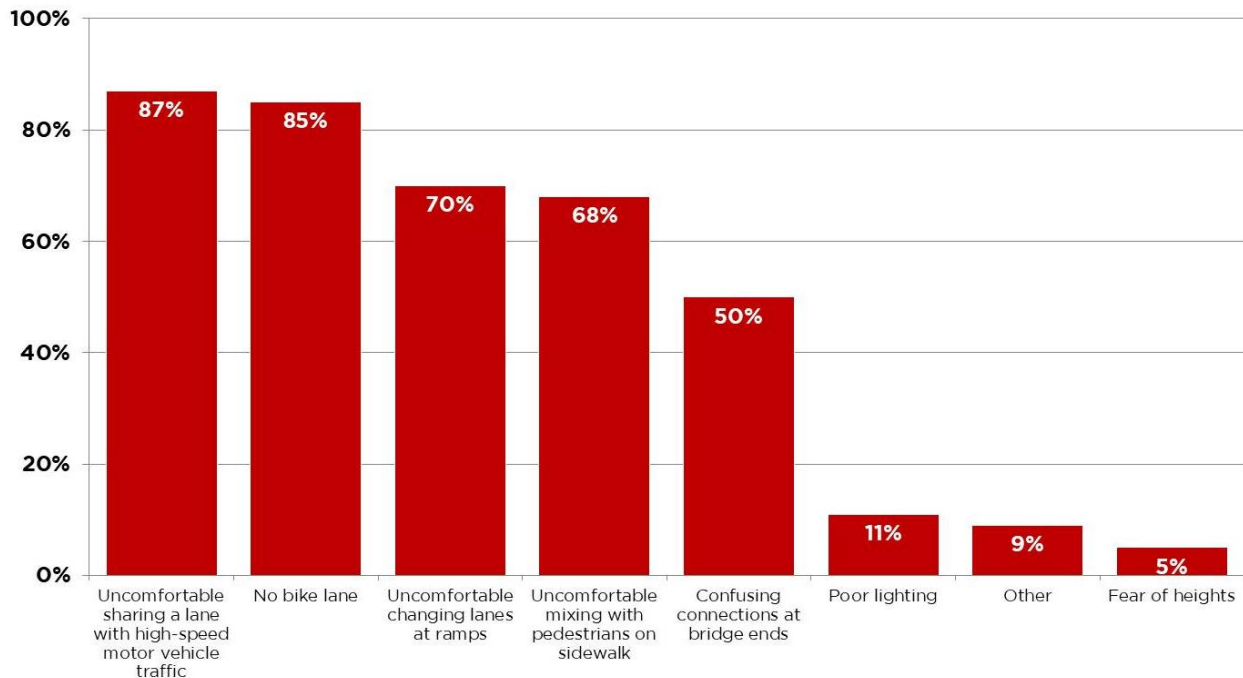


Figure 4: Reasons people feel uncomfortable cycling across the Granville Bridge⁹

A Strong Latent Demand for Using the Bridge

Many people commented that they avoid walking (41%) or biking (69%) across the bridge, even when it would be the most direct route (see *Figure 5*). This suggests there is a strong latent demand for using the bridge to walk or cycle.

According to recent census data, in 2016 there were about 18,000 residents and 17,000 jobs within a 5-minute walk of the bridge, and about 90,000 residents and 125,000 jobs within a 5-minute bike ride. The large numbers of people and jobs in close proximity to the bridge, coupled with the high percentages of people reporting that they actively avoid using the bridge today, suggest the bridge would be well-used by people living within this catchment area if it felt safer, more comfortable, and more convenient to walk or bike across.

⁹ Based on 3,555 responses.

Do you ever **avoid using** the Granville Bridge even when it would be the most direct route?

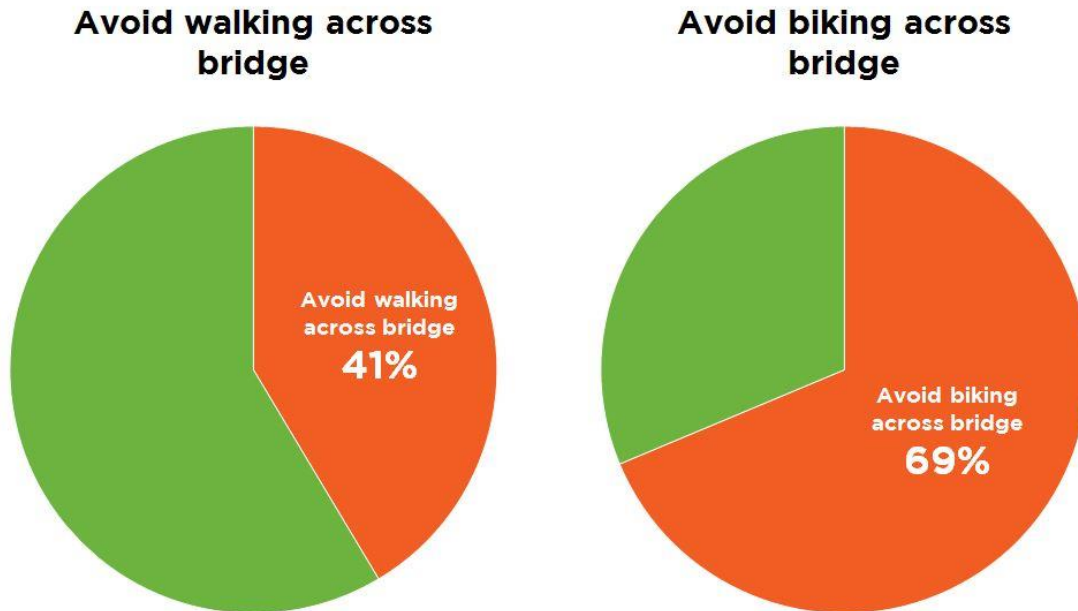


Figure 5: Proportion of people who avoid walking or biking across the Granville Bridge, even when it is the most direct route¹⁰

Strong Support for Draft Goals Overall

In the first phase of engagement, the public was encouraged to review the draft goals of the project:

- 1 Make **walking, rolling, and cycling** across the bridge **accessible, safe, and comfortable** for all ages and abilities
- 2 Provide **direct and intuitive** walking, rolling, and cycling **connections** to key destinations and the network
- 3 Create a **special place** that provides an enjoyable experience for all
- 4 Accommodate **motor vehicles**, considering the needs of transit, emergency services, and people driving
- 5 Design with the **future** in mind, considering related project and opportunities to coordinate work

Each of the draft goals has a large measure of public support based on the 5044 responses to the survey (see *Figure 6*):

- Over **80%** feel it is somewhat or very important to **improve walking** on the bridge (9% not important)

¹⁰ Based on 4,912 responses from people who reported they sometimes walk to get around, and 4,106 responses from people who sometimes bike to get around, respectively.

- Almost **70%** feel it is somewhat or very important to **improve cycling** on the bridge (20% not important)
- About **75%** feel it is somewhat or very important to **improve connections** to destinations (13% not important)
- About **65%** feel it is somewhat or very important to **create a special place** (21% not important)
- About **70%** feel it is somewhat or very important to **accommodate current traffic volumes** (12% not important)
- About **95%** feel it is somewhat or very important to **maintain reliable transit** (1% not important)
- Over **75%** feel it is somewhat or very important to **design with the future in mind**, considering potential related projects such as an elevator to Granville Island (11% not important)

High levels of support for draft goals (all responses)

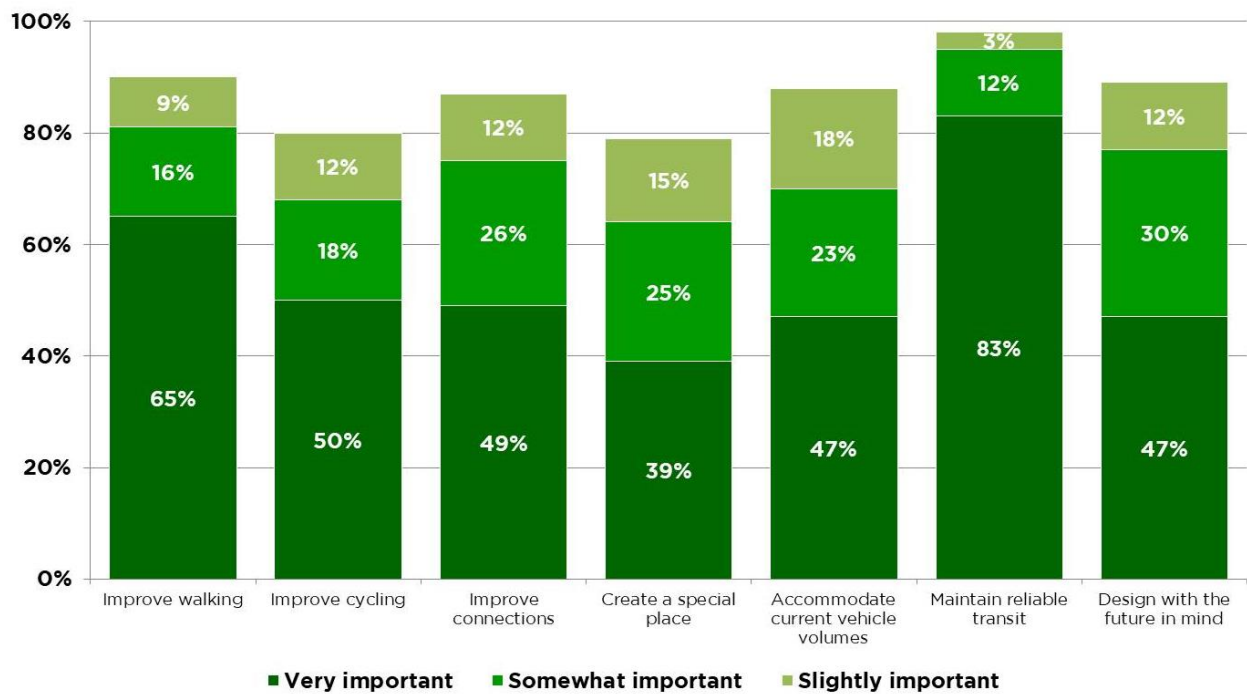


Figure 6: Survey responses indicate that each of the draft goals are somewhat to very important¹¹

¹¹ Based on all 5,044 responses.

Detailed Comments and Ideas Relating to Particular Goals

The highlights below reflect comments and ideas heard in Phase 1 through surveys, public events, and stakeholder discussions.

Draft Goal #1: Make walking, rolling, and cycling accessible, safe, and comfortable for all ages and abilities

There was strong support for improved accessibility, walking, and cycling across the bridge, with many respondents underscoring the following specific aspects:

- Separating road users by travel mode and speed (e.g. separate space for walking, slow cycling/rolling, faster cycling, and driving)
- Using easy grades, smooth surfaces, and pedestrian ramps to ensure accessibility for everyone
- Providing safe crosswalks at the bridge's on- / off-ramps and at either end of the bridge
- Minimizing the number of pedestrian and bike crossings required to navigate the bridge

A relatively small percentage of people commented that they feel the project is unnecessary because they felt the other False Creek bridges have adequate facilities, because they do not support walking or cycling investment in general, or because they feel the resources should be diverted to housing.

Draft Goal #2: Provide direct and intuitive walking, rolling, and cycling connections to key destinations and the network

There was a high level of interest in the improved walking, rolling, and cycling connections the project could provide, with many respondents specifically mentioning:

- Connections between South Granville and Downtown Granville that would benefit local businesses and help revitalize the street at each end of the bridge
- Using the bridge's on- and/or off-ramps to serve connections to different parts of the city and expand the bridge's walking or cycling catchment areas by minimizing grade transitions, particularly the Fir Street, W 4th Avenue, and/or Hemlock Street on- / off-ramps
- Excitement regarding potential elevator and staircase connections between the bridge and Granville Island, the Seawall, and Vancouver House
- Potential to expand transit capacity and reliability as the city becomes less car-dependent
- Improved wayfinding, particularly on the south end of the bridge and surrounding vicinity where the on- and off-ramps result in confusing connections

There was concern about how people would safely get to and from the bridge. For cycling, the need for new routes and connections was raised, including to the Arbutus Greenway, Drake Street, Broadway/10th Avenue corridor, and Seawall on both sides of False Creek.

Some respondents expressed interest in alternative ways to improve connectivity across False Creek, for example:

- Adding the existing small ferry services to the Compass Card program or making them free
- Building a separate walking and/or cycling bridge somewhere along False Creek, possibly a low-level bridge or one incorporated into future sea level rise protection

There was interest in how the Granville St / Drake St and Granville St / W 5th Ave intersections would operate if rebuilt to connect people to and from the *Granville Bridge Connector*.

Draft Goal #3: Create a special place that provides an enjoyable experience for all

There were strong feelings by many that the bridge needs to be a special public space that is enjoyable to pass through and perhaps be a destination in its own right. Although this goal of place-making on the bridge was less supported relative to other goals, those who are interested in it feel very strongly. Specific ideas people mentioned included:

- Providing benches and places to rest along the path
- Celebrating views, e.g. with lookout balconies at strategic locations
- Creating public space ‘moments’, urban ‘rooms’, or gathering spaces at strategic locations along the path (e.g. lookout balconies, pocket parks, pocket plazas)
- Interactive or dynamic lighting, rain-activated art, or other artistic elements
- Creating an art or story walk to celebrate local artists and/or tell important stories or histories, e.g. history of False Creek, story of (de)colonialization, Indigenous art
- Providing opportunities for small retail or active transportation-powered food carts
- Providing for both fast and slow cycling, and ensuring people cycling can slow down or stop to engage in the public space elements
- Creating green space on the bridge, e.g. through trees, landscaping, planters, and/or green infrastructure
- Repurposing or rebuilding the Fir Street or 4th Ave off-ramp to create a car-light or car-free “High Line experience” (inspired by New York City’s High Line), that would also provide relatively flat active transportation connections to and from Central Broadway and Kitsilano respectively
- Making the bridge an iconic landmark from a distance, e.g. through lit or sculptural elements along the path, an iconic elevator or observation tower, and/or transforming the bridge into a green park
- Creating gateways at either end of the bridge to announce the Downtown Granville entertainment district and South Granville shopping district
- Installing whimsical elements or attractions, e.g. bungee jumping, Ferris wheel, slide, “Granville Grind” staircase hike
- Amenities such as recycling stations, washrooms, and safety phones

There was interest in slowing motor vehicle traffic, e.g. through regulation, enforcement, and design (e.g. narrower lanes, new crossings with signals, chicanes or curves in lanes).

Some people who were less supportive of this goal noted that the city has many great public spaces already, suggesting that the focus of the bridge should be transportation. Others voiced concerns that creating a special place would be challenging given motor vehicle noise and emissions.

Some made the point that the majority of people crossing the bridge will still be in transit or private vehicles, and their experience is important too.

Draft Goal #4: Accommodate motor vehicles, considering the needs of transit, emergency services, and people driving.

There was almost universal support for maintaining or improving transit, with ideas including:

- Improving reliability with dedicated bus lanes or “queue jumpers” at strategic locations, if traffic data suggests this is needed
- Considering whether the future Arbutus LRT or other light rail could be extended across the bridge
- Providing good walking and cycling connections to the future rapid transit station at Granville-Broadway
- Being able to accommodate a transit stop on the bridge, should a Granville Island elevator proceed
- Improving ferry service across False Creek, e.g. by incorporating it into the Compass Card system

There was a diversity of opinions regarding general motor traffic, with:

- A recognition that the bridge provides for important regional movement between the North Shore and Richmond, including the YVR international airport
- Some people concerned about maintaining car-movement capacity through the intersections
- Some people concerned about maintaining particular movements, e.g. noting that the Fir off-ramp is currently the only way for southbound car traffic to turn east onto Broadway
- Others hoping the project could support a more car-free or “car-light” future on the bridge and in the downtown, particularly in the long term

Draft Goal #5: Design with the future in mind, considering related project and opportunities to coordinate work.

This goal was intended to raise awareness about on-going and potential nearby projects. Staff specifically referenced:

- The future replacement of the Granville loops to and from Pacific Street with a street grid
- A potential elevator and staircase to Granville Island (which would be delivered by the federal government which controls Granville Island), served by an intersection and bus stops on the bridge deck
- A future park at W 6 Ave and Fir Street
- A future SkyTrain Station at Granville and Broadway
- Bridge rehabilitation and seismic upgrades to keep the structure safe and in good condition

There was a very high level of excitement for a future elevator and staircase to Granville Island, and also some interest in the other projects that were noted.

Additional items brought up by the public included:

- Future land use and how the project might respond to or influence development and design in the area
- Possible replacement of the southbound to eastbound off-ramp to W 4th Ave combined with a reconfiguration of W 5th Avenue, with nearby residents discussing whether the adjacent green space could become a park or developed into a northward extension of the South Granville retail district
- Potential to repurpose or remove portions of on- or off-ramps to improve active transportation connections or to free up space for other city objectives

- Potential to further transform the bridge in the future as public interests and opportunities evolve, e.g. by reallocating additional general-purpose travel lanes to provide dedicated bus lanes or light rail service across the bridge

Some suggested that bolder moves are needed in the face of a climate emergency, and that the City should build on this project, perhaps by making the bridge, Downtown Granville Street, and/or the entire downtown car-free.

Other Emergent Themes

Level of Investment

There was a diversity of opinions regarding the level of investment required:

- Many people were excited by the potential to transform the bridge into a unique and iconic place, with some noting this should be considered an investment rather than an expense as it could increase tourism and boost local businesses
- Other respondents wanted to only spend as much as necessary to meet core transportation, accessibility, and safety objectives
- Some people wondered whether portions of on- or off-ramps could be removed to free up space which could then be developed to fund this project and support other city objectives
- Some suggested that the project could be phased, with basic and more functional elements introduced first, leaving room for enhancements for later

Means Prevention

The public generally recognized that means prevention features that help deter people from self-harm will be an essential component of the project, and there was a desire to understand how it would impact views and the quality of the experience for different design concepts.

Missing Goals

When prompted as to whether any goals were missing or required special attention, approximately 75% of respondents did not have anything to add.

Approximately 20% of survey respondents provided comments relating to:

- Specific details as to *how* the City should go about achieving a goal, e.g. how to improve safety or accessibility
- Divergent opinions on what extent to accommodate motor vehicles, ranging from ‘build a freeway to connect to the bridge’ to ‘make the downtown car-free’
- Divergent opinions regarding the importance of placemaking and an appropriate level of investment
- General feelings of support or non-support for the project

Approximately 5% of comments reflected issues not covered in the draft goals. Key themes centred around:

- Supporting climate emergency targets and using the project as a catalyst towards a more car-free future

- Protecting for potential future additions, (e.g. relating to enhanced sustainable transportation or placemaking)
- Environmental concerns (e.g. considering rainwater management, protecting nesting cormorant habitat)
- Considering ways to mitigate traffic impacts on neighbouring residents (e.g. reducing traffic noise)
- Incorporating means prevention (i.e. deterring self-harm) while retaining views

Big Ideas

As part of the first phase of public engagement, people were encouraged to share their ideas for the project. Through this, staff received a wide range of ideas to explore as a part of the second phase of engagement.

Ideas for a Granville Bridge Connector Aligned Down the Centre of the Bridge Deck

Many people were familiar with the idea of a raised centre path aligned down the middle of the bridge given material previously communicated in the Transportation 2040 Plan and City staff's January 2019 Council report on the project.

People commenting on this design approach felt it could be a comfortable and enjoyable experience by elevating the path to provide views and a sense of separation from traffic. Many people raised questions about where and how pedestrians and people biking would get on and off the bridge, either at intersections or using elevators or staircases. While many people expressed excitement about the idea, some expressed nervousness that this approach would make the experience of walking, rolling or cycling across the bridge unpleasant due to traffic on both sides of the path. Others were concerned that a centre path might leave safety issues at the on- / off-ramp crosswalks unaddressed, and/or that the City would prohibit access to the existing sidewalks.

Some members of the public had ideas on how to enhance this concept:

- Elevate the *Connector* as much as possible to maximize the views and further buffer people walking, rolling, and cycling from traffic, without making it too steep
- Elevate the *Connector* enough to widen it out such that it spans above traffic to create additional public space for public amenities and improved views
- Widen the *Connector* such that it occupies more than two travel lanes to create more public space
- Use the space occupied by the existing sidewalks for general purpose travel lanes to create more room for a wider *Connector* down the middle of the bridge deck

Ideas for a Granville Bridge Connector on One Side of the Bridge

Many people indicated that a *Connector* on one side of the bridge deck was an exciting concept for them since it would mean vehicle traffic is only passing on one side of the path, with some adding that a one-sided path could be made wider than a centre option by taking advantage of using the space currently occupied by the existing sidewalk. Many people were particularly excited about the west side for the excellent views it would offer toward the mountains, English Bay, and Burrard Bridge.

A number of people commented on the possibility of a *Connector* on the side of the bridge being better able to connect to new staircases or elevators to key locations below the bridge (e.g. south Seawall or

Vancouver House), or the possibility of providing additional walking and/or cycling connections on the W 4th and/or Fir off-ramps. Many people highlighted that using the Fir off-ramp to connect Central Broadway / W 10th Ave would be particularly attractive for cycling due to the relatively flat grades. Some went further, expressing ideas to repurpose or rebuild some or all of the on- / off-ramps to create better public spaces, while also enhancing connections, or even freeing up space for redevelopment. Some who were in favour of installing a *Connector* on the east side of the bridge similarly mentioned interest in providing a better pedestrian or cycling environment on the Hemlock on-ramp.

Ideas that Include a Granville Bridge Connector on Both Sides of the Bridge

Some people brought up alignment ideas with paths on both sides of the bridge, similar to the Burrard Bridge. People interested in these ideas frequently cited the Burrard Bridge design and the potential for people to enjoy the views on both sides of the bridge, or the possibility of using each of the south on- / off-ramps (i.e. Fir and Hemlock ramps) for additional connectivity.

In promoting this concept, some people brought up the idea of using this design approach to avoid on- / off-ramp crosswalks altogether by running the *Connector* down the on- / off-ramps instead of crossing the ramps to connect South Granville St to Downtown Granville St.

Ideas that Involve Building a New Structure for the Granville Bridge Connector

Many people expressed interest in a Granville Bridge *Connector* that does not use the bridge deck at all, but would instead be suspended underneath, perhaps hanging off the existing structure. Those interested in this idea felt it could create a unique experience that is fully weather-protected and separated from motor vehicles without impacting motor vehicle capacity or flow and offering flatter grades. Somewhat related, some suggested they would like to see a completely separate walking and/or biking bridge (i.e. not attached to the Granville Bridge), expressing that it might offer a more direct Seawall-to-Seawall connection.

Other Granville Bridge Connector Ideas

A range of other ideas were also brought up, including:

- Combining some of the above ideas by installing pedestrian space down the centre of the bridge to establish a pedestrian link between Downtown Granville to South Granville, while creating space for cycling on the side of the bridge, or vice versa
- Building a separate pedestrian-only bridge while reallocating space on the bridge deck for cycling;
- Pedestrian space on one side of the bridge and cycling space on the other
- Improving local ferry service as an attractive and cost-effective option connecting the north False Creek to south False Creek Seawall
- Clear tubeways or tunnels underneath False Creek

Staff carefully considered these ideas as they developed a shortlist of options for Phase 2 engagement.

Concerns

Survey respondents were invited to share any concerns they had about the project. While the majority of respondents expressed support for the project, some expressed concerns related to:

- Potential increased congestion
- Potential impacts to emergency access
- Costs to taxpayers
- Construction impacts

Others who supported the project were concerned that the project may:

- Fail to move forward or be delayed
- Not be aesthetically pleasing
- Hinder views
- Remove pedestrian access to ramps (if sidewalks were closed)
- Not meet project goals, e.g. separating different travel modes and speeds, connecting to the broader cycling network (noting that improvements beyond the bridge deck itself are needed), or addressing safety concerns at ramp crossings

What We Heard in Phase 2

In Phase 2 (September 2019), staff shared updated project goals that had been revised based on Phase 1 public and stakeholder input.

- 1 Support our **climate emergency** efforts by enabling more trips via sustainable transportation
- 2 Make **walking, rolling, and cycling** across the bridge **accessible, safe, and comfortable** for all ages and abilities
- 3 Provide **direct and intuitive** walking, rolling, and cycling **connections** to key destinations and the sustainable transportation network
- 4 Create a **special place** that provides an enjoyable experience for all
- 5 Enable **reliable transit** and continued access for emergency vehicles
- 6 Accommodate **motor vehicles**, considering the bridge's role in the regional transportation network
- 7 Integrate **means prevention** to deter self-harm
- 8 Incorporate **environmental features**, including provisions for rainwater management and wildlife habitat
- 9 **Design for the future**, considering compatibility with related projects and flexibility to adapt as the city grows
- 10 Provide **value for money** and maximize coordination opportunities

Staff also provided the public with an opportunity to review and comment on six shortlisted design options, and shared information on other options which were explored but eliminated. This section highlights key findings and themes from stakeholders and the general public.

Six shortlisted options

In the lead up to Phase 2, staff explored dozens of options for the Granville Bridge Connector, with the design concepts informed by staff expertise, public and stakeholder feedback, and consultant input. The long list was shortlisted to six options based on overall feasibility and their ability to meet core project objectives.

In Phase 2, the six shortlisted options were shared with stakeholders and the public for detailed comment and review:

- 1 **West Side:** a wide sidewalk and two-way bike lane on the west side of the bridge
- 2 **West Side Plus:** a slightly narrower version of the West Side option, with additional sidewalk improvements on the east side of the bridge and Hemlock on-ramp, plus an additional two-way cycling connection on the Fir off-ramp to 10th Avenue
- 3 **East Side:** a wide sidewalk and two-way bike lane on the east side of the bridge
- 4 **East Side Plus:** a slightly narrower version of the East Side option, with additional sidewalk improvements on the west side of the bridge and 4th Ave off-ramp, plus an additional two-way cycling connection on the Hemlock on-ramp to 7th Avenue
- 5 **Raised Centre:** a wide sidewalk and two-way cycling lane down the centre of the bridge, with the path elevated about 1m above the bridge deck
- 6 **Both Sides:** similar to the Burrard Bridge design, slightly widening the existing sidewalks on both sides of the bridge, with one-way bike lanes on each side between the widened sidewalk and the general traffic lane

Staff also shared material on options that were considered but did not make the shortlist due to critical flaws, including an ‘underside option’ and design options that used the on-/off-ramps in different ways.

More detail on both shortlisted and eliminated options is available online in the Phase 2 Supplemental Design Guide at vancouver.ca/granvilleconnector.

Key Findings

- **The ‘West Side Plus’ option emerged as the consensus preferred option** among stakeholders and the general public
- At workshops, there was also interest in the idea of an enhanced ‘Both Sides’ option if additional connections could be added similar to the ‘West Side Plus’ and ‘East Side Plus’ options
- **The ‘Raised Centre’ was the least preferred option**
- General preferences tended toward:
 - Sidewalks and bike lanes on the sides of the bridge rather than the middle
 - West side views over east side views
 - Options that improve walking on both sides of the bridge
 - Options that provide additional cycling connections using the on-/off-ramps
 - Options which are more flexible to allow for a phased implementation or design adaptations in the future
- **Many ideas were shared on how to refine and improve the design**, including:
 - Ensuring bike lanes are wide enough to support safe passing
 - Balancing movement and placemaking by focusing on specific locations, including at the bridge apex
 - Providing additional connectivity, in particular to Granville Island, the South False Creek Seawall, 10th Avenue, and Off-Broadway
 - Ensuring means prevention fencing contributes to the experience by maintaining views and incorporating lighting
 - Creating more space for the Connector by removing the centre median between northbound and southbound traffic
- **About 10% of survey respondents indicated that they did not like any option.** Concerns included:
 - Potential for increased congestion by reallocating travel lanes
 - Potential for increased congestion by adding new signals at the north and south end of the bridge
 - How municipal capital funding is allocated and spent

These findings are discussed in more detail below.

‘West Side Plus’ emerged as the consensus preferred option

The ‘West Side Plus’ emerged as the consensus preferred option at public open houses and workshops, and in the public survey.

This preference is reflected in survey responses shown in *Figure 7* and *Figure 8* below, which ask (a) ‘what do you think of each option’ and (b) ‘what is your favourite option’ respectively. The West Side Plus option was the top-ranked option for each question. The general rationale expressed behind these preferences is summarized in *Table 8*.

A number of stakeholders also expressed their preference for the 'West Side Plus' option, including the Downtown Vancouver Business Improvement Association, the South Granville Business Improvement Association, HUB Cycling, and Vancouver Public Space Network.

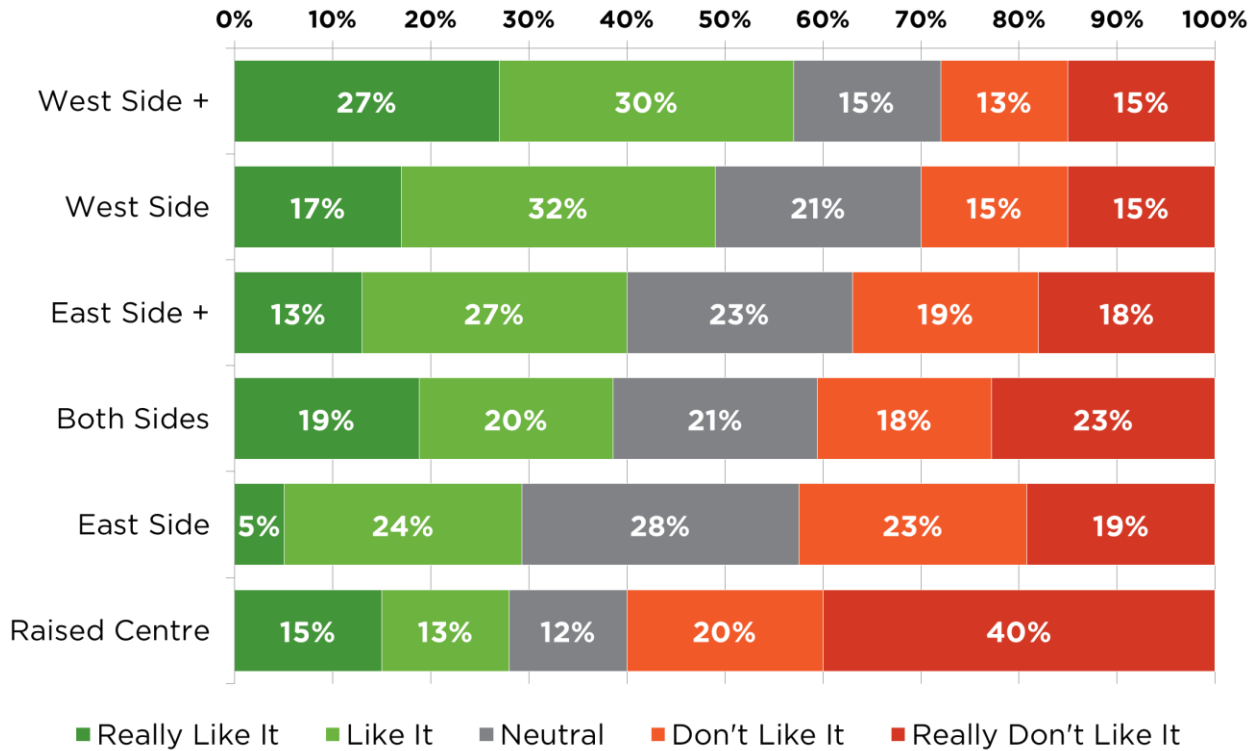


Figure 7. Overall, what do you think of each option? Based on 2602 survey responses.

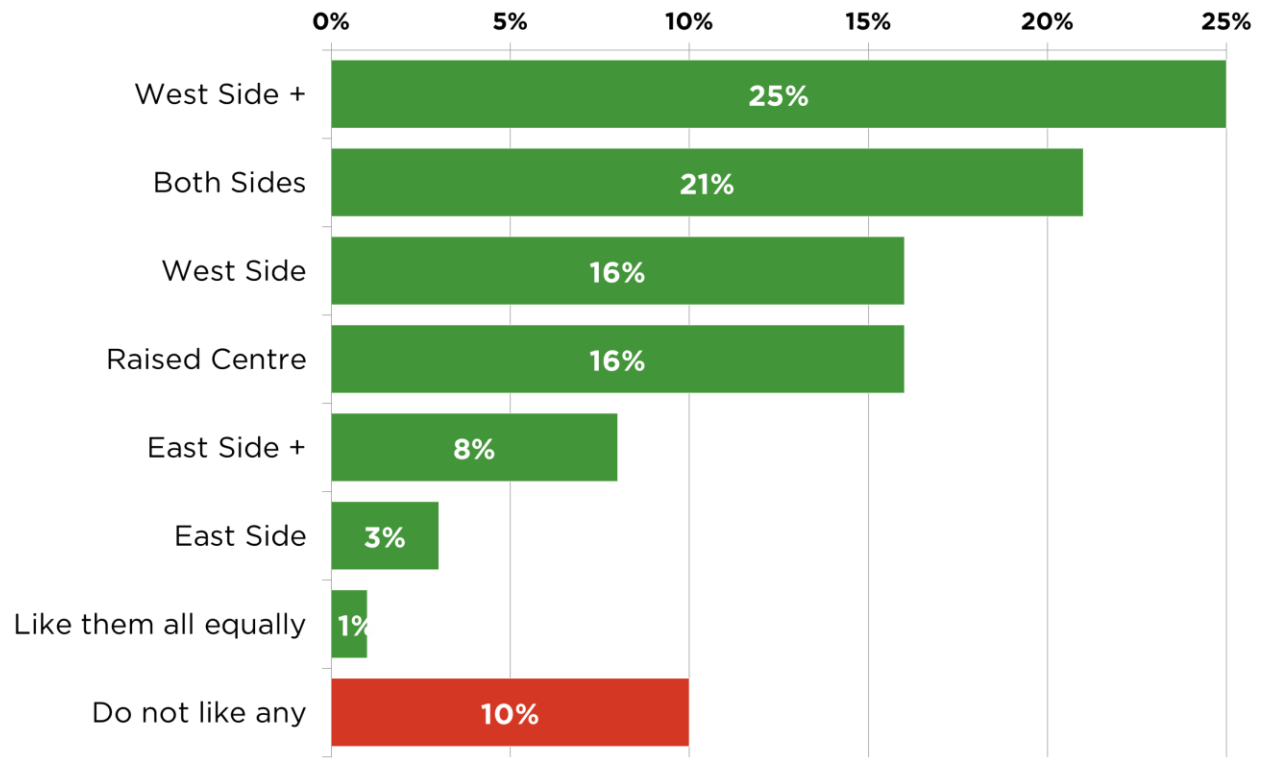


Figure 8. What is your favourite option? Based on 2602 survey responses.

Table 8. General preferences expressed by stakeholders and public in Phase 2 engagement.

Public Preference	Reasoning	West Side	West Side +	East Side	East Side +	Raised Centre	Both Sides
Side path(s) over centre path	<ul style="list-style-type: none"> • Unobstructed water views • Additional space from motor vehicle traffic • Potential to access path from on- and off-ramps • General concern that centre path might feel uncomfortable with traffic on both sides 	✓	✓	✓	✓		✓
West side views over east side views	<ul style="list-style-type: none"> • Preference for westerly views toward Burrard Bridge, English Bay, and mountains • West Side and West Side + options allow for more placemaking on west side 	✓	✓		✓		✓
Improving sidewalks on both sides	<ul style="list-style-type: none"> • Many people noted sidewalks on both sides will continue to be used, because of different connections offered by south end on- and off-ramps 		✓		✓		✓
Additional bike network connections	<ul style="list-style-type: none"> • Additional cycling connections on south end on- and off-ramps provide significant benefit by providing relatively flat connections to rest of bike network • Fir ramp connection with 10th Ave generally considered more valuable than Hemlock connection 		✓		✓		
Options which are more adaptable to all future enhancements	<ul style="list-style-type: none"> • Side options more adaptable than raised centre option due to use of floating barriers rather than raised structure • West Side and West Side + options have highest compatibility with future transit improvements, and for enabling additional ramp enhancements 	✓	✓	✓	✓		✓

Interest in other options

Although less popular than the 'West Side Plus' option, there was considerable interest in an enhanced version of the '**Both Sides**' option, particularly at the public workshops. Specifically, many people were interested in pursuing this alignment further if enhanced walking and cycling connections could be added to the Fir and/or Hemlock on-/off-ramps (as featured in the 'West Side Plus' and 'East Side Plus' options). Those recommending pursuing the 'Both Sides' design concept cited symmetry of the design and predictability for road users as key considerations, and suggested that one-way bike paths allow for safer passing. They also noted that while the 'Both Sides' option did not allow much space for placemaking or special 'moments', the bike lanes would equitably buffer the sidewalk from traffic on both sides of the bridge.

During and subsequent to the workshops, staff further explored the feasibility of a 'Both Sides' option with additional pedestrian and/or bike connections on the on-/off-ramps, however, it was determined this would be challenging due to:

- Expanding the 'Both Sides' option by adding a southbound Fir off-ramp connection to 10th Ave (as featured in the 'West Side Plus' option) would likely lead to significant wrong-way cycling on the bridge deck, unless a corresponding northbound cycling connection was also added to Hemlock Street. However, adding the latter would preclude pedestrian improvements to the Hemlock Ramp, and require removing most parking from Hemlock St, converting it to one-way, and adding right-turn bays in order to manage conflicts between right-turning vehicles and people biking northbound downhill.
- The motor vehicle restrictions necessary to ensure safe operation of the additional cycling connections on Hemlock Street would likely have significant local traffic impacts.

The raised centre option was the least preferred option by the public and stakeholders given that it does not meet the five criteria cited in *Table 8*, and because it was estimated to be the most expensive of the shortlisted options. Those who did prefer this option often cited concerns that signaling one or more on-/off-ramps on the bridge could adversely impact traffic or pose safety concerns.

Ideas for improving and refining the preferred option

Staff heard many ideas for refining and improving the design. These included:

- **Ensuring that two-way bike lanes are wide enough to accommodate safe passing.** The rapid growth in e-bikes, cyclelogistics which includes the use of cargo cycles, and other new mobility devices was often cited as a reason for needing wider paths that can comfortably accommodate a greater speed differential between the two directions of cycling. Suggestions included wider bike lanes throughout, or a variable path width with long passing zones.
- **Balancing the need for safe, comfortable, and accessible movement with opportunities for special places.** Suggestions included focusing primarily on a path that provides comfortable and safe movement with excellent views and places to rest along the way, while considering opportunities to create special places at key locations. Oft-cited key locations on the bridge deck included the bridge apex and the potential future interface with an elevator to Granville Island. Local business improvement associations suggested 'gateways' at each end of the bridge,

which could simultaneously provide wayfinding to announce both the path and the retail districts.

- **Ensuring means prevention fencing contributes to the experience and does not detract from it.** Suggestions included designs that preserve views and integrating colourful lighting to provide ambiance while improving safety.
- **Ensuring the on- and off-ramp crossings are safe while managing impacts to transit and traffic.** There was a desire to see more detail as to how signalized ramp crossings could work, to ensure they are safe for people walking, cycling, and driving. Some drivers expressed concern that signaling the ramps could cause safety issues if people speeding over the crest of the bridge unexpectedly came across a queue waiting for a signal change, or that people might change lanes erratically.
- **Improving walking and cycling connections between the Granville Bridge and Granville Island/South False Creek Seawall.** Suggestions included elevators and/or staircases at Granville Island and/or the Seawall, more direct walking and cycling paths, and improved wayfinding. There were specific suggestions on possible alignments, including consideration for how a walking and cycling path could link with a redesigned Anderson Street leading into Granville Island.
- **Addressing a cycling network gap to/from the Off-Broadway bike route in the east.** Suggestions included connecting to 7th via Granville Street or via 5th Ave/Hemlock, or shifting the Off-Broadway route from 7th to 8th Ave, so that a connection could be made at the Fir off-ramp.
- **Considering how people will connect to the future Granville-Broadway SkyTrain station.**
- **Removing the centre median currently separating north- and southbound motor traffic.** It was suggested that removing the median would encourage safer motor vehicle speeds, allow more space to be allocated for walking, cycling, and public space, and improve emergency response by allowing emergency vehicles to travel in the counterflow direction when necessary.
- **Prioritizing transit over general traffic.** Some people suggested dedicated transit lanes and/or transit priority measures at either end of the bridge to ensure reliable transit travel times. Others expressed concerns about potential traffic impacts of such measures.
- **Considering how the project could adapt over time.** Suggestions included reallocating additional road space to provide additional amenities and connectivity as the city continues to become less car-dependent, adding measures to further prioritize transit, and adding additional features such as public art or staircases as the budget allows.

What We Heard in Phase 3

In Phase 3 (January & February 2020), staff presented a recommended design (a refined version of the West Side Plus option), and provided opportunities for the public to share opinions and provide further comments. This section highlights key Phase 3 findings and themes from stakeholders and the general public.

Key Findings

- **High levels of public support for the recommended design**, with nearly 75% of survey respondents 'liking' or 'really liking' the design, and under 20% expressing a negative sentiment
- **Strong support for the recommended design from stakeholder groups representing broad interests**, including transportation, local businesses, people with disabilities, seniors, women, children and families, and public space, among others
- **Support for the recommended design across all gender and age categories, and all modes of travel**
- Relative to overall percentages, levels of support were:
 - Higher among people who walk or bike less than once a week across the bridge, with comments suggesting strong latent demand from people who are currently concerned about safety, accessibility, and comfort issues
 - Lower among people who frequently drive and people who never take transit across the bridge, with comments suggesting generalized concerns of road space reallocation projects on motor vehicle traffic
- **Preserving views is a high priority** to ensure a great experience for people using the path
- Interest in enhanced placemaking and design features is mixed, with:
 - Strong overall support for maintaining views and creating safe, comfortable paths with good separation between people walking, cycling, and driving, and places to rest along the way
 - Lighting identified as an important element for safety, personal security, and ambiance, as well as an opportunity for public art
 - Some interest in creating special moments along the way, with traffic noise and wind cited as factors that would discourage people from lingering in one place for extended periods
 - Many people excited about the opportunity to create a unique and special experience worthy of additional investment, with others concerned about overall costs
- Excitement over a potential elevator and staircase connection with Granville Island, and providing more direct connections to the Seawall
- Those opposed to the project expressed:
 - General concerns about City projects that reallocate road space away from motor vehicle traffic
 - Concern about potential traffic congestion and/or neighbourhood shortcutting
 - Concern about spending tax dollars
 - A belief that the project is unnecessary, and that safety and accessibility concerns for people using other modes besides driving are overstated or non-existent
- **Overall high levels of satisfaction with the engagement process**, with many stakeholders and public event participants expressing gratitude at the different ways people could contribute and share ideas and concerns, and how the iterative design process genuinely reflected input

More detail on previous rounds of engagement, including other design options, is available at vancouver.ca/granvilleconnector.

High Level of Support for the Recommended Design

The recommended design received high levels of support from the public, with nearly 75% of survey respondents 'liking' or 'really liking' it, and less than 20% expressing a negative opinion (see *Figure 9*).

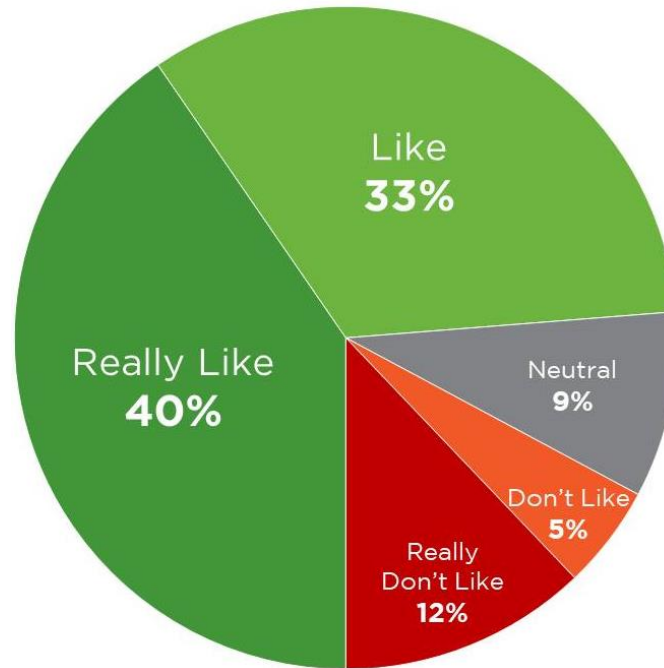


Figure 9: Overall, what do you think of the proposed design?¹²

The design also received support from stakeholder groups, including:

- Citizen advisory bodies, including committees representing Transportation, Persons with Disabilities, Seniors, Children and Families, and Women
- Business groups including the Downtown Vancouver and South Granville business improvement associations
- Transportation advocacy groups including HUB Cycling and Better Environmentally Sound Transportation (BEST)
- Public space advocacy groups including the Vancouver Public Space Network
- Health services agencies and persons with disabilities advocacy groups, including Vancouver Coastal Health, the Canadian National Institute for the Blind, Rick Hansen Foundation, and Vision Loss Rehabilitation Canada
- Stakeholders representing marginalized groups, including Covenant House and Gathering Place Community Centre

¹² Based on all 1682 Phase 3 survey responses.

Levels of Support Based on Age and Gender

Support for the design was consistent across gender and age groups (see Figure 10).

Relative to general results, support was:

- Highest among younger respondents, with some comments reflecting desire for more radical responses to the climate emergency and a general openness to change
- Slightly higher from respondents identifying as female, which may reflect increased concerns relating to physical safety and personal security

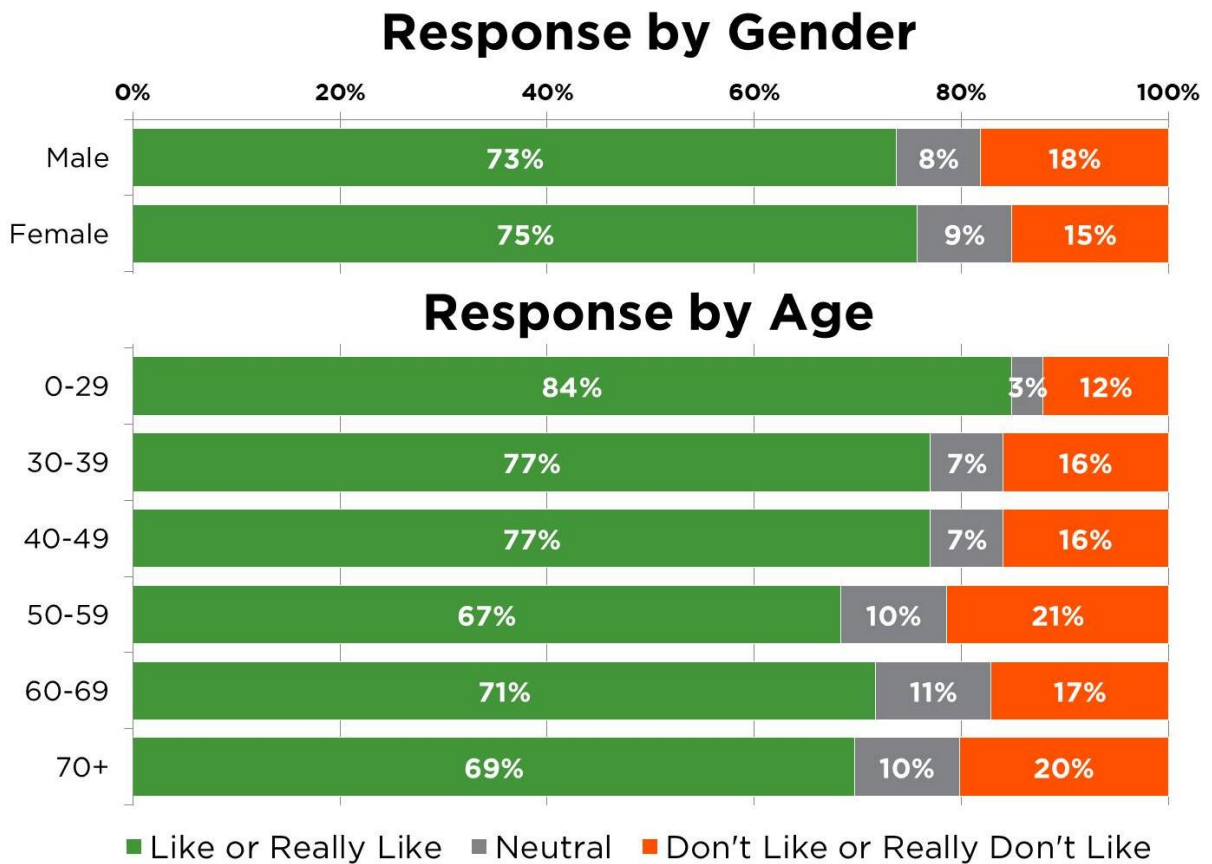


Figure 10: Overall, what do you think of the proposed design?¹³

¹³ Response counts per category: male = 859, female = 755, 0 to 29 = 163, 30 to 39 = 322, 40 to 49 = 267, 50 to 59 = 323, 60 to 69 = 354, 70+ = 251.

Levels of Support Based on Travel Mode and Travel Frequency Across Bridge

In general, respondents supported the recommended design regardless of frequency and travel modes used to cross the bridge (see Figure 11).

Relative to general results, support was:

- Higher among respondents who rarely or never walk or cycle across the bridge, and from those who take transit across the bridge, suggesting a strong latent demand from these groups
- Slightly lower for people who walk and cycle frequently across the bridge, who by their actions demonstrate they are somewhat more comfortable with existing conditions than those who avoid the bridge
- Lower for respondents who frequently drive across the bridge, likely since this group is more concerned about potential traffic impacts from the project
- Highest for respondents who rarely or never drive

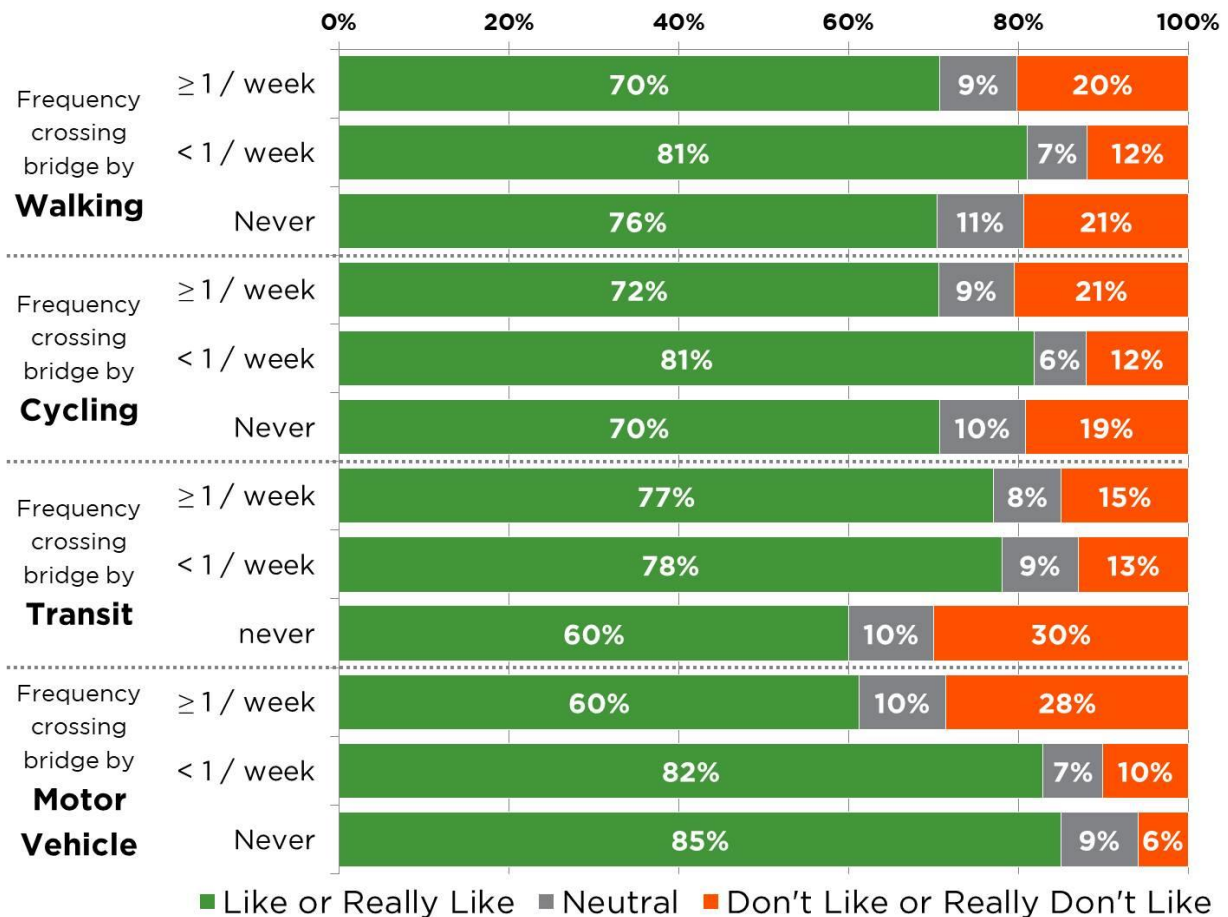


Figure 11: Overall, what do you think of the proposed design? Results based on frequency and mode of transportation respondents use to travel across the Granville Bridge.¹⁴

¹⁴ Response counts per category: Walking ≥ 1/week = 315, < 1/week = 725, never = 613; Cycling ≥ 1/week = 161, < 1/week = 396, never = 1092; Transit ≥ 1/week = 598, < 1/week = 713, never = 334; Driving ≥ 1/week = 712, < 1/week = 671, never = 258.

Feedback on Specific Design Features

Staff received comments on specific features as well as the overall design approach, through:

- Survey questions inviting comments on specific aspects of the proposed design (see *Table 9*)
- Conversations with participants at open houses and deep-dive workshops
- Discussions with stakeholders, including phone conversations, email correspondence, in person presentations and discussions, and walkshops

Table 9: Number of Phase 3 survey comments received on specific design features.

	Topic	Number of survey comments from people who...		
		... like or really like the design	... are neutral or unsure about the design	... don't like or really don't like the design
A	West Side Main Path	546	56	156
B	East Side Path & Hemlock Ramp Sidewalk Improvements	308	40	106
C	Fir Ramp Cycling Connection	351	31	104
D	Crossings at On- & Off-ramps	362	55	121
E	Bridge Ends & Connections			
	... North End	212	31	86
	... South End	244	26	84
	... Other Connections	355	48	89
F	Urban Design & Special Places			
	... Overall Experience	391	49	123
	... Special Moments	276	34	89
G	Means Prevention	473	35	99
H	Overall Reasons for Liking or Disliking the Design	973	133	272

The sections on the following pages highlight key themes that emerged through all stakeholder and public engagement efforts, arranged by the topics noted in the above table.

A. West Side Main Path Comments

The proposed primary path on the west side of the bridge includes:

- A wide and accessible sidewalk (typical 4.2m), with room for some street furniture
- A wide two-way bike path (typical 4.2m) between the sidewalk and motor vehicle lanes, with room for passing in each direction
- A protective barrier separating the bike path from the motor vehicle lanes, and a curb separating the bike path from the sidewalk
- Redesigned crosswalks with traffic signals at the Howe and Fir on- and off-ramps, to make them safe, accessible, and comfortable to cross



There were 541 comments on this topic from people who liked the overall design, 56 comments from people neutral or unsure about it, and 156 comments from people who didn't like it.

As this component was felt by many to be the 'core' element of the Connector, and since it was the first opportunity in the survey to provide open-ended comments, many comments were general in nature:

- Strong support for the proposed design and enthusiasm for the project in general
- Sentiments that the design looks safe and comfortable, and that the respondents were likely to use it on their own as well as with their families and visitors
- A feeling that the design is an improvement over the earlier 'centre path' concept
- Stressing the importance of providing enough space for safe passing by bike given the downhill grades and social cycling
- Reiterating a need to provide separate spaces for walking, cycling, and driving, with curbs or some other barrier to ensure compliance
- A few expressed concerns around the potential for conflicts between people walking and cycling at the Fir ramp

Many comments offered specific ideas as to how the design could further develop to ensure a safe, comfortable and enjoyable experience, e.g. through lighting, public seating, view preservation,

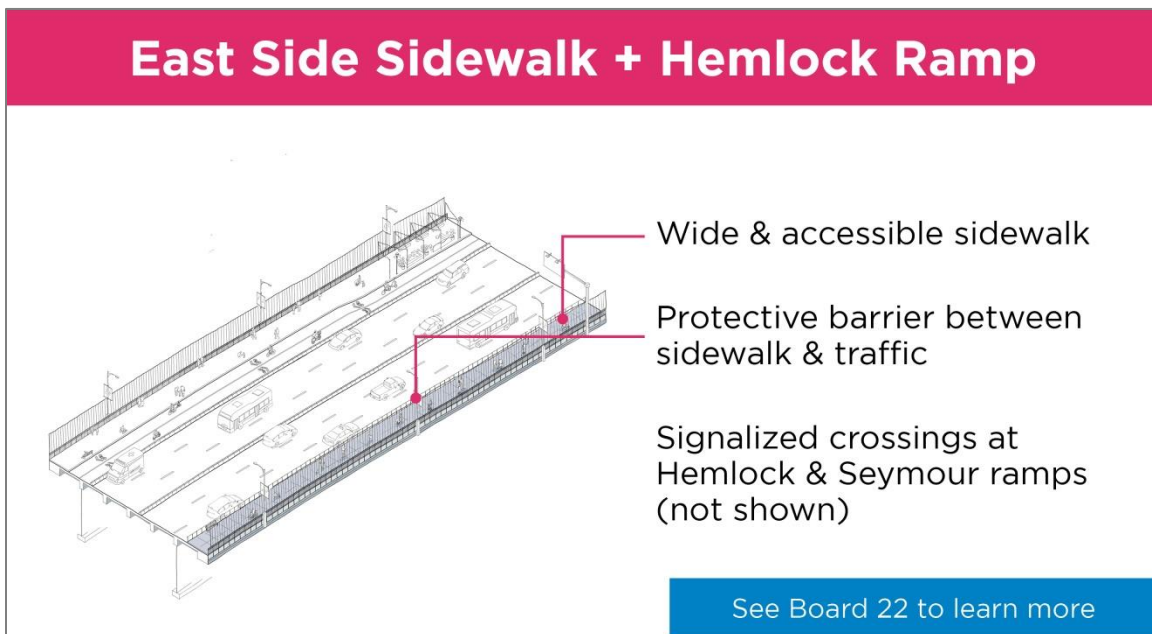
separation between user groups, landscaping, sound mitigation, weather protection, etc. These ideas are captured in detail later in this document in sub-section *F. Urban Design and Special Places*.

Negative comments were limited and tended to be general in nature, primarily relating to general traffic concerns and/or general opposition to investment in walking, cycling, and accessibility improvements.

B. East Side Path and Hemlock Ramp Sidewalk Improvements

The proposed design includes improvements for pedestrians on the east side of the bridge and Hemlock on-ramp, including:

- A wider and accessible sidewalk
- A protective barrier between the sidewalk and motor vehicle lanes
- Redesigned crosswalks with traffic signals at the Seymour and Hemlock on- and off-ramp to make them safe, accessible, and comfortable to cross
- Sidewalk improvements extending along the Hemlock on-ramp



There were 308 comments on this topic from people who liked the overall design, 40 comments from people neutral or unsure about it, and 106 comments from people who didn't like it.

Comments tended to focus on general support for the design approach on the east side, with many noting the protective barrier from motor traffic was much needed.

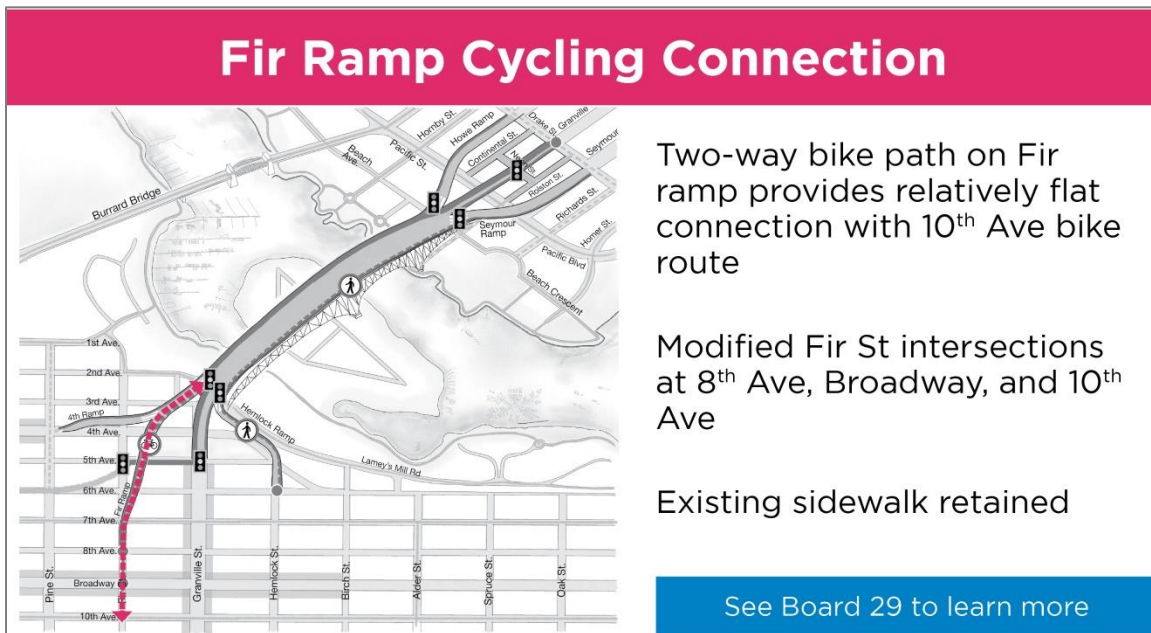
Some comments related to cycling on the east side of the bridge:

- Desire to also include cycling facilities on the east side of the bridge
- Consider upgrading the east side design to more closely mirror the west side
- A few expressed concern that the design would result in some people choosing to cycle on the east sidewalk rather than use the proposed two-way path on the west side

C. Fir Ramp Cycling Connection

The proposed design includes changes to the Fir ramp, including:

- Converting a motor vehicle lane on the east side of the ramp to provide a two-way bike lane for a safe and relatively flat connection with the 10th Ave bike route
- Enhancements at the 8th Ave, Broadway, and 10th Ave intersections to safely accommodate a two-way bike lane in the centre median
- Retention of existing sidewalks



In the Phase 3 survey, there were 351 comments on this topic from people who liked the overall design, 31 comments from people neutral or unsure about it, and 104 comments from people who didn't like it.

This component was well-received, with people who cycle noting:

- It would significantly improve the cycling network by providing a direct and relatively flat cycling connection with 10th Ave, which is one of the city's busiest east-west cycling routes
- It would significantly change travel patterns for people cycling
- It should be a high priority for implementation given the potential to encourage more cycling and support climate emergency targets

Concerns were fairly limited, focusing on whether:

- A protected centre path at the Broadway and 10th Ave intersections would feel safe, given the unusual design
- Proposed motor vehicle restrictions at the Fir-Broadway and Fir-10th Ave intersections would create traffic or vehicle circulation issues
- The crossing design at the Fir ramp signal would create conflicts between people walking and cycling

Particular suggestions or questions around design refinement included:

- Ensuring the intersection with W 10th Ave allows for cycles with larger turn radii (e.g. tandems or cargo bikes)
- Considering how people might be able continue cycling on the 4th Ave ramp to and from Kitsilano
- Exploring whether the bike lane could be on west side of ramp, so that it might buffer existing sidewalk and providing access to W 4th Ave
- Considering how people cycling would access the future SkyTrain station
- Highlighting that some people may choose to walk in the bike lane
- Considering how to minimize conflicts between people walking and cycling, particularly at the signalized Fir off-ramp crossing
- Considering whether the Fir St-8th Ave intersection could be further modified to improve pedestrian access to and from the existing ramp sidewalk

D. Crossings at On- and Off-Ramps

The proposed design includes changes to the existing crosswalks at the Howe, Fir, Hemlock and Seymour on- and off-ramps to make them safe and accessible. These changes include:

- Accessible traffic signals to allow for safe crossing
- Curb ramps to provide access for people using mobility aids



In the Phase 3 survey, there were 362 comments on this topic from people who liked the overall design, 35 comments from people neutral or unsure about it, and 121 comments from people who didn't like it.

The vast majority of comments were strongly supportive of the proposed changes to the on- and off-ramp crossings, with people particularly excited about:

- Improved safety for people walking, cycling, and driving
- Improved accessibility to allow access for people with disabilities
- The potential for the new signals to discourage speeding
- Coordinating signal timing if needed to mitigate potential traffic impacts

Concerns were limited, with some people particularly worried about:

- Cumulative traffic impacts of signalized ramps
- Traffic having to slow down
- Risk of traffic backing up over the crest of the bridge and causing unsafe conditions
- Whether the vehicle lane distribution between Granville Street and the on- and off-ramps was ideal given traffic flows
- How to minimize conflicts between people walking and cycling, particularly at the Fir off-ramp signal

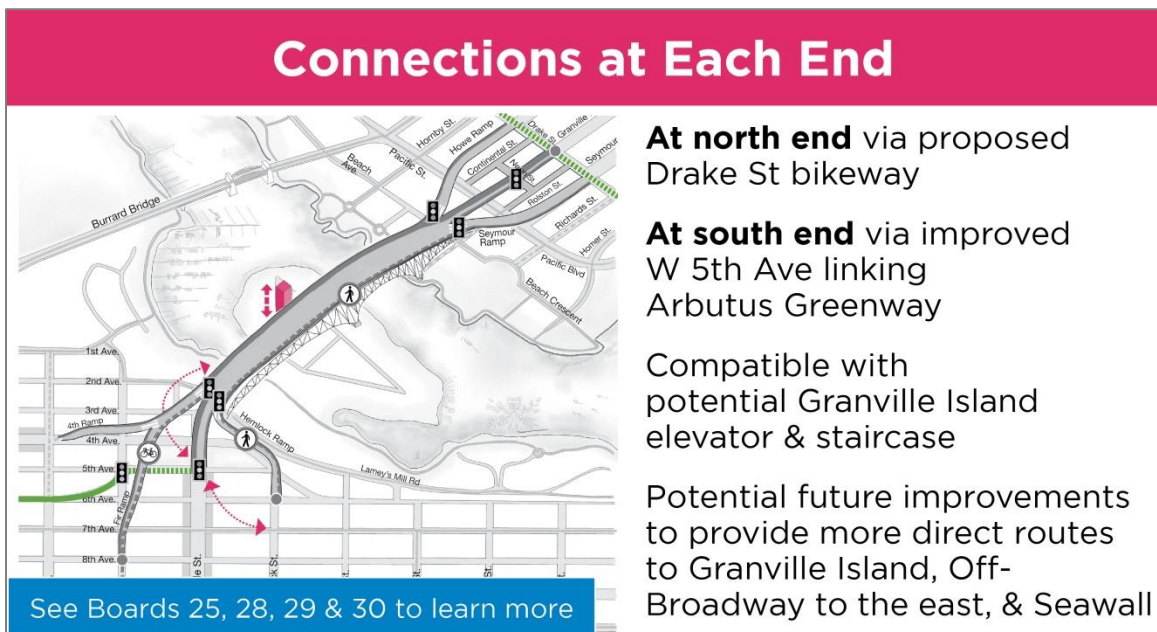
Particular suggestions for design refinement included:

- Providing people driving with ‘warning’ signals about upcoming red lights
- Ensuring sufficient holding areas at the intersections for people on bikes, and providing a foot rest if possible
- Desire for traffic signals across the bridge to allow people to safely cross not just the ramps, but the entire bridge from east to west (or vice versa) provided it could be done safely and traffic impacts are manageable
- Considering an east-west underpasses or overpasses for people walking and cycling, rather than signals

E. Bridge Ends and Connections

The proposed design includes changes at the bridge ends to make it easy and comfortable to get on and off the bridge. These changes include:

- North End – a rebuilt Granville-Drake intersection connecting to the proposed Drake St upgrades
- South End – a new signal at Granville St and 5th Ave, and improved W 5th Ave connection to the Arbutus Greenway
- Other connection enhancements, including future proofing to allow for a Granville Island elevator and staircase



North End Proposed Changes

In the Phase 3 survey, there were 212 comments on this topic from people who liked the overall design, 31 comments from people neutral or unsure about it, and 86 comments from people who didn't like it. This was also a major topic area at workshops.

Cycling connectivity was a strong theme for the north end, with comments highlighting:

- The importance of protected bike infrastructure on Drake Street to connect Granville Bridge with the rest of the downtown cycling network
- That the design should allow for safe turns at the Granville-Drake intersection, anticipating high "Seawall level" volumes of people walking and cycling
- How a bi-directional bike route on the west side of the path might allow people to continue cycling north on Granville Street downtown (i.e. how a safe transition could work)

Some people noted the walking improvements proposed for the Hemlock ramp and the cycling improvements proposed for the Fir ramp, and wondered whether similar walking or cycling improvements could also be made on the Howe and/or Seymour ramps.

There were comments regarding the replacement of the Granville Loops with a more people-friendly 'H' network of streets (a project approved by Council in 2010):

- Support for making the area feel safer and less confusing for people walking and cycling
- Excitement about the potential to invigorate what is perceived to be a tired or forgotten part of downtown
- Questions as to whether and how the new configuration would provide the same level of access and circulation currently provided by the loops, with people referencing their existing travel routes

While the boundary of the Granville Connector project only extends as far north as Drake Street, there were some comments regarding Granville Street downtown, particularly at workshops and in-person discussions:

- Excitement regarding the potential of the Connector to be a major attraction, drawing increased pedestrian traffic and vitality along Granville Street, and helping to reinvigorate local businesses
- Comments that the portion of Granville Street immediately north of Drake is currently a poor experience for people walking, primarily due to on-sidewalk 'flex' parking, associated bollards, and other sidewalk clutter
- Suggestions to improve the sidewalk experience north of Drake by removing the flex-parking on the sidewalk, along with associated bollards
- General support for measures that prioritize transit
- Questions as to how cycling connections might continue on Granville north of Drake
- Interest from the Downtown Vancouver Business Improvement Association in:
 - Conducting pilots to improve the streetscape, e.g. by moving parking from sidewalk to street and testing the impacts on transit
 - A 'gateway' feature to support wayfinding and announce the entertainment district

South End Proposed Changes

In the Phase 3 survey, there were 244 comments on this topic from people who liked the overall design, 26 comments from people neutral or unsure about it, and 84 comments from people who didn't like it.

There was also strong interest in this area from the South Granville Business Association, and from local residents in the area.

Comments focusing on the proposed rebuild of W 5th Avenue and replacing the South Loop generally reflected:

- Excitement about the Granville Bridge Connector connecting with the Arbutus Greenway
- Support for more intuitive connections between the bridge and surrounding community
- The new W 5th Ave should feel like an extension of the Arbutus Greenway, a landscaped green link with safe walking and cycling connections
- The new street network should take into consideration transit needs and traffic implications of future development (e.g. the future Squamish Nation Señákw development and potential increased development along the Broadway Corridor)
- Concern from local residents about street network changes resulting in potential shortcutting and speeding, particularly along 6th Avenue, and desire for mitigation measures such as turn restrictions (e.g. right-in-right-out measures) and/or speed tables at side streets

There was strong interest in the future development of the City-owned site currently contained within the South Loop, particularly from nearby residents and businesses:

- Desire for a plaza and potential gateway feature at the northwest corner of W 5th Ave and Granville St, with the South Granville BIA in particular noting the lack of public spaces along Granville St
- Desire for the site to accommodate for more direct walking and cycling connections between Granville St - 5th Ave and Granville Island / South False Creek Seawall
- Diverse ideas about potential land uses on the site, with suggestions including a social housing, park space, or a mix of development and public space
- Concerns from local residents about potential loss of green space and/or large buildings obscuring views

This feedback is being forwarded to the City's Broadway Corridor Planning team, which is considering potential land use changes in the area, as well as the City's Real Estate Services group.

Feedback was also received regarding Granville Street south of W 5th Ave. The South Granville Business Improvement Association noted in particular:

- Strong support for the project overall as a way to bring more vitality and foot traffic to the area
- Desire to improve the public realm and pedestrian experience, particularly along Granville St between the bridge and future SkyTrain station at Granville-Broadway
- A request to identify Granville Street as a gap for future work, with specific suggestions to:
 - Improve the pedestrian experience by slowing or reducing motor vehicle traffic on Granville, and exploring the potential to divert more through traffic to Fir and Hemlock streets
 - Remove peak hour parking restrictions to allow for full-time parking, and add corner bulges at intersections to create more space for people walking
 - Create more public spaces along Granville Street to allow for social gathering and support local business, including at the northwest corner of Granville and W 5th Ave and outside the future SkyTrain Station at Granville and Broadway

Some comments highlighted a cycling network gap between the south end of the Connector at Granville-5th Ave and the Off-Broadway cycling route on 7th Ave to the east, with suggestions to:

- Extend protected cycling facilities further south on Granville St to at least W 7th Ave

- Consider how to provide more direct cycling connections between Granville Bridge and the future SkyTrain station at Granville-Broadway

Other Potential Connection Improvements

In the Phase 3 survey, there were 355 comments on this topic from people who liked the overall design, 48 comments from people neutral or unsure about it, and 89 comments from people who didn't like it.

There is overwhelming support for an elevator and staircase connection with Granville Island, which would be a separate structure connected to the side of the bridge. People noted:

- It would significantly reduce walking distances between Granville Island and downtown, thereby drawing large volumes of pedestrians, supporting tourism, and becoming a major attraction for residents and visitors
- Suggestions to ensure the accompanying sidewalk platform at the bridge deck level be wide enough to accommodate large volumes of people using it
- Some concerns around ensuring people of all ages and abilities feel safe using it, and that it would be well-maintained
- Suggestions to create something iconic, with the potential for lookouts and other features
- Strong interest in a complementary transit connection with the elevator on the bridge deck, with excitement that it could further support a car-light or car-free Granville Island, tempered by some concerns that the accompanying signal across the entire bridge would have adverse traffic impacts
- Suggestions that the elevator and staircase be a high priority, given the positive impact it would have on walking mode share and the benefit it would have to the tourism economy

These and other Granville Island-related comments will be shared with the Canadian Mortgage and Housing Corporation (CMHC), the federal entity that controls Granville Island.

There was also support for additional staircases elsewhere along the Connector, especially if an elevator to Granville Island cannot be achieved in the near future. In particular, people expressed support for:

- A staircase at the South False Creek Seawall, with the area near Pacific Culinary Institute cited as one possible location
- Interest in promoting staircases at either end as a 'Granville Grind', encouraging outdoor exercise
- Designing staircases so that people using them feel safe and secure (e.g. with good lighting and visibility), with the Cambie Bridge south end staircase cited as a reference

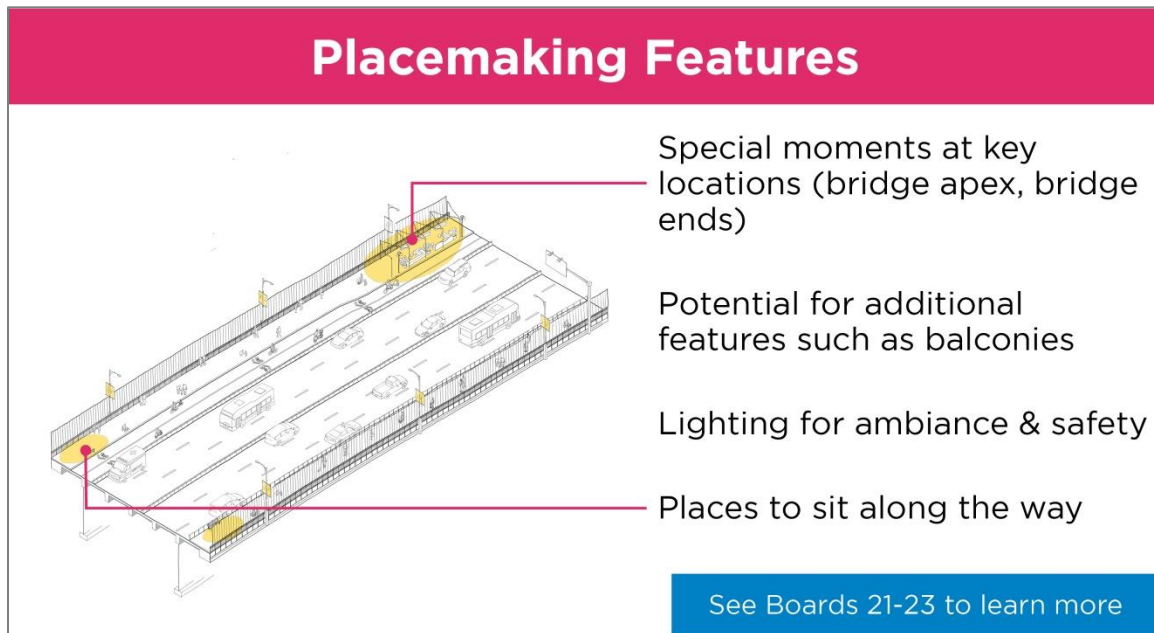
Some comments relating to connectivity reflected network deficiencies and gaps at either end of the bridge. These are captured in more detail in the previous subsections on north end and south end connections, but include desire for:

- A cycling connection between the Connector and the Off-Broadway route on W 7th Avenue to the east
- More direct connections between Granville-5th and the South False Creek Seawall / Granville Island
- Improved walking conditions on Granville Street, north of Drake Street, and south of W 5th Avenue
- Considerations for how people might safely cycle on Granville Street north of Drake and south of 5th Ave

F. Urban Design and Special Places

The proposed urban design approach is based on project goals and reflects themes heard through earlier phases of engagement, and includes:

- A path that is safe and delightful to move through for people of all ages and abilities, with views, lighting, and places to rest along the way
- Special places at key locations, including the bridge apex, at the future elevator to Granville Island, and potential gateway features at each end



The Overall Experience

In the Phase 3 survey, there were 391 means prevention comments on this topic from people who liked the overall design, 49 comments from people neutral or unsure about it, and 123 comments from people who didn't like it. This was also a major topic area at workshops.

Comments fell into different sub-themes, including views, lighting, furniture, public art, materials, landscaping, and barrier design. Major themes and ideas are highlighted below. Fencing was also identified as a key defining design feature influencing overall experience – see sub-section G. *Means Prevention Fencing* for comments on that topic.

General comments relating to overall experience

- Preserving views is paramount
- Lighting provides significant opportunities to enhance safety, personal security, and ambiance
- Providing places to rest along the way is important from an accessibility perspective
- Mixed sentiments on level of investment:
 - Some people feel the Connector is a once-in-a-lifetime opportunity to create something special for the city, and that an enhanced design would draw tourists and locals, help enliven business districts at either end, and make the path feel safer for a wider range of people
 - Others feel focus should be on transportation safety and basic comfort

Views

- Maintaining views is essential to overall experience and should be a top priority
- Fencing design should allow people to enjoy views while seated or standing
- Generally views are valued across the entire length of the bridge, with some comments noting in particular:
 - Views westward and northwestward towards English Bay and the mountains
 - Views north and northwestward towards the downtown skyline
 - Views toward Granville Island, particularly from the Fir off-ramp and Hemlock on-ramp
- See subsection *G. Means Prevention Fencing* in this report for more comments

Lighting

- Pedestrian-scale lighting is important for traffic safety and feelings of personal security
- Lighting is important for ambiance, contributing to the experience of path users
- Lighting offers a significant opportunity to contribute to the city skyline, and is something that can be appreciated even for people who aren't using the bridge
- Lighting can enhance the experience of path users and create opportunities to contribute to skyline
- Consider embedding ground lighting into sidewalks and paths, with the Bute-Robson Plaza 'solar pucks' used as a reference
- Use colourful, programmable, and/or interactive lighting:
 - Programmable lighting that can synchronize with other buildings to create light shows or mark special events
 - Interactive lighting to create a sense of whimsy, provide information on things like path usage and/or support safe, respectful behaviour, with the CityStudio *Illumilane* project cited as a reference
 - Lighting can be used to 'paint' concrete surface and highlight key features
- Consider enhanced lighting at rest areas to create a cozy atmosphere
- Consider how lighting could be used as a wayfinding feature
- Consider how to mitigate light pollution (e.g. dark sky compliant lighting)
- Consider lighting the truss structure below the bridge deck, highlighting it as an attractive design feature of the bridge
- Ensure lighting does not create safety hazards, e.g. by blinding or distracting people driving

Public Art

- General sentiment that providing safe, comfortable paths and preserving views is a higher priority than public art
- Means prevention fencing and lighting were often cited as key public art opportunities that could be incorporated into the design without taking up valuable path space:
 - Colourful and programmable lighting could provide ambiance and delight for bridge users while significantly contributing to the city skyline at night
 - Fencing metalwork or other design details could have sculptural elements, so long as views are not adversely impacted
- Strong interest in creating story, history, and/or art walk(s) along the path as a low cost way to create additional interest beyond views, through:
 - Interpretive signage, historical photos, and/or art
 - Self-guided audio tours or stories (e.g. through QR codes)
 - Suggested themes include nature and local ecosystems, sustainability, Indigenous history, history of False Creek, information on key particular views,

- Potential for a rotating gallery platform for emerging local artists, where curated works could periodically change
- Potential to coordinate locations with seating, alcoves, and/or particular views
- Opportunities to feature Indigenous artists and/or themes
- Other ideas:
 - Murals on concrete components (e.g. jersey barrier), with the New York City Department of Transportation's *Barrier Beautification Program* cited as a reference
 - Sculpture as part of public plaza and/or gateway feature at northwest corner of W 5 Ave and Granville St

Furniture

- Regularly-spaced places to rest are necessary from a basic accessibility perspective
- Consider views for people sitting on benches (some people noted that it is not possible to enjoy the views on Burrard Bridge while sitting on the benches, given concrete barrier height relative to eye-level)
- Consider weather protection for benches, especially at special moments
- Suggestions for other features at special moments or bridge ends, such as recycling stations, water fountains, restrooms, bike racks, and bike repair stations
- Prioritize furniture comfort, ease of maintenance, and ability to dry quickly over unique designs
- Consider using 'warmer' materials such as wood
- Consider some flexible furniture at key locations (e.g. Highline-style furniture which can slide on rails to multiple positions)
- Include call boxes for emergencies

Materials

- If budget is constrained, prioritize safety and comfort for people using the paths and preserving views over customized furniture or expensive materials
- Scoring patterns can be interesting but priority should be safety and accessibility (smooth surfaces, slip-resistance, distinguishing between walking and cycling paths)

Landscaping

- Significant interest in trees and landscaping was tempered by structural limitations of bridge (e.g. weight restrictions, inability to accommodate large soil volumes)
- Some suggestions to use landscaping as a way to soften edges, for example:
 - Planters at special moments
 - Planters as barriers between different user groups or hanging off the jersey barriers, with Shanghai 'flower-saddle' planters that sit atop concrete barricades cited as a reference
 - Trellises over walkway and spaces for climbing plants to provide visual interest and shade

Barrier between the bike lane and motor vehicle traffic

- Needs to be safe in event of collision
- Height should be carefully considered:
 - Not too tall as to block views or create interference with bicycle handlebars
 - Tall enough to feel safe
 - Consider railing on top of jersey barriers to provide additional height while being aesthetically interesting and preserving views.
 - Consider glare from motor vehicle headlights

- Incorporate transparent sound barriers at special moments if possible, which would encourage people to linger for longer periods of time
- Consider painting murals on the surface, with the New York City Department of Transportation's *Barrier Beautification Program* cited as a reference

Barrier between walking and cycling paths

- Desire for curb or other modest barrier to discourage people from biking on the sidewalk, or walking on the bike path
- Desire for ramps at key moments to allow people cycling to easily stop, dismount, and enjoy the space without blocking the bike lane, with Burrard Bridge cited as a negative example
- Specific delineation ideas to enhance experience included planters, material differentiation between paths, and embedded lighting flush with the surface

Special Locations

In the Phase 3 survey, there were 276 means prevention comments on this topic from people who liked the overall design, 34 comments from people neutral or unsure it, and 89 comments from people who didn't like it. There was also significant interest in the topic at workshops and other events.

General Comments

- Special moments should not come at the expense of safe, comfortable movement and preserving views
- Limit locations, noting the entire path is special by virtue of the views
- The location most often supported or referenced was the bridge apex, followed by the bridge ends and interface with future elevator to Granville Island; other locations noted included quarter-marks or 'special' view spots (considering views to English Bay, mountains, Celebration of Light, Granville Island, potential for establishing design rhythm)
- For most people, 'special moments' are momentary pauses to rest and enjoy the view; most people will not linger for extended periods unless traffic noise and wind can be mitigated
- Ensure moments are accessible to people cycling as well (via ramps to let people easily stop)
- Some support for balconies, alcoves, and/or enhanced lookout points along the way, with other comments noting this might be too expensive relative to benefit
- Non-supportive comments expressed concerns that:
 - Transportation function would be sacrificed (e.g. by making through movement for walking and/or cycling difficult or by creating too many 'no passing' zones)
 - Expensive features would be prioritized instead of functional movement-related ones

Bridge Apex

- General support for recommended proposal to create a mini-plaza by narrowing the bike lane at the apex (i.e. creating a 'no passing zone'), while recognizing that safe movement is the top priority
- Some concern about narrowed bike lane creating safety issues, with expressed preference for achieving wider space through balconies
- Seating placement should consider views, social interactions, and potential for programming space, while preventing people from circumventing means prevention fence
- Include ramps to allow people on bikes to stop and enjoy the space
- Frequent sentiments that people will not linger for extended periods unless sound from motor traffic can be mitigated

- Support for localized sound mitigation, with suggestions including incorporating plexiglass into the barrier between the bike lane and motor traffic, reducing motor vehicle volumes and speeds, and/or using different paving materials
- Opportunity for bridge apex to become distinguishing feature that is visually distinct and visible from afar
- Provide binoculars, with Jericho Beach cited as a reference
- Consider landscaping to 'soften' the space (e.g. planters)
- Consider additional lighting to create a cozy atmosphere
- Include supplementary furnishing such as recycling stations and bike racks
- Consider weather protection
- Vary means prevention design to allow for views from seated position
- Provide power outlets to support bike-powered food carts and small-scale programming
- Potential Wi-Fi hotspot

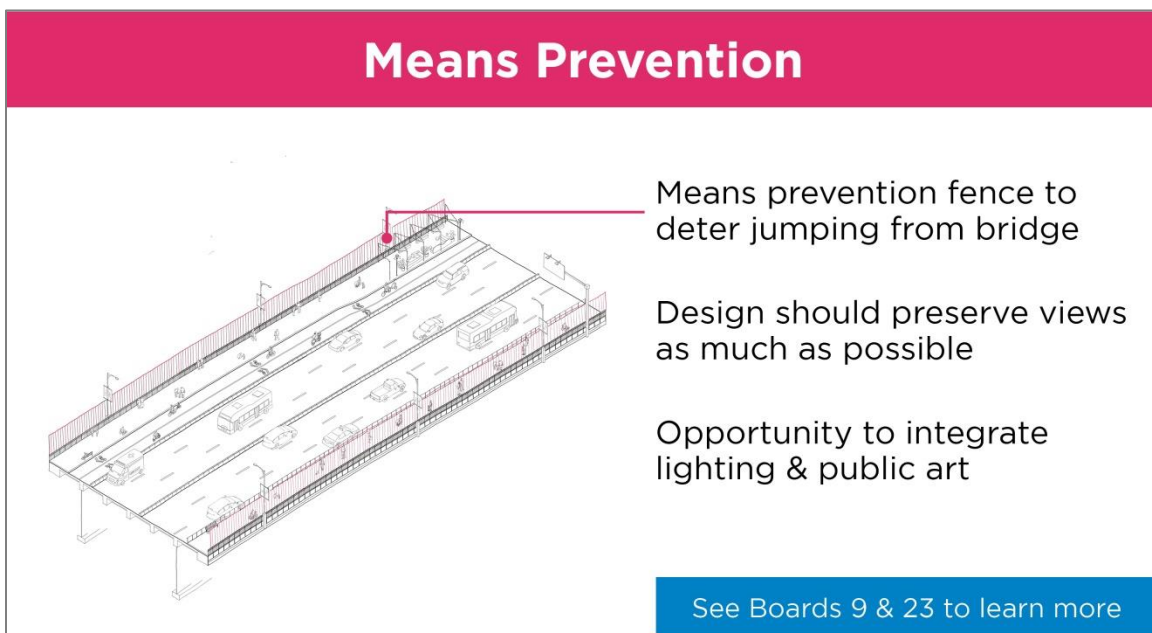
South Gateway

- Support for a plaza with special wayfinding feature (e.g. sculpture) at the northwest corner of Granville St and W 5th Avenue, noting this is where the Arbutus Greenway, Granville Bridge Connector, and South Granville business area all intersect
- General recognition that most significant opportunities for landscaping are not on the bridge itself but at the ends of the bridge (off-structure)

G. Means Prevention Fencing

The proposed design would include means prevention fencing to deter jumping and self-harm. The design would:

- Retain views as much as possible
- Include opportunities to integrate lighting and public art



In the Phase 3 survey, there were 473 means prevention comments on this topic from people who liked the overall design, 35 comments from people neutral or unsure about it, and 99 comments from people who didn't like it. There was also significant interest in the topic at workshops and other events, noting that fencing would have a major impact on the user experience. In stakeholder sessions, social service and health agencies in particular identified the importance of means prevention, and Covenant House mentioned they are planning to expand services for particularly vulnerable people near the north end of the bridge.

The majority of comments indicated a belief that means prevention is important, but needs to be done in a way that preserves views, which are deemed essential to the overall experience.

Comments generally reflected support for the proposed means prevention evaluation criteria noted in the Phase 3 engagement material:

- *Effectiveness* – ability to deter jumps by being difficult to climb or otherwise circumvent
- *Transparency* – ability to preserve views
- *Aesthetics* – appearance and ability to enhance overall experience with other features (e.g. lighting, public art)
- *Comfort* – ability to mitigate fear of heights or feelings of vertigo
- *Cost* – overall costs, including materials, installation, and ongoing maintenance

Specific issues and ideas included:

- Mitigating feelings of vertigo that some people might experience by ensuring the lower portion of the fence is less transparent
- Considering how to mitigate or eliminate the 'shuttered' or 'strobe' lighting effect that can be distracting or disorienting for people passing by, with Burrard Bridge cited as a good example, and Ironworkers Memorial Bridge a bad one
- Integrating lighting into the fence to minimize sidewalk clutter and provide rhythmic element
- Including programmable, colourful lighting for visual interest and ambiance, and to enhance the city skyline
- Varying height of fencing elements to mimic or complement the truss structure below the bridge deck, and providing visual interest for both path users and people observing the bridge from afar
- Incorporating metalwork or other design details so that the fencing becomes sculptural art, noting this opportunity may be greater at the lower portion of the fence where more opacity is desired and views would not be hindered
- Incorporating plaques, frames, and/or brackets to support the creation of story walks, history walks, or art walks
- Considering netting in lieu of fencing, with San Francisco's Golden Gate Bridge cited as an example
- Providing gaps large enough for camera lenses
- Considering potential to frame or augment particular views, e.g. with larger gaps at special locations where the fence is replaced with plexiglass or netting below
- Including a railing of some kind, if it can be delivered in such a way as to not make the bridge easy to climb
- Providing help phones as a complementary measure
- Angling elements to create a sense of spaciousness

There were some suggestions to explore additional funding sources, for example:

- Other levels of government, noting health care and emergency response sectors would directly benefit from reduced costs associated with decrease in deaths, significant injuries, emergency responses, and search and rescue efforts
- Public art funding, noting the means prevention fencing could incorporate significant public art (e.g. through lighting or other design features) that contributes to the city skyline

Those opposed to means prevention measures expressed the following sentiments:

- Fencing would destroy the experience if it obscured views
- Opportunities for self-harm exist throughout the city, and many people may simply go somewhere else if preventive measures are added to the bridge
- Investing in mental health initiatives rather than fencing would be a better use of resources
- Overall costs are not worthwhile

H. Overall Comments

The survey asked respondents to comment on why they liked or didn't like the design. The sentiments are generally captured on the preceding pages.

Comments were overwhelmingly supportive, with 973 comments from people supporting the design, 133 from people unsure about it, and 272 comments from people opposed.

Supportive comments generally focused on enthusiasm about the project:

- Enabling people to safely and comfortably walk and/or cycle over the bridge, including families, children, and seniors
- Making the bridge accessible to people who currently cannot use it, e.g. due to stairs at crossings and perceived danger from traffic
- Encouraging significantly more trips by sustainable transportation, and supporting the City's climate emergency efforts
- Supporting not only utilitarian trips, but encouraging recreational trips and tourism
- Helping to reinvigorate business areas at either end of the bridge
- Creating a major destination and highlight for the city

Non-supportive comments were fewer in number, generally focusing on:

- Concern about tax payer costs
- Concern about making driving more inconvenient
- Concern congestion by reallocating road space away from motor vehicles
- Preference for other design approaches, or for building an entirely new bridge

Selected Quotes

"Everything about [the design] feels thoughtfully considered and excellent. It will be a fantastic improvement for our city... user friendly, safe for all bridge users... and [offering] excellent options for cycling and pedestrian connections on both ends of the bridge.

"The crossings look very safe, and... will work well with future transit expansion and vehicle use. I particularly like the pedestrian features, especially the use of the West side of the bridge which has the best views.

“An inspired decision. I also like [the] compatibility for a potential Granville Island staircase / elevator.”

“This design is unique because it achieves both practical and utilitarian needs, while at the same time serving as a step forward that will make this bridge a major destination and highlight for the city. This design is amazing. It is truly exciting.”

“I'm very pleased. Let's get it underway! I'm getting older (68) still very active, walk and bike everywhere... this bridge is my most direct route to downtown, and the improvements will literally change my life for the better. I trust it will help the confidence of many seniors and families with young children to walk/bike more.”

“Crossing the current bridge is awful and this is a clear improvement in every way and method imaginable. Drivers will feel [safer] as no one will fall into traffic or suddenly "appear" at ramps.”

“.. not everyone can afford to travel in a car. This project will keep people safer and healthier.”

“[The design] responds to the realities of our climate emergency by providing for equal options for all mode of travel, [with the] potential to incorporate the bridge into the fabric of the city instead of it being a freeway devoid of character. It's the bridge we need and the bridge we deserve.”

“I am literally thrilled with this project, and very thankful for the efforts of the city-staff who are involved. Being the spouse of a person in a wheelchair, I would also like to say how important this project is to the mobility of those who are handicapped, and to their ability to enjoy their city more. Thank you.”

“Thank you to City staff for listening!”

“I'm so glad the city is doing this project. I hope it does not get value engineered as this will be a landmark when built.”

“The city is going on a really good path of transforming public space into a more inclusive and well-planned city, an enjoyable one. Safe sidewalks and bike paths will allow people to enjoy and exercise more. Those places will have enormous potential to attract people of all ages. If you build a city that allows kids and seniors to be safe and go out more often, it would be a city for everybody.”

‘Completely against this project. Spend the money on our homeless and mental health residents.’

“Anyone mobile enough to walk across the bridge should be able to cross the street/walk a few extra steps so sidewalks on both sides of the bridge would be unnecessary.”

“Car lanes are much more needed.”

Next Steps

Staff are currently preparing a report to Council. It will seek endorsement for an both an interim and an ultimate design, the latter based on the recommended option shared with the public in Phase 3, with refinements based on public and stakeholder input, as well as further analysis from staff and consultants. The report will also include recommendations for phasing the project and coordinating with other nearby work.