CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: January 22, 2019
Contact: Paul Storer
Contact No.: 604.873.7693
RTS No.: 12877
VanRIMS No.: 08-2000-20
Meeting Date: January 30, 2019

TO: Standing Committee on Policy and Strategic Priorities

FROM: General Manager of Engineering Services

SUBJECT: Potential Granville Bridge Connector – Public Engagement

RECOMMENDATION

A. THAT Council direct staff to engage stakeholders and the community regarding a design concept for the Granville Bridge which would reallocate the centre lanes for the creation of an accessible path so people can comfortably walk, use wheelchairs, strollers and other devices, and cycle across the bridge, in coordination with the rehabilitation and seismic upgrades, as generally outlined in this report; and

B. THAT Council direct staff to bring forward a recommendation on how to provide an accessible and enjoyable walking, rolling and cycling path for all ages and abilities across the Granville Bridge following the engagement and further technical analysis.

REPORT SUMMARY

Construction has started on rehabilitation and seismic upgrades to the Granville Bridge, which are funded in this current capital plan. Coordinating this work with introduction of a new walking and cycling facility will reduce the overall costs and impacts of the projects. This report recommends a stakeholder and public engagement process to inform the design of the new walking, rolling, and cycling path, which was identified in Transportation 2040 and included in the 2019-2022 Capital Plan.

The goal of this project would be to create a safe, comfortable, accessible and enjoyable walking, rolling and cycling experience across the bridge, which would seamlessly connect major destinations and link to the city's broader network. The project would take advantage of excess road space on the bridge by reallocating traffic lanes to create a unique experience and sense of place, including spectacular city views and opportunities for amenities such as art and public seating. The project is important to accommodate the growing number of people living, working, and playing in the city and region.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

On October 31, 2012, Council adopted the *Transportation 2040 Plan*, which identified the need to improve comfort and address gaps in Vancouver's walking and cycling network, and further identified the False Creek Bridges, including the Granville Bridge, as a high priority area of focus.

On October 7, 2010, Council adopted the *Granville Loops Policy Plan (amended on* July 17, 2018), which calls for the replacement of the freeway-like, elevated traffic loops with an "H" configuration of streets that connect the surrounding transportation network and the bridge. The reconfigured street network would improve the public realm, create better development parcels, improve connections, and upgrade a valuable area in terms of image and economic viability.

In November 2015, Council approved the Renewable City Strategy, putting Vancouver on a path to achieve 100% renewable energy use and reduce GHG emissions by 80% before 2050.

On October 30, 2018, Council awarded a contract for construction services for the Granville bridge structural repair (ITT PS20181181). This contract included the rehabilitation of the main north concrete approach between Beach Avenue and Neon Street and was the first of two rehabilitation contracts to be advanced in the 2019-2022 capital plan.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The Granville Bridge requires rehabilitation and seismic upgrades this capital plan. Work has already started at the north end to coordinate improvements with the delivery of the new streets under the bridge and will continue for the next couple years. Coordinating these improvements with the delivery of a new pathway will minimize costs and disruption to the public.

Granville Bridge is one of the most glaring barriers in Vancouver's pedestrian and cycling networks. Significant work has been done over the years to determine how to address this. The centre design has emerged as the most cost-effective way to close this gap in a way that maintains motor vehicle travel times and reliability and avoids conflicts at the ramps and Granville Loops.

Making this connection is critical to meet *Transportation 2040* walking and cycling targets. Without this, we risk adding motor vehicle trips to the network and increasing traffic congestion across the city.

The City Manager recommends the approach outlined in this report in order to advance this critical project.

REPORT

Background/Context

In 2012, Council adopted *Transportation 2040*, the City's long-range transportation plan. A key question that the Plan answers is how to accommodate more trips in a growing city and region where expansion of the road network is not possible. To achieve this, the plan sets a target that at least two-thirds of all trips be made by walking, cycling, and transit by 2040.

The area surrounding the downtown core is where there are some of the most significant opportunities to increase walking and cycling. The Plan identified that the False Creek bridges are key barriers to this and that walking and cycling improvements that are comfortable for people of all ages and abilities for all three False Creek Bridges needs to be a top priority.

Burrard Bridge was the first of the three to be improved, with construction completed in 2017. The changes were coordinated with major structural rehabilitation of the bridge, which minimized traffic impacts and costs of the project. Cambie Bridge followed with interim improvements completed in 2018.

Both of these projects have resulted in improvements for walking and cycling and, for Burrard, has also improved transit and general traffic reliability.

Granville Bridge is the last of the three bridges to be addressed and $25 million has been earmarked in the 2019-2022 Capital Plan to deliver this project.

Current Conditions

Built in 1954, Granville Bridge is an eight-lane bridge over False Creek. The bridge was designed to connect to high-speed, high-volume freeways that were never built. As a result the bridge has significant excess road capacity; even if each of the streets feeding the bridge were full, the bridge itself would be relatively empty. It carries a similar traffic volume to Burrard Bridge, which has half the number of vehicle lanes.

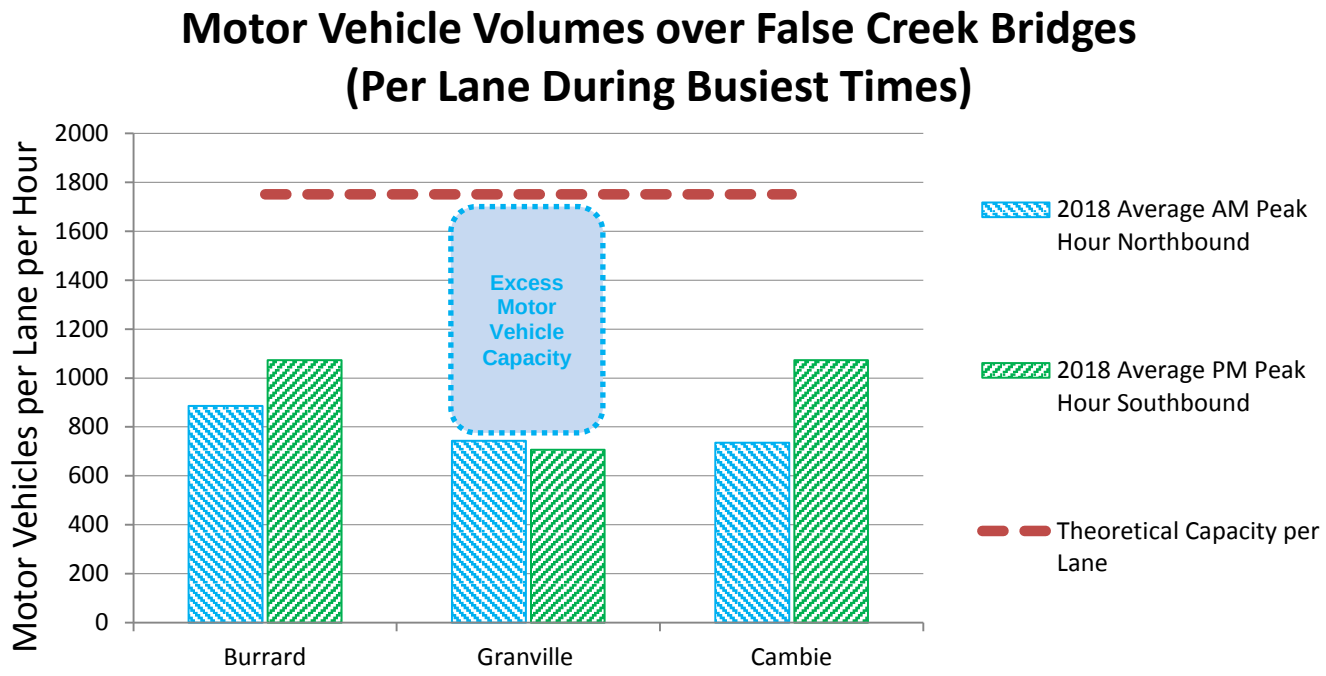

Figure 1. The eight-lane Granville Bridge has significant extra capacity. Up to four motor vehicle lanes could be reallocated towards a pathway, and there would be enough capacity to accommodate motor vehicle traffic. Connections at either end of the bridge would be redesigned to ensure safety and comfort while ensuring reasonable travel times for all modes.

Granville Bridge's freeway-style design results in significant challenges in today's urban context; Most notably:

- sidewalks on the bridge are narrow and uncomfortable, with no buffer from high-speed traffic;
- steps in the sidewalks make the bridge inaccessible to those with low mobility;
- unsignalized crosswalks at vehicle ramps and loops are uncomfortable and contribute to motor vehicle collisions;
- motor vehicles travel at high speeds and there are no cycling connections over the bridge;
- vehicle off-ramps and loops that were designed to accommodate high speed traffic create additional connectivity challenges at either end of the bridge.

Early Success from Burrard and Cambie Bridge projects

The recent improvements to the Burrard and Cambie Bridges have already yielded significant benefits.

On the Burrard Bridge, early data indicates significant increases in the volumes of people walking and cycling across the bridge – cycling, in particular, has increased by about 30% between 2013 and 2018. Southbound motor vehicle times have reduced by over a minute and travel time reliability has improved. Safety for all modes is also expected to have greatly improved.

On the Cambie Bridge, early data suggests that conflicts between people walking and cycling on the bridge have decreased (a key driver of the project), and that there has been no significant impact on motor vehicle travel time.

Early results from these projects are included in *Appendix A*, and more information will be provided as data is collected and analyzed.

Strategic Analysis

The potential Granville Bridge Connector would help link several major initiatives at either end of the bridge. Together these projects will fill major gaps in the network, creating comfortable, accessible and convenient connections that significantly improve walking, rolling and cycling, while creating a unique and delightful civic experience. The following map shows some of these key connections.

Figure 2. Connecting major destinations to benefit the entire city. The potential Granville Bridge Connector would fill major gaps in Vancouver's walking and cycling networks, making it safer, easier, and more enjoyable to get around and reach key destinations. Direct and accessible pedestrian connections would be made to Granville Street at both ends, linking major shopping and entertainment districts, with additional improvements linking to the Seawall and other amenities. For cycling, direct and safe connections to the broader all ages and abilities (AAA) network would be made via new or improved facilities on Drake and Richards streets. The new path would flow seamlessly into the Arbutus Greenway, effectively extending that project into the downtown. A feasibility assessment is also underway for an elevator to Granville Island, which would provide direct connections for walking, cycling, and transit while providing spectacular views and placemaking opportunities.

Over the past two decades, many options have been investigated to improve walking and cycling across the bridge, including added structure below or beside the bridge deck. These types of solutions are very expensive, particularly when there is excess space on the existing bridge which can be reallocated to achieve additional space for a pathway.

Initial investigations of how to reallocate road space looked at treatments similar to the Burrard and Cambie Bridges, which reallocated space beside the existing sidewalks. These options are challenged by having to cross the ramps at both ends of the bridge, as well as the loops at the north end, all of which make a safe, comfortable, and accessible path difficult to achieve.

This project would aim to create a centre path for people walking, rolling and cycling across the Granville Bridge by reallocating travel lanes. The path would have a physical buffer from vehicle traffic and be elevated above the remaining motor vehicle traffic lanes to ensure a safe and comfortable experience, with unique views and placemaking opportunities.

Seamless connections at either end of the bridge would conveniently connect the path to the walking and cycling network at both ends and link major destinations including Granville Street downtown, the South Granville shopping district, the Seawall, the Arbutus Greenway and the future Broadway SkyTrain station at Granville; it would also improve connections to Granville Island. A study is currently underway to determine the feasibility of an elevator from bridge deck

level to Granville Island, which could further improve access for walking, cycling, and transit, while also creating a sense of place.

Preliminary analysis shows that the existing traffic could be accommodated by two lanes in either direction, however further analysis is underway.

Proposed Engagement Process and Timelines

Initial engagement on the proposal for the centre-running pathway was done as part of the Transportation 2040 process, leading to the inclusion of the concept in the print version of the Plan. Further engagement will help provide a better understanding of local issues and concerns that need to be resolved. *Appendix B* outlines the proposed engagement plan leading to a Council decision on the potential Granville Bridge Connector. The engagement would discuss the centre design and other options that were considered, as well as their feasibility and trade-offs. If approved, further engagement would be undertaken during the detailed design stage to help inform and improve on features such as greenery, placemaking and public art opportunities.

Overall proposed project timelines are below:

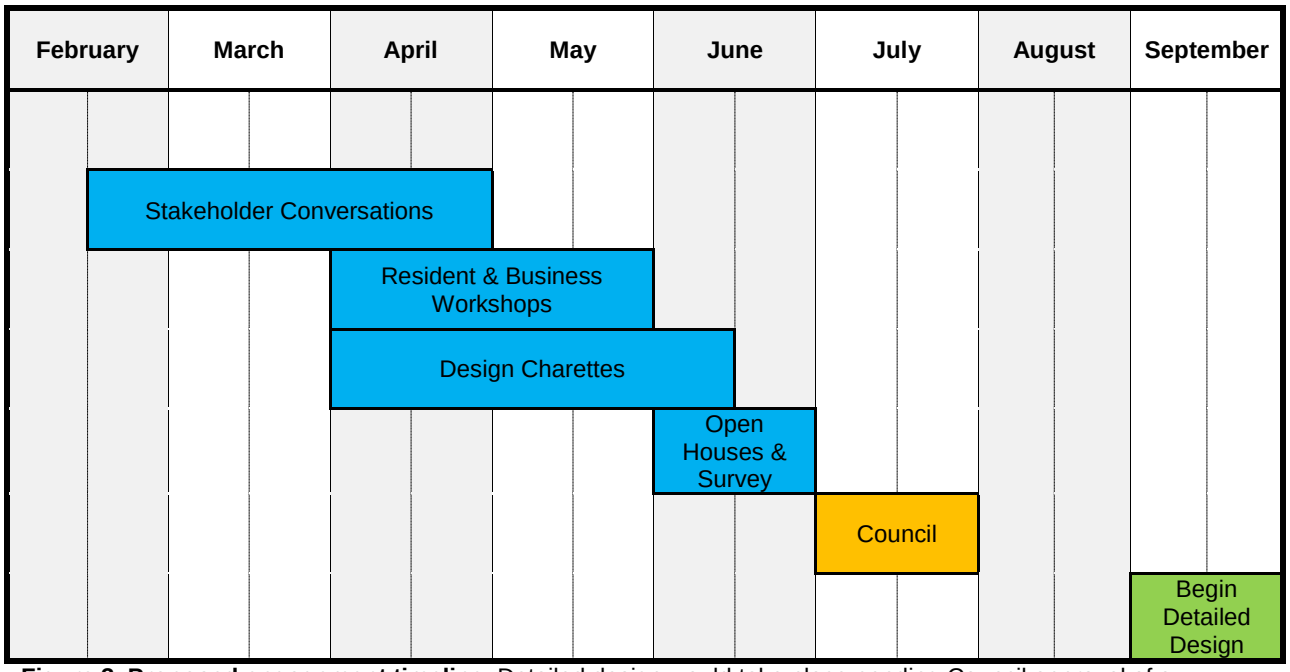

Figure 3. Proposed engagement timeline. Detailed design would take place pending Council approval of a conceptual design, and would include additional engagement. See *Appendix B* for details.

Sustainability

This work directly supports Vancouver's sustainability goals under the Greenest City Action Plan and more specifically the Renewable City Action Plan (RCAP). RCAP calls for a 50% reduction in greenhouse gas (GHG) emissions by 2030 and currently transportation in Vancouver accounts for 37% of the city's overall GHG emissions.

As Vancouver's population grows a critical component of meeting our GHG targets is by ensuring access for everyone to a comprehensive and safe walking, rolling and biking network and this project is a significant contribution to this.

As well, in light of council's unanimous support on January 16, 2019 of the motion Ramping Up Vancouver Climate Action in Response to the Climate Emergency, this work is even more urgent.

CONCLUSION

The potential Granville Bridge Connector is critical to supporting Vancouver's climate goals and accommodating a growing number of trips over the bridge, while ensuring that the transportation network continues to function well. Staff recommend moving forward with an engagement process to hear from stakeholders and the public before proceeding with detailed design of the project.

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APPENDIX A: Burrard Bridge Highlights

Some early results from the Burrard Bridge upgrades are highlighted below. More information will be shared as it becomes available.

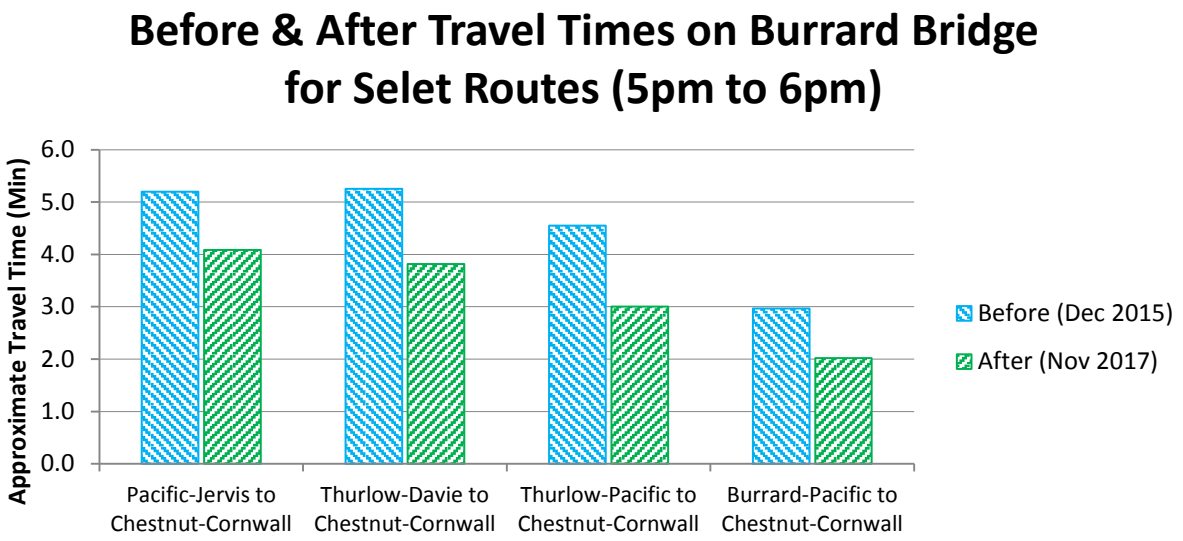

Figure A1. Travel times have improved on Burrard Street following the upgrades to Burrard Bridge and the Burrard-Pacific intersection, despite a reduction in motor vehicle lanes. Observed travel times fell by an average of 1 to 1.5 minutes depending on the route details.

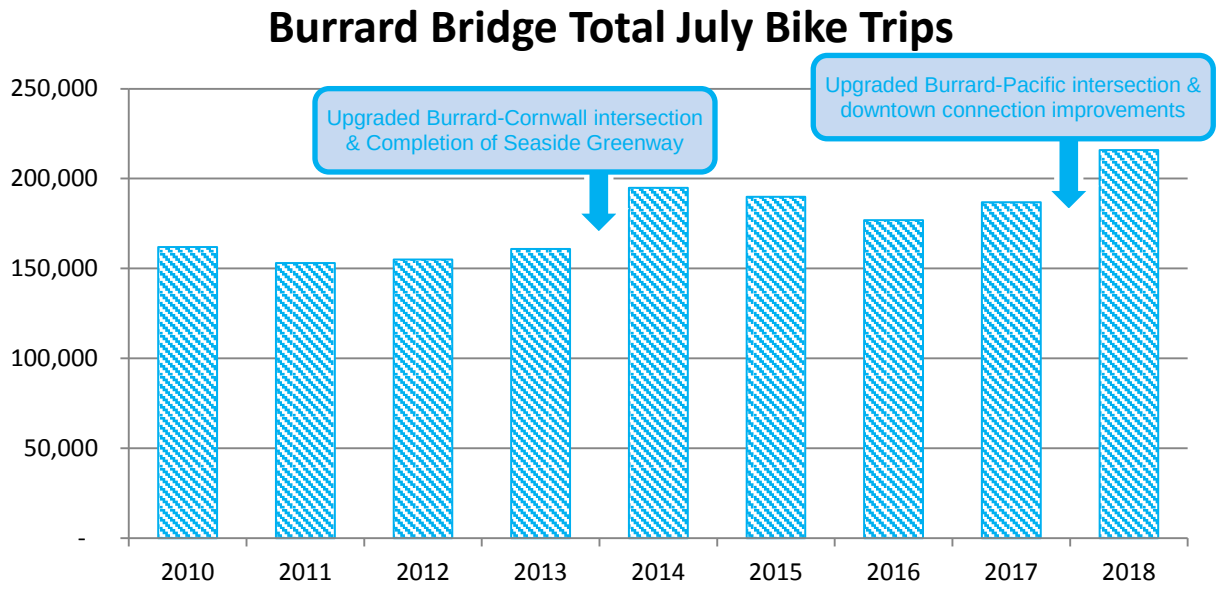

Figure A2. Cycling volumes increased significantly after each round of improvements to Burrard Bridge. The above charts highlights the number of bicycle trips each July, which increased by over 30% between 2013 and 2018.

APPENDIX B: Draft Engagement Outline

Previous Public Engagement

This project was included as part of the Transportation 2040 Plan, which was unanimously approved by Council in 2012 after significant public and stakeholder engagement, including:

- Broad public consultation in 2011 focused on ideas generation, with over 8,000 people participating at events including town hall meetings, artist-facilitated co-design workshops, surveys, and online discussion boards;
- Detailed public review of draft directions in 2012, with over 10,000 people participating at public events, open houses, and festivals, as well as through social media and 944 responses to an online questionnaire; and
- Ongoing engagement with over 50 stakeholder groups, including representatives from other government agencies, emergency services, health care and social care providers, industry leaders, non-profit organizations, and local business groups.

During plan development, improving all of the False Creek bridges for both walking and cycling was identified as a high priority by stakeholders and the general public.

In the years since Transportation 2040 was approved, more detailed discussions have taken place with specific stakeholders. These include informal workshops and conversations with the South Granville Business Improvement Association in 2013 and 2018, and a 2018 staff presentation to the Transportation 2040 Stakeholder Advisory Group, including representatives from the Downtown Vancouver Association, Better Environmentally Sound Transportation, and the Persons with Disabilities Advisory Committee. These discussions have been received with strong support.

Granville Bridge has also consistently been included in short-term *5-year Cycling Network: Additions & Upgrades map*, which provides stakeholders and the general public a look ahead to near-term active transportation projects. The map is presented to Council approximately every two years, most recently on November 15, 2017.

Proposed 2019 Engagement

Staff propose a multi-pronged engagement in 2019, focusing on an option that reallocates motor vehicle lanes on the bridge to create a centre path, and that link major destinations at either end with easy, intuitive walking and cycling connections. It would include targeted discussions for stakeholders that are most directly impacted, workshops for area residents and businesses, and open houses and surveys for the broader public to share their ideas and concerns. “Jam session” charrettes are also planned to encourage creative thinking on the project, including placemaking opportunities.

Key stakeholders include groups such as the South Granville and Downtown Vancouver business improvement associations, Vancouver Board of Trade, Tourism Vancouver and tour bus operators, TransLink, HUB, emergency services providers, Granville Island Corp (CMHC), Granville Island Business and Community Association, Granville Island Theatre District, and First Nations groups, as well as nearby resident association groups. Relevant Council-appointed citizen advisory committees will also be included once they are re-established, including those representing transportation, seniors, youth, gender equity, and persons with disabilities for

example. Efforts will be made to ensure an inclusive engagement that reaches a broad and diverse audience.

A general timeline is proposed as follows:

When	What	Why
February to April 2019	Stakeholder Conversations	- Share project overview and preliminary concepts with stakeholders who would be most impacted - Better understand specific interactions at each end of the bridge - Provide opportunity for stakeholders to share ideas, issues, and potential concerns
April to June 2019	Resident & Business Workshops	- Share iterated project overview and concepts in workshop setting - Provide opportunity for residents and businesses to share ideas, issues, and potential concerns - Explore opportunities to improve connections
March to June 2019	Design Jam Workshops	- Focus on creative placemaking opportunities while ensuring core transportation function - Explore opportunities to improve connections to nearby network and major destinations
June 2019	Public Open Houses (x2) & Survey	- Share iterated project overview and concepts - Provide opportunity for general public to share ideas, issues, and potential concerns
July 2019	Council report seeking high level concept approval	- Present refined concept to Council
September 2019	Detailed design begins	- Proceed with additional engagement if project is approved